2020 Index
IEEE Signal Processing Letters
Vol. 27

This index covers all technical items—papers, correspondence, reviews, etc.—that appeared in this periodical during 2020, and items from previous years that were commented upon or corrected in 2020. Departments and other items may also be covered if they have been judged to have archival value.

The Author Index contains the primary entry for each item, listed under the first author's name. The primary entry includes the coauthors' names, the title of the paper or other item, and its location, specified by the publication abbreviation, year, month, and inclusive pagination. The Subject Index contains entries describing the item under all appropriate subject headings, plus the first author's name, the publication abbreviation, month, and year, and inclusive pages. Note that the item title is found only under the primary entry in the Author Index.

Author Index

A

Aazhang, B., *see* Cosentino, R., *LSP 2020 1115-1119*

Acton, S.T., *see* Ma, H., *LSP 2020 161-165*

Addabbo, P., Liu, J., Orlando, D., and Ricci, G., Novel Parameter Estimation and Radar Detection Approaches for Multiple Point-Like Targets: Designs and Comparisons; *LSP 2020 1789-1793*

Adhikary, A.R., Sarkar, P., and Majhi, S., A Direct Construction of$q$-ary Even Length Z-Complementary Pairs Using Generalized Boolean Functions; *LSP 2020 146-150*

Adhikary, A.R., *see* Wang, G., *LSP 2020 136-140*

Adsumilli, B., *see* Madhusudana, P.C., *LSP 2020 1809-1813*

Adsumilli, B., *see* Tu, Z., *LSP 2020 1715-1719*

Afshar, P., Mohammadi, A., and Plataniotis, K.N., BayesCap: A Bayesian Approach to Brain Tumor Classification Using Capsule Networks; *LSP 2020 2024-2028*

Ahn, C.K., *see* Kim, S., *LSP 2020 2183-2187*

Ai, B., *see* Gong, X., *LSP 2020 1685-1689*

Akbar, M.N., and Saquib, M., Real Signal Equalization for OQAM; *LSP 2020 11-15*

Alpaslan, N., and Hanbay, K., Multi-Scale Shape Index-Based Local Binary Patterns for Texture Classification; *LSP 2020 660-664*

Amini, A., *see* Zamani, H., *LSP 2020 101-105*

Amiri, R., *see* Kazemi, S.A.R., *LSP 2020 1595-1599*

Amiri, R., *see* Kazemi, S.A.R., *LSP 2020 1200-1204*

An, D., *see* Li, M., *LSP 2020 1794-1798*

An, P., *see* Meng, C., *LSP 2020 525-529*

An, P., *see* Chen, Y., *LSP 2020 1135-1139*

An, W., *see* Ying, X., *LSP 2020 1500-1504*

An, W., *see* Ying, X., *LSP 2020 496-500*

Antonello, N., and Garner, P.N., At-Distribution Based Operator for Enhancing Out of Distribution Robustness of Neural Network Classifiers; *LSP 2020 1070-1074*

Aouada, D., *see* Ghorbel, E., *LSP 2020 580-584*

Appaiah, K., and Pal, D., All-Pass Filter Design Using Blaschke Interpolation; *LSP 2020 226-230*

Araki, S., *see* Emura, S., *LSP 2020 1630-1634*

Arce, F.d.l.H., Patrinos, P., Verhelst, M., and Bertrand, A., On the Convexity of Bit Depth Allocation for Linear MMSE Estimation in Wireless Sensor Networks; *LSP 2020 291-295*

Arias-de-Reyna, E., *see* Santos, I., *LSP 2020 121-125*

Arslan, H., *see* Tusha, A., *LSP 2020 491-495*

Asai, T., *see* Liu, W., *LSP 2020 1145-1149*

Ascenso, J., *see* Javaheri, A., *LSP 2020 1350-1354*

Aslam, A., and Khalid, Z., Joint $\mathbb{SO}(3)$-Spectral Domain Filtering of Spherical Signals in the Presence of Anisotropic Noise; *LSP 2020 2109-2113*

Assuncao, P.A.A., *see* Thomaz, L.A., *LSP 2020 965-969*

Aubry, A., *see* Du, X., *LSP 2020 595-599*

Aubry, A., *see* Du, X., *LSP 2020 885-889*

Aubry, A., *see* Yang, J., *LSP 2020 875-879*

Aujol, J., *see* Traonmilin, Y., *LSP 2020 1110-1114*

Auli-Llinas, F., *see* de Cea-Dominguez, C., *LSP 2020 840-844*

B

Bai, B., *see* Wan, J., *LSP 2020 1994-1998*

Bai, J., *see* Wang, H., *LSP 2020 1300-1304*

Baitcheva, T., *see* Dimitrov, M., *LSP 2020 1904-1908*

Baitcheva, T., *see* Dimitrov, M., *LSP 2020 341-345*

Balestriero, R., *see* Cosentino, R., *LSP 2020 1115-1119*

Bampis, C.G., *see* Chen, L., *LSP 2020 2144-2148*

Bando, Y., *see* Nugraha, A.A., *LSP 2020 2173-2177*

Banerjee, P., *see* Roy, R., *LSP 2020 1465-1469*

Banerjee, S., *see* Slavakis, K., *LSP 2020 171-175*

Bao, F., *see* Liu, R., *LSP 2020 1470-1474*

Bao, T., Yang, H., and Hasna, M.O., Secrecy Outage Analysis Over Random Beamforming Transmission With User Scheduling: Collusion vs. Exclusion; *LSP 2020 1295-1299*

Bao, Y., *see* Yang, H., *LSP 2020 286-290*

Bar-Shalom, Y., *see* Ye, S., *LSP 2020 1765-1768*

Baraniuk, R.G., *see* Cosentino, R., *LSP 2020 1115-1119*

Baranwal, M., *see* Garg, K., *LSP 2020 1760-1764*

Barni, M., *see* Niu, Y., *LSP 2020 191-195*

Bartrina-Rapesta, J., *see* de Cea-Dominguez, C., *LSP 2020 840-844*

Bates, A.P., Daducci, A., Sadeghi, P., and Caruyer, E., A 4D Basis and Sampling Scheme for the Tensor Encoded Multi-Dimensional Diffusion MRI Signal; *LSP 2020 790-794*

Battistelli, G., *see* Gao, L., *LSP 2020 201-205*

Bayram, I., An Exploratory Method for Smooth/Transient Decomposition; *LSP 2020 890-894*

Beack, S., *see* Zhen, K., *LSP 2020 2159-2163*

Behnia, F., *see* Kazemi, S.A.R., *LSP 2020 1595-1599*

Behnia, F., *see* Kazemi, S.A.R., *LSP 2020 1200-1204*

Belem, F.C., Guimaraes, S.J.F., and Falcao, A.X., Superpixel Segmentation Using Dynamic and Iterative Spanning Forest; *LSP 2020 1440-1444*

Benesty, J., *see* Wang, X., *LSP 2020 356-360*

Bertrand, A., *see* Arce, F.d.l.H., *LSP 2020 291-295*

Bertrand, N.P., Charles, A.S., Lee, J., Dunn, P.B., and Rozell, C.J., Efficient Tracking of Sparse Signals via an Earth Mover's Distance Dynamics Regularizer; *LSP 2020 1120-1124*

Besson, O., Adaptive Detection Using Whitened Data When Some of the Training Samples Undergo Covariance Mismatch; *LSP 2020 795-799*

Besson, O., *see* Vincent, F., *LSP 2020 1989-1993*

Bestagini, P., *see* Mandelli, S., *LSP 2020 1285-1289*

Bhattacharjee, S.S., Kumar, K., and George, N.V., Nearest Kronecker Product Decomposition Based Generalized Maximum Correntropy and Generalized Hyperbolic Secant Robust Adaptive Filters; *LSP 2020 1525-1529*

Birkbeck, N., *see* Madhusudana, P.C., *LSP 2020 1809-1813*

Blum, R.S., *see* Li, Y., *LSP 2020 16-20*

Boissy, J., Giovannelli, J., and Minvielle, P., An Insight Into the Gibbs Sampler: Keep the Samples or Drop Them?; *LSP 2020 2069-2073*

Bora, P.K., *see* Das, V., *LSP 2020 1025-1029*

Bordin, C.J., *see* de Figueredo, C.G., *LSP 2020 715-719*

Boudraa, A., *see* Preaux, Y., *LSP 2020 635-639*

Bovik, A.C., *see* Madhusudana, P.C., *LSP 2020 1809-1813*

Bovik, A.C., *see* Tu, Z., *LSP 2020 1715-1719*

Bovik, A.C., *see* Chen, L., *LSP 2020 2144-2148*
Braca, P., *see* Gaglione, D., *LSP 2020 1710-1714*
Bregovic, R., *see* Gao, Y., *LSP 2020 1425-1429*
Brites, C., *see* Javaheri, A., *LSP 2020 1350-1354*
Brugnoli, E., Toscano, E., and Vetro, C., Iterative Reconstruction of Signals on Graph; *LSP 2020 76-80*
Bruno, M.G.S., *see* de Figueredo, C.G., *LSP 2020 715-719*
Bu, K., He, Y., Jing, X., and Han, J., Adversarial Transfer Learning for Deep Learning Based Automatic Modulation Classification; *LSP 2020 880-884*
Budhiraja, R., *see* Sharma, E., *LSP 2020 486-490*
Bueno, A.A., and Silva, M.T.M., Gram-Schmidt-Based Sparsification for Kernel Dictionary; *LSP 2020 1130-1134*
Bugallo, M.F., *see* El-Laham, Y., *LSP 2020 46-50*
Byun, J., and Moon, T., Learning Blind Pixelwise Affine Image Denoiser With Single Noisy Images; *LSP 2020 1105-1109*

C

Cai, D., *see* Zou, Q., *LSP 2020 1290-1294*
Cai, D., *see* Zou, Q., *LSP 2020 506-510*
Cai, X., *see* Yang, Y., *LSP 2020 256-260*
Cai, Y., *see* Hu, G., *LSP 2020 1879-1883*
Campisi, P., *see* Kuzu, R.S., *LSP 2020 1869-1873*
Can, D., *see* Hsiao, R., *LSP 2020 1889-1893*
Candan, C., Chebyshev Center Computation on Probability Simplex With α-Divergence Measure; *LSP 2020 1515-1519*
Cao, Y., *see* Wang, Y., *LSP 2020 955-959*
Capan, G., *see* Turkmen, A.C., *LSP 2020 1575-1579*
Cardone, M., *see* Jeong, M., *LSP 2020 1909-1913*
Cariow, A., *see* Majorkowska-Mech, D., *LSP 2020 1195-1199*
Caruyer, E., *see* Bates, A.P., *LSP 2020 790-794*
Castella, M., *see* Marmin, A., *LSP 2020 970-974*
Cattai, T., *see* Colonnese, S., *LSP 2020 1160-1164*
Cavalcante, C.C., *see* E-Asim, F., *LSP 2020 1420-1424*
Celebi, M.E., *see* Sadri, A.R., *LSP 2020 111-115*
Cemgil, A.T., *see* Turkmen, A.C., *LSP 2020 1575-1579*
Cesar, P., *see* Viola, I., *LSP 2020 1660-1664*
Chae, J., Kim, S., and Hong, S., Stacked Bayesian Matching Pursuit for One-Bit Compressed Sensing; *LSP 2020 550-554*
Chakraborty, A., *see* De, R., *LSP 2020 1090-1094*
Chalise, B.K., *see* Guruacharya, S., *LSP 2020 431-435*
Chan, S.C., *see* Chu, Y., *LSP 2020 995-999*
Chang, H., *see* Li, M., *LSP 2020 1794-1798*
Charge, P., *see* Fu, Z., *LSP 2020 1140-1144*
Charles, A.S., *see* Bertrand, N.P., *LSP 2020 1120-1124*
Charlish, A., *see* Jung, S., *LSP 2020 1005-1009*
Chaudhury, K.N., *see* Gavaskar, R.G., *LSP 2020 610-614*
Chavali, V., and Wage, K.E., Cross Term Decay in Multiplicative Processors; *LSP 2020 56-60*
Chen, B., Tseng, Y., and Yin, J., Gaussian-Adaptive Bilateral Filter; *LSP 2020 1670-1674*
Chen, B., *see* Huang, Y., *LSP 2020 700-704*
Chen, C., *see* Huang, Y., *LSP 2020 66-70*
Chen, D., *see* Huang, Y., *LSP 2020 66-70*
Chen, D., *see* Tian, L., *LSP 2020 1974-1978*
Chen, D., *see* Lin, X., *LSP 2020 605-609*
Chen, F., *see* Qin, X., *LSP 2020 1520-1524*
Chen, F., *see* Zhang, X., *LSP 2020 1590-1594*
Chen, H., *see* Guo, J., *LSP 2020 1365-1369*
Chen, H., *see* Shi, Z., *LSP 2020 1755-1759*
Chen, J., *see* Li, S., *LSP 2020 371-375*
Chen, J., *see* Gong, X., *LSP 2020 1685-1689*
Chen, J., *see* Guo, Y., *LSP 2020 1255-1259*
Chen, J., *see* Wang, X., *LSP 2020 356-360*
Chen, J., Wang, Z., Liang, C., and Lin, C., Identity-Aware Face Super-Resolution for Low-Resolution Face Recognition; *LSP 2020 645-649*
Chen, J., *see* Chen, J., *LSP 2020 645-649*
Chen, L., *see* Liu, W., *LSP 2020 1145-1149*
Chen, L., Bampis, C.G., Li, Z., and Bovik, A.C., Learning to Distort Images Using Generative Adversarial Networks; *LSP 2020 2144-2148*
Chen, M., *see* Zhao, C., *LSP 2020 1080-1084*
Chen, O.Y., *see* Phan, H., *LSP 2020 1700-1704*
Chen, Q., *see* Zhu, Y., *LSP 2020 980-984*
Chen, S., *see* Guo, J., *LSP 2020 1365-1369*
Chen, S., Li, Z., and Tang, Z., Relation R-CNN: A Graph Based Relation-Aware Network for Object Detection; *LSP 2020 1680-1684*
Chen, S., Fan, Z., and Yin, J., Pseudo Label Based on Multiple Clustering for Unsupervised Cross-Domain Person Re-Identification; *LSP 2020 1460-1464*
Chen, T., and Wang, S., An Efficient Nonlinear Dichotomous Coordinate Descent Adaptive Algorithm Based on Random Fourier Features; *LSP 2020 1804-1808*
Chen, T., Shi, L., and Guo, L., Gridless Direction of Arrival Estimation Exploiting Sparse Linear Array; *LSP 2020 1625-1629*
Chen, W., *see* Gong, X., *LSP 2020 1685-1689*
Chen, W., *see* Tang, P., *LSP 2020 151-155*
Chen, Y., *see* Purwanto, D., *LSP 2020 2188*
Chen, Y., *see* Tian, X., *LSP 2020 1180-1184*
Chen, Y., *see* Liu, C., *LSP 2020 1620-1624*
Chen, Y., Li, W., and Wang, Y., Robust Gaussian Approximate Fixed-Interval Smoother With Outlier Detection; *LSP 2020 1505-1509*
Chen, Y., An, P., Huang, X., Yang, C., Liu, D., and Wu, Q., Light Field Compression Using Global Multiplane Representation and Two-Step Prediction; *LSP 2020 1135-1139*
Chen, Y., *see* Zhou, W., *LSP 2020 800-804*
Chen, Z., *see* Zhao, L., *LSP 2020 1750-1754*
Chen, Z., *see* Hu, D., *LSP 2020 1979-1983*
Cheng, B., *see* Li, S., *LSP 2020 371-375*
Cheng, C., Emirov, N., and Sun, Q., Preconditioned Gradient Descent Algorithm for Inverse Filtering on Spatially Distributed Networks; *LSP 2020 1834-1838*
Cheng, P., *see* Lin, Y., *LSP 2020 1095-1099*
Cheng, Y., *see* Yang, Z., *LSP 2020 2084-2088*
Cheon, S.J., *see* Lee, J.Y., *LSP 2020 2004-2008*
Chernoguz, N., An Adaptive Kinematic Filter Extended by the Additionally Measured Velocity or Acceleration; *LSP 2020 1430-1434*
Chisci, L., *see* Gao, L., *LSP 2020 201-205*
Cho, D., *see* Yoon, D., *LSP 2020 2139-2143*
Cho, D., *see* Kim, Y., *LSP 2020 1675-1679*
Cho, H., *see* Shin, D., *LSP 2020 1065-1069*
Cho, N.I., *see* Jang, Y.I., *LSP 2020 860-864*
Cho, S.I., and Kang, S., Extrapolation-Based Video Retargeting With Backward Warping Using an Image-to-Warping Vector Generation Network; *LSP 2020 446-450*
Choi, B.J., *see* Lee, J.Y., *LSP 2020 2004-2008*
Choi, J.Y., and Lee, B., Combining of Multiple Deep Networks via Ensemble Generalization Loss, Based on MRI Images, for Alzheimer's Disease Classification; *LSP 2020 206-210*
Chong, D., *see* Wang, H., *LSP 2020 1560-1564*
Chou, G., and Wang, R., The Nested QR Code; *LSP 2020 1230-1234*
Chowdhury, A.S., *see* Roy, R., *LSP 2020 1465-1469*
Chu, Y., Chan, S.C., Zhou, Y., and Wu, M., A New Diffusion Variable Spatial Regularized QRRLS Algorithm; *LSP 2020 995-999*
Chung, K.J., Souza, R., and Frayne, R., Restoration of Lossy JPEG-Compressed Brain MR Images Using Cross-Domain Neural Networks; *LSP 2020 141-145*
Cichocki, A., *see* Sedighin, F., *LSP 2020 810-814*
Clarkson, I.V.L., Sirianunpiboon, S., and Howard, S.D., Frequency Estimation in Coherent, Periodic Pulse Trains; *LSP 2020 1415-1419*
Coelho, R., *see* Zucatelli, G., *LSP 2020 1-5*
Cohen, I., *see* Wang, X., *LSP 2020 356-360*
Colominas, M.A., Meignen, S., and Pham, D., Fully Adaptive Ridge Detection Based on STFT Phase Information; *LSP 2020 620-624*

Colonnese, S., Lorenzo, P.D., Cattai, T., Scarano, G., and Fallani, F.D.V., A Joint Markov Model for Communities, Connectivity and Signals Defined Over Graphs; *LSP 2020 1160-1164*
Cosentino, R., Balestriero, R., Baraniuk, R.G., and Aazhang, B., Universal Frame Thresholding; *LSP 2020 1115-1119*
Cotescu, M., Drugman, T., Huybrechts, G., Lorenzo-Trueba, J., and Moinet, A., Voice Conversion for Whispered Speech Synthesis; *LSP 2020 186-190*
Cozzolino, D., *see* Mandelli, S., *LSP 2020 1285-1289*
Cui, G., *see* Du, X., *LSP 2020 595-599*
Cui, G., *see* Du, X., *LSP 2020 885-889*
Cui, G., *see* Yang, J., *LSP 2020 875-879*
Cui, S., *see* Zhang, S., *LSP 2020 1655-1659*
Cui, W., *see* Zhou, J., *LSP 2020 1410-1414*

D

Daducci, A., *see* Bates, A.P., *LSP 2020 790-794*
Dandapat, S., *see* Prabhakararao, E., *LSP 2020 2029-2033*
Dandapat, S., *see* Das, V., *LSP 2020 1025-1029*
Dang, X., *see* Shah, M.H., *LSP 2020 106-110*
Danglot, L., *see* Mukherjee, S., *LSP 2020 1085-1089*
Das, V., Prabhakararao, E., Dandapat, S., and Bora, P.K., B-Scan Attentive CNN for the Classification of Retinal Optical Coherence Tomography Volumes; *LSP 2020 1025-1029*
Davies, M.E., *see* Feuillen, T., *LSP 2020 396-400*
De, R., Chakraborty, A., and Sarkar, R., Document Image Binarization Using Dual Discriminator Generative Adversarial Networks; *LSP 2020 1090-1094*
de Almeida, A.L.F., *see* E-Asim, F., *LSP 2020 1420-1424*
de Cea-Dominguez, C., Moure, J.C., Bartrina-Rapesta, J., and Auli-Llinas, F., Complexity Scalable Bitplane Image Coding With Parallel Coefficient Processing; *LSP 2020 840-844*
de Figueredo, C.G., Bordin, C.J., and Bruno, M.G.S., Cooperative Parameter Estimation on the Unit Sphere Using a Network of Diffusion Particle Filters; *LSP 2020 715-719*
De Handschutter, P., Gillis, N., Vandaele, A., and Siebert, X., Near-Convex Archetypal Analysis; *LSP 2020 81-85*
de Lamare, R.C., *see* Mohammadzadeh, S., *LSP 2020 845-849*
De Magistris, G., *see* Gaglione, D., *LSP 2020 1710-1714*
De Maio, A., *see* Du, X., *LSP 2020 595-599*
De Maio, A., *see* Du, X., *LSP 2020 885-889*
De Maio, A., *see* Yang, J., *LSP 2020 875-879*
de Oliveira, N.R., Medeiros, D.S.V., and Mattos, D.M.F., A Sensitive Stylistic Approach to Identify Fake News on Social Networking; *LSP 2020 1250-1254*
De Vos, M., *see* Phan, H., *LSP 2020 1700-1704*
Dedecius, K., and Zemlicka, R., Sequential Poisson Regression in Diffusion Networks; *LSP 2020 625-629*
Dekorsy, A., *see* Wang, S., *LSP 2020 2039-2043*
Demisse, G., *see* Ghorbel, E., *LSP 2020 580-584*
Deng, T., *see* Zhou, J., *LSP 2020 2054-2058*
Deshmukh, S., and Dubey, A., Improved Covariance Matrix Estimation With an Application in Portfolio Optimization; *LSP 2020 985-989*
Dey, S., *see* Sharma, E., *LSP 2020 486-490*
Diakoloukas, V., Lygerakis, F., Lagoudakis, M.G., and Kotti, M., Variational Denoising Autoencoders and Least-Squares Policy Iteration for Statistical Dialogue Managers; *LSP 2020 960-964*
Dimitrov, M., Baitcheva, T., and Nikolov, N., On the Generation of Long Binary Sequences With Record-Breaking PSL Values; *LSP 2020 1904-1908*
Dimitrov, M., Baitcheva, T., and Nikolov, N., Efficient Generation of Low Autocorrelation Binary Sequences; *LSP 2020 341-345*
Ding, F., *see* Zhou, Y., *LSP 2020 1600-1604*
Ding, J., *see* Zhang, J., *LSP 2020 276-280*
Ding, Q., Shen, L., Yang, H., Dong, X., and Xu, M., VRFCNN: Virtual Reference Frame Generation Network for Quality SHVC; *LSP 2020 2049-2053*
Ding, Z., *see* Zhang, S., *LSP 2020 1655-1659*
do Nascimento, T.P., and Salles, E.O.T., Multi-Frame Super-Resolution Combining Demons Registration and Regularized Bayesian Reconstruction; *LSP 2020 2009-2013*
Dogan, S., *see* Tusha, A., *LSP 2020 491-495*
Dong, J., *see* Peng, D., *LSP 2020 426-430*
Dong, L., *see* Wang, H., *LSP 2020 1300-1304*
Dong, W., *see* Liu, X., *LSP 2020 650-654*
Dong, W., *see* Ren, S., *LSP 2020 575-579*
Dong, X., *see* Ding, Q., *LSP 2020 2049-2053*
Dong, Y., *see* Wu, T., *LSP 2020 1635-1639*
Dou, Y., *see* Zhao, Y., *LSP 2020 1949-1953*
Drugman, T., *see* Cotescu, M., *LSP 2020 186-190*
Du, J., *see* Qi, J., *LSP 2020 1485-1489*
Du, Q., *see* Tang, P., *LSP 2020 151-155*
Du, X., *see* Song, Y., *LSP 2020 1844-1848*
Du, X., Aubry, A., De Maio, A., and Cui, G., Toeplitz Structured Covariance Matrix Estimation for Radar Applications; *LSP 2020 595-599*
Du, X., Aubry, A., De Maio, A., and Cui, G., Hidden Convexity in Robust Waveform and Receive Filter Bank Optimization Under Range Unambiguous Clutter; *LSP 2020 885-889*
Du, X., *see* Song, Y., *LSP 2020 2124-2128*
Duan, H., *see* Wang, P., *LSP 2020 905-909*
Duan, P., *see* Ning, X., *LSP 2020 1944-1948*
Duan, R., *see* Li, H., *LSP 2020 51-55*
Duan, Z., *see* Jiang, F., *LSP 2020 1859-1863*
Dubey, A., *see* Deshmukh, S., *LSP 2020 985-989*
Dudhane, A., Hambarde, P., Patil, P., and Murala, S., Deep Underwater Image Restoration and Beyond; *LSP 2020 675-679*
Dulek, B., Ozturk, C., and Gezici, S., Optimal Decision Rules for Simple Hypothesis Testing Under General Criterion Involving Error Probabilities; *LSP 2020 261-265*
Dunn, P.B., *see* Bertrand, N.P., *LSP 2020 1120-1124*
Dytso, A., *see* Jeong, M., *LSP 2020 1909-1913*

E

E-Asim, F., de Almeida, A.L.F., Haardt, M., Cavalcante, C.C., and Nossek, J.A., Rank-One Detector for Kronecker-Structured Constant Modulus Constellations; *LSP 2020 1420-1424*
El-Laham, Y., and Bugallo, M.F., Stochastic Gradient Population Monte Carlo; *LSP 2020 46-50*
Elhilali, M., *see* Park, S., *LSP 2020 640-644*
Ellis, D.P.W., *see* Fonseca, E., *LSP 2020 1235-1239*
Emirov, N., *see* Cheng, C., *LSP 2020 1834-1838*
Emura, S., Sawada, H., Araki, S., and Harada, N., Multi-Delay Sparse Approach to Residual Crosstalk Reduction for Blind Source Separation; *LSP 2020 1630-1634*
Engelbrecht, H.A., *see* Last, P., *LSP 2020 421-425*
Erdogmus, D., *see* Han, M., *LSP 2020 1565-1569*
Essl, G., Topological IIR Filters Over Simplicial Topologies via Sheaves; *LSP 2020 1215-1219*

F

Fabry, J., Kuhl, S., and Jax, P., On the Steady State Performance of the Kalman Filter Applied to Acoustical Systems; *LSP 2020 1854-1858*
Falcao, A.X., *see* Belem, F.C., *LSP 2020 1440-1444*
Fallani, F.D.V., *see* Colonnese, S., *LSP 2020 1160-1164*
Fan, G., *see* Pan, Z., *LSP 2020 915-919*
Fan, X., *see* Ma, L., *LSP 2020 1210-1214*
Fan, X., *see* Jia, L., *LSP 2020 1220-1224*
Fan, Z., *see* Chen, S., *LSP 2020 1460-1464*
Fang, J., *see* Wang, P., *LSP 2020 905-909*
Fang, M., Han, Y., and Wen, J., Genetic Algorithm Based Rate Control for AV1; *LSP 2020 520-524*
Fang, W., *see* Purwanto, D., *LSP 2020 2188*
Faria, S.M.M.d., *see* Thomaz, L.A., *LSP 2020 965-969*

Farokhi, F., Privacy-Preserving Constrained Quadratic Optimization With Fisher Information; *LSP 2020 545-549*
Feng, D., *see* Hu, H., *LSP 2020 2034-2038*
Feng, G., *see* Zhou, L., *LSP 2020 166-170*
Feng, J., *see* Zhao, Y., *LSP 2020 1949-1953*
Feng, P., *see* Xu, D., *LSP 2020 1435-1439*
Fernandez-Menduina, S., and Perez-Gonzalez, F., Temporal Localization of Non-Static Digital Videos Using the Electrical Network Frequency; *LSP 2020 745-749*
Feuillen, T., Davies, M.E., Vandendorpe, L., and Jacques, L., (ℓ_1,ℓ_2)-RIP and Projected Back-Projection Reconstruction for Phase-Only Measurements; *LSP 2020 396-400*
Fevotte, C., *see* Zhang, S., *LSP 2020 1555-1559*
Fevotte, C., *see* Gouvert, O., *LSP 2020 815-819*
Fonseca, E., Hershey, S., Plakal, M., Ellis, D.P.W., Jansen, A., and Moore, R.C., Addressing Missing Labels in Large-Scale Sound Event Recognition Using a Teacher-Student Framework With Loss Masking; *LSP 2020 1235-1239*
Fontaine, M., *see* Nugraha, A.A., *LSP 2020 2173-2177*
Frayne, R., *see* Chung, K.J., *LSP 2020 141-145*
Fridrich, J., *see* Yousfi, Y., *LSP 2020 830-834*
Fu, K., *see* Lin, Y., *LSP 2020 1095-1099*
Fu, S., Liao, C., and Tsao, Y., Learning With Learned Loss Function: Speech Enhancement With Quality-Net to Improve Perceptual Evaluation of Speech Quality; *LSP 2020 26-30*
Fu, X., *see* Ibrahim, S., *LSP 2020 1125-1129*
Fu, X., *see* Zhu, Y., *LSP 2020 1999-2003*
Fu, Y., *see* Zheng, Z., *LSP 2020 925-929*
Fu, Z., Charge, P., and Wang, Y., A Virtual Nested MIMO Array Exploiting Fourth Order Difference Coarray; *LSP 2020 1140-1144*

G

Gaglione, D., Soldi, G., Braca, P., De Magistris, G., Meyer, F., and Hlawatsch, F., Classification-Aided Multitarget Tracking Using the Sum-Product Algorithm; *LSP 2020 1710-1714*
Gandhi, T.K., *see* Gautam, S., *LSP 2020 1695-1699*
Gao, E., *see* Pan, Z., *LSP 2020 915-919*
Gao, F., *see* Yang, Y., *LSP 2020 91-95*
Gao, G., *see* Liu, R., *LSP 2020 1470-1474*
Gao, J., *see* Li, Z., *LSP 2020 1690-1694*
Gao, L., and Guan, L., A Complete Discriminative Tensor Representation Learning for Two-Dimensional Correlation Analysis; *LSP 2020 1894-1898*
Gao, L., Battistelli, G., and Chisci, L., Multiobject Fusion With Minimum Information Loss; *LSP 2020 201-205*
Gao, R., Tronarp, F., and Sarkka, S., Variable Splitting Methods for Constrained State Estimation in Partially Observed Markov Processes; *LSP 2020 1305-1309*
Gao, X., *see* Tian, X., *LSP 2020 1180-1184*
Gao, X., Luo, J., Li, K., and Xie, Z., Hierarchical RANSAC-Based Rotation Averaging; *LSP 2020 1874-1878*
Gao, X., *see* Yu, H., *LSP 2020 560-564*
Gao, X., *see* Pan, Z., *LSP 2020 915-919*
Gao, Y., Bregovic, R., and Gotchev, A., Self-Supervised Light Field Reconstruction Using Shearlet Transform and Cycle Consistency; *LSP 2020 1425-1429*
Garcia-Fernandez, A.F., *see* Hostettler, R., *LSP 2020 211-215*
Garg, B., *see* Satti, P., *LSP 2020 1475-1479*
Garg, K., and Baranwal, M., CAPPA: Continuous-Time Accelerated Proximal Point Algorithm for Sparse Recovery; *LSP 2020 1760-1764*
Garner, P.N., *see* Antonello, N., *LSP 2020 1070-1074*
Garudadri, H., *see* Lee, C., *LSP 2020 1000-1004*
Gautam, S., Gandhi, T.K., and Panigrahi, B., An Improved Air-Light Estimation Scheme for Single Haze Images Using Color Constancy Prior; *LSP 2020 1695-1699*
Gavaskar, R.G., and Chaudhury, K.N., Plug-and-Play ISTA Converges With Kernel Denoisers; *LSP 2020 610-614*
Gazor, S., *see* Moghadasian, S.S., *LSP 2020 6-10*
Ge, Y., *see* Qin, X., *LSP 2020 1520-1524*
George, N.V., *see* Bhattacharjee, S.S., *LSP 2020 1525-1529*
Gezici, S., *see* Goken, C., *LSP 2020 281-285*
Gezici, S., *see* Dulek, B., *LSP 2020 261-265*
Gfeller, B., *see* Tagliasacchi, M., *LSP 2020 600-604*
Ghorbel, E., Demisse, G., Aouada, D., and Ottersten, B., Fast Adaptive Reparametrization (FAR) With Application to Human Action Recognition; *LSP 2020 580-584*
Ghosh, D., *see* Muralishankar, R., *LSP 2020 1240-1244*
Ghosh, P.K., *see* MV, A.R., *LSP 2020 1170-1174*
Ghoshal, A., *see* Hsiao, R., *LSP 2020 1889-1893*
Giampouras, P.V., *see* Rontogiannis, A.A., *LSP 2020 1340-1344*
Giannakis, G.B., *see* Gimenez-Febrer, P., *LSP 2020 326-330*
Gillis, N., *see* De Handschutter, P., *LSP 2020 81-85*
Gimenez-Febrer, P., Pages-Zamora, A., and Giannakis, G.B., Generalization Error Bounds for Kernel Matrix Completion and Extrapolation; *LSP 2020 326-330*
Giovannelli, J., *see* Boissy, J., *LSP 2020 2069-2073*
Godsill, S., *see* Ito, N., *LSP 2020 1075-1079*
Gogineni, V.C., Talebi, S.P., Werner, S., and Mandic, D.P., Fractional-Order Correntropy Adaptive Filters for Distributed Processing of α-Stable Signals; *LSP 2020 1884-1888*
Goken, C., and Gezici, S., Optimal Parameter Design for Estimation Theoretic Secure Broadcast; *LSP 2020 281-285*
Gomes, J., *see* Soares, C., *LSP 2020 670-674*
Gomez-Gil, P., *see* Jimenez-Guarneros, M., *LSP 2020 750-754*
Gong, A., *see* Huang, L., *LSP 2020 1585-1589*
Gong, X., Chen, W., Chen, J., and Ai, B., Tensor Denoising Using Low-Rank Tensor Train Decomposition; *LSP 2020 1685-1689*
Gong, Y., Yang, J., and Poellabauer, C., Detecting Replay Attacks Using Multi-Channel Audio: A Neural Network-Based Method; *LSP 2020 920-924*
Gonzalez-Gomez, C., *see* Mukherjee, S., *LSP 2020 1085-1089*
Goo, J., *see* Lim, H., *LSP 2020 126-130*
Gotchev, A., *see* Gao, Y., *LSP 2020 1425-1429*
Gou, C., *see* Shen, T., *LSP 2020 196-200*
Gouvert, O., Oberlin, T., and Fevotte, C., Negative Binomial Matrix Factorization; *LSP 2020 815-819*
Gu, S., Hou, J., Zeng, H., and Yuan, H., 3D Point Cloud Attribute Compression via Graph Prediction; *LSP 2020 176-180*
Guan, J., *see* Xu, D., *LSP 2020 1435-1439*
Guan, L., *see* Gao, L., *LSP 2020 1894-1898*
Guimaraes, S.J.F., *see* Belem, F.C., *LSP 2020 1440-1444*
Guitian, J.A.I., *see* Yang, F., *LSP 2020 331-335*
Guo, J., Zhuang, L., and Zheng, P., Smooth Incremental Learning of Correlation Filters for Visual Tracking; *LSP 2020 336-340*
Guo, J., Chen, H., and Chen, S., Improved Kernel Recursive Least Squares Algorithm Based Online Prediction for Nonstationary Time Series; *LSP 2020 1365-1369*
Guo, L., *see* Chen, T., *LSP 2020 1625-1629*
Guo, Q., *see* Yu, Z., *LSP 2020 2168-2172*
Guo, Y., Luo, Y., He, Z., Huang, J., and Chen, J., Hierarchical Neural Architecture Search for Single Image Super-Resolution; *LSP 2020 1255-1259*
Guo, Y., Zhang, Z., Huang, Y., and Zhang, P., DOA Estimation Method Based on Cascaded Neural Network for Two Closely Spaced Sources; *LSP 2020 570-574*
Guo, Y., *see* Ying, X., *LSP 2020 1500-1504*
Guo, Y., *see* Ying, X., *LSP 2020 496-500*
Gupta, N., *see* Sharma, E., *LSP 2020 486-490*
Guruacharya, S., Chalise, B.K., and Himed, B., Energy Distribution of Multiple Target Signal With Application to Target Counting; *LSP 2020 431-435*
Gurugopinath, S., *see* Muralishankar, R., *LSP 2020 1240-1244*

H

Haardt, M., *see* E-Asim, F., *LSP 2020 1420-1424*
Habets, E.A.P., *see* Mack, W., *LSP 2020 61-65*
Hamamoto, T., *see* Sugawara, M., *LSP 2020 765-769*
Hambarde, P., *see* Dudhane, A., *LSP 2020 675-679*

Han, D.K., *see* Lee, Y., *LSP 2020 131-135*
Han, D.K., *see* Park, S., *LSP 2020 640-644*
Han, H., *see* Zhang, S., *LSP 2020 1345-1349*
Han, J., *see* Bu, K., *LSP 2020 880-884*
Han, J., Li, Y., and Wang, S., Adaptively Leverage Unlabeled Tracklets Based on Part Attention Model for Few-Example Re-ID; *LSP 2020 2074-2078*
Han, J., *see* Zhang, L., *LSP 2020 950-954*
Han, K.J., *see* Park, T.J., *LSP 2020 381-385*
Han, M., Ozdenizci, O., Wang, Y., Koike-Akino, T., and Erdogmus, D., Disentangled Adversarial Autoencoder for Subject-Invariant Physiological Feature Extraction; *LSP 2020 1565-1569*
Han, S., *see* Xu, S., *LSP 2020 216-220*
Han, Y., *see* Fang, M., *LSP 2020 520-524*
Hanbay, K., *see* Alpaslan, N., *LSP 2020 660-664*
Hangai, S., *see* Sugawara, M., *LSP 2020 765-769*
Hao, W., Pang, S., Zhu, J., and Li, Y., Self-Weighting and Hypergraph Regularization for Multi-view Spectral Clustering; *LSP 2020 1325-1329*
Harada, N., *see* Emura, S., *LSP 2020 1630-1634*
Hasna, M.O., *see* Bao, T., *LSP 2020 1295-1299*
Haupt, J., *see* Kumar, A., *LSP 2020 2114-2118*
He, D., *see* Tian, L., *LSP 2020 1974-1978*
He, J., Li, L., and Shu, T., Localization of Near-Field Sources for Exact Source-Sensor Spatial Geometry; *LSP 2020 1040-1044*
He, L., *see* Xu, S., *LSP 2020 216-220*
He, P., He, S., Yang, Z., and Huang, P., An Off-Grid STAP Algorithm Based On Local Mesh Splitting With Bistatic Radar System; *LSP 2020 1355-1359*
He, Q., *see* Li, Y., *LSP 2020 16-20*
He, S., *see* He, P., *LSP 2020 1355-1359*
He, Y., *see* Bu, K., *LSP 2020 880-884*
He, Z., *see* Guo, Y., *LSP 2020 1255-1259*
Heinecke, A., Ho, J., and Hwang, W., Refinement and Universal Approximation via Sparsely Connected ReLU Convolution Nets; *LSP 2020 1175-1179*
Herranz, L., *see* Yang, F., *LSP 2020 331-335*
Hershey, S., *see* Fonseca, E., *LSP 2020 1235-1239*
Hezave, H., Javadzadeh, M., and Kahaei, M.H., Sparse Signal Reconstruction Using Blind Super-Resolution With Arbitrary Sampling; *LSP 2020 615-619*
Himed, B., *see* Guruacharya, S., *LSP 2020 431-435*
Hirakawa, K., *see* Lee, Y., *LSP 2020 461-465*
Hlawatsch, F., *see* Gaglione, D., *LSP 2020 1710-1714*
Ho, J., *see* Heinecke, A., *LSP 2020 1175-1179*
HoangVan, X., NguyenQuang, S., and Pereira, F., Versatile Video Coding Based Quality Scalability With Joint Layer Reference; *LSP 2020 2079-2083*
Hong, D., *see* Su, Y., *LSP 2020 740-744*
Hong, K., *see* Zhou, J., *LSP 2020 2054-2058*
Hong, S., *see* Chae, J., *LSP 2020 550-554*
Hong, S., *see* Kim, Y., *LSP 2020 1675-1679*
Hong, S., and Ryu, J., Unsupervised Face Domain Transfer for Low-Resolution Face Recognition; *LSP 2020 156-160*
Hong, T., Yavneh, I., and Zibulevsky, M., Solving RED With Weighted Proximal Methods; *LSP 2020 501-505*
Hong, Y., *see* Zhang, J., *LSP 2020 1605-1609*
Hostettler, R., Tronarp, F., Garcia-Fernandez, A.F., and Sarkka, S., Importance Densities for Particle Filtering Using Iterated Conditional Expectations; *LSP 2020 211-215*
Hou, J., *see* Gu, S., *LSP 2020 176-180*
Hou, J., *see* Zhang, F., *LSP 2020 540-544*
Hou, J., *see* Peng, Z., *LSP 2020 1720-1724*
Hou, X., *see* Liu, W., *LSP 2020 1145-1149*
Hou, Y., *see* Kuang, C., *LSP 2020 1445-1449*
Howard, S.D., *see* Clarkson, I.V.L., *LSP 2020 1415-1419*
Hsiao, R., Can, D., Ng, T., Travadi, R., and Ghoshal, A., Online Automatic Speech Recognition With Listen, Attend and Spell Model; *LSP 2020 1889-1893*
Hsieh, S., *see* Tai, C., *LSP 2020 2059-2063*
Hsieh, T., Wang, H., Lu, X., and Tsao, Y., WaveCRN: An Efficient Convolutional Recurrent Neural Network for End-to-End Speech Enhancement; *LSP 2020 2149-2153*
Hu, B., *see* Huang, Y., *LSP 2020 685-689*
Hu, D., Chen, Z., and Yin, F., Analytical Geometry Calibration for Acoustic Transceiver Arrays; *LSP 2020 1979-1983*
Hu, G., Cai, Y., and Zhang, Y., Legitimate Surveillance via Jamming in Multichannel Relaying System; *LSP 2020 1879-1883*
Hu, H., Feng, D., and Yang, F., A Promising Nonlinear Dimensionality Reduction Method: Kernel-Based Within Class Collaborative Preserving Discriminant Projection; *LSP 2020 2034-2038*
Hu, W., *see* Li, Z., *LSP 2020 1690-1694*
Hu, Y.H., *see* Qiu, J., *LSP 2020 855-859*
Hua, F., Nassif, R., Richard, C., Wang, H., and Sayed, A.H., Diffusion LMS With Communication Delays: Stability and Performance Analysis; *LSP 2020 730-734*
Hua, G., Xiang, Y., and Zhang, L.Y., Informed Histogram-Based Watermarking; *LSP 2020 236-240*
Hua, G., Over-Complete-Dictionary-Based Improved Spread Spectrum Watermarking Security; *LSP 2020 770-774*
Huang, B., *see* Liao, T., *LSP 2020 1020-1024*
Huang, J., *see* Guo, Y., *LSP 2020 1255-1259*
Huang, L., Song, K., Gong, A., Liu, C., and Yan, Y., RGB-T Saliency Detection via Low-Rank Tensor Learning and Unified Collaborative Ranking; *LSP 2020 1585-1589*
Huang, L., *see* Ke, X., *LSP 2020 96-100*
Huang, L., Yang, Q., Wu, J., Huang, Y., Wu, Q., and Xu, J., Generated Data With Sparse Regularized Multi-Pseudo Label for Person Re-Identification; *LSP 2020 391-395*
Huang, M., Liu, Z., Li, G., Zhou, X., and Le Meur, O., FANet: Features Adaptation Network for 360° Omnidirectional Salient Object Detection; *LSP 2020 1819-1823*
Huang, P., *see* He, P., *LSP 2020 1355-1359*
Huang, R., Xing, Y., and Zou, Y., Triple-Complementary Network for RGB-D Salient Object Detection; *LSP 2020 775-779*
Huang, S., Pun, Y., So, A.M., and Yang, K., A Provably Convergent Projected Gradient-Type Algorithm for TDOA-Based Geolocation Under the Quasi-Parabolic Ionosphere Model; *LSP 2020 1335-1339*
Huang, S., Lin, J., and Huangfu, L., Class-Prototype Discriminative Network for Generalized Zero-Shot Learning; *LSP 2020 301-305*
Huang, X., *see* Meng, C., *LSP 2020 525-529*
Huang, X., *see* Zhang, T., *LSP 2020 361-365*
Huang, X., Xu, S., Zhang, C., and Zhang, J., Robust CP Tensor Factorization With Skew Noise; *LSP 2020 785-789*
Huang, X., *see* Chen, Y., *LSP 2020 1135-1139*
Huang, Y., Tang, Z., Chen, D., Su, K., and Chen, C., Batching Soft IoU for Training Semantic Segmentation Networks; *LSP 2020 66-70*
Huang, Y., *see* Xu, X., *LSP 2020 436-440*
Huang, Y., *see* Zhang, C., *LSP 2020 1774-1778*
Huang, Y., Jia, G., Chen, B., and Zhang, Y., A New Robust Kalman Filter With Adaptive Estimate of Time-Varying Measurement Bias; *LSP 2020 700-704*
Huang, Y., *see* Guo, Y., *LSP 2020 570-574*
Huang, Y., *see* Quan, Y., *LSP 2020 116-120*
Huang, Y., *see* Yang, H., *LSP 2020 286-290*
Huang, Y., *see* Huang, L., *LSP 2020 391-395*
Huang, Y., *see* Zheng, Z., *LSP 2020 585-589*
Huang, Y., *see* Li, J., *LSP 2020 1969-1973*
Huang, Y., *see* Zhang, C., *LSP 2020 271-275*
Huang, Y., Li, L., Zhu, H., and Hu, B., Blind Quality Index of Depth Images Based on Structural Statistics for View Synthesis; *LSP 2020 685-689*
Huang, Z., *see* Sun, L., *LSP 2020 471-475*
Huangfu, L., *see* Huang, S., *LSP 2020 301-305*
Hung, J., *see* Yu, C., *LSP 2020 1035-1039*
Hung, K., *see* Yu, C., *LSP 2020 1035-1039*
Huybrechts, G., *see* Cotescu, M., *LSP 2020 186-190*
Hwang, W., *see* Heinecke, A., *LSP 2020 1175-1179*

I

Ibrahim, S., Fu, X., and Li, X., On Recoverability of Randomly Compressed Tensors With Low CP Rank; *LSP 2020 1125-1129*

Ito, N., and Godsill, S., A Multi-Target Track-Before-Detect Particle Filter Using Superpositional Data in Non-Gaussian Noise; *LSP 2020 1075-1079*

J

Jacques, L., *see* Feuillen, T., *LSP 2020 396-400*

Jang, Y.I., Kim, Y., and Cho, N.I., Dual Path Denoising Network for Real Photographic Noise; *LSP 2020 860-864*

Jansen, A., *see* Fonseca, E., *LSP 2020 1235-1239*

Javadzadeh, M., *see* Hezave, H., *LSP 2020 615-619*

Javaheri, A., Brites, C., Pereira, F., and Ascenso, J., Mahalanobis Based Point to Distribution Metric for Point Cloud Geometry Quality Evaluation; *LSP 2020 1350-1354*

Jax, P., *see* Fabry, J., *LSP 2020 1854-1858*

Jayendran, A., *see* Mishra, D., *LSP 2020 900-904*

Jeong, J.J., A Robust Affine Projection Algorithm Against Impulsive Noise; *LSP 2020 1530-1534*

Jeong, M., Dytso, A., and Cardone, M., Gradient of Error Probability of*M*-ary Hypothesis Testing Problems Under Multivariate Gaussian Noise; *LSP 2020 1909-1913*

Jezierska, A., *see* Marmin, A., *LSP 2020 970-974*

Ji, T., *see* Wang, R., *LSP 2020 1155-1159*

Jia, G., *see* Huang, Y., *LSP 2020 700-704*

Jia, K., *see* Jia, L., *LSP 2020 1220-1224*

Jia, L., *see* Zhang, T., *LSP 2020 361-365*

Jia, L., Jia, K., and Fan, X., Adaptive Lagrangian Multiplier for Quantization Parameter Cascading in HEVC Hierarchical Coding; *LSP 2020 1220-1224*

Jia, S., *see* Wu, T., *LSP 2020 1635-1639*

Jia, X., *see* Wu, D., *LSP 2020 1814-1818*

Jia, Y., *see* Peng, Z., *LSP 2020 1720-1724*

Jian, Z., *see* Ren, J., *LSP 2020 1929-1933*

Jiang, A., *see* Peng, L., *LSP 2020 406-410*

Jiang, F., and Duan, Z., Speaker Attractor Network: Generalizing Speech Separation to Unseen Numbers of Sources; *LSP 2020 1859-1863*

Jiang, G., *see* Zhang, X., *LSP 2020 1590-1594*

Jiang, G., Mao, X., and Liu, Y., Underdetermined DOA Estimation via Covariance Matrix Completion for Nested Sparse Circular Array in Nonuniform Noise; *LSP 2020 1824-1828*

Jiang, H., *see* Tang, W., *LSP 2020 366-370*

Jiang, J., Tay, D.B., Sun, Q., and Ouyang, S., Design of Nonsubsampled Graph Filter Banks via Lifting Schemes; *LSP 2020 441-445*

Jiang, P., Wan, B., Wang, Q., and Wu, J., Fast and Efficient Facial Expression Recognition Using a Gabor Convolutional Network; *LSP 2020 1954-1958*

Jiang, P., *see* Wu, Z., *LSP 2020 1205-1209*

Jiang, P., Liu, G., Wang, Q., and Wu, J., Accurate and Reliable Facial Expression Recognition Using Advanced Softmax Loss With Fixed Weights; *LSP 2020 725-729*

Jiang, X., and Wu, S., A Novel Parameter Estimation for Polynomial Phase Signals Using the Spectrum Phase; *LSP 2020 1919-1923*

Jiang, X., *see* Lim, K., *LSP 2020 231-235*

Jimenez-Guarneros, M., and Gomez-Gil, P., Custom Domain Adaptation: A New Method for Cross-Subject, EEG-Based Cognitive Load Recognition; *LSP 2020 750-754*

Jin, D., *see* Ma, L., *LSP 2020 1210-1214*

Jin, L., *see* Shi, J., *LSP 2020 1165-1169*

Jin, R., Lin, G., Wen, C., and Wang, J., Motion Context Network for Weakly Supervised Object Detection in Videos; *LSP 2020 1864-1868*

Jin, S., *see* Wang, C., *LSP 2020 780-784*

Jin, X., *see* Zhang, S., *LSP 2020 1345-1349*

Jing, P., *see* Su, Y., *LSP 2020 740-744*

Jing, X., *see* Bu, K., *LSP 2020 880-884*

Jing, Y., *see* Zhang, C., *LSP 2020 1774-1778*

Jing, Y., *see* Zhang, C., *LSP 2020 271-275*

Jung, A., and Nardelli, P.H.J., An Information-Theoretic Approach to Personalized Explainable Machine Learning; *LSP 2020 825-829*

Jung, A., On the Duality Between Network Flows and Network Lasso; *LSP 2020 940-944*

Jung, C., *see* Kim, J., *LSP 2020 1190-1194*

Jung, S., *see* Yeo, Y., *LSP 2020 2099-2103*

Jung, S., Schlangen, I., and Charlish, A., A Mnemonic Kalman Filter for Non-Linear Systems With Extensive Temporal Dependencies; *LSP 2020 1005-1009*

Jung, Y.G., Low, C.Y., Park, J., and Teoh, A.B.J., Periocular Recognition in the Wild With Generalized Label Smoothing Regularization; *LSP 2020 1455-1459*

K

Kahaei, M.H., *see* Hezave, H., *LSP 2020 615-619*

Kamalabadi, F., *see* Naumer, H., *LSP 2020 2154-2158*

Kamilov, U.S., *see* Song, G., *LSP 2020 451-455*

Kamilov, U.S., *see* Xu, X., *LSP 2020 1280-1284*

Kamper, H., *see* Last, P., *LSP 2020 421-425*

Kang, S., *see* Cho, S.I., *LSP 2020 446-450*

Kang, X., *see* Ma, J., *LSP 2020 930-934*

Kazemi, S.A.R., Amiri, R., and Behnia, F., An Approximate ML Estimator for Moving Target Localization in Distributed MIMO Radars; *LSP 2020 1595-1599*

Kazemi, S.A.R., Amiri, R., and Behnia, F., Efficient Joint Localization and Synchronization in Distributed MIMO Radars; *LSP 2020 1200-1204*

Ke, X., Wang, Y., and Huang, L., Three-Dimensional Rigid Body Localization in the Presence of Clock Offsets; *LSP 2020 96-100*

Kekempanos, L., *see* Varsi, A., *LSP 2020 1570-1574*

Khalid, Z., *see* Aslam, A., *LSP 2020 2109-2113*

Kheirati Roonizi, A., A New Approach to Gaussian Signal Smoothing: Application to ECG Components Separation; *LSP 2020 1924-1928*

Khoa Phan, T.D., and Yen Tran, T.H., A Space-Variant Nonlinear Algorithm for Denoising Omnidirectional Images Corrupted by Poisson Noise; *LSP 2020 535-539*

Kim, C., *see* Kim, J., *LSP 2020 1190-1194*

Kim, E., *see* Kim, J., *LSP 2020 2019-2023*

Kim, G., *see* Kim, H., *LSP 2020 516-519*

Kim, H., *see* Lim, H., *LSP 2020 126-130*

Kim, H., *see* Lim, H., *LSP 2020 1769-1773*

Kim, H., *see* Lim, J., *LSP 2020 36-40*

Kim, H., and Kim, G., Single Image Super-Resolution Using Fire Modules With Asymmetric Configuration; *LSP 2020 516-519*

Kim, J., Jung, C., and Kim, C., Dual Back-Projection-Based Internal Learning for Blind Super-Resolution; *LSP 2020 1190-1194*

Kim, J., Lee, Y., and Kim, E., Accelerating RNN Transducer Inference via Adaptive Expansion Search; *LSP 2020 2019-2023*

Kim, J., *see* Lim, S., *LSP 2020 835-839*

Kim, J., and Kim, W., Attentive Feedback Feature Pyramid Network for Shadow Detection; *LSP 2020 1964-1968*

Kim, K., *see* Kim, S., *LSP 2020 2183-2187*

Kim, M., *see* Zhen, K., *LSP 2020 2159-2163*

Kim, N.S., *see* Lee, J.Y., *LSP 2020 2004-2008*

Kim, S., *see* Chae, J., *LSP 2020 550-554*

Kim, S., Kim, K., and Ahn, C.K., Nonlinear Signal-Filtering Technique With Real-Time Gain Booster for Feedback System Applications; *LSP 2020 2183-2187*

Kim, S., *see* Yeo, Y., *LSP 2020 530-534*

Kim, W., *see* Lim, S., *LSP 2020 835-839*

Kim, W., *see* Kim, J., *LSP 2020 1964-1968*

Kim, Y., *see* Jang, Y.I., *LSP 2020 860-864*

Kim, Y., *see* Lim, H., *LSP 2020 126-130*

Kim, Y., Cho, D., and Hong, S., Towards Privacy-Preserving Domain Adaptation; *LSP 2020 1675-1679*

Kim, Y., *see* Lim, H., *LSP 2020 1769-1773*

Kishiyama, Y., *see* Liu, W., *LSP 2020 1145-1149*

Ko, H., *see* Lee, Y., *LSP 2020 131-135*
Ko, H., *see* Park, S., *LSP 2020 640-644*
Ko, S., *see* Yeo, Y., *LSP 2020 2099-2103*
Ko, S., *see* Yeo, Y., *LSP 2020 530-534*
Koch, P., *see* Phan, H., *LSP 2020 1700-1704*
Koike-Akino, T., *see* Han, M., *LSP 2020 1565-1569*
Kong, Y., *see* Zhang, Y., *LSP 2020 760-764*
Kong, Y., *see* Liu, Z., *LSP 2020 1745-1749*
Koochakzadeh, A., and Pal, P., Compressed Arrays and Hybrid Channel Sensing: A Cramér-Rao Bound Based Analysis; *LSP 2020 1395-1399*
Kornilov, M.V., Maximum Likelihood Estimation for Disk Image Parameters; *LSP 2020 1480-1484*
Kotti, M., *see* Diakoloukas, V., *LSP 2020 960-964*
Koutroumbas, K.D., *see* Rontogiannis, A.A., *LSP 2020 1340-1344*
Kuang, C., Wang, C., Wen, B., Hou, Y., and Lai, Y., An Improved CA-CFAR Method for Ship Target Detection in Strong Clutter Using UHF Radar; *LSP 2020 1445-1449*
Kuhl, S., *see* Fabry, J., *LSP 2020 1854-1858*
Kukrer, O., *see* Mohammadzadeh, S., *LSP 2020 845-849*
Kulkarni, P., and Vaidyanathan, P.P., On the Zeros of Ramanujan Filters; *LSP 2020 735-739*
Kumar, A., and Haupt, J., Convexifying Sparse Interpolation With Infinitely Wide Neural Networks: An Atomic Norm Approach; *LSP 2020 2114-2118*
Kumar, K., *see* Bhattacharjee, S.S., *LSP 2020 1525-1529*
Kumar, M., *see* Park, T.J., *LSP 2020 381-385*
Kumar, S., and Singh, S.K., Occluded Thermal Face Recognition Using Bag of CNN (*Bo*CNN); *LSP 2020 975-979*
Kuzu, R.S., Maiorana, E., and Campisi, P., Vein-Based Biometric Verification Using Densely-Connected Convolutional Autoencoder; *LSP 2020 1869-1873*
Kyochi, S., *see* Suzuki, T., *LSP 2020 466-470*

L

Labeau, F., *see* Lin, X., *LSP 2020 1934-1938*
Lagache, T., *see* Mukherjee, S., *LSP 2020 1085-1089*
Lagoudakis, M.G., *see* Diakoloukas, V., *LSP 2020 960-964*
Lai, H., and Xu, W., Statistical Properties of Kendall's Tau Under Contaminated Gaussian Model With Applications in Random Signal Detection; *LSP 2020 655-659*
Lai, Y., *see* Kuang, C., *LSP 2020 1445-1449*
Lam, K., *see* Liu, T., *LSP 2020 1320-1324*
Last, P., Engelbrecht, H.A., and Kamper, H., Unsupervised Feature Learning for Speech Using Correspondence and Siamese Networks; *LSP 2020 421-425*
Laurent, N., and Meignen, S., A Novel Time-Frequency Technique for Mode Retrieval Based on Linear Chirp Approximation; *LSP 2020 935-939*
Le, K.N., Multivariate Correlated Rayleigh Fading With MRC and Applications to Wireless Secrecy; *LSP 2020 1010-1014*
Le Meur, O., *see* Huang, M., *LSP 2020 1819-1823*
Leclaire, A., *see* Traonmilin, Y., *LSP 2020 1110-1114*
Lee, B., *see* Choi, J.Y., *LSP 2020 206-210*
Lee, C., *see* Qi, J., *LSP 2020 1485-1489*
Lee, C., Rao, B.D., and Garudadri, H., A Sparse Conjugate Gradient Adaptive Filter; *LSP 2020 1000-1004*
Lee, H., Sohn, K., and Min, D., Unsupervised Low-Light Image Enhancement Using Bright Channel Prior; *LSP 2020 251-255*
Lee, J., *see* Bertrand, N.P., *LSP 2020 1120-1124*
Lee, J.Y., Cheon, S.J., Choi, B.J., and Kim, N.S., Memory Attention: Robust Alignment Using Gating Mechanism for End-to-End Speech Synthesis; *LSP 2020 2004-2008*
Lee, K.M., *see* Song, G., *LSP 2020 1540-1544*
Lee, M.S., *see* Zhen, K., *LSP 2020 2159-2163*
Lee, S., *see* Zaheer, M.Z., *LSP 2020 1705-1709*
Lee, Y., Min, J., Han, D.K., and Ko, H., Spectro-Temporal Attention-Based Voice Activity Detection; *LSP 2020 131-135*
Lee, Y., and Hirakawa, K., Shift-And-Decorrelate Lifting: CAMRA for Lossless Intra Frame CFA Video Compression; *LSP 2020 461-465*
Lee, Y., *see* Kim, J., *LSP 2020 2019-2023*
Lehmann, F., and Pieczynski, W., Suboptimal Kalman Filtering in Triplet Markov Models Using Model Order Reduction; *LSP 2020 1100-1104*
Lei, H., *see* Zhang, H., *LSP 2020 555-559*
Lei, J., *see* Liu, C., *LSP 2020 1620-1624*
Lei, Z., *see* Yu, C., *LSP 2020 710-714*
Leus, G., *see* Manss, C., *LSP 2020 2119-2123*
Li, B., and Wu, N., Convergence Analysis of Gaussian SPAWN Under High-Order Graphical Models; *LSP 2020 1725-1729*
Li, B., *see* Li, Z., *LSP 2020 1690-1694*
Li, C., Li, G., and Varshney, P.K., Distributed Detection of Sparse Signals With Censoring Sensors Via Locally Most Powerful Test; *LSP 2020 346-350*
Li, D., *see* Zhou, K., *LSP 2020 1610-1614*
Li, F., *see* Xiao, D., *LSP 2020 296-300*
Li, G., *see* Huang, M., *LSP 2020 1819-1823*
Li, G., *see* Li, C., *LSP 2020 346-350*
Li, H., *see* Zhou, J., *LSP 2020 1410-1414*
Li, H., *see* Wang, P., *LSP 2020 905-909*
Li, H., *see* Liu, R., *LSP 2020 1470-1474*
Li, H., Yang, K., and Duan, R., Robust Multipath Time-Delay Estimation of Broadband Source Using a Vertical Line Array in Deep Water; *LSP 2020 51-55*
Li, H., *see* Zhou, Y., *LSP 2020 1310-1314*
Li, J., *see* Yu, Z., *LSP 2020 2168-2172*
Li, J., Wang, Y., Xie, H., and Ma, K., Learning Local and Global Priors for JPEG Image Artifacts Removal; *LSP 2020 2134-2138*
Li, J., *see* Luo, W., *LSP 2020 1545-1549*
Li, J., Liao, G., Huang, Y., and Nehorai, A., Manifold Optimization for Joint Design of MIMO-STAP Radars; *LSP 2020 1969-1973*
Li, K., *see* Wang, Z., *LSP 2020 1380-1384*
Li, K., *see* Gao, X., *LSP 2020 1874-1878*
Li, L., *see* He, J., *LSP 2020 1040-1044*
Li, L., *see* Li, Z., *LSP 2020 1690-1694*
Li, L., *see* Huang, Y., *LSP 2020 685-689*
Li, M., Chang, H., Xiang, Y., and An, D., A Novel Anti-Collusion Audio Fingerprinting Scheme Based on Fourier Coefficients Reversing; *LSP 2020 1794-1798*
Li, N., *see* Xia, S., *LSP 2020 1390-1394*
Li, Q., *see* Li, S., *LSP 2020 1400-1404*
Li, Q., *see* Xu, J., *LSP 2020 41-45*
Li, Q., *see* Wang, S., *LSP 2020 1784-1788*
Li, S., Zhao, S., Cheng, B., and Chen, J., Efficient Particle Scale Space for Robust Tracking; *LSP 2020 371-375*
Li, S., Li, Q., Zhu, Z., Tang, G., and Wakin, M.B., The Global Geometry of Centralized and Distributed Low-rank Matrix Recovery Without Regularization; *LSP 2020 1400-1404*
Li, S., and Zhang, X., A New Approach to Construct Virtual Array With Increased Degrees of Freedom for Moving Sparse Arrays; *LSP 2020 805-809*
Li, S.Z., *see* Yu, C., *LSP 2020 710-714*
Li, T., *see* Wang, H., *LSP 2020 181-185*
Li, W., *see* Ning, X., *LSP 2020 1944-1948*
Li, W., *see* Wu, T., *LSP 2020 1635-1639*
Li, W., *see* Chen, Y., *LSP 2020 1505-1509*
Li, X., *see* Shao, J., *LSP 2020 456-460*
Li, X., *see* Yu, Z., *LSP 2020 1245-1249*
Li, X., *see* Zhang, Y., *LSP 2020 476-480*
Li, X., *see* Liu, X., *LSP 2020 650-654*
Li, X., *see* Wu, D., *LSP 2020 1814-1818*
Li, X., *see* Wang, Z., *LSP 2020 1315-1319*
Li, X., *see* Ren, S., *LSP 2020 575-579*
Li, X., *see* Ren, S., *LSP 2020 575-579*
Li, X., Convolutional PCA for Multiple Time Series; *LSP 2020 1450-1454*
Li, X., *see* Ma, L., *LSP 2020 2129-2133*
Li, X., *see* Ibrahim, S., *LSP 2020 1125-1129*
Li, X.P., Liu, Q., and So, H.C., Rank-One Matrix Approximation With ℓ_p-Norm for Image Inpainting; *LSP 2020 680-684*
Li, Y., *see* Ma, J., *LSP 2020 930-934*

Li, Y., *see* Zhang, Y., *LSP 2020 760-764*
Li, Y., *see* Su, Y., *LSP 2020 740-744*
Li, Y., *see* Zhang, J., *LSP 2020 351-355*
Li, Y., *see* Zhu, Y., *LSP 2020 980-984*
Li, Y., *see* Liu, T., *LSP 2020 1550-1554*
Li, Y., *see* Tian, L., *LSP 2020 1645-1649*
Li, Y., *see* Pan, Z., *LSP 2020 1275-1279*
Li, Y., He, Q., and Blum, R.S., On the Product of Two Correlated Complex Gaussian Random Variables; *LSP 2020 16-20*
Li, Y., *see* Han, J., *LSP 2020 2074-2078*
Li, Y., *see* Hao, W., *LSP 2020 1325-1329*
Li, Z., *see* Chen, S., *LSP 2020 1680-1684*
Li, Z., Li, B., Gao, J., Li, L., and Hu, W., Manipulating Template Pixels for Model Adaptation of Siamese Visual Tracking; *LSP 2020 1690-1694*
Li, Z., *see* Chen, L., *LSP 2020 2144-2148*
Liang, C., *see* Chen, J., *LSP 2020 645-649*
Liao, C., *see* Fu, S., *LSP 2020 26-30*
Liao, G., *see* Yang, Y., *LSP 2020 91-95*
Liao, G., *see* Li, J., *LSP 2020 1969-1973*
Liao, J., *see* Xiang, C., *LSP 2020 1899-1903*
Liao, T., Wang, W., and Huang, B., Manifold Sensitivity Analysis of Frequency Diverse Array; *LSP 2020 1020-1024*
Liao, Y., *see* Zhang, J., *LSP 2020 276-280*
Lim, H., Kim, Y., Goo, J., and Kim, H., Interlayer Selective Attention Network for Robust Personalized Wake-Up Word Detection; *LSP 2020 126-130*
Lim, H., Kim, Y., and Kim, H., Cross-Informed Domain Adversarial Training for Noise-Robust Wake-Up Word Detection; *LSP 2020 1769-1773*
Lim, J., Kim, H., and Park, H., Interactive-Multiple-Model Algorithm Based on Minimax Particle Filtering; *LSP 2020 36-40*
Lim, K., Jiang, X., and Yi, C., Deep Clustering With Variational Autoencoder; *LSP 2020 231-235*
Lim, S., Kim, J., and Kim, W., Deep Spectral-Spatial Network for Single Image Deblurring; *LSP 2020 835-839*
Lin, C., *see* Chen, J., *LSP 2020 645-649*
Lin, G., *see* Jin, R., *LSP 2020 1864-1868*
Lin, J., *see* Huang, S., *LSP 2020 301-305*
Lin, J., *see* Tu, Z., *LSP 2020 1715-1719*
Lin, L., *see* Shi, Y., *LSP 2020 481-485*
Lin, X., Mei, L., Labeau, F., Sha, X., and Zhang, Y., Partial FFT Demodulation Scheme Based on Fast Convolution Structure; *LSP 2020 1934-1938*
Lin, X., *see* Xu, X., *LSP 2020 436-440*
Lin, X., Zhu, J., and Chen, D., Subband Aware CNN for Cell-Phone Recognition; *LSP 2020 605-609*
Lin, Y., Ling, S., Fu, K., and Cheng, P., An Identity-Preserved Model for Face Sketch-Photo Synthesis; *LSP 2020 1095-1099*
Lin, Z., *see* Ma, H., *LSP 2020 161-165*
Ling, S., *see* Lin, Y., *LSP 2020 1095-1099*
Liu, A., *see* Zhu, Y., *LSP 2020 1999-2003*
Liu, B., *see* Zhang, Y., *LSP 2020 760-764*
Liu, C., *see* Huang, L., *LSP 2020 1585-1589*
Liu, C., Zhou, W., Chen, Y., and Lei, J., Asymmetric Deeply Fused Network for Detecting Salient Objects in RGB-D Images; *LSP 2020 1620-1624*
Liu, C., Shan, H., Ma, T., and Wang, B., Optimality Verification of Tensor Completion Model via Self-Validation; *LSP 2020 1849-1853*
Liu, C., *see* Zhou, W., *LSP 2020 800-804*
Liu, D., *see* Meng, C., *LSP 2020 525-529*
Liu, D., *see* Chen, Y., *LSP 2020 1135-1139*
Liu, F., *see* Song, K., *LSP 2020 1050-1054*
Liu, G., *see* Jiang, P., *LSP 2020 725-729*
Liu, G., *see* Wang, X., *LSP 2020 1265-1269*
Liu, H., *see* Lv, F., *LSP 2020 1640-1644*
Liu, H., *see* Zou, Y., *LSP 2020 241-245*
Liu, J., *see* Song, G., *LSP 2020 451-455*
Liu, J., *see* Xu, X., *LSP 2020 1280-1284*
Liu, J., *see* Addabbo, P., *LSP 2020 1789-1793*
Liu, J., Lv, J., Yuan, M., Zhang, J., and Su, Y., ABSNet: Aesthetics-Based Saliency Network Using Multi-Task Convolutional Network; *LSP 2020 2014-2018*
Liu, J., and Zhang, X., Parameter-Adaptive Compensation (PAC) for Processing Underwater Selective Absorption; *LSP 2020 2178-2182*
Liu, L., *see* Wang, Z., *LSP 2020 1380-1384*
Liu, L., *see* Zhao, M., *LSP 2020 1914-1918*
Liu, P., *see* Zhu, X., *LSP 2020 1665-1669*
Liu, Q., *see* Zhou, J., *LSP 2020 2054-2058*
Liu, Q., *see* Li, X.P., *LSP 2020 680-684*
Liu, Q., *see* Wang, X., *LSP 2020 1265-1269*
Liu, R., Sisman, B., Bao, F., Gao, G., and Li, H., Modeling Prosodic Phrasing With Multi-Task Learning in Tacotron-Based TTS; *LSP 2020 1470-1474*
Liu, R., *see* Ma, L., *LSP 2020 1210-1214*
Liu, S., *see* Yang, H., *LSP 2020 286-290*
Liu, T., Zhao, R., Xiao, J., and Lam, K., Progressive Motion Representation Distillation With Two-Branch Networks for Egocentric Activity Recognition; *LSP 2020 1320-1324*
Liu, T., *see* Zhou, K., *LSP 2020 1610-1614*
Liu, T., *see* Quan, Y., *LSP 2020 116-120*
Liu, T., Xu, C., and Li, Y., Binary Complementary Sequence Set With Low Correlation Zone; *LSP 2020 1550-1554*
Liu, W., Hou, X., Kishiyama, Y., Chen, L., and Asai, T., Transform Domain Precoding (TDP) for 5G Evolution and 6G; *LSP 2020 1145-1149*
Liu, W., *see* Tang, P., *LSP 2020 151-155*
Liu, X., Xu, Z., Dong, W., Wang, L., and Li, X., Cognitive Resource Allocation for Target Tracking in Location-Aware Radar Networks; *LSP 2020 650-654*
Liu, X., Sun, Y., Lu, J., Yao, C., and Zhou, Y., Self-Similarity Action Proposal; *LSP 2020 2064-2068*
Liu, X., Zachariah, D., and Stoica, P., Robust Prediction When Features are Missing; *LSP 2020 720-724*
Liu, Y., *see* Jiang, G., *LSP 2020 1824-1828*
Liu, Z., *see* Huang, M., *LSP 2020 1819-1823*
Liu, Z., *see* Zhao, L., *LSP 2020 1750-1754*
Liu, Z., Kong, Y., Zhang, X., Wu, J., and Lu, W., Vital Sign Extraction in the Presence of Radar Mutual Interference; *LSP 2020 1745-1749*
Liu, Z., *see* Zheng, Z., *LSP 2020 376-380*
Locubiche-Serra, S., Seco-Granados, G., and Lopez-Salcedo, J.A., Asymptotic Analysis of the Convergence Time of Autoregressive Kalman Filters; *LSP 2020 820-824*
Long, B., *see* Lu, Z., *LSP 2020 665-669*
Lopez, A.M., *see* Yang, F., *LSP 2020 331-335*
Lopez-Salcedo, J.A., *see* Locubiche-Serra, S., *LSP 2020 820-824*
Lorenzo, P.D., *see* Colonnese, S., *LSP 2020 1160-1164*
Lorenzo-Trueba, J., *see* Cotescu, M., *LSP 2020 186-190*
Low, C.Y., *see* Jung, Y.G., *LSP 2020 1455-1459*
Lu, C., *see* Tai, C., *LSP 2020 2059-2063*
Lu, J., *see* Liu, X., *LSP 2020 2064-2068*
Lu, S., *see* Sun, J., *LSP 2020 895-899*
Lu, W., *see* Liu, Z., *LSP 2020 1745-1749*
Lu, X., *see* Hsieh, T., *LSP 2020 2149-2153*
Lu, Z., Long, B., and Yang, S., Saturation Based Iterative Approach for Single Image Dehazing; *LSP 2020 665-669*
Luo, J., *see* Gao, X., *LSP 2020 1874-1878*
Luo, W., Zhang, H., Li, J., and Wei, X., Learning Semantically Enhanced Feature for Fine-Grained Image Classification; *LSP 2020 1545-1549*
Luo, Y., *see* Guo, Y., *LSP 2020 1255-1259*
Luo, Z., *see* Ma, L., *LSP 2020 1210-1214*
Lv, F., Liu, H., Wang, Y., Zhao, J., and Yang, G., Learning Unbiased Zero-Shot Semantic Segmentation Networks Via Transductive Transfer; *LSP 2020 1640-1644*
Lv, J., *see* Liu, J., *LSP 2020 2014-2018*
Lygerakis, F., *see* Diakoloukas, V., *LSP 2020 960-964*
Lyu, Y., *see* Shi, Z., *LSP 2020 1755-1759*

M

Ma, H., Lin, Z., and Acton, S.T., FAST: Fast and Accurate Scale Estimation for Tracking; *LSP 2020 161-165*

Ma, J., Tao, R., Li, Y., and Kang, X., Fractional Power Spectrum and Fractional Correlation Estimations for Nonuniform Sampling; *LSP 2020 930-934*

Ma, J., *see* Tian, X., *LSP 2020 1180-1184*

Ma, K., *see* Li, J., *LSP 2020 2134-2138*

Ma, L., Jin, D., Liu, R., Fan, X., and Luo, Z., Joint Over and Under Exposures Correction by Aggregated Retinex Propagation for Image Enhancement; *LSP 2020 1210-1214*

Ma, L., Li, X., Shi, Y., Wu, J., and Zhang, Y., Correlation Filtering-Based Hashing for Fine-Grained Image Retrieval; *LSP 2020 2129-2133*

Ma, S., *see* Su, A., *LSP 2020 221-225*

Ma, T., *see* Liu, C., *LSP 2020 1849-1853*

Ma, X., *see* Qi, J., *LSP 2020 1485-1489*

Ma, X., *see* Wei, R., *LSP 2020 1740-1744*

Mack, W., and Habets, E.A.P., Deep Filtering: Signal Extraction and Reconstruction Using Complex Time-Frequency Filters; *LSP 2020 61-65*

Madhusudana, P.C., Birkbeck, N., Wang, Y., Adsumilli, B., and Bovik, A.C., Capturing Video Frame Rate Variations via Entropic Differencing; *LSP 2020 1809-1813*

Magron, P., and Virtanen, T., Online Spectrogram Inversion for Low-Latency Audio Source Separation; *LSP 2020 306-310*

Mahato, N.K., *see* Panigrahy, C., *LSP 2020 690-694*

Mahmood, A., *see* Zaheer, M.Z., *LSP 2020 1705-1709*

Mahmoudpour, S., and Schelkens, P., Synthesized View Quality Assessment Using Feature Matching and Superpixel Difference; *LSP 2020 1650-1654*

Mahurkar, A.G., and Seelamantula, C.S., Minkowski-Algebra-Based Super-Sparse Array Design for Super-Resolution Ultrasound Imaging; *LSP 2020 1060-1064*

Maiorana, E., *see* Kuzu, R.S., *LSP 2020 1869-1873*

Majhi, S., *see* Adhikary, A.R., *LSP 2020 146-150*

Majorkowska-Mech, D., and Cariow, A., Discrete Pseudo-Fractional Hadamard Transform and its Fast Algorithm; *LSP 2020 1195-1199*

Mandelli, S., Cozzolino, D., Bestagini, P., Verdoliva, L., and Tubaro, S., CNN-Based Fast Source Device Identification; *LSP 2020 1285-1289*

Mandic, D.P., *see* Gogineni, V.C., *LSP 2020 1884-1888*

Mangalore, A.R., Seelamantula, C.S., and Thakur, C.S., Neuromorphic Fringe Projection Profilometry; *LSP 2020 1510-1514*

Manss, C., Shutin, D., and Leus, G., Consensus Based Distributed Sparse Bayesian Learning by Fast Marginal Likelihood Maximization; *LSP 2020 2119-2123*

Mao, X., *see* Zhao, C., *LSP 2020 1080-1084*

Mao, X., *see* Jiang, G., *LSP 2020 1824-1828*

Marmin, A., Jezierska, A., Castella, M., and Pesquet, J., Global Optimization for Recovery of Clipped Signals Corrupted With Poisson-Gaussian Noise; *LSP 2020 970-974*

Maskell, S., *see* Varsi, A., *LSP 2020 1570-1574*

Masuyama, Y., Yatabe, K., Nagatomo, K., and Oikawa, Y., Joint Amplitude and Phase Refinement for Monaural Source Separation; *LSP 2020 1939-1943*

Mattos, D.M.F., *see* de Oliveira, N.R., *LSP 2020 1250-1254*

Maugey, T., and Toni, L., Large Database Compression Based on Perceived Information; *LSP 2020 1735-1739*

McLoughlin, I.V., *see* Phan, H., *LSP 2020 1700-1704*

Medeiros, D.S.V., *see* de Oliveira, N.R., *LSP 2020 1250-1254*

Mei, L., *see* Lin, X., *LSP 2020 1934-1938*

Meignen, S., *see* Colominas, M.A., *LSP 2020 620-624*

Meignen, S., *see* Laurent, N., *LSP 2020 935-939*

Meng, C., An, P., Huang, X., Yang, C., and Liu, D., Full Reference Light Field Image Quality Evaluation Based on Angular-Spatial Characteristic; *LSP 2020 525-529*

Meng, W., *see* Xu, S., *LSP 2020 216-220*

Mertins, A., *see* Phan, H., *LSP 2020 1700-1704*

Mestav, K.R., and Tong, L., Universal Data Anomaly Detection via Inverse Generative Adversary Network; *LSP 2020 511-515*

Meyer, F., *see* Gaglione, D., *LSP 2020 1710-1714*

Meynard, A., Spectral Estimation for Multivariate Locally Time-Warped Signals; *LSP 2020 311-315*

Miao, H., Zhang, F., and Tao, R., Novel Second-Order Statistics of the Chirp Cyclostationary Signals; *LSP 2020 910-914*

Milani, S., *see* Verde, S., *LSP 2020 1490-1494*

Mili, L., *see* Zheng, Z., *LSP 2020 376-380*

Min, D., *see* Lee, H., *LSP 2020 251-255*

Min, J., *see* Lee, Y., *LSP 2020 131-135*

Minvielle, P., *see* Boissy, J., *LSP 2020 2069-2073*

Mishra, D., Jayendran, A., and P., P.A., Effect of the Latent Structure on Clustering With GANs; *LSP 2020 900-904*

Moghadasian, S.S., and Gazor, S., Sparsely Localized Time-Frequency Energy Distributions for Multi-Component LFM Signals; *LSP 2020 6-10*

Mohammadi, A., *see* Afshar, P., *LSP 2020 2024-2028*

Mohammadzadeh, S., Nascimento, V.H., de Lamare, R.C., and Kukrer, O., Maximum Entropy-Based Interference-Plus-Noise Covariance Matrix Reconstruction for Robust Adaptive Beamforming; *LSP 2020 845-849*

Moinet, A., *see* Cotescu, M., *LSP 2020 186-190*

Moon, T., *see* Byun, J., *LSP 2020 1105-1109*

Moore, R.C., *see* Fonseca, E., *LSP 2020 1235-1239*

Moure, J.C., *see* de Cea-Dominguez, C., *LSP 2020 840-844*

Mozerov, M.G., *see* Yang, F., *LSP 2020 331-335*

Mukherjee, S., Gonzalez-Gomez, C., Danglot, L., Lagache, T., and Olivo-Marin, J., Generalizing the Statistical Analysis of Objects' Spatial Coupling in Bioimaging; *LSP 2020 1085-1089*

Muniraju, G., Tepedelenlioglu, C., and Spanias, A., Consensus Based Distributed Spectral Radius Estimation; *LSP 2020 1045-1049*

Murala, S., *see* Dudhane, A., *LSP 2020 675-679*

Muralishankar, R., Ghosh, D., and Gurugopinath, S., A Novel Modified Mel-DCT Filter Bank Structure With Application to Voice Activity Detection; *LSP 2020 1240-1244*

Murillo-Fuentes, J.J., *see* Santos, I., *LSP 2020 121-125*

MV, A.R., and Ghosh, P.K., SFNet: A Computationally Efficient Source Filter Model Based Neural Speech Synthesis; *LSP 2020 1170-1174*

N

Nagatomo, K., *see* Masuyama, Y., *LSP 2020 1939-1943*

Narayanan, S., *see* Park, T.J., *LSP 2020 381-385*

Nardelli, P.H.J., *see* Jung, A., *LSP 2020 825-829*

Nascimento, V.H., *see* Mohammadzadeh, S., *LSP 2020 845-849*

Nassif, R., *see* Hua, F., *LSP 2020 730-734*

Naumer, H., and Kamalabadi, F., Estimation of Linear Space-Invariant Dynamics; *LSP 2020 2154-2158*

Nehorai, A., *see* Li, J., *LSP 2020 1969-1973*

Ng, T., *see* Hsiao, R., *LSP 2020 1889-1893*

Nguyen, D.H.N., Neural Network-Optimized Channel Estimator and Training Signal Design for MIMO Systems With Few-Bit ADCs; *LSP 2020 1370-1374*

NguyenQuang, S., *see* HoangVan, X., *LSP 2020 2079-2083*

Nie, D., Xie, K., Zhou, F., and Qiao, G., A Correlation Detection Method of Low SNR Based on Multi-Channelization; *LSP 2020 1375-1379*

Nie, F., *see* Wu, D., *LSP 2020 1814-1818*

Nie, F., *see* Wang, Z., *LSP 2020 1315-1319*

Nie, Z., *see* Zhang, J., *LSP 2020 565-569*

Nikolov, N., *see* Dimitrov, M., *LSP 2020 1904-1908*

Nikolov, N., *see* Dimitrov, M., *LSP 2020 341-345*

Ning, K., *see* Zhao, M., *LSP 2020 1914-1918*

Ning, X., Duan, P., Li, W., and Zhang, S., Real-Time 3D Face Alignment Using an Encoder-Decoder Network With an Efficient Deconvolution Layer; *LSP 2020 1944-1948*

Niu, L., *see* Wan, J., *LSP 2020 1994-1998*

Niu, X., *see* Yu, Z., *LSP 2020 1245-1249*

Niu, Y., Tondi, B., Zhao, Y., and Barni, M., Primary Quantization Matrix Estimation of Double Compressed JPEG Images via CNN; *LSP 2020 191-195*

Nossek, J.A., *see* E-Asim, F., *LSP 2020 1420-1424*

Nowak, R.D., *see* Parhi, R., *LSP 2020 1779-1783*

Nugraha, A.A., Sekiguchi, K., Fontaine, M., Bando, Y., and Yoshii, K., Flow-Based Independent Vector Analysis for Blind Source Separation; *LSP 2020 2173-2177*

O

Oberlin, T., *see* Gouvert, O., *LSP 2020 815-819*
Oikawa, Y., *see* Masuyama, Y., *LSP 2020 1939-1943*
Olivo-Marin, J., *see* Mukherjee, S., *LSP 2020 1085-1089*
Orlando, D., *see* Addabbo, P., *LSP 2020 1789-1793*
Otroshi-Shahreza, H., *see* Zamani, H., *LSP 2020 101-105*
Ottersten, B., *see* Ghorbel, E., *LSP 2020 580-584*
Ou, Z., *see* Song, Y., *LSP 2020 31-35*
Ouyang, S., *see* Jiang, J., *LSP 2020 441-445*
Ozdenizci, O., *see* Han, M., *LSP 2020 1565-1569*
Ozturk, C., *see* Dulek, B., *LSP 2020 261-265*

P

P., P.A., *see* Mishra, D., *LSP 2020 900-904*
Pages-Zamora, A., *see* Gimenez-Febrer, P., *LSP 2020 326-330*
Pal, D., *see* Appaiah, K., *LSP 2020 226-230*
Pal, P., *see* Koochakzadeh, A., *LSP 2020 1395-1399*
Pan, Z., Wang, S., Zhu, M., and Li, Y., Automatic Waveform Recognition of Overlapping LPI Radar Signals Based on Multi-Instance Multi-Label Learning; *LSP 2020 1275-1279*
Pan, Z., Gao, X., Gao, E., and Fan, G., Adaptive Complexity for Pixel-Value-Ordering Based Reversible Data Hiding; *LSP 2020 915-919*
Panagakis, Y., *see* Pu, J., *LSP 2020 865-869*
Pang, S., *see* Hao, W., *LSP 2020 1325-1329*
Panigrahi, B., *see* Gautam, S., *LSP 2020 1695-1699*
Panigrahy, C., Seal, A., and Mahato, N.K., MRI and SPECT Image Fusion Using a Weighted Parameter Adaptive Dual Channel PCNN; *LSP 2020 690-694*
Pantic, M., *see* Pu, J., *LSP 2020 865-869*
Parhi, R., and Nowak, R.D., The Role of Neural Network Activation Functions; *LSP 2020 1779-1783*
Park, H., *see* Lim, J., *LSP 2020 36-40*
Park, H., and Yoo, C.D., CNN-Based Learnable Gammatone Filterbank and Equal-Loudness Normalization for Environmental Sound Classification; *LSP 2020 411-415*
Park, J., *see* Yoon, D., *LSP 2020 2139-2143*
Park, J., *see* Jung, Y.G., *LSP 2020 1455-1459*
Park, S., Elhilali, M., Han, D.K., and Ko, H., Amphibian Sounds Generating Network Based on Adversarial Learning; *LSP 2020 640-644*
Park, T.J., Han, K.J., Kumar, M., and Narayanan, S., Auto-Tuning Spectral Clustering for Speaker Diarization Using Normalized Maximum Eigengap; *LSP 2020 381-385*
Patil, P., *see* Dudhane, A., *LSP 2020 675-679*
Patrinos, P., *see* Arce, F.d.l.H., *LSP 2020 291-295*
Peixoto, E., Intra-Frame Compression of Point Cloud Geometry Using Dyadic Decomposition; *LSP 2020 246-250*
Peng, D., Dong, J., and Peng, Q., Overloaded Branch Chains Induced by False Data Injection Attack in Smart Grid; *LSP 2020 426-430*
Peng, L., and Tsakiris, M.C., Linear Regression Without Correspondences via Concave Minimization; *LSP 2020 1580-1584*
Peng, L., *see* Zhang, Y., *LSP 2020 476-480*
Peng, L., Jiang, A., Yi, Q., and Wang, M., Cumulative Rain Density Sensing Network for Single Image Derain; *LSP 2020 406-410*
Peng, Q., *see* Peng, D., *LSP 2020 426-430*
Peng, Z., Jia, Y., and Hou, J., Non-Negative Transfer Learning With Consistent Inter-Domain Distribution; *LSP 2020 1720-1724*
Pereira, F., *see* Javaheri, A., *LSP 2020 1350-1354*
Pereira, F., *see* HoangVan, X., *LSP 2020 2079-2083*
Perez-Gonzalez, F., *see* Fernandez-Menduina, S., *LSP 2020 745-749*
Pesquet, J., *see* Marmin, A., *LSP 2020 970-974*
Pham, D., *see* Colominas, M.A., *LSP 2020 620-624*
Pham, L., *see* Phan, H., *LSP 2020 1700-1704*
Phan, H., McLoughlin, I.V., Pham, L., Chen, O.Y., Koch, P., De Vos, M., and Mertins, A., Improving GANs for Speech Enhancement; *LSP 2020 1700-1704*
Pieczynski, W., *see* Lehmann, F., *LSP 2020 1100-1104*
Plakal, M., *see* Fonseca, E., *LSP 2020 1235-1239*
Plataniotis, K.N., *see* Afshar, P., *LSP 2020 2024-2028*
Poellabauer, C., *see* Gong, Y., *LSP 2020 920-924*
Prabhakararao, E., and Dandapat, S., Attentive RNN-Based Network to Fuse 12-Lead ECG and Clinical Features for Improved Myocardial Infarction Diagnosis; *LSP 2020 2029-2033*
Prabhakararao, E., *see* Das, V., *LSP 2020 1025-1029*
Pramono, R.R.A., *see* Purwanto, D., *LSP 2020 2188*
Preaux, Y., and Boudraa, A., Statistical Behavior of Teager-Kaiser Energy Operator in Presence of White Gaussian Noise; *LSP 2020 635-639*
Pu, J., Panagakis, Y., and Pantic, M., Active Speaker Detection and Localization in Videos Using Low-Rank and Kernelized Sparsity; *LSP 2020 865-869*
Pun, Y., *see* Huang, S., *LSP 2020 1335-1339*
Purwanto, D., Pramono, R.R.A., Chen, Y., and Fang, W., Corrections to "Three-Stream Network With Bidirectional Self-Attention for Action Recognition in Extreme Low Resolution Videos" *LSP 2020 2188*
Pyzer Knapp, E., *see* Varsi, A., *LSP 2020 1570-1574*

Q

Qaraqe, K., *see* Serbes, A., *LSP 2020 386-390*
Qi, J., Du, J., Siniscalchi, S.M., Ma, X., and Lee, C., On Mean Absolute Error for Deep Neural Network Based Vector-to-Vector Regression; *LSP 2020 1485-1489*
Qi, Z., *see* Tian, Y., *LSP 2020 1615-1619*
Qian, C., *see* Yang, Y., *LSP 2020 91-95*
Qian, J., *see* Zhu, X., *LSP 2020 1665-1669*
Qian, Z., *see* Wang, Z., *LSP 2020 71-75*
Qiao, G., *see* Nie, D., *LSP 2020 1375-1379*
Qiao, H., Estimating the Number of Sinusoids in Additive Sub-Gaussian Noise With Finite Measurements; *LSP 2020 1225-1229*
Qiao, H., A Universal Technique for Analysing Discrete Super-Resolution Algorithms; *LSP 2020 1829-1833*
Qin, X., Ge, Y., Yu, H., Chen, F., and Yang, D., Spatial Enhancement and Temporal Constraint for Weakly Supervised Action Localization; *LSP 2020 1520-1524*
Qin, Y., Zhang, W., Wang, Z., Zhao, C., and Shi, J., Layer-Wise Adaptive Updating for Few-Shot Image Classification; *LSP 2020 2044-2048*
Qiu, J., Wang, L., Wang, Y., and Hu, Y.H., Efficient Proposals: Scale Estimation for Object Proposals in Pedestrian Detection Tasks; *LSP 2020 855-859*
Quan, Y., Teng, H., Liu, T., and Huang, Y., Weakly-Supervised Sparse Coding With Geometric Prior for Interactive Texture Segmentation; *LSP 2020 116-120*
Quitry, F.d.C., *see* Tagliasacchi, M., *LSP 2020 630-634*
Quitry, F.d.C., *see* Tagliasacchi, M., *LSP 2020 600-604*

R

Rademacher, P., and Wagner, K., Efficient Bayesian Sequential Classification Under the Markov Assumption for Various Loss Functions; *LSP 2020 401-405*
Rahnavard, N., *see* Sadri, A.R., *LSP 2020 111-115*
Rao, B.D., *see* Lee, C., *LSP 2020 1000-1004*
Razavikia, S., *see* Zamani, H., *LSP 2020 101-105*
Ren, J., Wang, X., Jian, Z., and Ren, M., Multiscale Convolutional Fusion Network for Non-Lambertian Photometric Stereo; *LSP 2020 1929-1933*
Ren, M., *see* Ren, J., *LSP 2020 1929-1933*
Ren, S., Dong, W., Li, X., Wang, W., and Li, X., Extended Nested Arrays for Consecutive Virtual Aperture Enhancement; *LSP 2020 575-579*
Ren, W., Tian, J., Wang, Q., and Tang, Y., Dually Connected Deraining Net Using Pixel-Wise Attention; *LSP 2020 316-320*
Resek, T., *see* Verde, S., *LSP 2020 1490-1494*

Ricci, G., *see* Addabbo, P., *LSP 2020 1789-1793*
Richard, C., *see* Hua, F., *LSP 2020 730-734*
Rizk, E., *see* Vlaski, S., *LSP 2020 1385-1389*
Roblek, D., *see* Tagliasacchi, M., *LSP 2020 630-634*
Roblek, D., *see* Tagliasacchi, M., *LSP 2020 600-604*
Rocha, A., *see* Verde, S., *LSP 2020 1490-1494*
Rontogiannis, A.A., Giampouras, P.V., and Koutroumbas, K.D., Online Reweighted Least Squares Robust PCA; *LSP 2020 1340-1344*
Roy, R., Banerjee, P., and Chowdhury, A.S., A Level Set Based Unified Framework for Pulmonary Nodule Segmentation; *LSP 2020 1465-1469*
Rozell, C.J., *see* Bertrand, N.P., *LSP 2020 1120-1124*
Rupp, M., *see* Schwarz, S., *LSP 2020 321-325*
Ryu, J., *see* Hong, S., *LSP 2020 156-160*

S

Saatci, E., Period Determination in Cyclo-Stationary Signals by Autocorrelation and Ramanujan Subspaces; *LSP 2020 266-270*
Saatci, E., *see* Saatci, E., *LSP 2020 266-270*
Sadeghi, P., *see* Bates, A.P., *LSP 2020 790-794*
Sadri, A.R., Celebi, M.E., Rahnavard, N., and Viswanath, S.E., Sparse Wavelet Networks; *LSP 2020 111-115*
Sagong, M., *see* Yeo, Y., *LSP 2020 2099-2103*
Sagong, M., *see* Yeo, Y., *LSP 2020 530-534*
Saini, M., Satija, U., and Upadhayay, M.D., Wavelet Based Waveform Distortion Measures for Assessment of Denoised EEG Quality With Reference to Noise-Free EEG Signal; *LSP 2020 1260-1264*
Salles, E.O.T., *see* do Nascimento, T.P., *LSP 2020 2009-2013*
Santos, I., Murillo-Fuentes, J.J., and Arias-de-Reyna, E., A Double EP-Based Proposal for Turbo Equalization; *LSP 2020 121-125*
Saquib, M., *see* Akbar, M.N., *LSP 2020 11-15*
Sarkar, P., *see* Adhikary, A.R., *LSP 2020 146-150*
Sarkar, R., *see* De, R., *LSP 2020 1090-1094*
Sarkka, S., *see* Gao, R., *LSP 2020 1305-1309*
Sarkka, S., *see* Hostettler, R., *LSP 2020 211-215*
Satija, U., *see* Saini, M., *LSP 2020 1260-1264*
Satti, P., Sharma, N., and Garg, B., Min-Max Average Pooling Based Filter for Impulse Noise Removal; *LSP 2020 1475-1479*
Sawada, H., *see* Emura, S., *LSP 2020 1630-1634*
Sayed, A.H., *see* Vlaski, S., *LSP 2020 1385-1389*
Sayed, A.H., *see* Hua, F., *LSP 2020 730-734*
Scarano, G., *see* Colonnese, S., *LSP 2020 1160-1164*
Schelkens, P., *see* Mahmoudpour, S., *LSP 2020 1650-1654*
Schlangen, I., *see* Jung, S., *LSP 2020 1005-1009*
Schwarz, S., Recursive CSI Quantization of Time-Correlated MIMO Channels by Deep Learning Classification; *LSP 2020 1799-1803*
Schwarz, S., and Rupp, M., Reduced Complexity Recursive Grassmannian Quantization; *LSP 2020 321-325*
Seal, A., *see* Panigrahy, C., *LSP 2020 690-694*
Seco-Granados, G., *see* Locubiche-Serra, S., *LSP 2020 820-824*
Sedighin, F., Cichocki, A., Yokota, T., and Shi, Q., Matrix and Tensor Completion in Multiway Delay Embedded Space Using Tensor Train, With Application to Signal Reconstruction; *LSP 2020 810-814*
Seelamantula, C.S., *see* Mangalore, A.R., *LSP 2020 1510-1514*
Seelamantula, C.S., *see* Mahurkar, A.G., *LSP 2020 1060-1064*
Sekiguchi, K., *see* Nugraha, A.A., *LSP 2020 2173-2177*
Serbes, A., and Qaraqe, K., A Fast Method for Estimating Frequencies of Multiple Sinusoidals; *LSP 2020 386-390*
Sha, X., *see* Lin, X., *LSP 2020 1934-1938*
Shah, M.H., and Dang, X., Novel Feature Selection Method Using Bhattacharyya Distance for Neural Networks Based Automatic Modulation Classification; *LSP 2020 106-110*
Shan, H., *see* Liu, C., *LSP 2020 1849-1853*
Shang, X., *see* Wang, M., *LSP 2020 990-994*
Shao, J., and Li, X., Generalized Zero-Shot Learning With Multi-Channel Gaussian Mixture VAE; *LSP 2020 456-460*
Shao, M., *see* Wang, S., *LSP 2020 1784-1788*
Sharma, E., Gupta, N., Dey, S., and Budhiraja, R., Hybrid Massive MIMO Two-Way Relaying With Users and Relay Hardware Impairments; *LSP 2020 486-490*
Sharma, N., *see* Satti, P., *LSP 2020 1475-1479*
Shen, L., *see* Wang, Q., *LSP 2020 1150-1154*
Shen, L., *see* Ding, Q., *LSP 2020 2049-2053*
Shen, L., *see* Zhou, L., *LSP 2020 166-170*
Shen, T., Gou, C., Wang, J., and Wang, F., Simultaneous Segmentation and Classification of Mass Region From Mammograms Using a Mixed-Supervision Guided Deep Model; *LSP 2020 196-200*
Shen, X., *see* Shi, Z., *LSP 2020 1755-1759*
Shen, Y., *see* Sun, J., *LSP 2020 895-899*
Sheng, W., *see* Ying, X., *LSP 2020 1500-1504*
Sheng, W., *see* Ying, X., *LSP 2020 496-500*
Shi, J., *see* Yu, Z., *LSP 2020 1245-1249*
Shi, J., *see* Qin, Y., *LSP 2020 2044-2048*
Shi, J., Wang, G., and Jin, L., Least Squared Relative Error Estimator for RSS Based Localization With Unknown Transmit Power; *LSP 2020 1165-1169*
Shi, L., *see* Chen, T., *LSP 2020 1625-1629*
Shi, Q., *see* Sedighin, F., *LSP 2020 810-814*
Shi, X., Yu, D., and Zhang, W., Quantitative Relationship Between Localization Accuracy and Location Privacy Level in Wireless Localization System; *LSP 2020 1055-1059*
Shi, Y., *see* Wang, Q., *LSP 2020 1150-1154*
Shi, Y., Zhong, H., Yang, Z., Yang, X., and Lin, L., DDet: Dual-Path Dynamic Enhancement Network for Real-World Image Super-Resolution; *LSP 2020 481-485*
Shi, Y., *see* Ma, L., *LSP 2020 2129-2133*
Shi, Z., Shen, X., Chen, H., and Lyu, Y., Global Semantic Consistency Network for Image Manipulation Detection; *LSP 2020 1755-1759*
Shi, Z., *see* Zhang, L., *LSP 2020 950-954*
Shin, D., Cho, H., and Yang, I., Power-Law Processor Over Segmentation for Variable Length Transients Detection; *LSP 2020 1065-1069*
Shin, H., *see* Zaheer, M.Z., *LSP 2020 1705-1709*
Shin, Y., *see* Yeo, Y., *LSP 2020 2099-2103*
Shin, Y., *see* Yeo, Y., *LSP 2020 530-534*
Shu, T., *see* He, J., *LSP 2020 1040-1044*
Shutin, D., *see* Manss, C., *LSP 2020 2119-2123*
Siebert, X., *see* De Handschutter, P., *LSP 2020 81-85*
Silva, M.T.M., *see* Bueno, A.A., *LSP 2020 1130-1134*
Singh, S.K., *see* Kumar, S., *LSP 2020 975-979*
Siniscalchi, S.M., *see* Qi, J., *LSP 2020 1485-1489*
Sirianunpiboon, S., *see* Clarkson, I.V.L., *LSP 2020 1415-1419*
Sisman, B., *see* Liu, R., *LSP 2020 1470-1474*
Slavakis, K., and Banerjee, S., Robust Hierarchical-Optimization RLS Against Sparse Outliers; *LSP 2020 171-175*
So, A.M., *see* Huang, S., *LSP 2020 1335-1339*
So, H.C., *see* Li, X.P., *LSP 2020 680-684*
So, H.C., *see* Zheng, Z., *LSP 2020 585-589*
So, H.C., *see* Zheng, Z., *LSP 2020 1360-1364*
So, H.C., *see* Zheng, Z., *LSP 2020 925-929*
Soares, C., Valdeira, F., and Gomes, J., Range and Bearing Data Fusion for Precise Convex Network Localization; *LSP 2020 670-674*
Socheleau, F., A Multifamily GLRT for CFAR Detection of Signals in a Union of Subspaces; *LSP 2020 2104-2108*
Sohn, K., *see* Lee, H., *LSP 2020 251-255*
Soldi, G., *see* Gaglione, D., *LSP 2020 1710-1714*
Song, G., Sun, Y., Liu, J., Wang, Z., and Kamilov, U.S., A New Recurrent Plug-and-Play Prior Based on the Multiple Self-Similarity Network; *LSP 2020 451-455*
Song, G., and Lee, K.M., Bi-Directional Seed Attention Network for Interactive Image Segmentation; *LSP 2020 1540-1544*
Song, K., *see* Huang, L., *LSP 2020 1585-1589*
Song, K., Liu, F., Wang, P., and Wang, C., Sensing Performance of Multi-Antenna Energy Detector With Temporal Signal Correlation in Cognitive Vehicular Networks; *LSP 2020 1050-1054*

Song, Y., Zhu, Y., and Du, X., Model Parameter Learning for Real-Time High-Resolution Image Enhancement; *LSP 2020 1844-1848*
Song, Y., and Ou, Z., Semi-Supervised Seq2seq Joint-Stochastic-Approximation Autoencoders With Applications to Semantic Parsing; *LSP 2020 31-35*
Song, Y., Zhu, Y., and Du, X., Grouped Multi-Scale Network for Real-World Image Denoising; *LSP 2020 2124-2128*
Song, Z., *see* Wang, Y., *LSP 2020 2164-2167*
Soubies, E., *see* Zhang, S., *LSP 2020 1555-1559*
Souza, R., *see* Chung, K.J., *LSP 2020 141-145*
Spagnol, S., HRTF Selection by Anthropometric Regression for Improving Horizontal Localization Accuracy; *LSP 2020 590-594*
Spanias, A., *see* Muniraju, G., *LSP 2020 1045-1049*
Stankovic, L., The Support Uncertainty Principle and the Graph Rihaczek Distribution: Revisited and Improved; *LSP 2020 1030-1034*
Stoica, P., *see* Liu, X., *LSP 2020 720-724*
Su, A., Ma, S., and Zhao, X., Fast and Secure Steganography Based on J-UNIWARD; *LSP 2020 221-225*
Su, K., *see* Huang, Y., *LSP 2020 66-70*
Su, Y., Hong, D., Li, Y., and Jing, P., Low-Rank Regularized Deep Collaborative Matrix Factorization for Micro-Video Multi-Label Classification; *LSP 2020 740-744*
Su, Y., *see* Zhou, K., *LSP 2020 1610-1614*
Su, Y., *see* Liu, J., *LSP 2020 2014-2018*
Sugawara, M., Uruma, K., Hangai, S., and Hamamoto, T., Local and Global Graph Approaches to Image Colorization; *LSP 2020 765-769*
Sun, J., Wang, Y., Shen, Y., and Lu, S., High-Precision Trajectory Data Reconstruction for TT&C Systems Using LS B-Spline Approximation; *LSP 2020 895-899*
Sun, L., Wang, X., Yang, A., and Huang, Z., Radio Frequency Fingerprint Extraction Based on Multi-Dimension Approximate Entropy; *LSP 2020 471-475*
Sun, L., and Wang, Y., CTBRNN: A Novel Deep-Learning Based Signal Sequence Detector for Communications Systems; *LSP 2020 21-25*
Sun, M., *see* Xia, W., *LSP 2020 1185-1189*
Sun, Q., *see* Cheng, C., *LSP 2020 1834-1838*
Sun, Q., *see* Jiang, J., *LSP 2020 441-445*
Sun, T., *see* Yu, Z., *LSP 2020 2168-2172*
Sun, T., *see* Zhao, L., *LSP 2020 1750-1754*
Sun, Y., *see* Song, G., *LSP 2020 451-455*
Sun, Y., *see* Xu, X., *LSP 2020 1280-1284*
Sun, Y., *see* Liu, X., *LSP 2020 2064-2068*
Sung, J., *see* Zhen, K., *LSP 2020 2159-2163*
Suzuki, T., and Kyochi, S., Variable Macropixel Spectral-Spatial Transforms With Intra- and Inter-Color Decorrelations for Arbitrary RGB CFA-Sampled Raw Images; *LSP 2020 466-470*

T

Tagliasacchi, M., Quitry, F.d.C., and Roblek, D., Multi-Task Adapters for On-Device Audio Inference; *LSP 2020 630-634*
Tagliasacchi, M., Gfeller, B., Quitry, F.d.C., and Roblek, D., Pre-Training Audio Representations With Self-Supervision; *LSP 2020 600-604*
Tai, C., Hsieh, S., and Lu, C., Greedy Algorithms for Hybrid Compressed Sensing; *LSP 2020 2059-2063*
Takeuchi, K., Convolutional Approximate Message-Passing; *LSP 2020 416-420*
Talebi, S.P., *see* Gogineni, V.C., *LSP 2020 1884-1888*
Tang, B., *see* Xiang, S., *LSP 2020 86-90*
Tang, G., *see* Li, S., *LSP 2020 1400-1404*
Tang, P., Wang, Y., Liu, W., Du, Q., Wu, C., and Chen, W., A Tunable Detector for Distributed Target Detection in the Situation of Signal Mismatch; *LSP 2020 151-155*
Tang, W., Jiang, H., and Zhang, Q., Range-Angle Decoupling and Estimation for FDA-MIMO Radar via Atomic Norm Minimization and Accelerated Proximal Gradient; *LSP 2020 366-370*
Tang, Y., *see* Ren, W., *LSP 2020 316-320*
Tang, Z., *see* Huang, Y., *LSP 2020 66-70*
Tang, Z., *see* Chen, S., *LSP 2020 1680-1684*
Tao, M., *see* Zhang, X., *LSP 2020 1590-1594*
Tao, R., *see* Ma, J., *LSP 2020 930-934*
Tao, R., *see* Miao, H., *LSP 2020 910-914*
Tao, X., *see* Xia, S., *LSP 2020 1390-1394*
Tavora, L.M.N., *see* Thomaz, L.A., *LSP 2020 965-969*
Tay, D.B., Filter Design for Two-Channel Filter Banks on Directed Bipartite Graphs; *LSP 2020 2094-2098*
Tay, D.B., *see* Jiang, J., *LSP 2020 441-445*
Taylor, J., *see* Varsi, A., *LSP 2020 1570-1574*
Teng, H., *see* Quan, Y., *LSP 2020 116-120*
Teoh, A.B.J., *see* Jung, Y.G., *LSP 2020 1455-1459*
Tepedelenlioglu, C., *see* Muniraju, G., *LSP 2020 1045-1049*
Thakur, C.S., *see* Mangalore, A.R., *LSP 2020 1510-1514*
Thomaz, L.A., Assuncao, P.A.A., Tavora, L.M.N., Faria, S.M.M.d., Integer DCT Approximation With Arbitrary Size and Adjustable Precision; *LSP 2020 965-969*
Tian, J., *see* Ren, W., *LSP 2020 316-320*
Tian, L., Xu, C., Chen, D., He, D., and Truong, T., Enhancing mmWave DOA Estimation by Cumulative Power Gradient At Low SNR; *LSP 2020 1974-1978*
Tian, L., Xu, C., and Li, Y., A Family of Single-Channel Spectrally-Null-Constrained Sequences With Low Correlation; *LSP 2020 1645-1649*
Tian, S., *see* Xiang, C., *LSP 2020 1899-1903*
Tian, X., Chen, Y., Yang, C., Gao, X., and Ma, J., A Variational Pansharpening Method Based on Gradient Sparse Representation; *LSP 2020 1180-1184*
Tian, X., *see* Zhou, Y., *LSP 2020 1310-1314*
Tian, Y., *see* Xu, X., *LSP 2020 436-440*
Tian, Y., Wang, Y., Yang, L., and Qi, Z., CANet: Concatenated Attention Neural Network for Image Restoration; *LSP 2020 1615-1619*
Todros, K., *see* Yazdi, N., *LSP 2020 1959-1963*
Tondi, B., *see* Niu, Y., *LSP 2020 191-195*
Tong, L., *see* Mestav, K.R., *LSP 2020 511-515*
Toni, L., *see* Maugey, T., *LSP 2020 1735-1739*
Toscano, E., *see* Brugnoli, E., *LSP 2020 76-80*
Traonmilin, Y., Aujol, J., and Leclaire, A., Projected Gradient Descent for Non-Convex Sparse Spike Estimation; *LSP 2020 1110-1114*
Travadi, R., *see* Hsiao, R., *LSP 2020 1889-1893*
Tronarp, F., *see* Gao, R., *LSP 2020 1305-1309*
Tronarp, F., *see* Hostettler, R., *LSP 2020 211-215*
Truong, T., *see* Tian, L., *LSP 2020 1974-1978*
Tsai, S., *see* Wang, C., *LSP 2020 780-784*
Tsakiris, M.C., *see* Peng, L., *LSP 2020 1580-1584*
Tsao, Y., *see* Hsieh, T., *LSP 2020 2149-2153*
Tsao, Y., *see* Fu, S., *LSP 2020 26-30*
Tsao, Y., *see* Yu, C., *LSP 2020 1035-1039*
Tseng, Y., *see* Chen, B., *LSP 2020 1670-1674*
Tu, Z., Lin, J., Wang, Y., Adsumilli, B., and Bovik, A.C., Adaptive Debanding Filter; *LSP 2020 1715-1719*
Tubaro, S., *see* Mandelli, S., *LSP 2020 1285-1289*
Turkmen, A.C., Capan, G., and Cemgil, A.T., Clustering Event Streams With Low Rank Hawkes Processes; *LSP 2020 1575-1579*
Tusha, A., Dogan, S., and Arslan, H., A Hybrid Downlink NOMA With OFDM and OFDM-IM for Beyond 5G Wireless Networks; *LSP 2020 491-495*

U

Upadhayay, M.D., *see* Saini, M., *LSP 2020 1260-1264*
Uruma, K., *see* Sugawara, M., *LSP 2020 765-769*

V

Vaidyanathan, P.P., *see* Kulkarni, P., *LSP 2020 735-739*
Valdeira, F., *see* Soares, C., *LSP 2020 670-674*
Vandaele, A., *see* De Handschutter, P., *LSP 2020 81-85*
Vandendorpe, L., *see* Feuillen, T., *LSP 2020 396-400*
Varshney, P.K., *see* Li, C., *LSP 2020 346-350*

Varsi, A., Taylor, J., Kekempanos, L., Pyzer Knapp, E., and Maskell, S., A Fast Parallel Particle Filter for Shared Memory Systems; *LSP 2020 1570-1574*
Venkategowda, N.K.D., and Werner, S., Privacy-Preserving Distributed Maximum Consensus; *LSP 2020 1839-1843*
Verde, S., Resek, T., Milani, S., and Rocha, A., Ground-to-Aerial Viewpoint Localization via Landmark Graphs Matching; *LSP 2020 1490-1494*
Verdoliva, L., *see* Mandelli, S., *LSP 2020 1285-1289*
Verhelst, M., *see* Arce, F.d.l.H., *LSP 2020 291-295*
Vetro, C., *see* Brugnoli, E., *LSP 2020 76-80*
Vincent, F., and Besson, O., Non Zero Mean Adaptive Cosine Estimator and Application to Hyperspectral Imaging; *LSP 2020 1989-1993*
Viola, I., and Cesar, P., A Reduced Reference Metric for Visual Quality Evaluation of Point Cloud Contents; *LSP 2020 1660-1664*
Virtanen, T., *see* Magron, P., *LSP 2020 306-310*
Viswanath, S.E., *see* Sadri, A.R., *LSP 2020 111-115*
Vlaski, S., Rizk, E., and Sayed, A.H., Tracking Performance of Online Stochastic Learners; *LSP 2020 1385-1389*
Vorobyov, S.A., *see* Xu, F., *LSP 2020 1495-1499*

W

Wage, K.E., *see* Chavali, V., *LSP 2020 56-60*
Wagner, K., *see* Rademacher, P., *LSP 2020 401-405*
Wakin, M.B., *see* Li, S., *LSP 2020 1400-1404*
Wan, B., *see* Jiang, P., *LSP 2020 1954-1958*
Wan, J., Niu, L., Bai, B., and Wang, H., Graph Regularized Deep Discrete Hashing for Multi-Label Image Retrieval; *LSP 2020 1994-1998*
Wan, J., and Zhu, F., Cost-Sensitive Canonical Correlation Analysis for Semi-Supervised Multi-View Learning; *LSP 2020 1330-1334*
Wang, B., *see* Liu, C., *LSP 2020 1849-1853*
Wang, C., *see* Song, K., *LSP 2020 1050-1054*
Wang, C., *see* Zhang, X., *LSP 2020 1590-1594*
Wang, C., *see* Wu, Z., *LSP 2020 1205-1209*
Wang, C., Wen, C., Tsai, S., and Jin, S., Phase Retrieval With Learning Unfolded Expectation Consistent Signal Recovery Algorithm; *LSP 2020 780-784*
Wang, C., *see* Kuang, C., *LSP 2020 1445-1449*
Wang, F., *see* Shen, T., *LSP 2020 196-200*
Wang, G., Adhikary, A.R., Zhou, Z., and Yang, Y., Generalized Constructions of Complementary Sets of Sequences of Lengths Non-Power-of-Two; *LSP 2020 136-140*
Wang, G., *see* Shi, J., *LSP 2020 1165-1169*
Wang, G., *see* Wang, R., *LSP 2020 1155-1159*
Wang, H., *see* Wan, J., *LSP 2020 1994-1998*
Wang, H., Wang, S., Li, T., Yin, H., and Yu, L., Surprise-Based JND Estimation for Images; *LSP 2020 181-185*
Wang, H., *see* Hsieh, T., *LSP 2020 2149-2153*
Wang, H., Bai, J., and Dong, L., Intelligent Reflecting Surfaces Assisted Secure Transmission Without Eavesdropper's CSI; *LSP 2020 1300-1304*
Wang, H., *see* Zhu, X., *LSP 2020 1665-1669*
Wang, H., *see* Zhang, J., *LSP 2020 276-280*
Wang, H., Zou, Y., Chong, D., and Wang, W., Modeling Label Dependencies for Audio Tagging With Graph Convolutional Network; *LSP 2020 1560-1564*
Wang, H., *see* Yang, Z., *LSP 2020 2084-2088*
Wang, H., *see* Hua, F., *LSP 2020 730-734*
Wang, J., *see* Jin, R., *LSP 2020 1864-1868*
Wang, J., *see* Xu, J., *LSP 2020 41-45*
Wang, J., *see* Zhang, F., *LSP 2020 540-544*
Wang, J., *see* Shen, T., *LSP 2020 196-200*
Wang, L., *see* Liu, X., *LSP 2020 650-654*
Wang, L., *see* Qiu, J., *LSP 2020 855-859*
Wang, L., *see* Ying, X., *LSP 2020 1500-1504*
Wang, L., *see* Ying, X., *LSP 2020 496-500*
Wang, M., *see* Xiao, D., *LSP 2020 296-300*
Wang, M., and Shang, X., A Fast Image Fusion With Discrete Cosine Transform; *LSP 2020 990-994*
Wang, M., *see* Peng, L., *LSP 2020 406-410*
Wang, P., *see* Song, K., *LSP 2020 1050-1054*
Wang, P., Fang, J., Duan, H., and Li, H., Compressed Channel Estimation for Intelligent Reflecting Surface-Assisted Millimeter Wave Systems; *LSP 2020 905-909*
Wang, Q., Shen, L., and Shi, Y., Recognition-Driven Compressed Image Generation Using Semantic-Prior Information; *LSP 2020 1150-1154*
Wang, Q., *see* Jiang, P., *LSP 2020 1954-1958*
Wang, Q., *see* Ren, W., *LSP 2020 316-320*
Wang, Q., *see* Xu, Y., *LSP 2020 695-699*
Wang, Q., *see* Jiang, P., *LSP 2020 725-729*
Wang, R., *see* Wu, D., *LSP 2020 1814-1818*
Wang, R., *see* Wang, Z., *LSP 2020 1315-1319*
Wang, R., *see* Chou, G., *LSP 2020 1230-1234*
Wang, R., Ji, T., and Wang, G., Haze Removal by Modeling the Scattering Properties of the Medium; *LSP 2020 1155-1159*
Wang, S., *see* Wang, H., *LSP 2020 181-185*
Wang, S., *see* Chen, T., *LSP 2020 1804-1808*
Wang, S., *see* Zhang, T., *LSP 2020 361-365*
Wang, S., *see* Zhang, T., *LSP 2020 1535-1539*
Wang, S., *see* Zhang, J., *LSP 2020 351-355*
Wang, S., *see* Yu, C., *LSP 2020 1035-1039*
Wang, S., *see* Xia, S., *LSP 2020 1390-1394*
Wang, S., Li, Q., and Shao, M., One-Bit Symbol-Level Precoding for MU-MISO Downlink With Intelligent Reflecting Surface; *LSP 2020 1784-1788*
Wang, S., *see* Pan, Z., *LSP 2020 1275-1279*
Wang, S., *see* Han, J., *LSP 2020 2074-2078*
Wang, S., and Dekorsy, A., A Factor Graph-Based Distributed Consensus Kalman Filter; *LSP 2020 2039-2043*
Wang, W., *see* Liao, T., *LSP 2020 1020-1024*
Wang, W., *see* Zhang, J., *LSP 2020 1605-1609*
Wang, W., *see* Xu, D., *LSP 2020 1435-1439*
Wang, W., *see* Ren, S., *LSP 2020 575-579*
Wang, W., *see* Wang, H., *LSP 2020 1560-1564*
Wang, W., *see* Zhang, F., *LSP 2020 540-544*
Wang, W., *see* Zheng, Z., *LSP 2020 585-589*
Wang, W., *see* Zheng, Z., *LSP 2020 1360-1364*
Wang, W., *see* Zhang, S., *LSP 2020 850-854*
Wang, W., *see* Zheng, Z., *LSP 2020 925-929*
Wang, X., *see* Ren, J., *LSP 2020 1929-1933*
Wang, X., *see* Sun, L., *LSP 2020 471-475*
Wang, X., Benesty, J., Chen, J., and Cohen, I., Beamforming With Small-Spacing Microphone Arrays Using Constrained/Generalized LASSO; *LSP 2020 356-360*
Wang, X., Liu, G., Zhang, W., and Liu, Q., Selecting Optimal Completion to Partial Matrix via Self-Validation; *LSP 2020 1265-1269*
Wang, Y., *see* Ke, X., *LSP 2020 96-100*
Wang, Y., *see* Madhusudana, P.C., *LSP 2020 1809-1813*
Wang, Y., *see* Zhou, J., *LSP 2020 2054-2058*
Wang, Y., *see* Li, J., *LSP 2020 2134-2138*
Wang, Y., *see* Sun, L., *LSP 2020 21-25*
Wang, Y., *see* Lv, F., *LSP 2020 1640-1644*
Wang, Y., *see* Han, M., *LSP 2020 1565-1569*
Wang, Y., *see* Qiu, J., *LSP 2020 855-859*
Wang, Y., *see* Tian, Y., *LSP 2020 1615-1619*
Wang, Y., *see* Ying, X., *LSP 2020 1500-1504*
Wang, Y., Cao, Y., and Zhao, X., CEC: Cluster Embedding Coding for H.264 Steganography; *LSP 2020 955-959*
Wang, Y., Zhang, L., and Song, Z., Angle Estimation of Weak Scatterers Using Improved MUSIC for Bistatic MIMO Radar; *LSP 2020 2164-2167*
Wang, Y., *see* Tang, P., *LSP 2020 151-155*
Wang, Y., *see* Tu, Z., *LSP 2020 1715-1719*
Wang, Y., *see* Fu, Z., *LSP 2020 1140-1144*
Wang, Y., *see* Chen, Y., *LSP 2020 1505-1509*
Wang, Y., *see* Yang, S., *LSP 2020 1730-1734*
Wang, Y., *see* Ying, X., *LSP 2020 496-500*
Wang, Y., *see* Sun, J., *LSP 2020 895-899*
Wang, Z., Zhang, X., and Qian, Z., Practical Cover Selection for Steganography; *LSP 2020 71-75*

Wang, Z., *see* Qin, Y., *LSP 2020 2044-2048*
Wang, Z., *see* Song, G., *LSP 2020 451-455*
Wang, Z., *see* Yang, Y., *LSP 2020 1405-1409*
Wang, Z., Liu, L., and Li, K., Dynamic Markov Chain Monte Carlo-Based Spectrum Sensing; *LSP 2020 1380-1384*
Wang, Z., Xiang, C., Zou, W., and Xu, C., DMA Regularization: Enhancing Discriminability of Neural Networks by Decreasing the Minimal Angle; *LSP 2020 2089-2093*
Wang, Z., Nie, F., Zhang, C., Wang, R., and Li, X., Cappedℓ_p-Norm LDA for Outliers Robust Dimension Reduction; *LSP 2020 1315-1319*
Wang, Z., *see* Zhang, J., *LSP 2020 351-355*
Wang, Z., *see* Zhang, J., *LSP 2020 565-569*
Wang, Z., *see* Chen, J., *LSP 2020 645-649*
Wang, Z., *see* Xiang, C., *LSP 2020 1899-1903*
Wei, R., Ma, X., Zhao, S., and Yan, S., Doppler Estimation Based on Dual-HFM Signal and Speed Spectrum Scanning; *LSP 2020 1740-1744*
Wei, X., *see* Luo, W., *LSP 2020 1545-1549*
Weijer, J.v.d., *see* Yang, F., *LSP 2020 331-335*
Wen, B., *see* Kuang, C., *LSP 2020 1445-1449*
Wen, C., *see* Jin, R., *LSP 2020 1864-1868*
Wen, C., *see* Wang, C., *LSP 2020 780-784*
Wen, J., *see* Fang, M., *LSP 2020 520-524*
Werner, S., *see* Gogineni, V.C., *LSP 2020 1884-1888*
Werner, S., *see* Venkategowda, N.K.D., *LSP 2020 1839-1843*
Willett, P., *see* Ye, S., *LSP 2020 1765-1768*
Wohlberg, B., *see* Xu, X., *LSP 2020 1280-1284*
Wu, C., *see* Tang, P., *LSP 2020 151-155*
Wu, D., Zhang, H., Nie, F., Wang, R., Yang, C., Jia, X., and Li, X., Double-Attentive Principle Component Analysis; *LSP 2020 1814-1818*
Wu, H., *see* Yang, Z., *LSP 2020 2084-2088*
Wu, J., *see* Jiang, P., *LSP 2020 1954-1958*
Wu, J., *see* Liu, Z., *LSP 2020 1745-1749*
Wu, J., *see* Jiang, P., *LSP 2020 725-729*
Wu, J., *see* Ma, L., *LSP 2020 2129-2133*
Wu, J., *see* Huang, L., *LSP 2020 391-395*
Wu, M., *see* Chu, Y., *LSP 2020 995-999*
Wu, N., *see* Li, B., *LSP 2020 1725-1729*
Wu, N., *see* Zhao, M., *LSP 2020 1914-1918*
Wu, Q., *see* Huang, L., *LSP 2020 391-395*
Wu, Q., *see* Chen, Y., *LSP 2020 1135-1139*
Wu, S., *see* Jiang, X., *LSP 2020 1919-1923*
Wu, T., Li, W., Jia, S., Dong, Y., and Zeng, T., Deep Multi-Level Wavelet-CNN Denoiser Prior for Restoring Blurred Image With Cauchy Noise; *LSP 2020 1635-1639*
Wu, X., *see* Zhang, S., *LSP 2020 850-854*
Wu, Z., Wang, C., Jiang, P., and Zhou, Z., Range-Doppler Sidelobe Suppression for Pulsed Radar Based on Golay Complementary Codes; *LSP 2020 1205-1209*

X

Xia, S., Tao, X., Li, N., and Wang, S., Malicious User Detection in Non-Orthogonal Multiple Access Based on Spectrum Analysis; *LSP 2020 1390-1394*
Xia, W., Sun, M., and Zhou, Z., Diffusion Collaborative Feedback Particle Filter; *LSP 2020 1185-1189*
Xia, Y., *see* Zhang, S., *LSP 2020 1345-1349*
Xiang, C., *see* Wang, Z., *LSP 2020 2089-2093*
Xiang, C., Wang, Z., Tian, S., Liao, J., Zou, W., and Xu, C., Matrix Capsule Convolutional Projection for Deep Feature Learning; *LSP 2020 1899-1903*
Xiang, S., and Tang, B., Kernel-Based Edge-Preserving Methods for Abrupt Change Detection; *LSP 2020 86-90*
Xiang, Y., *see* Hua, G., *LSP 2020 236-240*
Xiang, Y., *see* Li, M., *LSP 2020 1794-1798*
Xiao, D., Li, F., Wang, M., and Zheng, H., A Novel High-Capacity Data Hiding in Encrypted Images Based on Compressive Sensing Progressive Recovery; *LSP 2020 296-300*
Xiao, J., *see* Liu, T., *LSP 2020 1320-1324*
Xiao, X., *see* Yang, Y., *LSP 2020 256-260*
Xie, H., *see* Li, J., *LSP 2020 2134-2138*
Xie, K., *see* Nie, D., *LSP 2020 1375-1379*
Xie, L., *see* Yang, S., *LSP 2020 1730-1734*
Xie, X., *see* Zheng, H., *LSP 2020 705-709*
Xie, Y., *see* Zhang, Y., *LSP 2020 476-480*
Xie, Z., *see* Gao, X., *LSP 2020 1874-1878*
Xing, Y., *see* Huang, R., *LSP 2020 775-779*
Xu, C., *see* Tian, L., *LSP 2020 1974-1978*
Xu, C., *see* Wang, Z., *LSP 2020 2089-2093*
Xu, C., *see* Liu, T., *LSP 2020 1550-1554*
Xu, C., *see* Tian, L., *LSP 2020 1645-1649*
Xu, C., *see* Xiang, C., *LSP 2020 1899-1903*
Xu, D., Guan, J., Feng, P., and Wang, W., Association Loss for Visual Object Detection; *LSP 2020 1435-1439*
Xu, F., Vorobyov, S.A., and Yang, X., Joint DOD and DOA Estimation in Slow-Time MIMO Radar via PARAFAC Decomposition; *LSP 2020 1495-1499*
Xu, J., Li, Q., and Wang, J., Multiple Norms and Boundary Constraint Enforced Image Deblurring via Efficient MCMC Algorithm; *LSP 2020 41-45*
Xu, J., *see* Huang, L., *LSP 2020 391-395*
Xu, M., *see* Ding, Q., *LSP 2020 2049-2053*
Xu, S., Han, S., Meng, W., and He, L., QoS-Based Robust Cooperative-Jamming-Aided Beamforming for Correlated Wiretap Channels; *LSP 2020 216-220*
Xu, S., *see* Huang, X., *LSP 2020 785-789*
Xu, W., *see* Lai, H., *LSP 2020 655-659*
Xu, X., Zou, Q., Lin, X., Huang, Y., and Tian, Y., Integral Knowledge Distillation for Multi-Person Pose Estimation; *LSP 2020 436-440*
Xu, X., Sun, Y., Liu, J., Wohlberg, B., and Kamilov, U.S., Provable Convergence of Plug-and-Play Priors With MMSE Denoisers; *LSP 2020 1280-1284*
Xu, Y., and Wang, Q., Asymptotical Optimality of Change Point Detection With Unknown Discrete Post-Change Distributions; *LSP 2020 695-699*
Xu, Z., *see* Zhang, Q., *LSP 2020 945-949*
Xu, Z., *see* Liu, X., *LSP 2020 650-654*

Y

Yan, S., *see* Wei, R., *LSP 2020 1740-1744*
Yan, Y., *see* Huang, L., *LSP 2020 1585-1589*
Yang, A., *see* Sun, L., *LSP 2020 471-475*
Yang, C., *see* Tian, X., *LSP 2020 1180-1184*
Yang, C., *see* Meng, C., *LSP 2020 525-529*
Yang, C., *see* Wu, D., *LSP 2020 1814-1818*
Yang, C., *see* Chen, Y., *LSP 2020 1135-1139*
Yang, C., *see* Zheng, Z., *LSP 2020 1360-1364*
Yang, D., *see* Qin, X., *LSP 2020 1520-1524*
Yang, D., *see* Zheng, H., *LSP 2020 705-709*
Yang, F., *see* Hu, H., *LSP 2020 2034-2038*
Yang, F., Herranz, L., Weijer, J.v.d., Guitian, J.A.I., Lopez, A.M., and Mozerov, M.G., Variable Rate Deep Image Compression With Modulated Autoencoder; *LSP 2020 331-335*
Yang, G., *see* Lv, F., *LSP 2020 1640-1644*
Yang, H., *see* Bao, T., *LSP 2020 1295-1299*
Yang, H., *see* Zou, Q., *LSP 2020 1290-1294*
Yang, H., *see* Ding, Q., *LSP 2020 2049-2053*
Yang, H., Yang, Z., Bao, Y., Liu, S., and Huang, Y., Fast Steganalysis Method for VoIP Streams; *LSP 2020 286-290*
Yang, H., *see* Zou, Q., *LSP 2020 506-510*
Yang, I., *see* Shin, D., *LSP 2020 1065-1069*
Yang, J., *see* Gong, Y., *LSP 2020 920-924*
Yang, J., Aubry, A., De Maio, A., Yu, X., and Cui, G., Design of Constant Modulus Discrete Phase Radar Waveforms Subject to Multi-Spectral Constraints; *LSP 2020 875-879*
Yang, K., *see* Huang, S., *LSP 2020 1335-1339*
Yang, K., *see* Li, H., *LSP 2020 51-55*
Yang, L., *see* Tian, Y., *LSP 2020 1615-1619*
Yang, P., *see* Zhang, J., *LSP 2020 1605-1609*

Yang, Q., *see* Huang, L., *LSP 2020 391-395*
Yang, S., *see* Lu, Z., *LSP 2020 665-669*
Yang, S., Wang, Y., and Xie, L., Adversarial Feature Learning and Unsupervised Clustering Based Speech Synthesis for Found Data With Acoustic and Textual Noise; *LSP 2020 1730-1734*
Yang, X., *see* Xu, F., *LSP 2020 1495-1499*
Yang, X., *see* Shi, Y., *LSP 2020 481-485*
Yang, Y., Yu, H., Zhao, X., and Yi, X., An Adaptive Double-Layered Embedding Scheme for MP3 Steganography; *LSP 2020 1984-1988*
Yang, Y., Xiao, X., Cai, X., and Zhang, W., A Secure and Privacy-Preserving Technique Based on Contrast-Enhancement Reversible Data Hiding and Plaintext Encryption for Medical Images; *LSP 2020 256-260*
Yang, Y., and Wang, Z., Haze Removal: Push DCP at the Edge; *LSP 2020 1405-1409*
Yang, Y., Gao, F., Qian, C., and Liao, G., Model-Aided Deep Neural Network for Source Number Detection; *LSP 2020 91-95*
Yang, Y., *see* Wang, G., *LSP 2020 136-140*
Yang, Z., *see* He, P., *LSP 2020 1355-1359*
Yang, Z., *see* Shi, Y., *LSP 2020 481-485*
Yang, Z., Cheng, Y., Wu, H., and Wang, H., Enhanced Matrix CFAR Detection With Dimensionality Reduction of Riemannian Manifold; *LSP 2020 2084-2088*
Yang, Z., *see* Yang, H., *LSP 2020 286-290*
Yao, C., *see* Liu, X., *LSP 2020 2064-2068*
Yatabe, K., Consistent ICA: Determined BSS Meets Spectrogram Consistency; *LSP 2020 870-874*
Yatabe, K., *see* Masuyama, Y., *LSP 2020 1939-1943*
Yavneh, I., *see* Hong, T., *LSP 2020 501-505*
Yazdi, N., and Todros, K., Measure-Transformed MVDR Beamforming; *LSP 2020 1959-1963*
Ye, S., Bar-Shalom, Y., and Willett, P., Estimation of the Support Parameters of a Uniform PDF and the Cramér-Rao-Leibniz Lower Bound; *LSP 2020 1765-1768*
Yen Tran, T.H., *see* Khoa Phan, T.D., *LSP 2020 535-539*
Yeo, Y., Sagong, M., Shin, Y., Jung, S., and Ko, S., Simple Yet Effective Way for Improving the Performance of Depth Map Super-Resolution; *LSP 2020 2099-2103*
Yeo, Y., Shin, Y., Sagong, M., Kim, S., and Ko, S., Simple Yet Effective Way for Improving the Performance of Lossy Image Compression; *LSP 2020 530-534*
Yi, C., *see* Lim, K., *LSP 2020 231-235*
Yi, Q., *see* Peng, L., *LSP 2020 406-410*
Yi, X., *see* Yang, Y., *LSP 2020 1984-1988*
Yin, F., *see* Hu, D., *LSP 2020 1979-1983*
Yin, H., *see* Wang, H., *LSP 2020 181-185*
Yin, J., *see* Chen, B., *LSP 2020 1670-1674*
Yin, J., *see* Chen, S., *LSP 2020 1460-1464*
Ying, X., Wang, L., Wang, Y., Sheng, W., An, W., and Guo, Y., Deformable 3D Convolution for Video Super-Resolution; *LSP 2020 1500-1504*
Ying, X., Wang, Y., Wang, L., Sheng, W., An, W., and Guo, Y., A Stereo Attention Module for Stereo Image Super-Resolution; *LSP 2020 496-500*
Yokota, T., *see* Sedighin, F., *LSP 2020 810-814*
Yoo, C.D., *see* Park, H., *LSP 2020 411-415*
Yoon, D., Park, J., and Cho, D., Lightweight Deep CNN for Natural Image Matting via Similarity-Preserving Knowledge Distillation; *LSP 2020 2139-2143*
Yoshii, K., *see* Nugraha, A.A., *LSP 2020 2173-2177*
You, X., *see* Zhang, C., *LSP 2020 1774-1778*
You, X., *see* Zhang, C., *LSP 2020 271-275*
Yousfi, Y., and Fridrich, J., An Intriguing Struggle of CNNs in JPEG Steganalysis and the OneHot Solution; *LSP 2020 830-834*
Yu, C., *see* Zhao, C., *LSP 2020 1080-1084*
Yu, C., Hung, K., Wang, S., Tsao, Y., and Hung, J., Time-Domain Multi-Modal Bone/Air Conducted Speech Enhancement; *LSP 2020 1035-1039*
Yu, C., Zhu, X., Lei, Z., and Li, S.Z., Out-of-Distribution Detection for Reliable Face Recognition; *LSP 2020 710-714*
Yu, D., *see* Shi, X., *LSP 2020 1055-1059*
Yu, H., *see* Yang, Y., *LSP 2020 1984-1988*
Yu, H., *see* Qin, X., *LSP 2020 1520-1524*
Yu, H., Gao, X., and Yu, L., Crowdsourcing Based Cross Random Access Point Referencing for Video Coding; *LSP 2020 560-564*
Yu, L., *see* Wang, H., *LSP 2020 181-185*
Yu, L., *see* Zhou, W., *LSP 2020 800-804*
Yu, L., *see* Yu, H., *LSP 2020 560-564*
Yu, S., *see* Zhao, M., *LSP 2020 1914-1918*
Yu, X., *see* Yang, J., *LSP 2020 875-879*
Yu, Z., Li, X., Niu, X., Shi, J., and Zhao, G., AutoHR: A Strong End-to-End Baseline for Remote Heart Rate Measurement With Neural Searching; *LSP 2020 1245-1249*
Yu, Z., Li, J., Guo, Q., and Sun, T., Message Passing Based Robust Target Localization in Distributed MIMO Radars in the Presence of Outliers; *LSP 2020 2168-2172*
Yuan, H., *see* Gu, S., *LSP 2020 176-180*
Yuan, M., *see* Liu, J., *LSP 2020 2014-2018*

Z

Zachariah, D., *see* Liu, X., *LSP 2020 720-724*
Zaheer, M.Z., Mahmood, A., Shin, H., and Lee, S., A Self-Reasoning Framework for Anomaly Detection Using Video-Level Labels; *LSP 2020 1705-1709*
Zahradnik, P., Robust Analytical Design of Optimal Equiripple Lowpass FIR Filters; *LSP 2020 755-759*
Zamani, H., Razavikia, S., Otroshi-Shahreza, H., and Amini, A., Separation of Nonlinearly Mixed Sources Using End-to-End Deep Neural Networks; *LSP 2020 101-105*
Zemlicka, R., *see* Dedecius, K., *LSP 2020 625-629*
Zeng, H., *see* Gu, S., *LSP 2020 176-180*
Zeng, T., *see* Wu, T., *LSP 2020 1635-1639*
Zhang, C., Jing, Y., Huang, Y., and You, X., Interleaved Training for Intelligent Surface-Assisted Wireless Communications; *LSP 2020 1774-1778*
Zhang, C., *see* Wang, Z., *LSP 2020 1315-1319*
Zhang, C., *see* Huang, X., *LSP 2020 785-789*
Zhang, C., Jing, Y., Huang, Y., and You, X., Massive MIMO With Ternary ADCs; *LSP 2020 271-275*
Zhang, F., *see* Miao, H., *LSP 2020 910-914*
Zhang, F., Hou, J., Wang, J., and Wang, W., Uniqueness Guarantee of Solutions of Tensor Tubal-Rank Minimization Problem; *LSP 2020 540-544*
Zhang, H., and Lei, H., The Failure Case of Phase Transition for Penalized Problems in Corrupted Sensing; *LSP 2020 555-559*
Zhang, H., *see* Zou, Q., *LSP 2020 1290-1294*
Zhang, H., *see* Luo, W., *LSP 2020 1545-1549*
Zhang, H., *see* Wu, D., *LSP 2020 1814-1818*
Zhang, H., *see* Zou, Q., *LSP 2020 506-510*
Zhang, H., *see* Zheng, C., *LSP 2020 1270-1274*
Zhang, J., Yang, P., Wang, W., Hong, Y., and Zhang, L., Image Editing via Segmentation Guided Self-Attention Network; *LSP 2020 1605-1609*
Zhang, J., Wang, Z., Li, Y., and Wang, S., Node-Adaptive Multi-Graph Fusion Using Extreme Value Theory; *LSP 2020 351-355*
Zhang, J., *see* Huang, X., *LSP 2020 785-789*
Zhang, J., Wang, Z., Zhao, Z., and Nie, Z., Persymmetric Adaptive Detection With Reduced-Dimension Approach; *LSP 2020 565-569*
Zhang, J., Liao, Y., Zhu, X., Wang, H., and Ding, J., A Deep Learning Approach in the Discrete Cosine Transform Domain to Median Filtering Forensics; *LSP 2020 276-280*
Zhang, J., *see* Liu, J., *LSP 2020 2014-2018*
Zhang, L., *see* Zhang, J., *LSP 2020 1605-1609*
Zhang, L., *see* Wang, Y., *LSP 2020 2164-2167*
Zhang, L., *see* Zhang, S., *LSP 2020 850-854*
Zhang, L., Han, J., and Shi, Z., Learning Temporal Relations from Semantic Neighbors for Acoustic Scene Classification; *LSP 2020 950-954*
Zhang, L.Y., *see* Hua, G., *LSP 2020 236-240*
Zhang, N., *see* Zhang, Q., *LSP 2020 945-949*
Zhang, P., *see* Guo, Y., *LSP 2020 570-574*

Zhang, Q., Zhu, J., Zhang, N., and Xu, Z., Multidimensional Variational Line Spectra Estimation; *LSP 2020 945-949*
Zhang, Q., *see* Tang, W., *LSP 2020 366-370*
Zhang, S., Soubies, E., and Fevotte, C., On the Identifiability of Transform Learning for Non-Negative Matrix Factorization; *LSP 2020 1555-1559*
Zhang, S., Cui, S., and Ding, Z., Hypergraph Spectral Clustering for Point Cloud Segmentation; *LSP 2020 1655-1659*
Zhang, S., *see* Ning, X., *LSP 2020 1944-1948*
Zhang, S., Han, H., Jin, X., and Xia, Y., Complementary Mean-Square Analysis of CNLMS Algorithm Using Pseudo-Energy-Conservation Method; *LSP 2020 1345-1349*
Zhang, S., Zhang, L., Wang, W., and Wu, X., AsNet: Asymmetrical Network for Learning Rich Features in Person Re-Identification; *LSP 2020 850-854*
Zhang, S., *see* Zheng, C., *LSP 2020 1270-1274*
Zhang, T., Wang, S., Huang, X., and Jia, L., Kernel Recursive Least Squares Algorithm Based on the Nyström Method With*k*-Means Sampling; *LSP 2020 361-365*
Zhang, T., and Wang, S., Nyström Kernel Algorithm Under Generalized Maximum Correntropy Criterion; *LSP 2020 1535-1539*
Zhang, W., *see* Qin, Y., *LSP 2020 2044-2048*
Zhang, W., *see* Yang, Y., *LSP 2020 256-260*
Zhang, W., *see* Shi, X., *LSP 2020 1055-1059*
Zhang, W., *see* Wang, X., *LSP 2020 1265-1269*
Zhang, X., *see* Wang, Z., *LSP 2020 71-75*
Zhang, X., *see* Li, S., *LSP 2020 805-809*
Zhang, X., Chen, F., Wang, C., Tao, M., and Jiang, G., SiENet: Siamese Expansion Network for Image Extrapolation; *LSP 2020 1590-1594*
Zhang, X., *see* Zhou, L., *LSP 2020 166-170*
Zhang, X., *see* Liu, Z., *LSP 2020 1745-1749*
Zhang, X., *see* Liu, J., *LSP 2020 2178-2182*
Zhang, Y., *see* Lin, X., *LSP 2020 1934-1938*
Zhang, Y., Peng, L., Li, X., and Xie, Y., A Sparse Robust Adaptive Filtering Algorithm Based on the*q*-Rényi Kernel Function; *LSP 2020 476-480*
Zhang, Y., Li, Y., Kong, Y., and Liu, B., Attention Aggregation Encoder-Decoder Network Framework for Stereo Matching; *LSP 2020 760-764*
Zhang, Y., *see* Huang, Y., *LSP 2020 700-704*
Zhang, Y., *see* Zhu, Y., *LSP 2020 980-984*
Zhang, Y., *see* Hu, G., *LSP 2020 1879-1883*
Zhang, Y., *see* Ma, L., *LSP 2020 2129-2133*
Zhang, Z., *see* Zheng, H., *LSP 2020 705-709*
Zhang, Z., *see* Guo, Y., *LSP 2020 570-574*
Zhao, C., *see* Qin, Y., *LSP 2020 2044-2048*
Zhao, C., Mao, X., Chen, M., and Yu, C., Continuous Approximation Based Dimension-Reduced Estimation for Arbitrary Sampling; *LSP 2020 1080-1084*
Zhao, G., *see* Yu, Z., *LSP 2020 1245-1249*
Zhao, J., *see* Lv, F., *LSP 2020 1640-1644*
Zhao, J., *see* Zheng, Z., *LSP 2020 376-380*
Zhao, L., Zhao, T., Sun, T., Liu, Z., and Chen, Z., Multi-View Robust Feature Learning for Data Clustering; *LSP 2020 1750-1754*
Zhao, M., Ning, K., Yu, S., Liu, L., and Wu, N., Quantizing Oriented Object Detection Network via Outlier-Aware Quantization and IoU Approximation; *LSP 2020 1914-1918*
Zhao, R., *see* Liu, T., *LSP 2020 1320-1324*
Zhao, S., *see* Li, S., *LSP 2020 371-375*
Zhao, S., *see* Wei, R., *LSP 2020 1740-1744*
Zhao, T., *see* Zhao, L., *LSP 2020 1750-1754*
Zhao, X., *see* Yang, Y., *LSP 2020 1984-1988*
Zhao, X., *see* Wang, Y., *LSP 2020 955-959*
Zhao, X., *see* Su, A., *LSP 2020 221-225*
Zhao, Y., Dou, Y., and Feng, J., Temporally Refined Graph U-Nets for Human Shape and Pose Estimation From Monocular Videos; *LSP 2020 1949-1953*
Zhao, Y., *see* Niu, Y., *LSP 2020 191-195*
Zhao, Z., *see* Zhang, J., *LSP 2020 565-569*
Zhen, K., Lee, M.S., Sung, J., Beack, S., and Kim, M., Psychoacoustic Calibration of Loss Functions for Efficient End-to-End Neural Audio Coding; *LSP 2020 2159-2163*
Zheng, C., Zhu, L., Zhang, S., and Zhang, H., Efficient Parameter-Free Adaptive Multi-Modal Hashing; *LSP 2020 1270-1274*
Zheng, H., *see* Xiao, D., *LSP 2020 296-300*
Zheng, H., Yang, D., Xie, X., and Zhang, Z., An Adaptive Algorithm for Active Vibration Control of Parameter-Varying Systems With a New Online Secondary Path Estimation Method; *LSP 2020 705-709*
Zheng, P., *see* Guo, J., *LSP 2020 336-340*
Zheng, Z., Huang, Y., Wang, W., and So, H.C., Direction-of-Arrival Estimation of Coherent Signals via Coprime Array Interpolation; *LSP 2020 585-589*
Zheng, Z., Yang, C., Wang, W., and So, H.C., Robust DOA Estimation Against Mutual Coupling With Nested Array; *LSP 2020 1360-1364*
Zheng, Z., Zhao, J., Mili, L., and Liu, Z., Robust Unscented Unbiased Minimum-Variance Estimator for Nonlinear System Dynamic State Estimation With Unknown Inputs; *LSP 2020 376-380*
Zheng, Z., Fu, Y., Wang, W., and So, H.C., Sparse Array Design for Adaptive Beamforming via Semidefinite Relaxation; *LSP 2020 925-929*
Zhong, H., *see* Shi, Y., *LSP 2020 481-485*
Zhou, F., *see* Nie, D., *LSP 2020 1375-1379*
Zhou, J., Li, H., and Cui, W., Low-Complexity Joint Transmit and Receive Beamforming for MIMO Radar With Multi-Targets; *LSP 2020 1410-1414*
Zhou, J., Hong, K., Deng, T., Wang, Y., and Liu, Q., Progressive Colorization via Iterative Generative Models; *LSP 2020 2054-2058*
Zhou, K., Li, D., Su, Y., and Liu, T., Joint Design of Transmit Waveform and Mismatch Filter in the Presence of Interrupted Sampling Repeater Jamming; *LSP 2020 1610-1614*
Zhou, L., Feng, G., Shen, L., and Zhang, X., On Security Enhancement of Steganography via Generative Adversarial Image; *LSP 2020 166-170*
Zhou, W., *see* Liu, C., *LSP 2020 1620-1624*
Zhou, W., Chen, Y., Liu, C., and Yu, L., GFNet: Gate Fusion Network With Res2Net for Detecting Salient Objects in RGB-D Images; *LSP 2020 800-804*
Zhou, X., *see* Huang, M., *LSP 2020 1819-1823*
Zhou, Y., *see* Chu, Y., *LSP 2020 995-999*
Zhou, Y., and Ding, F., Modeling Nonlinear Processes Using the Radial Basis Function-Based State-Dependent Autoregressive Models; *LSP 2020 1600-1604*
Zhou, Y., *see* Liu, X., *LSP 2020 2064-2068*
Zhou, Y., Tian, X., and Li, H., Multi-Task WaveRNN With an Integrated Architecture for Cross-Lingual Voice Conversion; *LSP 2020 1310-1314*
Zhou, Z., *see* Wu, Z., *LSP 2020 1205-1209*
Zhou, Z., *see* Wang, G., *LSP 2020 136-140*
Zhou, Z., *see* Xia, W., *LSP 2020 1185-1189*
Zhu, F., *see* Wan, J., *LSP 2020 1330-1334*
Zhu, H., *see* Huang, Y., *LSP 2020 685-689*
Zhu, J., *see* Zhang, Q., *LSP 2020 945-949*
Zhu, J., *see* Lin, X., *LSP 2020 605-609*
Zhu, J., *see* Hao, W., *LSP 2020 1325-1329*
Zhu, L., *see* Zheng, C., *LSP 2020 1270-1274*
Zhu, M., *see* Pan, Z., *LSP 2020 1275-1279*
Zhu, X., Qian, J., Wang, H., and Liu, P., Curriculum Enhanced Supervised Attention Network for Person Re-Identification; *LSP 2020 1665-1669*
Zhu, X., *see* Yu, C., *LSP 2020 710-714*
Zhu, X., *see* Zhang, J., *LSP 2020 276-280*
Zhu, Y., *see* Song, Y., *LSP 2020 1844-1848*
Zhu, Y., Chen, Q., Li, Y., and Zhang, Y., Frequency-Domain Entropy-Based Blind Support Recovery from Multiple Measurement Vectors; *LSP 2020 980-984*
Zhu, Y., *see* Zhu, Y., *LSP 2020 980-984*
Zhu, Y., *see* Song, Y., *LSP 2020 2124-2128*
Zhu, Y., Fu, X., and Liu, A., Learning Dual Transformation Networks for Image Contrast Enhancement; *LSP 2020 1999-2003*
Zhu, Z., *see* Li, S., *LSP 2020 1400-1404*
Zhuang, L., *see* Guo, J., *LSP 2020 336-340*
Zibulevsky, M., *see* Hong, T., *LSP 2020 501-505*
Zou, Q., A PDE Model for Smooth Surface Reconstruction from 2D Parallel Slices; *LSP 2020 1015-1019*
Zou, Q., *see* Xu, X., *LSP 2020 436-440*

Zou, Q., Zhang, H., Cai, D., and Yang, H., A Low-Complexity Joint User Activity, Channel and Data Estimation for Grant-Free Massive MIMO Systems; *LSP 2020 1290-1294*

Zou, Q., Zhang, H., Cai, D., and Yang, H., Message Passing Based Joint Channel and User Activity Estimation for Uplink Grant-Free Massive MIMO Systems With Low-Precision ADCs; *LSP 2020 506-510*

Zou, W., *see* Wang, Z., *LSP 2020 2089-2093*

Zou, W., *see* Xiang, C., *LSP 2020 1899-1903*

Zou, Y., *see* Huang, R., *LSP 2020 775-779*

Zou, Y., and Liu, H., Semidefinite Programming Methods for Alleviating Clock Synchronization Bias and Sensor Position Errors in TDOA Localization; *LSP 2020 241-245*

Zou, Y., *see* Wang, H., *LSP 2020 1560-1564*

Zucatelli, G., and Coelho, R., Adaptive Reverberation Absorption Using Non-Stationary Masking Components Detection for Intelligibility Improvement; *LSP 2020 1-5*

Subject Index

Numeric

5G mobile communication

A Hybrid Downlink NOMA With OFDM and OFDM-IM for Beyond 5G Wireless Networks. *Tusha, A.*, +, *LSP 2020 491-495*

Transform Domain Precoding (TDP) for 5G Evolution and 6G. *Liu, W.*, +, *LSP 2020 1145-1149*

6G mobile communication

Transform Domain Precoding (TDP) for 5G Evolution and 6G. *Liu, W.*, +, *LSP 2020 1145-1149*

A

Acoustic signal processing

A Novel Anti-Collusion Audio Fingerprinting Scheme Based on Fourier Coefficients Reversing. *Li, M.*, +, *LSP 2020 1794-1798*

Analytical Geometry Calibration for Acoustic Transceiver Arrays. *Hu, D.*, +, *LSP 2020 1979-1983*

Beamforming With Small-Spacing Microphone Arrays Using Constrained/Generalized LASSO. *Wang, X.*, +, *LSP 2020 356-360*

CNN-Based Learnable Gammatone Filterbank and Equal-Loudness Normalization for Environmental Sound Classification. *Park, H.*, +, *LSP 2020 411-415*

HRTF Selection by Anthropometric Regression for Improving Horizontal Localization Accuracy. *Spagnol, S., LSP 2020 590-594*

Minkowski-Algebra-Based Super-Sparse Array Design for Super-Resolution Ultrasound Imaging. *Mahurkar, A.G.*, +, *LSP 2020 1060-1064*

On the Steady State Performance of the Kalman Filter Applied to Acoustical Systems. *Fabry, J.*, +, *LSP 2020 1854-1858*

Psychoacoustic Calibration of Loss Functions for Efficient End-to-End Neural Audio Coding. *Zhen, K.*, +, *LSP 2020 2159-2163*

Robust Multipath Time-Delay Estimation of Broadband Source Using a Vertical Line Array in Deep Water. *Li, H.*, +, *LSP 2020 51-55*

Adaptive codes

Intra-Frame Compression of Point Cloud Geometry Using Dyadic Decomposition. *Peixoto, E., LSP 2020 246-250*

Adaptive estimation

A New Diffusion Variable Spatial Regularized QRRLS Algorithm. *Chu, Y.*, +, *LSP 2020 995-999*

A New Robust Kalman Filter With Adaptive Estimate of Time-Varying Measurement Bias. *Huang, Y.*, +, *LSP 2020 700-704*

Novel Parameter Estimation and Radar Detection Approaches for Multiple Point-Like Targets: Designs and Comparisons. *Addabbo, P.*, +, *LSP 2020 1789-1793*

Adaptive filters

A Robust Affine Projection Algorithm Against Impulsive Noise. *Jeong, J.J., LSP 2020 1530-1534*

A Sparse Conjugate Gradient Adaptive Filter. *Lee, C.*, +, *LSP 2020 1000-1004*

A Sparse Robust Adaptive Filtering Algorithm Based on the$q$-Rényi Kernel Function. *Zhang, Y.*, +, *LSP 2020 476-480*

A Tunable Detector for Distributed Target Detection in the Situation of Signal Mismatch. *Tang, P.*, +, *LSP 2020 151-155*

Adaptive Debanding Filter. *Tu, Z.*, +, *LSP 2020 1715-1719*

Adaptively Leverage Unlabeled Tracklets Based on Part Attention Model for Few-Example Re-ID. *Han, J.*, +, *LSP 2020 2074-2078*

An Adaptive Kinematic Filter Extended by the Additionally Measured Velocity or Acceleration. *Chernoguz, N., LSP 2020 1430-1434*

Complementary Mean-Square Analysis of CNLMS Algorithm Using Pseudo-Energy-Conservation Method. *Zhang, S.*, +, *LSP 2020 1345-1349*

Diffusion LMS With Communication Delays: Stability and Performance Analysis. *Hua, F.*, +, *LSP 2020 730-734*

Fractional-Order Correntropy Adaptive Filters for Distributed Processing of α-Stable Signals. *Gogineni, V.C.*, +, *LSP 2020 1884-1888*

Gaussian-Adaptive Bilateral Filter. *Chen, B.*, +, *LSP 2020 1670-1674*

Kernel Recursive Least Squares Algorithm Based on the Nyström Method With$k$-Means Sampling. *Zhang, T.*, +, *LSP 2020 361-365*

Nearest Kronecker Product Decomposition Based Generalized Maximum Correntropy and Generalized Hyperbolic Secant Robust Adaptive Filters. *Bhattacharjee, S.S.*, +, *LSP 2020 1525-1529*

Nyström Kernel Algorithm Under Generalized Maximum Correntropy Criterion. *Zhang, T.*, +, *LSP 2020 1535-1539*

Robust Hierarchical-Optimization RLS Against Sparse Outliers. *Slavakis, K.*, +, *LSP 2020 171-175*

Tracking Performance of Online Stochastic Learners. *Vlaski, S.*, +, *LSP 2020 1385-1389*

Adaptive signal detection

Adaptive Detection Using Whitened Data When Some of the Training Samples Undergo Covariance Mismatch. *Besson, O., LSP 2020 795-799*

Adaptive signal processing

Nearest Kronecker Product Decomposition Based Generalized Maximum Correntropy and Generalized Hyperbolic Secant Robust Adaptive Filters. *Bhattacharjee, S.S.*, +, *LSP 2020 1525-1529*

Affine transforms

A Robust Affine Projection Algorithm Against Impulsive Noise. *Jeong, J.J., LSP 2020 1530-1534*

Airborne radar

An Off-Grid STAP Algorithm Based On Local Mesh Splitting With Bistatic Radar System. *He, P.*, +, *LSP 2020 1355-1359*

All-pass filters

All-Pass Filter Design Using Blaschke Interpolation. *Appaiah, K.*, +, *LSP 2020 226-230*

Amplify and forward communication

Legitimate Surveillance via Jamming in Multichannel Relaying System. *Hu, G.*, +, *LSP 2020 1879-1883*

Analog-digital conversion

A Low-Complexity Joint User Activity, Channel and Data Estimation for Grant-Free Massive MIMO Systems. *Zou, Q.*, +, *LSP 2020 1290-1294*

Massive MIMO With Ternary ADCs. *Zhang, C.*, +, *LSP 2020 271-275*

Message Passing Based Joint Channel and User Activity Estimation for Uplink Grant-Free Massive MIMO Systems With Low-Precision ADCs. *Zou, Q.*, +, *LSP 2020 506-510*

Neural Network-Optimized Channel Estimator and Training Signal Design for MIMO Systems With Few-Bit ADCs. *Nguyen, D.H.N., LSP 2020 1370-1374*

Angular measurement

Range and Bearing Data Fusion for Precise Convex Network Localization. *Soares, C.*, +, *LSP 2020 670-674*

Antenna arrays

Efficient Joint Localization and Synchronization in Distributed MIMO Radars. *Kazemi, S.A.R.*, +, *LSP 2020 1200-1204*

Hybrid Massive MIMO Two-Way Relaying With Users and Relay Hardware Impairments. *Sharma, E.*, +, *LSP 2020 486-490*

Low-Complexity Joint Transmit and Receive Beamforming for MIMO Radar With Multi-Targets. *Zhou, J.*, +, *LSP 2020 1410-1414*

Manifold Sensitivity Analysis of Frequency Diverse Array. *Liao, T.*, +, *LSP 2020 1020-1024*
Massive MIMO With Ternary ADCs. *Zhang, C.*, +, *LSP 2020 271-275*
Recursive CSI Quantization of Time-Correlated MIMO Channels by Deep Learning Classification. *Schwarz, S., LSP 2020 1799-1803*
Secrecy Outage Analysis Over Random Beamforming Transmission With User Scheduling: Collusion vs. Exclusion. *Bao, T.*, +, *LSP 2020 1295-1299*
Sensing Performance of Multi-Antenna Energy Detector With Temporal Signal Correlation in Cognitive Vehicular Networks. *Song, K.*, +, *LSP 2020 1050-1054*

Antenna theory
Massive MIMO With Ternary ADCs. *Zhang, C.*, +, *LSP 2020 271-275*

Approximation theory
A Low-Complexity Joint User Activity, Channel and Data Estimation for Grant-Free Massive MIMO Systems. *Zou, Q.*, +, *LSP 2020 1290-1294*
Asymptotic Analysis of the Convergence Time of Autoregressive Kalman Filters. *Locubiche-Serra, S.*, +, *LSP 2020 820-824*
CAPPA: Continuous-Time Accelerated Proximal Point Algorithm for Sparse Recovery. *Garg, K.*, +, *LSP 2020 1760-1764*
Continuous Approximation Based Dimension-Reduced Estimation for Arbitrary Sampling. *Zhao, C.*, +, *LSP 2020 1080-1084*
Convolutional Approximate Message-Passing. *Takeuchi, K., LSP 2020 416-420*
Filter Design for Two-Channel Filter Banks on Directed Bipartite Graphs. *Tay, D.B., LSP 2020 2094-2098*
Fractional Power Spectrum and Fractional Correlation Estimations for Non-uniform Sampling. *Ma, J.*, +, *LSP 2020 930-934*
Global Optimization for Recovery of Clipped Signals Corrupted With Poisson-Gaussian Noise. *Marmin, A.*, +, *LSP 2020 970-974*
High-Precision Trajectory Data Reconstruction for TT&C Systems Using LS B-Spline Approximation. *Sun, J.*, +, *LSP 2020 895-899*
Hybrid Massive MIMO Two-Way Relaying With Users and Relay Hardware Impairments. *Sharma, E.*, +, *LSP 2020 486-490*
Importance Densities for Particle Filtering Using Iterated Conditional Expectations. *Hostettler, R.*, +, *LSP 2020 211-215*
Integer DCT Approximation With Arbitrary Size and Adjustable Precision. *Thomaz, L.A.*, +, *LSP 2020 965-969*
Legitimate Surveillance via Jamming in Multichannel Relaying System. *Hu, G.*, +, *LSP 2020 1879-1883*
Localization of Near-Field Sources for Exact Source-Sensor Spatial Geometry. *He, J.*, +, *LSP 2020 1040-1044*
Low-Complexity Joint Transmit and Receive Beamforming for MIMO Radar With Multi-Targets. *Zhou, J.*, +, *LSP 2020 1410-1414*
On Mean Absolute Error for Deep Neural Network Based Vector-to-Vector Regression. *Qi, J.*, +, *LSP 2020 1485-1489*
Provable Convergence of Plug-and-Play Priors With MMSE Denoisers. *Xu, X.*, +, *LSP 2020 1280-1284*
Quantizing Oriented Object Detection Network via Outlier-Aware Quantization and IoU Approximation. *Zhao, M.*, +, *LSP 2020 1914-1918*
Robust Gaussian Approximate Fixed-Interval Smoother With Outlier Detection. *Chen, Y.*, +, *LSP 2020 1505-1509*
Separation of Nonlinearly Mixed Sources Using End-to-End Deep Neural Networks. *Zamani, H.*, +, *LSP 2020 101-105*
Suboptimal Kalman Filtering in Triplet Markov Models Using Model Order Reduction. *Lehmann, F.*, +, *LSP 2020 1100-1104*

Arithmetic codes
Intra-Frame Compression of Point Cloud Geometry Using Dyadic Decomposition. *Peixoto, E., LSP 2020 246-250*

Array signal processing
A New Approach to Construct Virtual Array With Increased Degrees of Freedom for Moving Sparse Arrays. *Li, S.*, +, *LSP 2020 805-809*
A Virtual Nested MIMO Array Exploiting Fourth Order Difference Coarray. *Fu, Z.*, +, *LSP 2020 1140-1144*
Analytical Geometry Calibration for Acoustic Transceiver Arrays. *Hu, D.*, +, *LSP 2020 1979-1983*
Angle Estimation of Weak Scatterers Using Improved MUSIC for Bistatic MIMO Radar. *Wang, Y.*, +, *LSP 2020 2164-2167*
Beamforming With Small-Spacing Microphone Arrays Using Constrained/Generalized LASSO. *Wang, X.*, +, *LSP 2020 356-360*
Compressed Arrays and Hybrid Channel Sensing: A Cramér-Rao Bound Based Analysis. *Koochakzadeh, A.*, +, *LSP 2020 1395-1399*
Compressed Channel Estimation for Intelligent Reflecting Surface-Assisted Millimeter Wave Systems. *Wang, P.*, +, *LSP 2020 905-909*
Continuous Approximation Based Dimension-Reduced Estimation for Arbitrary Sampling. *Zhao, C.*, +, *LSP 2020 1080-1084*
Cross Term Decay in Multiplicative Processors. *Chavali, V.*, +, *LSP 2020 56-60*
Detecting Replay Attacks Using Multi-Channel Audio: A Neural Network-Based Method. *Gong, Y.*, +, *LSP 2020 920-924*
Direction-of-Arrival Estimation of Coherent Signals via Coprime Array Interpolation. *Zheng, Z.*, +, *LSP 2020 585-589*
Enhancing mmWave DOA Estimation by Cumulative Power Gradient At Low SNR. *Tian, L.*, +, *LSP 2020 1974-1978*
Extended Nested Arrays for Consecutive Virtual Aperture Enhancement. *Ren, S.*, +, *LSP 2020 575-579*
Intelligent Reflecting Surfaces Assisted Secure Transmission Without Eavesdropper's CSI. *Wang, H.*, +, *LSP 2020 1300-1304*
Interleaved Training for Intelligent Surface-Assisted Wireless Communications. *Zhang, C.*, +, *LSP 2020 1774-1778*
Joint DOD and DOA Estimation in Slow-Time MIMO Radar via PARAFAC Decomposition. *Xu, F.*, +, *LSP 2020 1495-1499*
Localization of Near-Field Sources for Exact Source-Sensor Spatial Geometry. *He, J.*, +, *LSP 2020 1040-1044*
Low-Complexity Joint Transmit and Receive Beamforming for MIMO Radar With Multi-Targets. *Zhou, J.*, +, *LSP 2020 1410-1414*
Manifold Sensitivity Analysis of Frequency Diverse Array. *Liao, T.*, +, *LSP 2020 1020-1024*
Maximum Entropy-Based Interference-Plus-Noise Covariance Matrix Reconstruction for Robust Adaptive Beamforming. *Mohammadzadeh, S.*, +, *LSP 2020 845-849*
Measure-Transformed MVDR Beamforming. *Yazdi, N.*, +, *LSP 2020 1959-1963*
Minkowski-Algebra-Based Super-Sparse Array Design for Super-Resolution Ultrasound Imaging. *Mahurkar, A.G.*, +, *LSP 2020 1060-1064*
Model-Aided Deep Neural Network for Source Number Detection. *Yang, Y.*, +, *LSP 2020 91-95*
QoS-Based Robust Cooperative-Jamming-Aided Beamforming for Correlated Wiretap Channels. *Xu, S.*, +, *LSP 2020 216-220*
Range-Angle Decoupling and Estimation for FDA-MIMO Radar via Atomic Norm Minimization and Accelerated Proximal Gradient. *Tang, W.*, +, *LSP 2020 366-370*
Recursive CSI Quantization of Time-Correlated MIMO Channels by Deep Learning Classification. *Schwarz, S., LSP 2020 1799-1803*
Robust DOA Estimation Against Mutual Coupling With Nested Array. *Zheng, Z.*, +, *LSP 2020 1360-1364*
Robust Multipath Time-Delay Estimation of Broadband Source Using a Vertical Line Array in Deep Water. *Li, H.*, +, *LSP 2020 51-55*
Secrecy Outage Analysis Over Random Beamforming Transmission With User Scheduling: Collusion vs. Exclusion. *Bao, T.*, +, *LSP 2020 1295-1299*
Sparse Array Design for Adaptive Beamforming via Semidefinite Relaxation. *Zheng, Z.*, +, *LSP 2020 925-929*
Transform Domain Precoding (TDP) for 5G Evolution and 6G. *Liu, W.*, +, *LSP 2020 1145-1149*
Underdetermined DOA Estimation via Covariance Matrix Completion for Nested Sparse Circular Array in Nonuniform Noise. *Jiang, G.*, +, *LSP 2020 1824-1828*

Audio coding
A Novel Anti-Collusion Audio Fingerprinting Scheme Based on Fourier Coefficients Reversing. *Li, M.*, +, *LSP 2020 1794-1798*
Psychoacoustic Calibration of Loss Functions for Efficient End-to-End Neural Audio Coding. *Zhen, K.*, +, *LSP 2020 2159-2163*

Audio recording
Modeling Label Dependencies for Audio Tagging With Graph Convolutional Network. *Wang, H.*, +, *LSP 2020 1560-1564*

Subband Aware CNN for Cell-Phone Recognition. *Lin, X.*, +, *LSP 2020 605-609*

Audio signal processing

Addressing Missing Labels in Large-Scale Sound Event Recognition Using a Teacher-Student Framework With Loss Masking. *Fonseca, E.*, +, *LSP 2020 1235-1239*

Amphibian Sounds Generating Network Based on Adversarial Learning. *Park, S.*, +, *LSP 2020 640-644*

Analytical Geometry Calibration for Acoustic Transceiver Arrays. *Hu, D.*, +, *LSP 2020 1979-1983*

CNN-Based Learnable Gammatone Filterbank and Equal-Loudness Normalization for Environmental Sound Classification. *Park, H.*, +, *LSP 2020 411-415*

Consistent ICA: Determined BSS Meets Spectrogram Consistency. *Yatabe, K., LSP 2020 870-874*

Detecting Replay Attacks Using Multi-Channel Audio: A Neural Network-Based Method. *Gong, Y.*, +, *LSP 2020 920-924*

Flow-Based Independent Vector Analysis for Blind Source Separation. *Nugraha, A.A.*, +, *LSP 2020 2173-2177*

HRTF Selection by Anthropometric Regression for Improving Horizontal Localization Accuracy. *Spagnol, S., LSP 2020 590-594*

Modeling Label Dependencies for Audio Tagging With Graph Convolutional Network. *Wang, H.*, +, *LSP 2020 1560-1564*

Online Spectrogram Inversion for Low-Latency Audio Source Separation. *Magron, P.*, +, *LSP 2020 306-310*

Pre-Training Audio Representations With Self-Supervision. *Tagliasacchi, M.*, +, *LSP 2020 600-604*

Psychoacoustic Calibration of Loss Functions for Efficient End-to-End Neural Audio Coding. *Zhen, K.*, +, *LSP 2020 2159-2163*

Subband Aware CNN for Cell-Phone Recognition. *Lin, X.*, +, *LSP 2020 605-609*

Audio-visual systems

Active Speaker Detection and Localization in Videos Using Low-Rank and Kernelized Sparsity. *Pu, J.*, +, *LSP 2020 865-869*

Autoregressive processes

Asymptotic Analysis of the Convergence Time of Autoregressive Kalman Filters. *Locubiche-Serra, S.*, +, *LSP 2020 820-824*

Modeling Nonlinear Processes Using the Radial Basis Function-Based State-Dependent Autoregressive Models. *Zhou, Y.*, +, *LSP 2020 1600-1604*

Temporal Localization of Non-Static Digital Videos Using the Electrical Network Frequency. *Fernandez-Menduina, S.*, +, *LSP 2020 745-749*

Vital Sign Extraction in the Presence of Radar Mutual Interference. *Liu, Z.*, +, *LSP 2020 1745-1749*

AWGN

A Multifamily GLRT for CFAR Detection of Signals in a Union of Subspaces. *Socheleau, F., LSP 2020 2104-2108*

Grouped Multi-Scale Network for Real-World Image Denoising. *Song, Y.*, +, *LSP 2020 2124-2128*

AWGN channels

Learning Blind Pixelwise Affine Image Denoiser With Single Noisy Images. *Byun, J.*, +, *LSP 2020 1105-1109*

B

Backpropagation

Amphibian Sounds Generating Network Based on Adversarial Learning. *Park, S.*, +, *LSP 2020 640-644*

Flow-Based Independent Vector Analysis for Blind Source Separation. *Nugraha, A.A.*, +, *LSP 2020 2173-2177*

Banach spaces

The Role of Neural Network Activation Functions. *Parhi, R.*, +, *LSP 2020 1779-1783*

Band-pass filters

Vital Sign Extraction in the Presence of Radar Mutual Interference. *Liu, Z.*, +, *LSP 2020 1745-1749*

Bandlimited signals

Iterative Reconstruction of Signals on Graph. *Brugnoli, E.*, +, *LSP 2020 76-80*

Bar codes

The Nested QR Code. *Chou, G.*, +, *LSP 2020 1230-1234*

Bayes methods

A New Robust Kalman Filter With Adaptive Estimate of Time-Varying Measurement Bias. *Huang, Y.*, +, *LSP 2020 700-704*

An Insight Into the Gibbs Sampler: Keep the Samples or Drop Them?. *Boissy, J.*, +, *LSP 2020 2069-2073*

BayesCap: A Bayesian Approach to Brain Tumor Classification Using Capsule Networks. *Afshar, P.*, +, *LSP 2020 2024-2028*

Consensus Based Distributed Sparse Bayesian Learning by Fast Marginal Likelihood Maximization. *Manss, C.*, +, *LSP 2020 2119-2123*

Cooperative Parameter Estimation on the Unit Sphere Using a Network of Diffusion Particle Filters. *de Figueredo, C.G.*, +, *LSP 2020 715-719*

Deep Clustering With Variational Autoencoder. *Lim, K.*, +, *LSP 2020 231-235*

Efficient Bayesian Sequential Classification Under the Markov Assumption for Various Loss Functions. *Rademacher, P.*, +, *LSP 2020 401-405*

Multi-Frame Super-Resolution Combining Demons Registration and Regularized Bayesian Reconstruction. *do Nascimento, T.P.*, +, *LSP 2020 2009-2013*

Multidimensional Variational Line Spectra Estimation. *Zhang, Q.*, +, *LSP 2020 945-949*

Multiobject Fusion With Minimum Information Loss. *Gao, L.*, +, *LSP 2020 201-205*

Multiple Norms and Boundary Constraint Enforced Image Deblurring via Efficient MCMC Algorithm. *Xu, J.*, +, *LSP 2020 41-45*

Novel Parameter Estimation and Radar Detection Approaches for Multiple Point-Like Targets: Designs and Comparisons. *Addabbo, P.*, +, *LSP 2020 1789-1793*

Optimal Decision Rules for Simple Hypothesis Testing Under General Criterion Involving Error Probabilities. *Dulek, B.*, +, *LSP 2020 261-265*

Optimal Parameter Design for Estimation Theoretic Secure Broadcast. *Goken, C.*, +, *LSP 2020 281-285*

Robust Gaussian Approximate Fixed-Interval Smoother With Outlier Detection. *Chen, Y.*, +, *LSP 2020 1505-1509*

Sequential Poisson Regression in Diffusion Networks. *Dedecius, K.*, +, *LSP 2020 625-629*

Stacked Bayesian Matching Pursuit for One-Bit Compressed Sensing. *Chae, J.*, +, *LSP 2020 550-554*

Variable Splitting Methods for Constrained State Estimation in Partially Observed Markov Processes. *Gao, R.*, +, *LSP 2020 1305-1309*

Belief networks

Consensus Based Distributed Sparse Bayesian Learning by Fast Marginal Likelihood Maximization. *Manss, C.*, +, *LSP 2020 2119-2123*

Convergence Analysis of Gaussian SPAWN Under High-Order Graphical Models. *Li, B.*, +, *LSP 2020 1725-1729*

Bessel functions

On the Product of Two Correlated Complex Gaussian Random Variables. *Li, Y.*, +, *LSP 2020 16-20*

Binary codes

Correlation Filtering-Based Hashing for Fine-Grained Image Retrieval. *Ma, L.*, +, *LSP 2020 2129-2133*

Efficient Parameter-Free Adaptive Multi-Modal Hashing. *Zheng, C.*, +, *LSP 2020 1270-1274*

Graph Regularized Deep Discrete Hashing for Multi-Label Image Retrieval. *Wan, J.*, +, *LSP 2020 1994-1998*

Binary sequences

A Direct Construction of$q$-ary Even Length Z-Complementary Pairs Using Generalized Boolean Functions. *Adhikary, A.R.*, +, *LSP 2020 146-150*

Binary Complementary Sequence Set With Low Correlation Zone. *Liu, T.*, +, *LSP 2020 1550-1554*

Efficient Generation of Low Autocorrelation Binary Sequences. *Dimitrov, M.*, +, *LSP 2020 341-345*

On the Generation of Long Binary Sequences With Record-Breaking PSL Values. *Dimitrov, M.*, +, *LSP 2020 1904-1908*

Biodiffusion

A 4D Basis and Sampling Scheme for the Tensor Encoded Multi-Dimensional Diffusion MRI Signal. *Bates, A.P.*, +, *LSP 2020 790-794*

Biological tissues
B-Scan Attentive CNN for the Classification of Retinal Optical Coherence Tomography Volumes. *Das, V.*, +, *LSP 2020 1025-1029*
Biomedical MRI
A 4D Basis and Sampling Scheme for the Tensor Encoded Multi-Dimensional Diffusion MRI Signal. *Bates, A.P.*, +, *LSP 2020 790-794*
Combining of Multiple Deep Networks via Ensemble Generalization Loss, Based on MRI Images, for Alzheimer's Disease Classification. *Choi, J.Y.*, +, *LSP 2020 206-210*
MRI and SPECT Image Fusion Using a Weighted Parameter Adaptive Dual Channel PCNN. *Panigrahy, C.*, +, *LSP 2020 690-694*
Restoration of Lossy JPEG-Compressed Brain MR Images Using Cross-Domain Neural Networks. *Chung, K.J.*, +, *LSP 2020 141-145*
Biomedical optical imaging
B-Scan Attentive CNN for the Classification of Retinal Optical Coherence Tomography Volumes. *Das, V.*, +, *LSP 2020 1025-1029*
Biomedical ultrasonics
Minkowski-Algebra-Based Super-Sparse Array Design for Super-Resolution Ultrasound Imaging. *Mahurkar, A.G.*, +, *LSP 2020 1060-1064*
Biometrics (access control)
Periocular Recognition in the Wild With Generalized Label Smoothing Regularization. *Jung, Y.G.*, +, *LSP 2020 1455-1459*
Vein-Based Biometric Verification Using Densely-Connected Convolutional Autoencoder. *Kuzu, R.S.*, +, *LSP 2020 1869-1873*
Blind source separation
Consistent ICA: Determined BSS Meets Spectrogram Consistency. *Yatabe, K., LSP 2020 870-874*
Flow-Based Independent Vector Analysis for Blind Source Separation. *Nugraha, A.A.*, +, *LSP 2020 2173-2177*
Multi-Delay Sparse Approach to Residual Crosstalk Reduction for Blind Source Separation. *Emura, S.*, +, *LSP 2020 1630-1634*
Separation of Nonlinearly Mixed Sources Using End-to-End Deep Neural Networks. *Zamani, H.*, +, *LSP 2020 101-105*
Spectral Estimation for Multivariate Locally Time-Warped Signals. *Meynard, A., LSP 2020 311-315*
Bones
Time-Domain Multi-Modal Bone/Air Conducted Speech Enhancement. *Yu, C.*, +, *LSP 2020 1035-1039*
Boolean functions
A Direct Construction of$q$-ary Even Length Z-Complementary Pairs Using Generalized Boolean Functions. *Adhikary, A.R.*, +, *LSP 2020 146-150*
Brain
BayesCap: A Bayesian Approach to Brain Tumor Classification Using Capsule Networks. *Afshar, P.*, +, *LSP 2020 2024-2028*
Restoration of Lossy JPEG-Compressed Brain MR Images Using Cross-Domain Neural Networks. *Chung, K.J.*, +, *LSP 2020 141-145*

C

Calculus
Fractional-Order Correntropy Adaptive Filters for Distributed Processing of α-Stable Signals. *Gogineni, V.C.*, +, *LSP 2020 1884-1888*
Calibration
Automatic Waveform Recognition of Overlapping LPI Radar Signals Based on Multi-Instance Multi-Label Learning. *Pan, Z.*, +, *LSP 2020 1275-1279*
Psychoacoustic Calibration of Loss Functions for Efficient End-to-End Neural Audio Coding. *Zhen, K.*, +, *LSP 2020 2159-2163*
Semidefinite Programming Methods for Alleviating Clock Synchronization Bias and Sensor Position Errors in TDOA Localization. *Zou, Y.*, +, *LSP 2020 241-245*
Cameras
A Space-Variant Nonlinear Algorithm for Denoising Omnidirectional Images Corrupted by Poisson Noise. *Khoa Phan, T.D.*, +, *LSP 2020 535-539*
CNN-Based Fast Source Device Identification. *Mandelli, S.*, +, *LSP 2020 1285-1289*
DDet: Dual-Path Dynamic Enhancement Network for Real-World Image Super-Resolution. *Shi, Y.*, +, *LSP 2020 481-485*
Dual Path Denoising Network for Real Photographic Noise. *Jang, Y.I.*, +, *LSP 2020 860-864*
Hierarchical RANSAC-Based Rotation Averaging. *Gao, X.*, +, *LSP 2020 1874-1878*
Neuromorphic Fringe Projection Profilometry. *Mangalore, A.R.*, +, *LSP 2020 1510-1514*
Cancer
A Level Set Based Unified Framework for Pulmonary Nodule Segmentation. *Roy, R.*, +, *LSP 2020 1465-1469*
BayesCap: A Bayesian Approach to Brain Tumor Classification Using Capsule Networks. *Afshar, P.*, +, *LSP 2020 2024-2028*
Simultaneous Segmentation and Classification of Mass Region From Mammograms Using a Mixed-Supervision Guided Deep Model. *Shen, T.*, +, *LSP 2020 196-200*
Cardiology
AutoHR: A Strong End-to-End Baseline for Remote Heart Rate Measurement With Neural Searching. *Yu, Z.*, +, *LSP 2020 1245-1249*
Cellular biophysics
Generalizing the Statistical Analysis of Objects' Spatial Coupling in Bioimaging. *Mukherjee, S.*, +, *LSP 2020 1085-1089*
Cellular neural networks
Occluded Thermal Face Recognition Using Bag of CNN (*Bo*CNN). *Kumar, S.*, +, *LSP 2020 975-979*
Cepstral analysis
A Novel Modified Mel-DCT Filter Bank Structure With Application to Voice Activity Detection. *Muralishankar, R.*, +, *LSP 2020 1240-1244*
CNN-Based Learnable Gammatone Filterbank and Equal-Loudness Normalization for Environmental Sound Classification. *Park, H.*, +, *LSP 2020 411-415*
Channel bank filters
A Novel Modified Mel-DCT Filter Bank Structure With Application to Voice Activity Detection. *Muralishankar, R.*, +, *LSP 2020 1240-1244*
Design of Nonsubsampled Graph Filter Banks via Lifting Schemes. *Jiang, J.*, +, *LSP 2020 441-445*
Filter Design for Two-Channel Filter Banks on Directed Bipartite Graphs. *Tay, D.B., LSP 2020 2094-2098*
Hidden Convexity in Robust Waveform and Receive Filter Bank Optimization Under Range Unambiguous Clutter. *Du, X.*, +, *LSP 2020 885-889*
On the Zeros of Ramanujan Filters. *Kulkarni, P.*, +, *LSP 2020 735-739*
SFNet: A Computationally Efficient Source Filter Model Based Neural Speech Synthesis. *MV, A.R.*, +, *LSP 2020 1170-1174*
Channel estimation
A Low-Complexity Joint User Activity, Channel and Data Estimation for Grant-Free Massive MIMO Systems. *Zou, Q.*, +, *LSP 2020 1290-1294*
Compressed Channel Estimation for Intelligent Reflecting Surface-Assisted Millimeter Wave Systems. *Wang, P.*, +, *LSP 2020 905-909*
Message Passing Based Joint Channel and User Activity Estimation for Uplink Grant-Free Massive MIMO Systems With Low-Precision ADCs. *Zou, Q.*, +, *LSP 2020 506-510*
Neural Network-Optimized Channel Estimator and Training Signal Design for MIMO Systems With Few-Bit ADCs. *Nguyen, D.H.N., LSP 2020 1370-1374*
Recursive CSI Quantization of Time-Correlated MIMO Channels by Deep Learning Classification. *Schwarz, S., LSP 2020 1799-1803*
Clocks
Efficient Joint Localization and Synchronization in Distributed MIMO Radars. *Kazemi, S.A.R.*, +, *LSP 2020 1200-1204*
Three-Dimensional Rigid Body Localization in the Presence of Clock Offsets. *Ke, X.*, +, *LSP 2020 96-100*
Cloud computing
A Secure and Privacy-Preserving Technique Based on Contrast-Enhancement Reversible Data Hiding and Plaintext Encryption for Medical Images. *Yang, Y.*, +, *LSP 2020 256-260*
Code division multiple access
Binary Complementary Sequence Set With Low Correlation Zone. *Liu, T.*, +, *LSP 2020 1550-1554*
Codecs
Psychoacoustic Calibration of Loss Functions for Efficient End-to-End Neural Audio Coding. *Zhen, K.*, +, *LSP 2020 2159-2163*

Cognition
Custom Domain Adaptation: A New Method for Cross-Subject, EEG-Based Cognitive Load Recognition. *Jimenez-Guarneros, M.*, +, *LSP 2020 750-754*
Cognitive radar
Cognitive Resource Allocation for Target Tracking in Location-Aware Radar Networks. *Liu, X.*, +, *LSP 2020 650-654*
Cognitive radio
Dynamic Markov Chain Monte Carlo-Based Spectrum Sensing. *Wang, Z.*, +, *LSP 2020 1380-1384*
Sensing Performance of Multi-Antenna Energy Detector With Temporal Signal Correlation in Cognitive Vehicular Networks. *Song, K.*, +, *LSP 2020 1050-1054*
Compressed sensing
(ℓ_1,ℓ_2)-RIP and Projected Back-Projection Reconstruction for Phase-Only Measurements. *Feuillen, T.*, +, *LSP 2020 396-400*
A Novel High-Capacity Data Hiding in Encrypted Images Based on Compressive Sensing Progressive Recovery. *Xiao, D.*, +, *LSP 2020 296-300*
A Universal Technique for Analysing Discrete Super-Resolution Algorithms. *Qiao, H., LSP 2020 1829-1833*
Compressed Arrays and Hybrid Channel Sensing: A Cramér-Rao Bound Based Analysis. *Koochakzadeh, A.*, +, *LSP 2020 1395-1399*
Convolutional Approximate Message-Passing. *Takeuchi, K., LSP 2020 416-420*
Frequency-Domain Entropy-Based Blind Support Recovery from Multiple Measurement Vectors. *Zhu, Y.*, +, *LSP 2020 980-984*
Greedy Algorithms for Hybrid Compressed Sensing. *Tai, C.*, +, *LSP 2020 2059-2063*
On Recoverability of Randomly Compressed Tensors With Low CP Rank. *Ibrahim, S.*, +, *LSP 2020 1125-1129*
Provable Convergence of Plug-and-Play Priors With MMSE Denoisers. *Xu, X.*, +, *LSP 2020 1280-1284*
Range-Angle Decoupling and Estimation for FDA-MIMO Radar via Atomic Norm Minimization and Accelerated Proximal Gradient. *Tang, W.*, +, *LSP 2020 366-370*
Sparsely Localized Time-Frequency Energy Distributions for Multi-Component LFM Signals. *Moghadasian, S.S.*, +, *LSP 2020 6-10*
Stacked Bayesian Matching Pursuit for One-Bit Compressed Sensing. *Chae, J.*, +, *LSP 2020 550-554*
Underdetermined DOA Estimation via Covariance Matrix Completion for Nested Sparse Circular Array in Nonuniform Noise. *Jiang, G.*, +, *LSP 2020 1824-1828*
Computational complexity
A Complete Discriminative Tensor Representation Learning for Two-Dimensional Correlation Analysis. *Gao, L.*, +, *LSP 2020 1894-1898*
A Double EP-Based Proposal for Turbo Equalization. *Santos, I.*, +, *LSP 2020 121-125*
A Fast Parallel Particle Filter for Shared Memory Systems. *Varsi, A.*, +, *LSP 2020 1570-1574*
A Mnemonic Kalman Filter for Non-Linear Systems With Extensive Temporal Dependencies. *Jung, S.*, +, *LSP 2020 1005-1009*
An Efficient Nonlinear Dichotomous Coordinate Descent Adaptive Algorithm Based on Random Fourier Features. *Chen, T.*, +, *LSP 2020 1804-1808*
CAPPA: Continuous-Time Accelerated Proximal Point Algorithm for Sparse Recovery. *Garg, K.*, +, *LSP 2020 1760-1764*
Consensus Based Distributed Sparse Bayesian Learning by Fast Marginal Likelihood Maximization. *Manss, C.*, +, *LSP 2020 2119-2123*
Convergence Analysis of Gaussian SPAWN Under High-Order Graphical Models. *Li, B.*, +, *LSP 2020 1725-1729*
Design of Constant Modulus Discrete Phase Radar Waveforms Subject to Multi-Spectral Constraints. *Yang, J.*, +, *LSP 2020 875-879*
Efficient Tracking of Sparse Signals via an Earth Mover's Distance Dynamics Regularizer. *Bertrand, N.P.*, +, *LSP 2020 1120-1124*
Fast Adaptive Reparametrization (FAR) With Application to Human Action Recognition. *Ghorbel, E.*, +, *LSP 2020 580-584*
Fast and Secure Steganography Based on J-UNIWARD. *Su, A.*, +, *LSP 2020 221-225*
Interactive-Multiple-Model Algorithm Based on Minimax Particle Filtering. *Lim, J.*, +, *LSP 2020 36-40*
Linear Regression Without Correspondences via Concave Minimization. *Peng, L.*, +, *LSP 2020 1580-1584*
Low-Complexity Joint Transmit and Receive Beamforming for MIMO Radar With Multi-Targets. *Zhou, J.*, +, *LSP 2020 1410-1414*
Message Passing Based Robust Target Localization in Distributed MIMO Radars in the Presence of Outliers. *Yu, Z.*, +, *LSP 2020 2168-2172*
Novel Feature Selection Method Using Bhattacharyya Distance for Neural Networks Based Automatic Modulation Classification. *Shah, M.H.*, +, *LSP 2020 106-110*
Nyström Kernel Algorithm Under Generalized Maximum Correntropy Criterion. *Zhang, T.*, +, *LSP 2020 1535-1539*
Reduced Complexity Recursive Grassmannian Quantization. *Schwarz, S.*, +, *LSP 2020 321-325*
Solving RED With Weighted Proximal Methods. *Hong, T.*, +, *LSP 2020 501-505*
Stacked Bayesian Matching Pursuit for One-Bit Compressed Sensing. *Chae, J.*, +, *LSP 2020 550-554*
Underdetermined DOA Estimation via Covariance Matrix Completion for Nested Sparse Circular Array in Nonuniform Noise. *Jiang, G.*, +, *LSP 2020 1824-1828*
Computational geometry
Intra-Frame Compression of Point Cloud Geometry Using Dyadic Decomposition. *Peixoto, E., LSP 2020 246-250*
Computer network security
Fast Steganalysis Method for VoIP Streams. *Yang, H.*, +, *LSP 2020 286-290*
Computer vision
Association Loss for Visual Object Detection. *Xu, D.*, +, *LSP 2020 1435-1439*
Attentive Feedback Feature Pyramid Network for Shadow Detection. *Kim, J.*, +, *LSP 2020 1964-1968*
Deep Spectral-Spatial Network for Single Image Deblurring. *Lim, S.*, +, *LSP 2020 835-839*
Fast and Efficient Facial Expression Recognition Using a Gabor Convolutional Network. *Jiang, P.*, +, *LSP 2020 1954-1958*
Image Editing via Segmentation Guided Self-Attention Network. *Zhang, J.*, +, *LSP 2020 1605-1609*
Learning to Distort Images Using Generative Adversarial Networks. *Chen, L.*, +, *LSP 2020 2144-2148*
Neuromorphic Fringe Projection Profilometry. *Mangalore, A.R.*, +, *LSP 2020 1510-1514*
Recognition-Driven Compressed Image Generation Using Semantic-Prior Information. *Wang, Q.*, +, *LSP 2020 1150-1154*
Relation R-CNN: A Graph Based Relation-Aware Network for Object Detection. *Chen, S.*, +, *LSP 2020 1680-1684*
RGB-T Saliency Detection via Low-Rank Tensor Learning and Unified Collaborative Ranking. *Huang, L.*, +, *LSP 2020 1585-1589*
Robust CP Tensor Factorization With Skew Noise. *Huang, X.*, +, *LSP 2020 785-789*
Self-Similarity Action Proposal. *Liu, X.*, +, *LSP 2020 2064-2068*
Computerized tomography
A Level Set Based Unified Framework for Pulmonary Nodule Segmentation. *Roy, R.*, +, *LSP 2020 1465-1469*
Concave programming
A Provably Convergent Projected Gradient-Type Algorithm for TDOA-Based Geolocation Under the Quasi-Parabolic Ionosphere Model. *Huang, S.*, +, *LSP 2020 1335-1339*
Intelligent Reflecting Surfaces Assisted Secure Transmission Without Eavesdropper's CSI. *Wang, H.*, +, *LSP 2020 1300-1304*
Least Squared Relative Error Estimator for RSS Based Localization With Unknown Transmit Power. *Shi, J.*, +, *LSP 2020 1165-1169*
Legitimate Surveillance via Jamming in Multichannel Relaying System. *Hu, G.*, +, *LSP 2020 1879-1883*
Linear Regression Without Correspondences via Concave Minimization. *Peng, L.*, +, *LSP 2020 1580-1584*
On the Convexity of Bit Depth Allocation for Linear MMSE Estimation in Wireless Sensor Networks. *Arce, F.d.l.H.*, +, *LSP 2020 291-295*

Projected Gradient Descent for Non-Convex Sparse Spike Estimation. *Traonmilin, Y.*, +, *LSP 2020 1110-1114*
The Global Geometry of Centralized and Distributed Low-rank Matrix Recovery Without Regularization. *Li, S.*, +, *LSP 2020 1400-1404*

Conjugate gradient methods
A Sparse Conjugate Gradient Adaptive Filter. *Lee, C.*, +, *LSP 2020 1000-1004*

Control system synthesis
Nonlinear Signal-Filtering Technique With Real-Time Gain Booster for Feedback System Applications. *Kim, S.*, +, *LSP 2020 2183-2187*

Convergence
An Adaptive Algorithm for Active Vibration Control of Parameter-Varying Systems With a New Online Secondary Path Estimation Method. *Zheng, H.*, +, *LSP 2020 705-709*
Convergence Analysis of Gaussian SPAWN Under High-Order Graphical Models. *Li, B.*, +, *LSP 2020 1725-1729*
Privacy-Preserving Distributed Maximum Consensus. *Venkategowda, N.K.D.*, +, *LSP 2020 1839-1843*

Convergence of numerical methods
A Sparse Conjugate Gradient Adaptive Filter. *Lee, C.*, +, *LSP 2020 1000-1004*
CAPPA: Continuous-Time Accelerated Proximal Point Algorithm for Sparse Recovery. *Garg, K.*, +, *LSP 2020 1760-1764*
Plug-and-Play ISTA Converges With Kernel Denoisers. *Gavaskar, R.G.*, +, *LSP 2020 610-614*

Convex programming
Convexifying Sparse Interpolation With Infinitely Wide Neural Networks: An Atomic Norm Approach. *Kumar, A.*, +, *LSP 2020 2114-2118*
Global Optimization for Recovery of Clipped Signals Corrupted With Poisson-Gaussian Noise. *Marmin, A.*, +, *LSP 2020 970-974*
Legitimate Surveillance via Jamming in Multichannel Relaying System. *Hu, G.*, +, *LSP 2020 1879-1883*
Near-Convex Archetypal Analysis. *De Handschutter, P.*, +, *LSP 2020 81-85*
On the Convexity of Bit Depth Allocation for Linear MMSE Estimation in Wireless Sensor Networks. *Arce, F.d.l.H.*, +, *LSP 2020 291-295*
Projected Gradient Descent for Non-Convex Sparse Spike Estimation. *Traonmilin, Y.*, +, *LSP 2020 1110-1114*
Range and Bearing Data Fusion for Precise Convex Network Localization. *Soares, C.*, +, *LSP 2020 670-674*
Range-Angle Decoupling and Estimation for FDA-MIMO Radar via Atomic Norm Minimization and Accelerated Proximal Gradient. *Tang, W.*, +, *LSP 2020 366-370*
The Global Geometry of Centralized and Distributed Low-rank Matrix Recovery Without Regularization. *Li, S.*, +, *LSP 2020 1400-1404*
Toeplitz Structured Covariance Matrix Estimation for Radar Applications. *Du, X.*, +, *LSP 2020 595-599*

Convolution
A Deep Learning Approach in the Discrete Cosine Transform Domain to Median Filtering Forensics. *Zhang, J.*, +, *LSP 2020 276-280*
Consistent ICA: Determined BSS Meets Spectrogram Consistency. *Yatabe, K., LSP 2020 870-874*

Convolutional neural networks
A Deep Learning Approach in the Discrete Cosine Transform Domain to Median Filtering Forensics. *Zhang, J.*, +, *LSP 2020 276-280*
An Intriguing Struggle of CNNs in JPEG Steganalysis and the OneHot Solution. *Yousfi, Y.*, +, *LSP 2020 830-834*
Association Loss for Visual Object Detection. *Xu, D.*, +, *LSP 2020 1435-1439*
Attentive Feedback Feature Pyramid Network for Shadow Detection. *Kim, J.*, +, *LSP 2020 1964-1968*
Automatic Waveform Recognition of Overlapping LPI Radar Signals Based on Multi-Instance Multi-Label Learning. *Pan, Z.*, +, *LSP 2020 1275-1279*
B-Scan Attentive CNN for the Classification of Retinal Optical Coherence Tomography Volumes. *Das, V.*, +, *LSP 2020 1025-1029*
CNN-Based Fast Source Device Identification. *Mandelli, S.*, +, *LSP 2020 1285-1289*
CNN-Based Learnable Gammatone Filterbank and Equal-Loudness Normalization for Environmental Sound Classification. *Park, H.*, +, *LSP 2020 411-415*
Combining of Multiple Deep Networks via Ensemble Generalization Loss, Based on MRI Images, for Alzheimer's Disease Classification. *Choi, J.Y.*, +, *LSP 2020 206-210*
Convolutional Approximate Message-Passing. *Takeuchi, K., LSP 2020 416-420*
Deep Multi-Level Wavelet-CNN Denoiser Prior for Restoring Blurred Image With Cauchy Noise. *Wu, T.*, +, *LSP 2020 1635-1639*
Deformable 3D Convolution for Video Super-Resolution. *Ying, X.*, +, *LSP 2020 1500-1504*
Dual Path Denoising Network for Real Photographic Noise. *Jang, Y.I.*, +, *LSP 2020 860-864*
Extrapolation-Based Video Retargeting With Backward Warping Using an Image-to-Warping Vector Generation Network. *Cho, S.I.*, +, *LSP 2020 446-450*
FANet: Features Adaptation Network for 360° Omnidirectional Salient Object Detection. *Huang, M.*, +, *LSP 2020 1819-1823*
Fast and Efficient Facial Expression Recognition Using a Gabor Convolutional Network. *Jiang, P.*, +, *LSP 2020 1954-1958*
GFNet: Gate Fusion Network With Res2Net for Detecting Salient Objects in RGB-D Images. *Zhou, W.*, +, *LSP 2020 800-804*
Improving GANs for Speech Enhancement. *Phan, H.*, +, *LSP 2020 1700-1704*
Learning Blind Pixelwise Affine Image Denoiser With Single Noisy Images. *Byun, J.*, +, *LSP 2020 1105-1109*
Learning Local and Global Priors for JPEG Image Artifacts Removal. *Li, J.*, +, *LSP 2020 2134-2138*
Learning Semantically Enhanced Feature for Fine-Grained Image Classification. *Luo, W.*, +, *LSP 2020 1545-1549*
Learning Temporal Relations from Semantic Neighbors for Acoustic Scene Classification. *Zhang, L.*, +, *LSP 2020 950-954*
Lightweight Deep CNN for Natural Image Matting via Similarity-Preserving Knowledge Distillation. *Yoon, D.*, +, *LSP 2020 2139-2143*
Matrix Capsule Convolutional Projection for Deep Feature Learning. *Xiang, C.*, +, *LSP 2020 1899-1903*
Model Parameter Learning for Real-Time High-Resolution Image Enhancement. *Song, Y.*, +, *LSP 2020 1844-1848*
Modeling Label Dependencies for Audio Tagging With Graph Convolutional Network. *Wang, H.*, +, *LSP 2020 1560-1564*
Periocular Recognition in the Wild With Generalized Label Smoothing Regularization. *Jung, Y.G.*, +, *LSP 2020 1455-1459*
Primary Quantization Matrix Estimation of Double Compressed JPEG Images via CNN. *Niu, Y.*, +, *LSP 2020 191-195*
Quantizing Oriented Object Detection Network via Outlier-Aware Quantization and IoU Approximation. *Zhao, M.*, +, *LSP 2020 1914-1918*
Refinement and Universal Approximation via Sparsely Connected ReLU Convolution Nets. *Heinecke, A.*, +, *LSP 2020 1175-1179*
Relation R-CNN: A Graph Based Relation-Aware Network for Object Detection. *Chen, S.*, +, *LSP 2020 1680-1684*
Restoration of Lossy JPEG-Compressed Brain MR Images Using Cross-Domain Neural Networks. *Chung, K.J.*, +, *LSP 2020 141-145*
Subband Aware CNN for Cell-Phone Recognition. *Lin, X.*, +, *LSP 2020 605-609*
Temporally Refined Graph U-Nets for Human Shape and Pose Estimation From Monocular Videos. *Zhao, Y.*, +, *LSP 2020 1949-1953*
Vein-Based Biometric Verification Using Densely-Connected Convolutional Autoencoder. *Kuzu, R.S.*, +, *LSP 2020 1869-1873*
VRFCNN: Virtual Reference Frame Generation Network for Quality SHVC. *Ding, Q.*, +, *LSP 2020 2049-2053*
WaveCRN: An Efficient Convolutional Recurrent Neural Network for End-to-End Speech Enhancement. *Hsieh, T.*, +, *LSP 2020 2149-2153*

Cooperative communication
QoS-Based Robust Cooperative-Jamming-Aided Beamforming for Correlated Wiretap Channels. *Xu, S.*, +, *LSP 2020 216-220*

Copyright
A Novel Anti-Collusion Audio Fingerprinting Scheme Based on Fourier Coefficients Reversing. *Li, M.*, +, *LSP 2020 1794-1798*
Correlation methods
A Complete Discriminative Tensor Representation Learning for Two-Dimensional Correlation Analysis. *Gao, L.*, +, *LSP 2020 1894-1898*
A Correlation Detection Method of Low SNR Based on Multi-Channelization. *Nie, D.*, +, *LSP 2020 1375-1379*
A Direct Construction of$q$-ary Even Length Z-Complementary Pairs Using Generalized Boolean Functions. *Adhikary, A.R.*, +, *LSP 2020 146-150*
A Family of Single-Channel Spectrally-Null-Constrained Sequences With Low Correlation. *Tian, L.*, +, *LSP 2020 1645-1649*
An Adaptive Kinematic Filter Extended by the Additionally Measured Velocity or Acceleration. *Chernoguz, N., LSP 2020 1430-1434*
Binary Complementary Sequence Set With Low Correlation Zone. *Liu, T.*, +, *LSP 2020 1550-1554*
Correlation Filtering-Based Hashing for Fine-Grained Image Retrieval. *Ma, L.*, +, *LSP 2020 2129-2133*
Cost-Sensitive Canonical Correlation Analysis for Semi-Supervised Multi-View Learning. *Wan, J.*, +, *LSP 2020 1330-1334*
Direction-of-Arrival Estimation of Coherent Signals via Coprime Array Interpolation. *Zheng, Z.*, +, *LSP 2020 585-589*
Efficient Generation of Low Autocorrelation Binary Sequences. *Dimitrov, M.*, +, *LSP 2020 341-345*
Fractional Power Spectrum and Fractional Correlation Estimations for Non-uniform Sampling. *Ma, J.*, +, *LSP 2020 930-934*
Multivariate Correlated Rayleigh Fading With MRC and Applications to Wireless Secrecy. *Le, K.N., LSP 2020 1010-1014*
Novel Second-Order Statistics of the Chirp Cyclostationary Signals. *Miao, H.*, +, *LSP 2020 910-914*
On the Product of Two Correlated Complex Gaussian Random Variables. *Li, Y.*, +, *LSP 2020 16-20*
Period Determination in Cyclo-Stationary Signals by Autocorrelation and Ramanujan Subspaces. *Saatci, E.*, +, *LSP 2020 266-270*
Recursive CSI Quantization of Time-Correlated MIMO Channels by Deep Learning Classification. *Schwarz, S., LSP 2020 1799-1803*
Robust Hierarchical-Optimization RLS Against Sparse Outliers. *Slavakis, K.*, +, *LSP 2020 171-175*
Sensing Performance of Multi-Antenna Energy Detector With Temporal Signal Correlation in Cognitive Vehicular Networks. *Song, K.*, +, *LSP 2020 1050-1054*
Covariance matrices
Adaptive Detection Using Whitened Data When Some of the Training Samples Undergo Covariance Mismatch. *Besson, O., LSP 2020 795-799*
Enhanced Matrix CFAR Detection With Dimensionality Reduction of Riemannian Manifold. *Yang, Z.*, +, *LSP 2020 2084-2088*
Gradient of Error Probability of$M$-ary Hypothesis Testing Problems Under Multivariate Gaussian Noise. *Jeong, M.*, +, *LSP 2020 1909-1913*
Improved Covariance Matrix Estimation With an Application in Portfolio Optimization. *Deshmukh, S.*, +, *LSP 2020 985-989*
Maximum Entropy-Based Interference-Plus-Noise Covariance Matrix Reconstruction for Robust Adaptive Beamforming. *Mohammadzadeh, S.*, +, *LSP 2020 845-849*
Model-Aided Deep Neural Network for Source Number Detection. *Yang, Y.*, +, *LSP 2020 91-95*
Non Zero Mean Adaptive Cosine Estimator and Application to Hyperspectral Imaging. *Vincent, F.*, +, *LSP 2020 1989-1993*
Novel Parameter Estimation and Radar Detection Approaches for Multiple Point-Like Targets: Designs and Comparisons. *Addabbo, P.*, +, *LSP 2020 1789-1793*
On the Steady State Performance of the Kalman Filter Applied to Acoustical Systems. *Fabry, J.*, +, *LSP 2020 1854-1858*
Persymmetric Adaptive Detection With Reduced-Dimension Approach. *Zhang, J.*, +, *LSP 2020 565-569*
Robust DOA Estimation Against Mutual Coupling With Nested Array. *Zheng, Z.*, +, *LSP 2020 1360-1364*
Robust Gaussian Approximate Fixed-Interval Smoother With Outlier Detection. *Chen, Y.*, +, *LSP 2020 1505-1509*
Toeplitz Structured Covariance Matrix Estimation for Radar Applications. *Du, X.*, +, *LSP 2020 595-599*
Underdetermined DOA Estimation via Covariance Matrix Completion for Nested Sparse Circular Array in Nonuniform Noise. *Jiang, G.*, +, *LSP 2020 1824-1828*
Crosstalk
Multi-Delay Sparse Approach to Residual Crosstalk Reduction for Blind Source Separation. *Emura, S.*, +, *LSP 2020 1630-1634*
Crowdsourcing
Crowdsourcing Based Cross Random Access Point Referencing for Video Coding. *Yu, H.*, +, *LSP 2020 560-564*
Cryptography
A Novel High-Capacity Data Hiding in Encrypted Images Based on Compressive Sensing Progressive Recovery. *Xiao, D.*, +, *LSP 2020 296-300*
A Secure and Privacy-Preserving Technique Based on Contrast-Enhancement Reversible Data Hiding and Plaintext Encryption for Medical Images. *Yang, Y.*, +, *LSP 2020 256-260*
Correlation Filtering-Based Hashing for Fine-Grained Image Retrieval. *Ma, L.*, +, *LSP 2020 2129-2133*
Over-Complete-Dictionary-Based Improved Spread Spectrum Watermarking Security. *Hua, G., LSP 2020 770-774*
CW radar
Vital Sign Extraction in the Presence of Radar Mutual Interference. *Liu, Z.*, +, *LSP 2020 1745-1749*

D

Data analysis
A Complete Discriminative Tensor Representation Learning for Two-Dimensional Correlation Analysis. *Gao, L.*, +, *LSP 2020 1894-1898*
Generalized Zero-Shot Learning With Multi-Channel Gaussian Mixture VAE. *Shao, J.*, +, *LSP 2020 456-460*
Hypergraph Spectral Clustering for Point Cloud Segmentation. *Zhang, S.*, +, *LSP 2020 1655-1659*
Near-Convex Archetypal Analysis. *De Handschutter, P.*, +, *LSP 2020 81-85*
Robust CP Tensor Factorization With Skew Noise. *Huang, X.*, +, *LSP 2020 785-789*
Data compression
3D Point Cloud Attribute Compression via Graph Prediction. *Gu, S.*, +, *LSP 2020 176-180*
A Reduced Reference Metric for Visual Quality Evaluation of Point Cloud Contents. *Viola, I.*, +, *LSP 2020 1660-1664*
An Intriguing Struggle of CNNs in JPEG Steganalysis and the OneHot Solution. *Yousfi, Y.*, +, *LSP 2020 830-834*
CANet: Concatenated Attention Neural Network for Image Restoration. *Tian, Y.*, +, *LSP 2020 1615-1619*
CEC: Cluster Embedding Coding for H.264 Steganography. *Wang, Y.*, +, *LSP 2020 955-959*
CNN-Based Fast Source Device Identification. *Mandelli, S.*, +, *LSP 2020 1285-1289*
Complexity Scalable Bitplane Image Coding With Parallel Coefficient Processing. *de Cea-Dominguez, C.*, +, *LSP 2020 840-844*
Fast Steganalysis Method for VoIP Streams. *Yang, H.*, +, *LSP 2020 286-290*
Haze Removal: Push DCP at the Edge. *Yang, Y.*, +, *LSP 2020 1405-1409*
Integer DCT Approximation With Arbitrary Size and Adjustable Precision. *Thomaz, L.A.*, +, *LSP 2020 965-969*
Intra-Frame Compression of Point Cloud Geometry Using Dyadic Decomposition. *Peixoto, E., LSP 2020 246-250*
Large Database Compression Based on Perceived Information. *Maugey, T.*, +, *LSP 2020 1735-1739*
Learning Local and Global Priors for JPEG Image Artifacts Removal. *Li, J.*, +, *LSP 2020 2134-2138*
Light Field Compression Using Global Multiplane Representation and Two-Step Prediction. *Chen, Y.*, +, *LSP 2020 1135-1139*
Primary Quantization Matrix Estimation of Double Compressed JPEG Images via CNN. *Niu, Y.*, +, *LSP 2020 191-195*

Recognition-Driven Compressed Image Generation Using Semantic-Prior Information. *Wang, Q.*, +, *LSP 2020 1150-1154*
Restoration of Lossy JPEG-Compressed Brain MR Images Using Cross-Domain Neural Networks. *Chung, K.J.*, +, *LSP 2020 141-145*
Shift-And-Decorrelate Lifting: CAMRA for Lossless Intra Frame CFA Video Compression. *Lee, Y.*, +, *LSP 2020 461-465*
Simple Yet Effective Way for Improving the Performance of Lossy Image Compression. *Yeo, Y.*, +, *LSP 2020 530-534*
Variable Macropixel Spectral-Spatial Transforms With Intra- and Inter-Color Decorrelations for Arbitrary RGB CFA-Sampled Raw Images. *Suzuki, T.*, +, *LSP 2020 466-470*
Variable Rate Deep Image Compression With Modulated Autoencoder. *Yang, F.*, +, *LSP 2020 331-335*
Versatile Video Coding Based Quality Scalability With Joint Layer Reference. *HoangVan, X.*, +, *LSP 2020 2079-2083*

Data encapsulation
A Novel Anti-Collusion Audio Fingerprinting Scheme Based on Fourier Coefficients Reversing. *Li, M.*, +, *LSP 2020 1794-1798*
A Novel High-Capacity Data Hiding in Encrypted Images Based on Compressive Sensing Progressive Recovery. *Xiao, D.*, +, *LSP 2020 296-300*
A Secure and Privacy-Preserving Technique Based on Contrast-Enhancement Reversible Data Hiding and Plaintext Encryption for Medical Images. *Yang, Y.*, +, *LSP 2020 256-260*
Adaptive Complexity for Pixel-Value-Ordering Based Reversible Data Hiding. *Pan, Z.*, +, *LSP 2020 915-919*

Data handling
Discrete Pseudo-Fractional Hadamard Transform and its Fast Algorithm. *Majorkowska-Mech, D.*, +, *LSP 2020 1195-1199*
Generated Data With Sparse Regularized Multi-Pseudo Label for Person Re-Identification. *Huang, L.*, +, *LSP 2020 391-395*

Data privacy
A Novel High-Capacity Data Hiding in Encrypted Images Based on Compressive Sensing Progressive Recovery. *Xiao, D.*, +, *LSP 2020 296-300*
A Secure and Privacy-Preserving Technique Based on Contrast-Enhancement Reversible Data Hiding and Plaintext Encryption for Medical Images. *Yang, Y.*, +, *LSP 2020 256-260*
Privacy-Preserving Constrained Quadratic Optimization With Fisher Information. *Farokhi, F., LSP 2020 545-549*
Privacy-Preserving Distributed Maximum Consensus. *Venkategowda, N.K.D.*, +, *LSP 2020 1839-1843*
Towards Privacy-Preserving Domain Adaptation. *Kim, Y.*, +, *LSP 2020 1675-1679*

Data protection
A Novel Anti-Collusion Audio Fingerprinting Scheme Based on Fourier Coefficients Reversing. *Li, M.*, +, *LSP 2020 1794-1798*

Data reduction
A Promising Nonlinear Dimensionality Reduction Method: Kernel-Based Within Class Collaborative Preserving Discriminant Projection. *Hu, H.*, +, *LSP 2020 2034-2038*

Data structures
Hypergraph Spectral Clustering for Point Cloud Segmentation. *Zhang, S.*, +, *LSP 2020 1655-1659*

Data visualization
ABSNet: Aesthetics-Based Saliency Network Using Multi-Task Convolutional Network. *Liu, J.*, +, *LSP 2020 2014-2018*

Database theory
Large Database Compression Based on Perceived Information. *Maugey, T.*, +, *LSP 2020 1735-1739*

Decision making
An Information-Theoretic Approach to Personalized Explainable Machine Learning. *Jung, A.*, +, *LSP 2020 825-829*
Overloaded Branch Chains Induced by False Data Injection Attack in Smart Grid. *Peng, D.*, +, *LSP 2020 426-430*

Decision theory
Optimal Decision Rules for Simple Hypothesis Testing Under General Criterion Involving Error Probabilities. *Dulek, B.*, +, *LSP 2020 261-265*

Decode and forward communication
Legitimate Surveillance via Jamming in Multichannel Relaying System. *Hu, G.*, +, *LSP 2020 1879-1883*
Multivariate Correlated Rayleigh Fading With MRC and Applications to Wireless Secrecy. *Le, K.N., LSP 2020 1010-1014*

Decoding
A Double EP-Based Proposal for Turbo Equalization. *Santos, I.*, +, *LSP 2020 121-125*
Accelerating RNN Transducer Inference via Adaptive Expansion Search. *Kim, J.*, +, *LSP 2020 2019-2023*
Attention Aggregation Encoder-Decoder Network Framework for Stereo Matching. *Zhang, Y.*, +, *LSP 2020 760-764*
Over-Complete-Dictionary-Based Improved Spread Spectrum Watermarking Security. *Hua, G., LSP 2020 770-774*
Psychoacoustic Calibration of Loss Functions for Efficient End-to-End Neural Audio Coding. *Zhen, K.*, +, *LSP 2020 2159-2163*
Rank-One Detector for Kronecker-Structured Constant Modulus Constellations. *E-Asim, F.*, +, *LSP 2020 1420-1424*
SiENet: Siamese Expansion Network for Image Extrapolation. *Zhang, X.*, +, *LSP 2020 1590-1594*

Decorrelation
Variable Macropixel Spectral-Spatial Transforms With Intra- and Inter-Color Decorrelations for Arbitrary RGB CFA-Sampled Raw Images. *Suzuki, T.*, +, *LSP 2020 466-470*

Delay estimation
Diffusion LMS With Communication Delays: Stability and Performance Analysis. *Hua, F.*, +, *LSP 2020 730-734*
Robust Multipath Time-Delay Estimation of Broadband Source Using a Vertical Line Array in Deep Water. *Li, H.*, +, *LSP 2020 51-55*

Delays
An Approximate ML Estimator for Moving Target Localization in Distributed MIMO Radars. *Kazemi, S.A.R.*, +, *LSP 2020 1595-1599*

Demodulation
Partial FFT Demodulation Scheme Based on Fast Convolution Structure. *Lin, X.*, +, *LSP 2020 1934-1938*

Diffusion
Sequential Poisson Regression in Diffusion Networks. *Dedecius, K.*, +, *LSP 2020 625-629*

Digital-analog conversion
One-Bit Symbol-Level Precoding for MU-MISO Downlink With Intelligent Reflecting Surface. *Wang, S.*, +, *LSP 2020 1784-1788*

Directed graphs
Filter Design for Two-Channel Filter Banks on Directed Bipartite Graphs. *Tay, D.B., LSP 2020 2094-2098*

Direction-of-arrival estimation
A New Approach to Construct Virtual Array With Increased Degrees of Freedom for Moving Sparse Arrays. *Li, S.*, +, *LSP 2020 805-809*
A Virtual Nested MIMO Array Exploiting Fourth Order Difference Coarray. *Fu, Z.*, +, *LSP 2020 1140-1144*
Analytical Geometry Calibration for Acoustic Transceiver Arrays. *Hu, D.*, +, *LSP 2020 1979-1983*
Angle Estimation of Weak Scatterers Using Improved MUSIC for Bistatic MIMO Radar. *Wang, Y.*, +, *LSP 2020 2164-2167*
Beamforming With Small-Spacing Microphone Arrays Using Constrained/Generalized LASSO. *Wang, X.*, +, *LSP 2020 356-360*
Continuous Approximation Based Dimension-Reduced Estimation for Arbitrary Sampling. *Zhao, C.*, +, *LSP 2020 1080-1084*
Direction-of-Arrival Estimation of Coherent Signals via Coprime Array Interpolation. *Zheng, Z.*, +, *LSP 2020 585-589*
DOA Estimation Method Based on Cascaded Neural Network for Two Closely Spaced Sources. *Guo, Y.*, +, *LSP 2020 570-574*
Enhancing mmWave DOA Estimation by Cumulative Power Gradient At Low SNR. *Tian, L.*, +, *LSP 2020 1974-1978*
Estimating the Number of Sinusoids in Additive Sub-Gaussian Noise With Finite Measurements. *Qiao, H., LSP 2020 1225-1229*
Extended Nested Arrays for Consecutive Virtual Aperture Enhancement. *Ren, S.*, +, *LSP 2020 575-579*

Gridless Direction of Arrival Estimation Exploiting Sparse Linear Array. *Chen, T.*, +, *LSP 2020 1625-1629*
Joint DOD and DOA Estimation in Slow-Time MIMO Radar via PARAFAC Decomposition. *Xu, F.*, +, *LSP 2020 1495-1499*
Localization of Near-Field Sources for Exact Source-Sensor Spatial Geometry. *He, J.*, +, *LSP 2020 1040-1044*
Model-Aided Deep Neural Network for Source Number Detection. *Yang, Y.*, +, *LSP 2020 91-95*
Range-Angle Decoupling and Estimation for FDA-MIMO Radar via Atomic Norm Minimization and Accelerated Proximal Gradient. *Tang, W.*, +, *LSP 2020 366-370*
Robust DOA Estimation Against Mutual Coupling With Nested Array. *Zheng, Z.*, +, *LSP 2020 1360-1364*
Robust Multipath Time-Delay Estimation of Broadband Source Using a Vertical Line Array in Deep Water. *Li, H.*, +, *LSP 2020 51-55*
Underdetermined DOA Estimation via Covariance Matrix Completion for Nested Sparse Circular Array in Nonuniform Noise. *Jiang, G.*, +, *LSP 2020 1824-1828*

Discrete cosine transforms
A Deep Learning Approach in the Discrete Cosine Transform Domain to Median Filtering Forensics. *Zhang, J.*, +, *LSP 2020 276-280*
A Fast Image Fusion With Discrete Cosine Transform. *Wang, M.*, +, *LSP 2020 990-994*
A Novel Modified Mel-DCT Filter Bank Structure With Application to Voice Activity Detection. *Muralishankar, R.*, +, *LSP 2020 1240-1244*
An Intriguing Struggle of CNNs in JPEG Steganalysis and the OneHot Solution. *Yousfi, Y.*, +, *LSP 2020 830-834*
CEC: Cluster Embedding Coding for H.264 Steganography. *Wang, Y.*, +, *LSP 2020 955-959*
Integer DCT Approximation With Arbitrary Size and Adjustable Precision. *Thomaz, L.A.*, +, *LSP 2020 965-969*
Restoration of Lossy JPEG-Compressed Brain MR Images Using Cross-Domain Neural Networks. *Chung, K.J.*, +, *LSP 2020 141-145*

Discrete Fourier transforms
A Fast Method for Estimating Frequencies of Multiple Sinusoidals. *Serbes, A.*, +, *LSP 2020 386-390*
Power-Law Processor Over Segmentation for Variable Length Transients Detection. *Shin, D.*, +, *LSP 2020 1065-1069*
The Support Uncertainty Principle and the Graph Rihaczek Distribution: Revisited and Improved. *Stankovic, L., LSP 2020 1030-1034*

Discrete time systems
On the Steady State Performance of the Kalman Filter Applied to Acoustical Systems. *Fabry, J.*, +, *LSP 2020 1854-1858*

Discrete transforms
Discrete Pseudo-Fractional Hadamard Transform and its Fast Algorithm. *Majorkowska-Mech, D.*, +, *LSP 2020 1195-1199*

Diseases
Attentive RNN-Based Network to Fuse 12-Lead ECG and Clinical Features for Improved Myocardial Infarction Diagnosis. *Prabhakararao, E.*, +, *LSP 2020 2029-2033*
B-Scan Attentive CNN for the Classification of Retinal Optical Coherence Tomography Volumes. *Das, V.*, +, *LSP 2020 1025-1029*
Combining of Multiple Deep Networks via Ensemble Generalization Loss, Based on MRI Images, for Alzheimer's Disease Classification. *Choi, J.Y.*, +, *LSP 2020 206-210*
MRI and SPECT Image Fusion Using a Weighted Parameter Adaptive Dual Channel PCNN. *Panigrahy, C.*, +, *LSP 2020 690-694*
Simultaneous Segmentation and Classification of Mass Region From Mammograms Using a Mixed-Supervision Guided Deep Model. *Shen, T.*, +, *LSP 2020 196-200*

Distortion
Blind Quality Index of Depth Images Based on Structural Statistics for View Synthesis. *Huang, Y.*, +, *LSP 2020 685-689*
Fast and Secure Steganography Based on J-UNIWARD. *Su, A.*, +, *LSP 2020 221-225*
Learning to Distort Images Using Generative Adversarial Networks. *Chen, L.*, +, *LSP 2020 2144-2148*
Surprise-Based JND Estimation for Images. *Wang, H.*, +, *LSP 2020 181-185*

Distributed algorithms
Consensus Based Distributed Spectral Radius Estimation. *Muniraju, G.*, +, *LSP 2020 1045-1049*
Privacy-Preserving Distributed Maximum Consensus. *Venkategowda, N.K.D.*, +, *LSP 2020 1839-1843*

Distributed processing
Consensus Based Distributed Sparse Bayesian Learning by Fast Marginal Likelihood Maximization. *Manss, C.*, +, *LSP 2020 2119-2123*

Diversity reception
Multivariate Correlated Rayleigh Fading With MRC and Applications to Wireless Secrecy. *Le, K.N., LSP 2020 1010-1014*

Document image processing
Document Image Binarization Using Dual Discriminator Generative Adversarial Networks. *De, R.*, +, *LSP 2020 1090-1094*
Dual Path Denoising Network for Real Photographic Noise. *Jang, Y.I.*, +, *LSP 2020 860-864*

Doppler radar
An Improved CA-CFAR Method for Ship Target Detection in Strong Clutter Using UHF Radar. *Kuang, C.*, +, *LSP 2020 1445-1449*
Hidden Convexity in Robust Waveform and Receive Filter Bank Optimization Under Range Unambiguous Clutter. *Du, X.*, +, *LSP 2020 885-889*
Joint DOD and DOA Estimation in Slow-Time MIMO Radar via PARAFAC Decomposition. *Xu, F.*, +, *LSP 2020 1495-1499*
Range-Doppler Sidelobe Suppression for Pulsed Radar Based on Golay Complementary Codes. *Wu, Z.*, +, *LSP 2020 1205-1209*

Doppler shift
An Approximate ML Estimator for Moving Target Localization in Distributed MIMO Radars. *Kazemi, S.A.R.*, +, *LSP 2020 1595-1599*
Doppler Estimation Based on Dual-HFM Signal and Speed Spectrum Scanning. *Wei, R.*, +, *LSP 2020 1740-1744*

Dynamic programming
Unsupervised Feature Learning for Speech Using Correspondence and Siamese Networks. *Last, P.*, +, *LSP 2020 421-425*

E

Echo suppression
A Robust Affine Projection Algorithm Against Impulsive Noise. *Jeong, J.J., LSP 2020 1530-1534*

Edge detection
Deep Spectral-Spatial Network for Single Image Deblurring. *Lim, S.*, +, *LSP 2020 835-839*
Image Editing via Segmentation Guided Self-Attention Network. *Zhang, J.*, +, *LSP 2020 1605-1609*
Kernel-Based Edge-Preserving Methods for Abrupt Change Detection. *Xiang, S.*, +, *LSP 2020 86-90*
Maximum Likelihood Estimation for Disk Image Parameters. *Kornilov, M.V., LSP 2020 1480-1484*

Eigenvalues and eigenfunctions
A Promising Nonlinear Dimensionality Reduction Method: Kernel-Based Within Class Collaborative Preserving Discriminant Projection. *Hu, H.*, +, *LSP 2020 2034-2038*
Angle Estimation of Weak Scatterers Using Improved MUSIC for Bistatic MIMO Radar. *Wang, Y.*, +, *LSP 2020 2164-2167*
Auto-Tuning Spectral Clustering for Speaker Diarization Using Normalized Maximum Eigengap. *Park, T.J.*, +, *LSP 2020 381-385*
Consensus Based Distributed Spectral Radius Estimation. *Muniraju, G.*, +, *LSP 2020 1045-1049*
Estimating the Number of Sinusoids in Additive Sub-Gaussian Noise With Finite Measurements. *Qiao, H., LSP 2020 1225-1229*
Filter Design for Two-Channel Filter Banks on Directed Bipartite Graphs. *Tay, D.B., LSP 2020 2094-2098*
Malicious User Detection in Non-Orthogonal Multiple Access Based on Spectrum Analysis. *Xia, S.*, +, *LSP 2020 1390-1394*
Model-Aided Deep Neural Network for Source Number Detection. *Yang, Y.*, +, *LSP 2020 91-95*
On the Steady State Performance of the Kalman Filter Applied to Acoustical Systems. *Fabry, J.*, +, *LSP 2020 1854-1858*

Electric current control
Nonlinear Signal-Filtering Technique With Real-Time Gain Booster for Feedback System Applications. *Kim, S.*, +, *LSP 2020 2183-2187*
Electrocardiography
A New Approach to Gaussian Signal Smoothing: Application to ECG Components Separation. *Kheirati Roonizi, A., LSP 2020 1924-1928*
Attentive RNN-Based Network to Fuse 12-Lead ECG and Clinical Features for Improved Myocardial Infarction Diagnosis. *Prabhakararao, E.*, +, *LSP 2020 2029-2033*
Electroencephalography
Custom Domain Adaptation: A New Method for Cross-Subject, EEG-Based Cognitive Load Recognition. *Jimenez-Guarneros, M.*, +, *LSP 2020 750-754*
Wavelet Based Waveform Distortion Measures for Assessment of Denoised EEG Quality With Reference to Noise-Free EEG Signal. *Saini, M.*, +, *LSP 2020 1260-1264*
Embedded systems
Informed Histogram-Based Watermarking. *Hua, G.*, +, *LSP 2020 236-240*
Emotion recognition
Fast and Efficient Facial Expression Recognition Using a Gabor Convolutional Network. *Jiang, P.*, +, *LSP 2020 1954-1958*
Encoding
Attention Aggregation Encoder-Decoder Network Framework for Stereo Matching. *Zhang, Y.*, +, *LSP 2020 760-764*
Optimal Parameter Design for Estimation Theoretic Secure Broadcast. *Goken, C.*, +, *LSP 2020 281-285*
SiENet: Siamese Expansion Network for Image Extrapolation. *Zhang, X.*, +, *LSP 2020 1590-1594*
Energy conservation
Massive MIMO With Ternary ADCs. *Zhang, C.*, +, *LSP 2020 271-275*
Energy consumption
On the Convexity of Bit Depth Allocation for Linear MMSE Estimation in Wireless Sensor Networks. *Arce, F.d.l.H.*, +, *LSP 2020 291-295*
Entropy
A Novel Modified Mel-DCT Filter Bank Structure With Application to Voice Activity Detection. *Muralishankar, R.*, +, *LSP 2020 1240-1244*
Batching Soft IoU for Training Semantic Segmentation Networks. *Huang, Y.*, +, *LSP 2020 66-70*
Frequency-Domain Entropy-Based Blind Support Recovery from Multiple Measurement Vectors. *Zhu, Y.*, +, *LSP 2020 980-984*
Maximum Entropy-Based Interference-Plus-Noise Covariance Matrix Reconstruction for Robust Adaptive Beamforming. *Mohammadzadeh, S.*, +, *LSP 2020 845-849*
Radio Frequency Fingerprint Extraction Based on Multi-Dimension Approximate Entropy. *Sun, L.*, +, *LSP 2020 471-475*
Surprise-Based JND Estimation for Images. *Wang, H.*, +, *LSP 2020 181-185*
Towards Privacy-Preserving Domain Adaptation. *Kim, Y.*, +, *LSP 2020 1675-1679*
Wavelet Based Waveform Distortion Measures for Assessment of Denoised EEG Quality With Reference to Noise-Free EEG Signal. *Saini, M.*, +, *LSP 2020 1260-1264*
Entropy codes
3D Point Cloud Attribute Compression via Graph Prediction. *Gu, S.*, +, *LSP 2020 176-180*
Equalizers
A Double EP-Based Proposal for Turbo Equalization. *Santos, I.*, +, *LSP 2020 121-125*
Real Signal Equalization for OQAM. *Akbar, M.N.*, +, *LSP 2020 11-15*
Equiripple filters
Robust Analytical Design of Optimal Equiripple Lowpass FIR Filters. *Zahradnik, P., LSP 2020 755-759*
Error statistics
A Hybrid Downlink NOMA With OFDM and OFDM-IM for Beyond 5G Wireless Networks. *Tusha, A.*, +, *LSP 2020 491-495*
Gradient of Error Probability of*M*-ary Hypothesis Testing Problems Under Multivariate Gaussian Noise. *Jeong, M.*, +, *LSP 2020 1909-1913*
One-Bit Symbol-Level Precoding for MU-MISO Downlink With Intelligent Reflecting Surface. *Wang, S.*, +, *LSP 2020 1784-1788*
Optimal Decision Rules for Simple Hypothesis Testing Under General Criterion Involving Error Probabilities. *Dulek, B.*, +, *LSP 2020 261-265*
Partial FFT Demodulation Scheme Based on Fast Convolution Structure. *Lin, X.*, +, *LSP 2020 1934-1938*
Rank-One Detector for Kronecker-Structured Constant Modulus Constellations. *E-Asim, F.*, +, *LSP 2020 1420-1424*
Estimation theory
Classification-Aided Multitarget Tracking Using the Sum-Product Algorithm. *Gaglione, D.*, +, *LSP 2020 1710-1714*
Estimation of the Support Parameters of a Uniform PDF and the Cramér-Rao-Leibniz Lower Bound. *Ye, S.*, +, *LSP 2020 1765-1768*
Hierarchical RANSAC-Based Rotation Averaging. *Gao, X.*, +, *LSP 2020 1874-1878*
Improved Covariance Matrix Estimation With an Application in Portfolio Optimization. *Deshmukh, S.*, +, *LSP 2020 985-989*
Maximum Entropy-Based Interference-Plus-Noise Covariance Matrix Reconstruction for Robust Adaptive Beamforming. *Mohammadzadeh, S.*, +, *LSP 2020 845-849*
Multidimensional Variational Line Spectra Estimation. *Zhang, Q.*, +, *LSP 2020 945-949*
Period Determination in Cyclo-Stationary Signals by Autocorrelation and Ramanujan Subspaces. *Saatci, E.*, +, *LSP 2020 266-270*
Robust Gaussian Approximate Fixed-Interval Smoother With Outlier Detection. *Chen, Y.*, +, *LSP 2020 1505-1509*
Sensing Performance of Multi-Antenna Energy Detector With Temporal Signal Correlation in Cognitive Vehicular Networks. *Song, K.*, +, *LSP 2020 1050-1054*
WaveCRN: An Efficient Convolutional Recurrent Neural Network for End-to-End Speech Enhancement. *Hsieh, T.*, +, *LSP 2020 2149-2153*
Extrapolation
Extrapolation-Based Video Retargeting With Backward Warping Using an Image-to-Warping Vector Generation Network. *Cho, S.I.*, +, *LSP 2020 446-450*
SiENet: Siamese Expansion Network for Image Extrapolation. *Zhang, X.*, +, *LSP 2020 1590-1594*
Eyes
B-Scan Attentive CNN for the Classification of Retinal Optical Coherence Tomography Volumes. *Das, V.*, +, *LSP 2020 1025-1029*
Periocular Recognition in the Wild With Generalized Label Smoothing Regularization. *Jung, Y.G.*, +, *LSP 2020 1455-1459*

F

Face recognition
Accurate and Reliable Facial Expression Recognition Using Advanced Softmax Loss With Fixed Weights. *Jiang, P.*, +, *LSP 2020 725-729*
An Identity-Preserved Model for Face Sketch-Photo Synthesis. *Lin, Y.*, +, *LSP 2020 1095-1099*
Cost-Sensitive Canonical Correlation Analysis for Semi-Supervised Multi-View Learning. *Wan, J.*, +, *LSP 2020 1330-1334*
Fast and Efficient Facial Expression Recognition Using a Gabor Convolutional Network. *Jiang, P.*, +, *LSP 2020 1954-1958*
Identity-Aware Face Super-Resolution for Low-Resolution Face Recognition. *Chen, J.*, +, *LSP 2020 645-649*
Joint Over and Under Exposures Correction by Aggregated Retinex Propagation for Image Enhancement. *Ma, L.*, +, *LSP 2020 1210-1214*
Occluded Thermal Face Recognition Using Bag of CNN (*Bo*CNN). *Kumar, S.*, +, *LSP 2020 975-979*
Out-of-Distribution Detection for Reliable Face Recognition. *Yu, C.*, +, *LSP 2020 710-714*
Periocular Recognition in the Wild With Generalized Label Smoothing Regularization. *Jung, Y.G.*, +, *LSP 2020 1455-1459*
Real-Time 3D Face Alignment Using an Encoder-Decoder Network With an Efficient Deconvolution Layer. *Ning, X.*, +, *LSP 2020 1944-1948*
Unsupervised Face Domain Transfer for Low-Resolution Face Recognition. *Hong, S.*, +, *LSP 2020 156-160*

Fading channels
Message Passing Based Joint Channel and User Activity Estimation for Uplink Grant-Free Massive MIMO Systems With Low-Precision ADCs. *Zou, Q.*, +, *LSP 2020 506-510*
Novel Feature Selection Method Using Bhattacharyya Distance for Neural Networks Based Automatic Modulation Classification. *Shah, M.H.*, +, *LSP 2020 106-110*
Real Signal Equalization for OQAM. *Akbar, M.N.*, +, *LSP 2020 11-15*
Failure analysis
Overloaded Branch Chains Induced by False Data Injection Attack in Smart Grid. *Peng, D.*, +, *LSP 2020 426-430*
Fast Fourier transforms
Multidimensional Variational Line Spectra Estimation. *Zhang, Q.*, +, *LSP 2020 945-949*
Partial FFT Demodulation Scheme Based on Fast Convolution Structure. *Lin, X.*, +, *LSP 2020 1934-1938*
Feature extraction
A Complete Discriminative Tensor Representation Learning for Two-Dimensional Correlation Analysis. *Gao, L.*, +, *LSP 2020 1894-1898*
A Reduced Reference Metric for Visual Quality Evaluation of Point Cloud Contents. *Viola, I.*, +, *LSP 2020 1660-1664*
A Self-Reasoning Framework for Anomaly Detection Using Video-Level Labels. *Zaheer, M.Z.*, +, *LSP 2020 1705-1709*
A Stereo Attention Module for Stereo Image Super-Resolution. *Ying, X.*, +, *LSP 2020 496-500*
ABSNet: Aesthetics-Based Saliency Network Using Multi-Task Convolutional Network. *Liu, J.*, +, *LSP 2020 2014-2018*
Accurate and Reliable Facial Expression Recognition Using Advanced Softmax Loss With Fixed Weights. *Jiang, P.*, +, *LSP 2020 725-729*
An Identity-Preserved Model for Face Sketch-Photo Synthesis. *Lin, Y.*, +, *LSP 2020 1095-1099*
An Intriguing Struggle of CNNs in JPEG Steganalysis and the OneHot Solution. *Yousfi, Y.*, +, *LSP 2020 830-834*
AsNet: Asymmetrical Network for Learning Rich Features in Person Re-Identification. *Zhang, S.*, +, *LSP 2020 850-854*
Asymmetric Deeply Fused Network for Detecting Salient Objects in RGB-D Images. *Liu, C.*, +, *LSP 2020 1620-1624*
Attentive Feedback Feature Pyramid Network for Shadow Detection. *Kim, J.*, +, *LSP 2020 1964-1968*
B-Scan Attentive CNN for the Classification of Retinal Optical Coherence Tomography Volumes. *Das, V.*, +, *LSP 2020 1025-1029*
Blind Quality Index of Depth Images Based on Structural Statistics for View Synthesis. *Huang, Y.*, +, *LSP 2020 685-689*
CANet: Concatenated Attention Neural Network for Image Restoration. *Tian, Y.*, +, *LSP 2020 1615-1619*
Cappedℓ_p-Norm LDA for Outliers Robust Dimension Reduction. *Wang, Z.*, +, *LSP 2020 1315-1319*
Correlation Filtering-Based Hashing for Fine-Grained Image Retrieval. *Ma, L.*, +, *LSP 2020 2129-2133*
Cumulative Rain Density Sensing Network for Single Image Derain. *Peng, L.*, +, *LSP 2020 406-410*
Deep Underwater Image Restoration and Beyond. *Dudhane, A.*, +, *LSP 2020 675-679*
Deformable 3D Convolution for Video Super-Resolution. *Ying, X.*, +, *LSP 2020 1500-1504*
Disentangled Adversarial Autoencoder for Subject-Invariant Physiological Feature Extraction. *Han, M.*, +, *LSP 2020 1565-1569*
DMA Regularization: Enhancing Discriminability of Neural Networks by Decreasing the Minimal Angle. *Wang, Z.*, +, *LSP 2020 2089-2093*
Dually Connected Deraining Net Using Pixel-Wise Attention. *Ren, W.*, +, *LSP 2020 316-320*
FANet: Features Adaptation Network for 360° Omnidirectional Salient Object Detection. *Huang, M.*, +, *LSP 2020 1819-1823*
Fast Adaptive Reparametrization (FAR) With Application to Human Action Recognition. *Ghorbel, E.*, +, *LSP 2020 580-584*
Fast and Efficient Facial Expression Recognition Using a Gabor Convolutional Network. *Jiang, P.*, +, *LSP 2020 1954-1958*
Fast Steganalysis Method for VoIP Streams. *Yang, H.*, +, *LSP 2020 286-290*
GFNet: Gate Fusion Network With Res2Net for Detecting Salient Objects in RGB-D Images. *Zhou, W.*, +, *LSP 2020 800-804*
Global Semantic Consistency Network for Image Manipulation Detection. *Shi, Z.*, +, *LSP 2020 1755-1759*
Ground-to-Aerial Viewpoint Localization via Landmark Graphs Matching. *Verde, S.*, +, *LSP 2020 1490-1494*
Integral Knowledge Distillation for Multi-Person Pose Estimation. *Xu, X.*, +, *LSP 2020 436-440*
Interlayer Selective Attention Network for Robust Personalized Wake-Up Word Detection. *Lim, H.*, +, *LSP 2020 126-130*
Layer-Wise Adaptive Updating for Few-Shot Image Classification. *Qin, Y.*, +, *LSP 2020 2044-2048*
Learning Semantically Enhanced Feature for Fine-Grained Image Classification. *Luo, W.*, +, *LSP 2020 1545-1549*
Learning Temporal Relations from Semantic Neighbors for Acoustic Scene Classification. *Zhang, L.*, +, *LSP 2020 950-954*
Lightweight Deep CNN for Natural Image Matting via Similarity-Preserving Knowledge Distillation. *Yoon, D.*, +, *LSP 2020 2139-2143*
Matrix Capsule Convolutional Projection for Deep Feature Learning. *Xiang, C.*, +, *LSP 2020 1899-1903*
Model Parameter Learning for Real-Time High-Resolution Image Enhancement. *Song, Y.*, +, *LSP 2020 1844-1848*
Multi-Scale Shape Index-Based Local Binary Patterns for Texture Classification. *Alpaslan, N.*, +, *LSP 2020 660-664*
Multi-View Robust Feature Learning for Data Clustering. *Zhao, L.*, +, *LSP 2020 1750-1754*
Multiscale Convolutional Fusion Network for Non-Lambertian Photometric Stereo. *Ren, J.*, +, *LSP 2020 1929-1933*
Novel Feature Selection Method Using Bhattacharyya Distance for Neural Networks Based Automatic Modulation Classification. *Shah, M.H.*, +, *LSP 2020 106-110*
Occluded Thermal Face Recognition Using Bag of CNN (*Bo*CNN). *Kumar, S.*, +, *LSP 2020 975-979*
Periocular Recognition in the Wild With Generalized Label Smoothing Regularization. *Jung, Y.G.*, +, *LSP 2020 1455-1459*
Pseudo Label Based on Multiple Clustering for Unsupervised Cross-Domain Person Re-Identification. *Chen, S.*, +, *LSP 2020 1460-1464*
Restoration of Lossy JPEG-Compressed Brain MR Images Using Cross-Domain Neural Networks. *Chung, K.J.*, +, *LSP 2020 141-145*
RGB-T Saliency Detection via Low-Rank Tensor Learning and Unified Collaborative Ranking. *Huang, L.*, +, *LSP 2020 1585-1589*
Self-Similarity Action Proposal. *Liu, X.*, +, *LSP 2020 2064-2068*
SiENet: Siamese Expansion Network for Image Extrapolation. *Zhang, X.*, +, *LSP 2020 1590-1594*
Spatial Enhancement and Temporal Constraint for Weakly Supervised Action Localization. *Qin, X.*, +, *LSP 2020 1520-1524*
Subband Aware CNN for Cell-Phone Recognition. *Lin, X.*, +, *LSP 2020 605-609*
Synthesized View Quality Assessment Using Feature Matching and Superpixel Difference. *Mahmoudpour, S.*, +, *LSP 2020 1650-1654*
Temporally Refined Graph U-Nets for Human Shape and Pose Estimation From Monocular Videos. *Zhao, Y.*, +, *LSP 2020 1949-1953*
Unsupervised Face Domain Transfer for Low-Resolution Face Recognition. *Hong, S.*, +, *LSP 2020 156-160*
Unsupervised Feature Learning for Speech Using Correspondence and Siamese Networks. *Last, P.*, +, *LSP 2020 421-425*
Vein-Based Biometric Verification Using Densely-Connected Convolutional Autoencoder. *Kuzu, R.S.*, +, *LSP 2020 1869-1873*
Vital Sign Extraction in the Presence of Radar Mutual Interference. *Liu, Z.*, +, *LSP 2020 1745-1749*
Weakly-Supervised Sparse Coding With Geometric Prior for Interactive Texture Segmentation. *Quan, Y.*, +, *LSP 2020 116-120*
Feature selection
FANet: Features Adaptation Network for 360° Omnidirectional Salient Object Detection. *Huang, M.*, +, *LSP 2020 1819-1823*

Feedback
Diffusion Collaborative Feedback Particle Filter. *Xia, W.*, +, *LSP 2020 1185-1189*
Nonlinear Signal-Filtering Technique With Real-Time Gain Booster for Feedback System Applications. *Kim, S.*, +, *LSP 2020 2183-2187*
Feedforward neural networks
Sparse Wavelet Networks. *Sadri, A.R.*, +, *LSP 2020 111-115*
The Role of Neural Network Activation Functions. *Parhi, R.*, +, *LSP 2020 1779-1783*
File organization
Efficient Parameter-Free Adaptive Multi-Modal Hashing. *Zheng, C.*, +, *LSP 2020 1270-1274*
Filtering theory
A Correlation Detection Method of Low SNR Based on Multi-Channelization. *Nie, D.*, +, *LSP 2020 1375-1379*
A Double EP-Based Proposal for Turbo Equalization. *Santos, I.*, +, *LSP 2020 121-125*
A Robust Affine Projection Algorithm Against Impulsive Noise. *Jeong, J.J., LSP 2020 1530-1534*
All-Pass Filter Design Using Blaschke Interpolation. *Appaiah, K.*, +, *LSP 2020 226-230*
CNN-Based Learnable Gammatone Filterbank and Equal-Loudness Normalization for Environmental Sound Classification. *Park, H.*, +, *LSP 2020 411-415*
Complementary Mean-Square Analysis of CNLMS Algorithm Using Pseudo-Energy-Conservation Method. *Zhang, S.*, +, *LSP 2020 1345-1349*
Deep Filtering: Signal Extraction and Reconstruction Using Complex Time-Frequency Filters. *Mack, W.*, +, *LSP 2020 61-65*
Fractional Power Spectrum and Fractional Correlation Estimations for Non-uniform Sampling. *Ma, J.*, +, *LSP 2020 930-934*
Joint Design of Transmit Waveform and Mismatch Filter in the Presence of Interrupted Sampling Repeater Jamming. *Zhou, K.*, +, *LSP 2020 1610-1614*
Multi-Delay Sparse Approach to Residual Crosstalk Reduction for Blind Source Separation. *Emura, S.*, +, *LSP 2020 1630-1634*
Multiobject Fusion With Minimum Information Loss. *Gao, L.*, +, *LSP 2020 201-205*
Nonlinear Signal-Filtering Technique With Real-Time Gain Booster for Feedback System Applications. *Kim, S.*, +, *LSP 2020 2183-2187*
On the Steady State Performance of the Kalman Filter Applied to Acoustical Systems. *Fabry, J.*, +, *LSP 2020 1854-1858*
Robust Analytical Design of Optimal Equiripple Lowpass FIR Filters. *Zahradnik, P., LSP 2020 755-759*
Shift-And-Decorrelate Lifting: CAMRA for Lossless Intra Frame CFA Video Compression. *Lee, Y.*, +, *LSP 2020 461-465*
Smooth Incremental Learning of Correlation Filters for Visual Tracking. *Guo, J.*, +, *LSP 2020 336-340*
Variable Macropixel Spectral-Spatial Transforms With Intra- and Inter-Color Decorrelations for Arbitrary RGB CFA-Sampled Raw Images. *Suzuki, T.*, +, *LSP 2020 466-470*
Fingerprint identification
Radio Frequency Fingerprint Extraction Based on Multi-Dimension Approximate Entropy. *Sun, L.*, +, *LSP 2020 471-475*
FIR filters
An Adaptive Algorithm for Active Vibration Control of Parameter-Varying Systems With a New Online Secondary Path Estimation Method. *Zheng, H.*, +, *LSP 2020 705-709*
Robust Analytical Design of Optimal Equiripple Lowpass FIR Filters. *Zahradnik, P., LSP 2020 755-759*
FM radar
Vital Sign Extraction in the Presence of Radar Mutual Interference. *Liu, Z.*, +, *LSP 2020 1745-1749*
Formal verification
An Information-Theoretic Approach to Personalized Explainable Machine Learning. *Jung, A.*, +, *LSP 2020 825-829*
Fourier analysis
Amphibian Sounds Generating Network Based on Adversarial Learning. *Park, S.*, +, *LSP 2020 640-644*
Projected Gradient Descent for Non-Convex Sparse Spike Estimation. *Traonmilin, Y.*, +, *LSP 2020 1110-1114*
Fourier transforms
A Novel Anti-Collusion Audio Fingerprinting Scheme Based on Fourier Coefficients Reversing. *Li, M.*, +, *LSP 2020 1794-1798*
An Efficient Nonlinear Dichotomous Coordinate Descent Adaptive Algorithm Based on Random Fourier Features. *Chen, T.*, +, *LSP 2020 1804-1808*
Deep Filtering: Signal Extraction and Reconstruction Using Complex Time-Frequency Filters. *Mack, W.*, +, *LSP 2020 61-65*
Fractional Power Spectrum and Fractional Correlation Estimations for Non-uniform Sampling. *Ma, J.*, +, *LSP 2020 930-934*
Fully Adaptive Ridge Detection Based on STFT Phase Information. *Colominas, M.A.*, +, *LSP 2020 620-624*
Online Spectrogram Inversion for Low-Latency Audio Source Separation. *Magron, P.*, +, *LSP 2020 306-310*
Sparsely Localized Time-Frequency Energy Distributions for Multi-Component LFM Signals. *Moghadasian, S.S.*, +, *LSP 2020 6-10*
Fraud
An Information-Theoretic Approach to Personalized Explainable Machine Learning. *Jung, A.*, +, *LSP 2020 825-829*
Frequency division multiple access
A Hybrid Downlink NOMA With OFDM and OFDM-IM for Beyond 5G Wireless Networks. *Tusha, A.*, +, *LSP 2020 491-495*
Frequency division multiplexing
Compressed Channel Estimation for Intelligent Reflecting Surface-Assisted Millimeter Wave Systems. *Wang, P.*, +, *LSP 2020 905-909*
Recursive CSI Quantization of Time-Correlated MIMO Channels by Deep Learning Classification. *Schwarz, S., LSP 2020 1799-1803*
Frequency estimation
Frequency Estimation in Coherent, Periodic Pulse Trains. *Clarkson, I.V.L.*, +, *LSP 2020 1415-1419*
Multidimensional Variational Line Spectra Estimation. *Zhang, Q.*, +, *LSP 2020 945-949*
Frequency modulation
Doppler Estimation Based on Dual-HFM Signal and Speed Spectrum Scanning. *Wei, R.*, +, *LSP 2020 1740-1744*
Sparsely Localized Time-Frequency Energy Distributions for Multi-Component LFM Signals. *Moghadasian, S.S.*, +, *LSP 2020 6-10*
Temporal Localization of Non-Static Digital Videos Using the Electrical Network Frequency. *Fernandez-Menduina, S.*, +, *LSP 2020 745-749*
Frequency-domain analysis
Consistent ICA: Determined BSS Meets Spectrogram Consistency. *Yatabe, K., LSP 2020 870-874*
Convolutional PCA for Multiple Time Series. *Li, X., LSP 2020 1450-1454*
Frequency-Domain Entropy-Based Blind Support Recovery from Multiple Measurement Vectors. *Zhu, Y.*, +, *LSP 2020 980-984*
Multi-Delay Sparse Approach to Residual Crosstalk Reduction for Blind Source Separation. *Emura, S.*, +, *LSP 2020 1630-1634*
Novel Second-Order Statistics of the Chirp Cyclostationary Signals. *Miao, H.*, +, *LSP 2020 910-914*
Power-Law Processor Over Segmentation for Variable Length Transients Detection. *Shin, D.*, +, *LSP 2020 1065-1069*
Transform Domain Precoding (TDP) for 5G Evolution and 6G. *Liu, W.*, +, *LSP 2020 1145-1149*
Function approximation
Refinement and Universal Approximation via Sparsely Connected ReLU Convolution Nets. *Heinecke, A.*, +, *LSP 2020 1175-1179*

G

Gabor filters
Fast and Efficient Facial Expression Recognition Using a Gabor Convolutional Network. *Jiang, P.*, +, *LSP 2020 1954-1958*
Game theory
Overloaded Branch Chains Induced by False Data Injection Attack in Smart Grid. *Peng, D.*, +, *LSP 2020 426-430*

Gaussian channels
QoS-Based Robust Cooperative-Jamming-Aided Beamforming for Correlated Wiretap Channels. *Xu, S.*, +, *LSP 2020 216-220*
Statistical Properties of Kendall's Tau Under Contaminated Gaussian Model With Applications in Random Signal Detection. *Lai, H.*, +, *LSP 2020 655-659*
Gaussian distribution
Asymptotic Analysis of the Convergence Time of Autoregressive Kalman Filters. *Locubiche-Serra, S.*, +, *LSP 2020 820-824*
Capturing Video Frame Rate Variations via Entropic Differencing. *Madhusudana, P.C.*, +, *LSP 2020 1809-1813*
Energy Distribution of Multiple Target Signal With Application to Target Counting. *Guruacharya, S.*, +, *LSP 2020 431-435*
Fractional-Order Correntropy Adaptive Filters for Distributed Processing of α-Stable Signals. *Gogineni, V.C.*, +, *LSP 2020 1884-1888*
Frequency-Domain Entropy-Based Blind Support Recovery from Multiple Measurement Vectors. *Zhu, Y.*, +, *LSP 2020 980-984*
Generalized Zero-Shot Learning With Multi-Channel Gaussian Mixture VAE. *Shao, J.*, +, *LSP 2020 456-460*
On the Product of Two Correlated Complex Gaussian Random Variables. *Li, Y.*, +, *LSP 2020 16-20*
Robust Gaussian Approximate Fixed-Interval Smoother With Outlier Detection. *Chen, Y.*, +, *LSP 2020 1505-1509*
Statistical Behavior of Teager-Kaiser Energy Operator in Presence of White Gaussian Noise. *Preaux, Y.*, +, *LSP 2020 635-639*
Gaussian noise
A Fast Parallel Particle Filter for Shared Memory Systems. *Varsi, A.*, +, *LSP 2020 1570-1574*
A Multi-Target Track-Before-Detect Particle Filter Using Superpositional Data in Non-Gaussian Noise. *Ito, N.*, +, *LSP 2020 1075-1079*
A Multifamily GLRT for CFAR Detection of Signals in a Union of Subspaces. *Socheleau, F., LSP 2020 2104-2108*
A Universal Technique for Analysing Discrete Super-Resolution Algorithms. *Qiao, H., LSP 2020 1829-1833*
An Approximate ML Estimator for Moving Target Localization in Distributed MIMO Radars. *Kazemi, S.A.R.*, +, *LSP 2020 1595-1599*
Dual Path Denoising Network for Real Photographic Noise. *Jang, Y.I.*, +, *LSP 2020 860-864*
Estimating the Number of Sinusoids in Additive Sub-Gaussian Noise With Finite Measurements. *Qiao, H., LSP 2020 1225-1229*
Estimation of Linear Space-Invariant Dynamics. *Naumer, H.*, +, *LSP 2020 2154-2158*
Global Optimization for Recovery of Clipped Signals Corrupted With Poisson-Gaussian Noise. *Marmin, A.*, +, *LSP 2020 970-974*
Gradient of Error Probability of*M*-ary Hypothesis Testing Problems Under Multivariate Gaussian Noise. *Jeong, M.*, +, *LSP 2020 1909-1913*
Joint $\mathbb{SO}(3)$-Spectral Domain Filtering of Spherical Signals in the Presence of Anisotropic Noise. *Aslam, A.*, +, *LSP 2020 2109-2113*
Kernel Recursive Least Squares Algorithm Based on the Nyström Method With*k*-Means Sampling. *Zhang, T.*, +, *LSP 2020 361-365*
Persymmetric Adaptive Detection With Reduced-Dimension Approach. *Zhang, J.*, +, *LSP 2020 565-569*
Privacy-Preserving Distributed Maximum Consensus. *Venkategowda, N.K.D.*, +, *LSP 2020 1839-1843*
Statistical Behavior of Teager-Kaiser Energy Operator in Presence of White Gaussian Noise. *Preaux, Y.*, +, *LSP 2020 635-639*
Gaussian processes
(ℓ_1,ℓ_2)-RIP and Projected Back-Projection Reconstruction for Phase-Only Measurements. *Feuillen, T.*, +, *LSP 2020 396-400*
A Double EP-Based Proposal for Turbo Equalization. *Santos, I.*, +, *LSP 2020 121-125*
A Factor Graph-Based Distributed Consensus Kalman Filter. *Wang, S.*, +, *LSP 2020 2039-2043*
A Mnemonic Kalman Filter for Non-Linear Systems With Extensive Temporal Dependencies. *Jung, S.*, +, *LSP 2020 1005-1009*
A New Approach to Gaussian Signal Smoothing: Application to ECG Components Separation. *Kheirati Roonizi, A., LSP 2020 1924-1928*
Convergence Analysis of Gaussian SPAWN Under High-Order Graphical Models. *Li, B.*, +, *LSP 2020 1725-1729*
Cross Term Decay in Multiplicative Processors. *Chavali, V.*, +, *LSP 2020 56-60*
Deep Clustering With Variational Autoencoder. *Lim, K.*, +, *LSP 2020 231-235*
Dual Back-Projection-Based Internal Learning for Blind Super-Resolution. *Kim, J.*, +, *LSP 2020 1190-1194*
Dual Path Denoising Network for Real Photographic Noise. *Jang, Y.I.*, +, *LSP 2020 860-864*
Generalized Zero-Shot Learning With Multi-Channel Gaussian Mixture VAE. *Shao, J.*, +, *LSP 2020 456-460*
Importance Densities for Particle Filtering Using Iterated Conditional Expectations. *Hostettler, R.*, +, *LSP 2020 211-215*
Non Zero Mean Adaptive Cosine Estimator and Application to Hyperspectral Imaging. *Vincent, F.*, +, *LSP 2020 1989-1993*
On Mean Absolute Error for Deep Neural Network Based Vector-to-Vector Regression. *Qi, J.*, +, *LSP 2020 1485-1489*
On the Identifiability of Transform Learning for Non-Negative Matrix Factorization. *Zhang, S.*, +, *LSP 2020 1555-1559*
Suboptimal Kalman Filtering in Triplet Markov Models Using Model Order Reduction. *Lehmann, F.*, +, *LSP 2020 1100-1104*
The Failure Case of Phase Transition for Penalized Problems in Corrupted Sensing. *Zhang, H.*, +, *LSP 2020 555-559*
Uniqueness Guarantee of Solutions of Tensor Tubal-Rank Minimization Problem. *Zhang, F.*, +, *LSP 2020 540-544*
Voice Conversion for Whispered Speech Synthesis. *Cotescu, M.*, +, *LSP 2020 186-190*
Genetic algorithms
Genetic Algorithm Based Rate Control for AV1. *Fang, M.*, +, *LSP 2020 520-524*
Geometry
A Reduced Reference Metric for Visual Quality Evaluation of Point Cloud Contents. *Viola, I.*, +, *LSP 2020 1660-1664*
A Virtual Nested MIMO Array Exploiting Fourth Order Difference Coarray. *Fu, Z.*, +, *LSP 2020 1140-1144*
Analytical Geometry Calibration for Acoustic Transceiver Arrays. *Hu, D.*, +, *LSP 2020 1979-1983*
Chebyshev Center Computation on Probability Simplex With α-Divergence Measure. *Candan, C., LSP 2020 1515-1519*
Hierarchical RANSAC-Based Rotation Averaging. *Gao, X.*, +, *LSP 2020 1874-1878*
Non-Negative Transfer Learning With Consistent Inter-Domain Distribution. *Peng, Z.*, +, *LSP 2020 1720-1724*
Geophysical image processing
A Variational Pansharpening Method Based on Gradient Sparse Representation. *Tian, X.*, +, *LSP 2020 1180-1184*
Non Zero Mean Adaptive Cosine Estimator and Application to Hyperspectral Imaging. *Vincent, F.*, +, *LSP 2020 1989-1993*
Parameter-Adaptive Compensation (PAC) for Processing Underwater Selective Absorption. *Liu, J.*, +, *LSP 2020 2178-2182*
Geophysical signal processing
Joint $\mathbb{SO}(3)$-Spectral Domain Filtering of Spherical Signals in the Presence of Anisotropic Noise. *Aslam, A.*, +, *LSP 2020 2109-2113*
Robust Multipath Time-Delay Estimation of Broadband Source Using a Vertical Line Array in Deep Water. *Li, H.*, +, *LSP 2020 51-55*
Gesture recognition
Fast Adaptive Reparametrization (FAR) With Application to Human Action Recognition. *Ghorbel, E.*, +, *LSP 2020 580-584*
Self-Similarity Action Proposal. *Liu, X.*, +, *LSP 2020 2064-2068*
Golay codes
A Direct Construction of*q*-ary Even Length Z-Complementary Pairs Using Generalized Boolean Functions. *Adhikary, A.R.*, +, *LSP 2020 146-150*
Range-Doppler Sidelobe Suppression for Pulsed Radar Based on Golay Complementary Codes. *Wu, Z.*, +, *LSP 2020 1205-1209*

Gradient methods
A Provably Convergent Projected Gradient-Type Algorithm for TDOA-Based Geolocation Under the Quasi-Parabolic Ionosphere Model. *Huang, S.*, +, *LSP 2020 1335-1339*
A Sparse Conjugate Gradient Adaptive Filter. *Lee, C.*, +, *LSP 2020 1000-1004*
A Variational Pansharpening Method Based on Gradient Sparse Representation. *Tian, X.*, +, *LSP 2020 1180-1184*
Batching Soft IoU for Training Semantic Segmentation Networks. *Huang, Y.*, +, *LSP 2020 66-70*
CAPPA: Continuous-Time Accelerated Proximal Point Algorithm for Sparse Recovery. *Garg, K.*, +, *LSP 2020 1760-1764*
Enhanced Matrix CFAR Detection With Dimensionality Reduction of Riemannian Manifold. *Yang, Z.*, +, *LSP 2020 2084-2088*
Flow-Based Independent Vector Analysis for Blind Source Separation. *Nugraha, A.A.*, +, *LSP 2020 2173-2177*
Kernel Recursive Least Squares Algorithm Based on the Nyström Method With*k*-Means Sampling. *Zhang, T.*, +, *LSP 2020 361-365*
Manifold Optimization for Joint Design of MIMO-STAP Radars. *Li, J.*, +, *LSP 2020 1969-1973*
MRI and SPECT Image Fusion Using a Weighted Parameter Adaptive Dual Channel PCNN. *Panigrahy, C.*, +, *LSP 2020 690-694*
One-Bit Symbol-Level Precoding for MU-MISO Downlink With Intelligent Reflecting Surface. *Wang, S.*, +, *LSP 2020 1784-1788*
Parameter-Adaptive Compensation (PAC) for Processing Underwater Selective Absorption. *Liu, J.*, +, *LSP 2020 2178-2182*
Preconditioned Gradient Descent Algorithm for Inverse Filtering on Spatially Distributed Networks. *Cheng, C.*, +, *LSP 2020 1834-1838*
Privacy-Preserving Constrained Quadratic Optimization With Fisher Information. *Farokhi, F., LSP 2020 545-549*
Projected Gradient Descent for Non-Convex Sparse Spike Estimation. *Traonmilin, Y.*, +, *LSP 2020 1110-1114*
Range-Angle Decoupling and Estimation for FDA-MIMO Radar via Atomic Norm Minimization and Accelerated Proximal Gradient. *Tang, W.*, +, *LSP 2020 366-370*
Simple Yet Effective Way for Improving the Performance of Lossy Image Compression. *Yeo, Y.*, +, *LSP 2020 530-534*
Solving RED With Weighted Proximal Methods. *Hong, T.*, +, *LSP 2020 501-505*
Sparse Wavelet Networks. *Sadri, A.R.*, +, *LSP 2020 111-115*
Graph theory
3D Point Cloud Attribute Compression via Graph Prediction. *Gu, S.*, +, *LSP 2020 176-180*
A Factor Graph-Based Distributed Consensus Kalman Filter. *Wang, S.*, +, *LSP 2020 2039-2043*
A Joint Markov Model for Communities, Connectivity and Signals Defined Over Graphs. *Colonnese, S.*, +, *LSP 2020 1160-1164*
Clustering Event Streams With Low Rank Hawkes Processes. *Turkmen, A.C.*, +, *LSP 2020 1575-1579*
Consensus Based Distributed Spectral Radius Estimation. *Muniraju, G.*, +, *LSP 2020 1045-1049*
Convergence Analysis of Gaussian SPAWN Under High-Order Graphical Models. *Li, B.*, +, *LSP 2020 1725-1729*
Design of Nonsubsampled Graph Filter Banks via Lifting Schemes. *Jiang, J.*, +, *LSP 2020 441-445*
Graph Regularized Deep Discrete Hashing for Multi-Label Image Retrieval. *Wan, J.*, +, *LSP 2020 1994-1998*
Ground-to-Aerial Viewpoint Localization via Landmark Graphs Matching. *Verde, S.*, +, *LSP 2020 1490-1494*
Hierarchical RANSAC-Based Rotation Averaging. *Gao, X.*, +, *LSP 2020 1874-1878*
Hypergraph Spectral Clustering for Point Cloud Segmentation. *Zhang, S.*, +, *LSP 2020 1655-1659*
Iterative Reconstruction of Signals on Graph. *Brugnoli, E.*, +, *LSP 2020 76-80*
Local and Global Graph Approaches to Image Colorization. *Sugawara, M.*, +, *LSP 2020 765-769*
Message Passing Based Robust Target Localization in Distributed MIMO Radars in the Presence of Outliers. *Yu, Z.*, +, *LSP 2020 2168-2172*
Modeling Label Dependencies for Audio Tagging With Graph Convolutional Network. *Wang, H.*, +, *LSP 2020 1560-1564*
Node-Adaptive Multi-Graph Fusion Using Extreme Value Theory. *Zhang, J.*, +, *LSP 2020 351-355*
On the Duality Between Network Flows and Network Lasso. *Jung, A., LSP 2020 940-944*
Preconditioned Gradient Descent Algorithm for Inverse Filtering on Spatially Distributed Networks. *Cheng, C.*, +, *LSP 2020 1834-1838*
Relation R-CNN: A Graph Based Relation-Aware Network for Object Detection. *Chen, S.*, +, *LSP 2020 1680-1684*
RGB-T Saliency Detection via Low-Rank Tensor Learning and Unified Collaborative Ranking. *Huang, L.*, +, *LSP 2020 1585-1589*
Self-Weighting and Hypergraph Regularization for Multi-view Spectral Clustering. *Hao, W.*, +, *LSP 2020 1325-1329*
Superpixel Segmentation Using Dynamic and Iterative Spanning Forest. *Belem, F.C.*, +, *LSP 2020 1440-1444*
Temporally Refined Graph U-Nets for Human Shape and Pose Estimation From Monocular Videos. *Zhao, Y.*, +, *LSP 2020 1949-1953*
The Support Uncertainty Principle and the Graph Rihaczek Distribution: Revisited and Improved. *Stankovic, L., LSP 2020 1030-1034*
Graphics processing units
A Fast Parallel Particle Filter for Shared Memory Systems. *Varsi, A.*, +, *LSP 2020 1570-1574*
Greedy algorithms
Greedy Algorithms for Hybrid Compressed Sensing. *Tai, C.*, +, *LSP 2020 2059-2063*
Stacked Bayesian Matching Pursuit for One-Bit Compressed Sensing. *Chae, J.*, +, *LSP 2020 550-554*
Group theory
Grouped Multi-Scale Network for Real-World Image Denoising. *Song, Y.*, +, *LSP 2020 2124-2128*

H

Hadamard transforms
Discrete Pseudo-Fractional Hadamard Transform and its Fast Algorithm. *Majorkowska-Mech, D.*, +, *LSP 2020 1195-1199*
Hankel matrices
Matrix and Tensor Completion in Multiway Delay Embedded Space Using Tensor Train, With Application to Signal Reconstruction. *Sedighin, F.*, +, *LSP 2020 810-814*
Hearing
CNN-Based Learnable Gammatone Filterbank and Equal-Loudness Normalization for Environmental Sound Classification. *Park, H.*, +, *LSP 2020 411-415*
HRTF Selection by Anthropometric Regression for Improving Horizontal Localization Accuracy. *Spagnol, S., LSP 2020 590-594*
Hearing aids
Online Spectrogram Inversion for Low-Latency Audio Source Separation. *Magron, P.*, +, *LSP 2020 306-310*
Hessian matrices
Manifold Optimization for Joint Design of MIMO-STAP Radars. *Li, J.*, +, *LSP 2020 1969-1973*
Hidden Markov models
Online Automatic Speech Recognition With Listen, Attend and Spell Model. *Hsiao, R.*, +, *LSP 2020 1889-1893*
Higher order statistics
A Virtual Nested MIMO Array Exploiting Fourth Order Difference Coarray. *Fu, Z.*, +, *LSP 2020 1140-1144*
Fractional-Order Correntropy Adaptive Filters for Distributed Processing of α-Stable Signals. *Gogineni, V.C.*, +, *LSP 2020 1884-1888*
Localization of Near-Field Sources for Exact Source-Sensor Spatial Geometry. *He, J.*, +, *LSP 2020 1040-1044*
Novel Second-Order Statistics of the Chirp Cyclostationary Signals. *Miao, H.*, +, *LSP 2020 910-914*

Hilbert spaces
A Sparse Robust Adaptive Filtering Algorithm Based on the$q$-Rényi Kernel Function. *Zhang, Y.*, +, *LSP 2020 476-480*
Generalization Error Bounds for Kernel Matrix Completion and Extrapolation. *Gimenez-Febrer, P.*, +, *LSP 2020 326-330*
Nyström Kernel Algorithm Under Generalized Maximum Correntropy Criterion. *Zhang, T.*, +, *LSP 2020 1535-1539*
Hilbert transforms
Vital Sign Extraction in the Presence of Radar Mutual Interference. *Liu, Z.*, +, *LSP 2020 1745-1749*
Hydrophones
Robust Multipath Time-Delay Estimation of Broadband Source Using a Vertical Line Array in Deep Water. *Li, H.*, +, *LSP 2020 51-55*
Hyperspectral imaging
Non Zero Mean Adaptive Cosine Estimator and Application to Hyperspectral Imaging. *Vincent, F.*, +, *LSP 2020 1989-1993*

I

Identification
Estimation of Linear Space-Invariant Dynamics. *Naumer, H.*, +, *LSP 2020 2154-2158*
IEEE publishing
List of Reviewers. *LSP 2020 2189-2197*
IIR filters
Topological IIR Filters Over Simplicial Topologies via Sheaves. *Essl, G., LSP 2020 1215-1219*
Image classification
A Secure and Privacy-Preserving Technique Based on Contrast-Enhancement Reversible Data Hiding and Plaintext Encryption for Medical Images. *Yang, Y.*, +, *LSP 2020 256-260*
Association Loss for Visual Object Detection. *Xu, D.*, +, *LSP 2020 1435-1439*
B-Scan Attentive CNN for the Classification of Retinal Optical Coherence Tomography Volumes. *Das, V.*, +, *LSP 2020 1025-1029*
BayesCap: A Bayesian Approach to Brain Tumor Classification Using Capsule Networks. *Afshar, P.*, +, *LSP 2020 2024-2028*
Cappedℓ_p-Norm LDA for Outliers Robust Dimension Reduction. *Wang, Z.*, +, *LSP 2020 1315-1319*
Combining of Multiple Deep Networks via Ensemble Generalization Loss, Based on MRI Images, for Alzheimer's Disease Classification. *Choi, J.Y.*, +, *LSP 2020 206-210*
Cumulative Rain Density Sensing Network for Single Image Derain. *Peng, L.*, +, *LSP 2020 406-410*
Deep Clustering With Variational Autoencoder. *Lim, K.*, +, *LSP 2020 231-235*
DMA Regularization: Enhancing Discriminability of Neural Networks by Decreasing the Minimal Angle. *Wang, Z.*, +, *LSP 2020 2089-2093*
Double-Attentive Principle Component Analysis. *Wu, D.*, +, *LSP 2020 1814-1818*
Layer-Wise Adaptive Updating for Few-Shot Image Classification. *Qin, Y.*, +, *LSP 2020 2044-2048*
Learning Semantically Enhanced Feature for Fine-Grained Image Classification. *Luo, W.*, +, *LSP 2020 1545-1549*
Learning Temporal Relations from Semantic Neighbors for Acoustic Scene Classification. *Zhang, L.*, +, *LSP 2020 950-954*
Learning Unbiased Zero-Shot Semantic Segmentation Networks Via Transductive Transfer. *Lv, F.*, +, *LSP 2020 1640-1644*
Manipulating Template Pixels for Model Adaptation of Siamese Visual Tracking. *Li, Z.*, +, *LSP 2020 1690-1694*
Matrix Capsule Convolutional Projection for Deep Feature Learning. *Xiang, C.*, +, *LSP 2020 1899-1903*
Multi-Scale Shape Index-Based Local Binary Patterns for Texture Classification. *Alpaslan, N.*, +, *LSP 2020 660-664*
On Security Enhancement of Steganography via Generative Adversarial Image. *Zhou, L.*, +, *LSP 2020 166-170*
Periocular Recognition in the Wild With Generalized Label Smoothing Regularization. *Jung, Y.G.*, +, *LSP 2020 1455-1459*
Self-Similarity Action Proposal. *Liu, X.*, +, *LSP 2020 2064-2068*
Simultaneous Segmentation and Classification of Mass Region From Mammograms Using a Mixed-Supervision Guided Deep Model. *Shen, T.*, +, *LSP 2020 196-200*
Image coding
3D Point Cloud Attribute Compression via Graph Prediction. *Gu, S.*, +, *LSP 2020 176-180*
A 4D Basis and Sampling Scheme for the Tensor Encoded Multi-Dimensional Diffusion MRI Signal. *Bates, A.P.*, +, *LSP 2020 790-794*
A Novel High-Capacity Data Hiding in Encrypted Images Based on Compressive Sensing Progressive Recovery. *Xiao, D.*, +, *LSP 2020 296-300*
A Reduced Reference Metric for Visual Quality Evaluation of Point Cloud Contents. *Viola, I.*, +, *LSP 2020 1660-1664*
An Intriguing Struggle of CNNs in JPEG Steganalysis and the OneHot Solution. *Yousfi, Y.*, +, *LSP 2020 830-834*
CANet: Concatenated Attention Neural Network for Image Restoration. *Tian, Y.*, +, *LSP 2020 1615-1619*
CNN-Based Fast Source Device Identification. *Mandelli, S.*, +, *LSP 2020 1285-1289*
Complexity Scalable Bitplane Image Coding With Parallel Coefficient Processing. *de Cea-Dominguez, C.*, +, *LSP 2020 840-844*
Correlation Filtering-Based Hashing for Fine-Grained Image Retrieval. *Ma, L.*, +, *LSP 2020 2129-2133*
Cumulative Rain Density Sensing Network for Single Image Derain. *Peng, L.*, +, *LSP 2020 406-410*
Deep Clustering With Variational Autoencoder. *Lim, K.*, +, *LSP 2020 231-235*
Fast and Secure Steganography Based on J-UNIWARD. *Su, A.*, +, *LSP 2020 221-225*
Haze Removal: Push DCP at the Edge. *Yang, Y.*, +, *LSP 2020 1405-1409*
Integer DCT Approximation With Arbitrary Size and Adjustable Precision. *Thomaz, L.A.*, +, *LSP 2020 965-969*
Intra-Frame Compression of Point Cloud Geometry Using Dyadic Decomposition. *Peixoto, E., LSP 2020 246-250*
Learning Local and Global Priors for JPEG Image Artifacts Removal. *Li, J.*, +, *LSP 2020 2134-2138*
Light Field Compression Using Global Multiplane Representation and Two-Step Prediction. *Chen, Y.*, +, *LSP 2020 1135-1139*
Mahalanobis Based Point to Distribution Metric for Point Cloud Geometry Quality Evaluation. *Javaheri, A.*, +, *LSP 2020 1350-1354*
Multi-Scale Shape Index-Based Local Binary Patterns for Texture Classification. *Alpaslan, N.*, +, *LSP 2020 660-664*
On Security Enhancement of Steganography via Generative Adversarial Image. *Zhou, L.*, +, *LSP 2020 166-170*
Practical Cover Selection for Steganography. *Wang, Z.*, +, *LSP 2020 71-75*
Primary Quantization Matrix Estimation of Double Compressed JPEG Images via CNN. *Niu, Y.*, +, *LSP 2020 191-195*
Real-Time 3D Face Alignment Using an Encoder-Decoder Network With an Efficient Deconvolution Layer. *Ning, X.*, +, *LSP 2020 1944-1948*
Recognition-Driven Compressed Image Generation Using Semantic-Prior Information. *Wang, Q.*, +, *LSP 2020 1150-1154*
Restoration of Lossy JPEG-Compressed Brain MR Images Using Cross-Domain Neural Networks. *Chung, K.J.*, +, *LSP 2020 141-145*
SiENet: Siamese Expansion Network for Image Extrapolation. *Zhang, X.*, +, *LSP 2020 1590-1594*
Simple Yet Effective Way for Improving the Performance of Lossy Image Compression. *Yeo, Y.*, +, *LSP 2020 530-534*
Variable Macropixel Spectral-Spatial Transforms With Intra- and Inter-Color Decorrelations for Arbitrary RGB CFA-Sampled Raw Images. *Suzuki, T.*, +, *LSP 2020 466-470*
Variable Rate Deep Image Compression With Modulated Autoencoder. *Yang, F.*, +, *LSP 2020 331-335*
Image color analysis
3D Point Cloud Attribute Compression via Graph Prediction. *Gu, S.*, +, *LSP 2020 176-180*
A Reduced Reference Metric for Visual Quality Evaluation of Point Cloud Contents. *Viola, I.*, +, *LSP 2020 1660-1664*

ABSNet: Aesthetics-Based Saliency Network Using Multi-Task Convolutional Network. *Liu, J.*, +, *LSP 2020 2014-2018*
Adaptive Debanding Filter. *Tu, Z.*, +, *LSP 2020 1715-1719*
An Improved Air-Light Estimation Scheme for Single Haze Images Using Color Constancy Prior. *Gautam, S.*, +, *LSP 2020 1695-1699*
Asymmetric Deeply Fused Network for Detecting Salient Objects in RGB-D Images. *Liu, C.*, +, *LSP 2020 1620-1624*
Attentive Feedback Feature Pyramid Network for Shadow Detection. *Kim, J.*, +, *LSP 2020 1964-1968*
Blind Quality Index of Depth Images Based on Structural Statistics for View Synthesis. *Huang, Y.*, +, *LSP 2020 685-689*
Deep Underwater Image Restoration and Beyond. *Dudhane, A.*, +, *LSP 2020 675-679*
GFNet: Gate Fusion Network With Res2Net for Detecting Salient Objects in RGB-D Images. *Zhou, W.*, +, *LSP 2020 800-804*
Haze Removal by Modeling the Scattering Properties of the Medium. *Wang, R.*, +, *LSP 2020 1155-1159*
Image Editing via Segmentation Guided Self-Attention Network. *Zhang, J.*, +, *LSP 2020 1605-1609*
Joint Over and Under Exposures Correction by Aggregated Retinex Propagation for Image Enhancement. *Ma, L.*, +, *LSP 2020 1210-1214*
Learning Dual Transformation Networks for Image Contrast Enhancement. *Zhu, Y.*, +, *LSP 2020 1999-2003*
Local and Global Graph Approaches to Image Colorization. *Sugawara, M.*, +, *LSP 2020 765-769*
Parameter-Adaptive Compensation (PAC) for Processing Underwater Selective Absorption. *Liu, J.*, +, *LSP 2020 2178-2182*
Progressive Colorization via Iterative Generative Models. *Zhou, J.*, +, *LSP 2020 2054-2058*
RGB-T Saliency Detection via Low-Rank Tensor Learning and Unified Collaborative Ranking. *Huang, L.*, +, *LSP 2020 1585-1589*
Saturation Based Iterative Approach for Single Image Dehazing. *Lu, Z.*, +, *LSP 2020 665-669*
Shift-And-Decorrelate Lifting: CAMRA for Lossless Intra Frame CFA Video Compression. *Lee, Y.*, +, *LSP 2020 461-465*
Simple Yet Effective Way for Improving the Performance of Depth Map Super-Resolution. *Yeo, Y.*, +, *LSP 2020 2099-2103*
Temporally Refined Graph U-Nets for Human Shape and Pose Estimation From Monocular Videos. *Zhao, Y.*, +, *LSP 2020 1949-1953*
Triple-Complementary Network for RGB-D Salient Object Detection. *Huang, R.*, +, *LSP 2020 775-779*
Unsupervised Low-Light Image Enhancement Using Bright Channel Prior. *Lee, H.*, +, *LSP 2020 251-255*
Variable Macropixel Spectral-Spatial Transforms With Intra- and Inter-Color Decorrelations for Arbitrary RGB CFA-Sampled Raw Images. *Suzuki, T.*, +, *LSP 2020 466-470*

Image denoising

A New Recurrent Plug-and-Play Prior Based on the Multiple Self-Similarity Network. *Song, G.*, +, *LSP 2020 451-455*
A Space-Variant Nonlinear Algorithm for Denoising Omnidirectional Images Corrupted by Poisson Noise. *Khoa Phan, T.D.*, +, *LSP 2020 535-539*
Adaptive Debanding Filter. *Tu, Z.*, +, *LSP 2020 1715-1719*
An Improved Air-Light Estimation Scheme for Single Haze Images Using Color Constancy Prior. *Gautam, S.*, +, *LSP 2020 1695-1699*
CANet: Concatenated Attention Neural Network for Image Restoration. *Tian, Y.*, +, *LSP 2020 1615-1619*
Capturing Video Frame Rate Variations via Entropic Differencing. *Madhusudana, P.C.*, +, *LSP 2020 1809-1813*
Cumulative Rain Density Sensing Network for Single Image Derain. *Peng, L.*, +, *LSP 2020 406-410*
Deep Multi-Level Wavelet-CNN Denoiser Prior for Restoring Blurred Image With Cauchy Noise. *Wu, T.*, +, *LSP 2020 1635-1639*
Dual Path Denoising Network for Real Photographic Noise. *Jang, Y.I.*, +, *LSP 2020 860-864*
Grouped Multi-Scale Network for Real-World Image Denoising. *Song, Y.*, +, *LSP 2020 2124-2128*
Haze Removal by Modeling the Scattering Properties of the Medium. *Wang, R.*, +, *LSP 2020 1155-1159*
Kernel-Based Edge-Preserving Methods for Abrupt Change Detection. *Xiang, S.*, +, *LSP 2020 86-90*
Learning Blind Pixelwise Affine Image Denoiser With Single Noisy Images. *Byun, J.*, +, *LSP 2020 1105-1109*
Learning to Distort Images Using Generative Adversarial Networks. *Chen, L.*, +, *LSP 2020 2144-2148*
Min-Max Average Pooling Based Filter for Impulse Noise Removal. *Satti, P.*, +, *LSP 2020 1475-1479*
Plug-and-Play ISTA Converges With Kernel Denoisers. *Gavaskar, R.G.*, +, *LSP 2020 610-614*
Provable Convergence of Plug-and-Play Priors With MMSE Denoisers. *Xu, X.*, +, *LSP 2020 1280-1284*
Unsupervised Low-Light Image Enhancement Using Bright Channel Prior. *Lee, H.*, +, *LSP 2020 251-255*

Image enhancement

Adaptive Debanding Filter. *Tu, Z.*, +, *LSP 2020 1715-1719*
An Improved Air-Light Estimation Scheme for Single Haze Images Using Color Constancy Prior. *Gautam, S.*, +, *LSP 2020 1695-1699*
Deep Underwater Image Restoration and Beyond. *Dudhane, A.*, +, *LSP 2020 675-679*
DMA Regularization: Enhancing Discriminability of Neural Networks by Decreasing the Minimal Angle. *Wang, Z.*, +, *LSP 2020 2089-2093*
Dually Connected Deraining Net Using Pixel-Wise Attention. *Ren, W.*, +, *LSP 2020 316-320*
Joint Over and Under Exposures Correction by Aggregated Retinex Propagation for Image Enhancement. *Ma, L.*, +, *LSP 2020 1210-1214*
Learning Dual Transformation Networks for Image Contrast Enhancement. *Zhu, Y.*, +, *LSP 2020 1999-2003*
Model Parameter Learning for Real-Time High-Resolution Image Enhancement. *Song, Y.*, +, *LSP 2020 1844-1848*
On Security Enhancement of Steganography via Generative Adversarial Image. *Zhou, L.*, +, *LSP 2020 166-170*
Saturation Based Iterative Approach for Single Image Dehazing. *Lu, Z.*, +, *LSP 2020 665-669*
Simple Yet Effective Way for Improving the Performance of Lossy Image Compression. *Yeo, Y.*, +, *LSP 2020 530-534*
Spatial Enhancement and Temporal Constraint for Weakly Supervised Action Localization. *Qin, X.*, +, *LSP 2020 1520-1524*
Unsupervised Low-Light Image Enhancement Using Bright Channel Prior. *Lee, H.*, +, *LSP 2020 251-255*
Versatile Video Coding Based Quality Scalability With Joint Layer Reference. *HoangVan, X.*, +, *LSP 2020 2079-2083*

Image filtering

Adaptive Debanding Filter. *Tu, Z.*, +, *LSP 2020 1715-1719*
Correlation Filtering-Based Hashing for Fine-Grained Image Retrieval. *Ma, L.*, +, *LSP 2020 2129-2133*
Efficient Particle Scale Space for Robust Tracking. *Li, S.*, +, *LSP 2020 371-375*
Gaussian-Adaptive Bilateral Filter. *Chen, B.*, +, *LSP 2020 1670-1674*
Kernel-Based Edge-Preserving Methods for Abrupt Change Detection. *Xiang, S.*, +, *LSP 2020 86-90*
Maximum Likelihood Estimation for Disk Image Parameters. *Kornilov, M.V., LSP 2020 1480-1484*
Min-Max Average Pooling Based Filter for Impulse Noise Removal. *Satti, P.*, +, *LSP 2020 1475-1479*

Image forensics

CNN-Based Fast Source Device Identification. *Mandelli, S.*, +, *LSP 2020 1285-1289*

Image fusion

A Fast Image Fusion With Discrete Cosine Transform. *Wang, M.*, +, *LSP 2020 990-994*
A Variational Pansharpening Method Based on Gradient Sparse Representation. *Tian, X.*, +, *LSP 2020 1180-1184*
Asymmetric Deeply Fused Network for Detecting Salient Objects in RGB-D Images. *Liu, C.*, +, *LSP 2020 1620-1624*

Cost-Sensitive Canonical Correlation Analysis for Semi-Supervised Multi-View Learning. *Wan, J.*, +, *LSP 2020 1330-1334*
GFNet: Gate Fusion Network With Res2Net for Detecting Salient Objects in RGB-D Images. *Zhou, W.*, +, *LSP 2020 800-804*
Joint Over and Under Exposures Correction by Aggregated Retinex Propagation for Image Enhancement. *Ma, L.*, +, *LSP 2020 1210-1214*
MRI and SPECT Image Fusion Using a Weighted Parameter Adaptive Dual Channel PCNN. *Panigrahy, C.*, +, *LSP 2020 690-694*
Multiscale Convolutional Fusion Network for Non-Lambertian Photometric Stereo. *Ren, J.*, +, *LSP 2020 1929-1933*
Occluded Thermal Face Recognition Using Bag of CNN (*Bo*CNN). *Kumar, S.*, +, *LSP 2020 975-979*
Real-Time 3D Face Alignment Using an Encoder-Decoder Network With an Efficient Deconvolution Layer. *Ning, X.*, +, *LSP 2020 1944-1948*
Temporally Refined Graph U-Nets for Human Shape and Pose Estimation From Monocular Videos. *Zhao, Y.*, +, *LSP 2020 1949-1953*

Image matching

Adaptively Leverage Unlabeled Tracklets Based on Part Attention Model for Few-Example Re-ID. *Han, J.*, +, *LSP 2020 2074-2078*
Attention Aggregation Encoder-Decoder Network Framework for Stereo Matching. *Zhang, Y.*, +, *LSP 2020 760-764*
Ground-to-Aerial Viewpoint Localization via Landmark Graphs Matching. *Verde, S.*, +, *LSP 2020 1490-1494*
Pseudo Label Based on Multiple Clustering for Unsupervised Cross-Domain Person Re-Identification. *Chen, S.*, +, *LSP 2020 1460-1464*
Synthesized View Quality Assessment Using Feature Matching and Superpixel Difference. *Mahmoudpour, S.*, +, *LSP 2020 1650-1654*

Image motion analysis

Motion Context Network for Weakly Supervised Object Detection in Videos. *Jin, R.*, +, *LSP 2020 1864-1868*
Power-Law Processor Over Segmentation for Variable Length Transients Detection. *Shin, D.*, +, *LSP 2020 1065-1069*
Progressive Motion Representation Distillation With Two-Branch Networks for Egocentric Activity Recognition. *Liu, T.*, +, *LSP 2020 1320-1324*
Self-Similarity Action Proposal. *Liu, X.*, +, *LSP 2020 2064-2068*
Spatial Enhancement and Temporal Constraint for Weakly Supervised Action Localization. *Qin, X.*, +, *LSP 2020 1520-1524*
Temporally Refined Graph U-Nets for Human Shape and Pose Estimation From Monocular Videos. *Zhao, Y.*, +, *LSP 2020 1949-1953*
VRFCNN: Virtual Reference Frame Generation Network for Quality SHVC. *Ding, Q.*, +, *LSP 2020 2049-2053*

Image processing

Adaptive Complexity for Pixel-Value-Ordering Based Reversible Data Hiding. *Pan, Z.*, +, *LSP 2020 915-919*
Hierarchical RANSAC-Based Rotation Averaging. *Gao, X.*, +, *LSP 2020 1874-1878*

Image recognition

AsNet: Asymmetrical Network for Learning Rich Features in Person Re-Identification. *Zhang, S.*, +, *LSP 2020 850-854*
Deep Clustering With Variational Autoencoder. *Lim, K.*, +, *LSP 2020 231-235*
Progressive Motion Representation Distillation With Two-Branch Networks for Egocentric Activity Recognition. *Liu, T.*, +, *LSP 2020 1320-1324*
Recognition-Driven Compressed Image Generation Using Semantic-Prior Information. *Wang, Q.*, +, *LSP 2020 1150-1154*

Image reconstruction

A 4D Basis and Sampling Scheme for the Tensor Encoded Multi-Dimensional Diffusion MRI Signal. *Bates, A.P.*, +, *LSP 2020 790-794*
A New Recurrent Plug-and-Play Prior Based on the Multiple Self-Similarity Network. *Song, G.*, +, *LSP 2020 451-455*
A Novel High-Capacity Data Hiding in Encrypted Images Based on Compressive Sensing Progressive Recovery. *Xiao, D.*, +, *LSP 2020 296-300*
A PDE Model for Smooth Surface Reconstruction from 2D Parallel Slices. *Zou, Q., LSP 2020 1015-1019*
A Variational Pansharpening Method Based on Gradient Sparse Representation. *Tian, X.*, +, *LSP 2020 1180-1184*
DDet: Dual-Path Dynamic Enhancement Network for Real-World Image Super-Resolution. *Shi, Y.*, +, *LSP 2020 481-485*
Double-Attentive Principle Component Analysis. *Wu, D.*, +, *LSP 2020 1814-1818*
Dual Back-Projection-Based Internal Learning for Blind Super-Resolution. *Kim, J.*, +, *LSP 2020 1190-1194*
High-Precision Trajectory Data Reconstruction for TT&C Systems Using LS B-Spline Approximation. *Sun, J.*, +, *LSP 2020 895-899*
Multi-Frame Super-Resolution Combining Demons Registration and Regularized Bayesian Reconstruction. *do Nascimento, T.P.*, +, *LSP 2020 2009-2013*
Neuromorphic Fringe Projection Profilometry. *Mangalore, A.R.*, +, *LSP 2020 1510-1514*
Phase Retrieval With Learning Unfolded Expectation Consistent Signal Recovery Algorithm. *Wang, C.*, +, *LSP 2020 780-784*
Provable Convergence of Plug-and-Play Priors With MMSE Denoisers. *Xu, X.*, +, *LSP 2020 1280-1284*
Self-Supervised Light Field Reconstruction Using Shearlet Transform and Cycle Consistency. *Gao, Y.*, +, *LSP 2020 1425-1429*
Simple Yet Effective Way for Improving the Performance of Lossy Image Compression. *Yeo, Y.*, +, *LSP 2020 530-534*
Temporally Refined Graph U-Nets for Human Shape and Pose Estimation From Monocular Videos. *Zhao, Y.*, +, *LSP 2020 1949-1953*

Image registration

Multi-Frame Super-Resolution Combining Demons Registration and Regularized Bayesian Reconstruction. *do Nascimento, T.P.*, +, *LSP 2020 2009-2013*

Image representation

3D Point Cloud Attribute Compression via Graph Prediction. *Gu, S.*, +, *LSP 2020 176-180*
A Complete Discriminative Tensor Representation Learning for Two-Dimensional Correlation Analysis. *Gao, L.*, +, *LSP 2020 1894-1898*
A Variational Pansharpening Method Based on Gradient Sparse Representation. *Tian, X.*, +, *LSP 2020 1180-1184*
An Intriguing Struggle of CNNs in JPEG Steganalysis and the OneHot Solution. *Yousfi, Y.*, +, *LSP 2020 830-834*
AsNet: Asymmetrical Network for Learning Rich Features in Person Re-Identification. *Zhang, S.*, +, *LSP 2020 850-854*
Asymmetric Deeply Fused Network for Detecting Salient Objects in RGB-D Images. *Liu, C.*, +, *LSP 2020 1620-1624*
Blind Quality Index of Depth Images Based on Structural Statistics for View Synthesis. *Huang, Y.*, +, *LSP 2020 685-689*
Correlation Filtering-Based Hashing for Fine-Grained Image Retrieval. *Ma, L.*, +, *LSP 2020 2129-2133*
DDet: Dual-Path Dynamic Enhancement Network for Real-World Image Super-Resolution. *Shi, Y.*, +, *LSP 2020 481-485*
Efficient Particle Scale Space for Robust Tracking. *Li, S.*, +, *LSP 2020 371-375*
Light Field Compression Using Global Multiplane Representation and Two-Step Prediction. *Chen, Y.*, +, *LSP 2020 1135-1139*
Low-Rank Regularized Deep Collaborative Matrix Factorization for Micro-Video Multi-Label Classification. *Su, Y.*, +, *LSP 2020 740-744*
Mahalanobis Based Point to Distribution Metric for Point Cloud Geometry Quality Evaluation. *Javaheri, A.*, +, *LSP 2020 1350-1354*
Manipulating Template Pixels for Model Adaptation of Siamese Visual Tracking. *Li, Z.*, +, *LSP 2020 1690-1694*
Motion Context Network for Weakly Supervised Object Detection in Videos. *Jin, R.*, +, *LSP 2020 1864-1868*
Multi-Scale Shape Index-Based Local Binary Patterns for Texture Classification. *Alpaslan, N.*, +, *LSP 2020 660-664*
Progressive Motion Representation Distillation With Two-Branch Networks for Egocentric Activity Recognition. *Liu, T.*, +, *LSP 2020 1320-1324*
Relation R-CNN: A Graph Based Relation-Aware Network for Object Detection. *Chen, S.*, +, *LSP 2020 1680-1684*
Self-Supervised Light Field Reconstruction Using Shearlet Transform and Cycle Consistency. *Gao, Y.*, +, *LSP 2020 1425-1429*
Self-Weighting and Hypergraph Regularization for Multi-view Spectral Clustering. *Hao, W.*, +, *LSP 2020 1325-1329*

Image resolution
A Space-Variant Nonlinear Algorithm for Denoising Omnidirectional Images Corrupted by Poisson Noise. *Khoa Phan, T.D.*, +, *LSP 2020 535-539*
A Stereo Attention Module for Stereo Image Super-Resolution. *Ying, X.*, +, *LSP 2020 496-500*
A Universal Technique for Analysing Discrete Super-Resolution Algorithms. *Qiao, H., LSP 2020 1829-1833*
A Variational Pansharpening Method Based on Gradient Sparse Representation. *Tian, X.*, +, *LSP 2020 1180-1184*
Cross Term Decay in Multiplicative Processors. *Chavali, V.*, +, *LSP 2020 56-60*
DDet: Dual-Path Dynamic Enhancement Network for Real-World Image Super-Resolution. *Shi, Y.*, +, *LSP 2020 481-485*
Deformable 3D Convolution for Video Super-Resolution. *Ying, X.*, +, *LSP 2020 1500-1504*
Dual Back-Projection-Based Internal Learning for Blind Super-Resolution. *Kim, J.*, +, *LSP 2020 1190-1194*
Hierarchical Neural Architecture Search for Single Image Super-Resolution. *Guo, Y.*, +, *LSP 2020 1255-1259*
Identity-Aware Face Super-Resolution for Low-Resolution Face Recognition. *Chen, J.*, +, *LSP 2020 645-649*
Local and Global Graph Approaches to Image Colorization. *Sugawara, M.*, +, *LSP 2020 765-769*
Minkowski-Algebra-Based Super-Sparse Array Design for Super-Resolution Ultrasound Imaging. *Mahurkar, A.G.*, +, *LSP 2020 1060-1064*
Model Parameter Learning for Real-Time High-Resolution Image Enhancement. *Song, Y.*, +, *LSP 2020 1844-1848*
Multi-Frame Super-Resolution Combining Demons Registration and Regularized Bayesian Reconstruction. *do Nascimento, T.P.*, +, *LSP 2020 2009-2013*
Multi-Scale Shape Index-Based Local Binary Patterns for Texture Classification. *Alpaslan, N.*, +, *LSP 2020 660-664*
Phase Retrieval With Learning Unfolded Expectation Consistent Signal Recovery Algorithm. *Wang, C.*, +, *LSP 2020 780-784*
Simple Yet Effective Way for Improving the Performance of Depth Map Super-Resolution. *Yeo, Y.*, +, *LSP 2020 2099-2103*
Single Image Super-Resolution Using Fire Modules With Asymmetric Configuration. *Kim, H.*, +, *LSP 2020 516-519*
Surprise-Based JND Estimation for Images. *Wang, H.*, +, *LSP 2020 181-185*
Unsupervised Face Domain Transfer for Low-Resolution Face Recognition. *Hong, S.*, +, *LSP 2020 156-160*
Variable Macropixel Spectral-Spatial Transforms With Intra- and Inter-Color Decorrelations for Arbitrary RGB CFA-Sampled Raw Images. *Suzuki, T.*, +, *LSP 2020 466-470*

Image restoration
An Improved Air-Light Estimation Scheme for Single Haze Images Using Color Constancy Prior. *Gautam, S.*, +, *LSP 2020 1695-1699*
Attentive Feedback Feature Pyramid Network for Shadow Detection. *Kim, J.*, +, *LSP 2020 1964-1968*
CANet: Concatenated Attention Neural Network for Image Restoration. *Tian, Y.*, +, *LSP 2020 1615-1619*
Cumulative Rain Density Sensing Network for Single Image Derain. *Peng, L.*, +, *LSP 2020 406-410*
Deep Multi-Level Wavelet-CNN Denoiser Prior for Restoring Blurred Image With Cauchy Noise. *Wu, T.*, +, *LSP 2020 1635-1639*
Deep Spectral-Spatial Network for Single Image Deblurring. *Lim, S.*, +, *LSP 2020 835-839*
Deep Underwater Image Restoration and Beyond. *Dudhane, A.*, +, *LSP 2020 675-679*
Dually Connected Deraining Net Using Pixel-Wise Attention. *Ren, W.*, +, *LSP 2020 316-320*
Local and Global Graph Approaches to Image Colorization. *Sugawara, M.*, +, *LSP 2020 765-769*
Multiple Norms and Boundary Constraint Enforced Image Deblurring via Efficient MCMC Algorithm. *Xu, J.*, +, *LSP 2020 41-45*
Parameter-Adaptive Compensation (PAC) for Processing Underwater Selective Absorption. *Liu, J.*, +, *LSP 2020 2178-2182*
Plug-and-Play ISTA Converges With Kernel Denoisers. *Gavaskar, R.G.*, +, *LSP 2020 610-614*
Rank-One Matrix Approximation With ℓ_p-Norm for Image Inpainting. *Li, X.P.*, +, *LSP 2020 680-684*
Restoration of Lossy JPEG-Compressed Brain MR Images Using Cross-Domain Neural Networks. *Chung, K.J.*, +, *LSP 2020 141-145*
Saturation Based Iterative Approach for Single Image Dehazing. *Lu, Z.*, +, *LSP 2020 665-669*
SiENet: Siamese Expansion Network for Image Extrapolation. *Zhang, X.*, +, *LSP 2020 1590-1594*

Image retrieval
Correlation Filtering-Based Hashing for Fine-Grained Image Retrieval. *Ma, L.*, +, *LSP 2020 2129-2133*
Graph Regularized Deep Discrete Hashing for Multi-Label Image Retrieval. *Wan, J.*, +, *LSP 2020 1994-1998*

Image sampling
A 4D Basis and Sampling Scheme for the Tensor Encoded Multi-Dimensional Diffusion MRI Signal. *Bates, A.P.*, +, *LSP 2020 790-794*
CANet: Concatenated Attention Neural Network for Image Restoration. *Tian, Y.*, +, *LSP 2020 1615-1619*
Self-Supervised Light Field Reconstruction Using Shearlet Transform and Cycle Consistency. *Gao, Y.*, +, *LSP 2020 1425-1429*
Simple Yet Effective Way for Improving the Performance of Depth Map Super-Resolution. *Yeo, Y.*, +, *LSP 2020 2099-2103*
Variable Macropixel Spectral-Spatial Transforms With Intra- and Inter-Color Decorrelations for Arbitrary RGB CFA-Sampled Raw Images. *Suzuki, T.*, +, *LSP 2020 466-470*

Image scanners
Neuromorphic Fringe Projection Profilometry. *Mangalore, A.R.*, +, *LSP 2020 1510-1514*

Image segmentation
A Level Set Based Unified Framework for Pulmonary Nodule Segmentation. *Roy, R.*, +, *LSP 2020 1465-1469*
Asymmetric Deeply Fused Network for Detecting Salient Objects in RGB-D Images. *Liu, C.*, +, *LSP 2020 1620-1624*
B-Scan Attentive CNN for the Classification of Retinal Optical Coherence Tomography Volumes. *Das, V.*, +, *LSP 2020 1025-1029*
Batching Soft IoU for Training Semantic Segmentation Networks. *Huang, Y.*, +, *LSP 2020 66-70*
Bi-Directional Seed Attention Network for Interactive Image Segmentation. *Song, G.*, +, *LSP 2020 1540-1544*
GFNet: Gate Fusion Network With Res2Net for Detecting Salient Objects in RGB-D Images. *Zhou, W.*, +, *LSP 2020 800-804*
Global Semantic Consistency Network for Image Manipulation Detection. *Shi, Z.*, +, *LSP 2020 1755-1759*
Hypergraph Spectral Clustering for Point Cloud Segmentation. *Zhang, S.*, +, *LSP 2020 1655-1659*
Image Editing via Segmentation Guided Self-Attention Network. *Zhang, J.*, +, *LSP 2020 1605-1609*
Learning Temporal Relations from Semantic Neighbors for Acoustic Scene Classification. *Zhang, L.*, +, *LSP 2020 950-954*
Learning Unbiased Zero-Shot Semantic Segmentation Networks Via Transductive Transfer. *Lv, F.*, +, *LSP 2020 1640-1644*
Power-Law Processor Over Segmentation for Variable Length Transients Detection. *Shin, D.*, +, *LSP 2020 1065-1069*
Recognition-Driven Compressed Image Generation Using Semantic-Prior Information. *Wang, Q.*, +, *LSP 2020 1150-1154*
RGB-T Saliency Detection via Low-Rank Tensor Learning and Unified Collaborative Ranking. *Huang, L.*, +, *LSP 2020 1585-1589*
Self-Similarity Action Proposal. *Liu, X.*, +, *LSP 2020 2064-2068*
SiENet: Siamese Expansion Network for Image Extrapolation. *Zhang, X.*, +, *LSP 2020 1590-1594*
Simultaneous Segmentation and Classification of Mass Region From Mammograms Using a Mixed-Supervision Guided Deep Model. *Shen, T.*, +, *LSP 2020 196-200*
Superpixel Segmentation Using Dynamic and Iterative Spanning Forest. *Belem, F.C.*, +, *LSP 2020 1440-1444*

Triple-Complementary Network for RGB-D Salient Object Detection. *Huang, R.*, +, *LSP 2020 775-779*
Variable Macropixel Spectral-Spatial Transforms With Intra- and Inter-Color Decorrelations for Arbitrary RGB CFA-Sampled Raw Images. *Suzuki, T.*, +, *LSP 2020 466-470*
Weakly-Supervised Sparse Coding With Geometric Prior for Interactive Texture Segmentation. *Quan, Y.*, +, *LSP 2020 116-120*

Image sensors
CNN-Based Fast Source Device Identification. *Mandelli, S.*, +, *LSP 2020 1285-1289*
Neuromorphic Fringe Projection Profilometry. *Mangalore, A.R.*, +, *LSP 2020 1510-1514*
Self-Supervised Light Field Reconstruction Using Shearlet Transform and Cycle Consistency. *Gao, Y.*, +, *LSP 2020 1425-1429*
Variable Macropixel Spectral-Spatial Transforms With Intra- and Inter-Color Decorrelations for Arbitrary RGB CFA-Sampled Raw Images. *Suzuki, T.*, +, *LSP 2020 466-470*

Image sequences
Adaptive Debanding Filter. *Tu, Z.*, +, *LSP 2020 1715-1719*
Capturing Video Frame Rate Variations via Entropic Differencing. *Madhusudana, P.C.*, +, *LSP 2020 1809-1813*
Deformable 3D Convolution for Video Super-Resolution. *Ying, X.*, +, *LSP 2020 1500-1504*
Learning Temporal Relations from Semantic Neighbors for Acoustic Scene Classification. *Zhang, L.*, +, *LSP 2020 950-954*
Progressive Motion Representation Distillation With Two-Branch Networks for Egocentric Activity Recognition. *Liu, T.*, +, *LSP 2020 1320-1324*
Spatial Enhancement and Temporal Constraint for Weakly Supervised Action Localization. *Qin, X.*, +, *LSP 2020 1520-1524*

Image texture
A Secure and Privacy-Preserving Technique Based on Contrast-Enhancement Reversible Data Hiding and Plaintext Encryption for Medical Images. *Yang, Y.*, +, *LSP 2020 256-260*
An Improved Air-Light Estimation Scheme for Single Haze Images Using Color Constancy Prior. *Gautam, S.*, +, *LSP 2020 1695-1699*
Deep Spectral-Spatial Network for Single Image Deblurring. *Lim, S.*, +, *LSP 2020 835-839*
Full Reference Light Field Image Quality Evaluation Based on Angular-Spatial Characteristic. *Meng, C.*, +, *LSP 2020 525-529*
Global Semantic Consistency Network for Image Manipulation Detection. *Shi, Z.*, +, *LSP 2020 1755-1759*
Identity-Aware Face Super-Resolution for Low-Resolution Face Recognition. *Chen, J.*, +, *LSP 2020 645-649*
Multi-Scale Shape Index-Based Local Binary Patterns for Texture Classification. *Alpaslan, N.*, +, *LSP 2020 660-664*
Out-of-Distribution Detection for Reliable Face Recognition. *Yu, C.*, +, *LSP 2020 710-714*
Simple Yet Effective Way for Improving the Performance of Depth Map Super-Resolution. *Yeo, Y.*, +, *LSP 2020 2099-2103*
Synthesized View Quality Assessment Using Feature Matching and Superpixel Difference. *Mahmoudpour, S.*, +, *LSP 2020 1650-1654*
Weakly-Supervised Sparse Coding With Geometric Prior for Interactive Texture Segmentation. *Quan, Y.*, +, *LSP 2020 116-120*

Importance sampling
Diffusion Collaborative Feedback Particle Filter. *Xia, W.*, +, *LSP 2020 1185-1189*
Importance Densities for Particle Filtering Using Iterated Conditional Expectations. *Hostettler, R.*, +, *LSP 2020 211-215*
Stochastic Gradient Population Monte Carlo. *El-Laham, Y.*, +, *LSP 2020 46-50*

Impulse noise
A Robust Affine Projection Algorithm Against Impulsive Noise. *Jeong, J.J., LSP 2020 1530-1534*
Measure-Transformed MVDR Beamforming. *Yazdi, N.*, +, *LSP 2020 1959-1963*
Min-Max Average Pooling Based Filter for Impulse Noise Removal. *Satti, P.*, +, *LSP 2020 1475-1479*
Nyström Kernel Algorithm Under Generalized Maximum Correntropy Criterion. *Zhang, T.*, +, *LSP 2020 1535-1539*
Statistical Properties of Kendall's Tau Under Contaminated Gaussian Model With Applications in Random Signal Detection. *Lai, H.*, +, *LSP 2020 655-659*

Independent component analysis
Consistent ICA: Determined BSS Meets Spectrogram Consistency. *Yatabe, K., LSP 2020 870-874*
Multi-Delay Sparse Approach to Residual Crosstalk Reduction for Blind Source Separation. *Emura, S.*, +, *LSP 2020 1630-1634*

Inference mechanisms
Accelerating RNN Transducer Inference via Adaptive Expansion Search. *Kim, J.*, +, *LSP 2020 2019-2023*
Convergence Analysis of Gaussian SPAWN Under High-Order Graphical Models. *Li, B.*, +, *LSP 2020 1725-1729*
Robust Gaussian Approximate Fixed-Interval Smoother With Outlier Detection. *Chen, Y.*, +, *LSP 2020 1505-1509*

Information retrieval
Efficient Parameter-Free Adaptive Multi-Modal Hashing. *Zheng, C.*, +, *LSP 2020 1270-1274*

Integer programming
One-Bit Symbol-Level Precoding for MU-MISO Downlink With Intelligent Reflecting Surface. *Wang, S.*, +, *LSP 2020 1784-1788*
Range-Doppler Sidelobe Suppression for Pulsed Radar Based on Golay Complementary Codes. *Wu, Z.*, +, *LSP 2020 1205-1209*

Interactive systems
Bi-Directional Seed Attention Network for Interactive Image Segmentation. *Song, G.*, +, *LSP 2020 1540-1544*
Variational Denoising Autoencoders and Least-Squares Policy Iteration for Statistical Dialogue Managers. *Diakoloukas, V.*, +, *LSP 2020 960-964*

Intercarrier interference
Partial FFT Demodulation Scheme Based on Fast Convolution Structure. *Lin, X.*, +, *LSP 2020 1934-1938*

Interference (signal)
Beamforming With Small-Spacing Microphone Arrays Using Constrained/Generalized LASSO. *Wang, X.*, +, *LSP 2020 356-360*
Multi-Delay Sparse Approach to Residual Crosstalk Reduction for Blind Source Separation. *Emura, S.*, +, *LSP 2020 1630-1634*
Sparse Array Design for Adaptive Beamforming via Semidefinite Relaxation. *Zheng, Z.*, +, *LSP 2020 925-929*

Interference suppression
Deep Filtering: Signal Extraction and Reconstruction Using Complex Time-Frequency Filters. *Mack, W.*, +, *LSP 2020 61-65*
Partial FFT Demodulation Scheme Based on Fast Convolution Structure. *Lin, X.*, +, *LSP 2020 1934-1938*

Internet telephony
Fast Steganalysis Method for VoIP Streams. *Yang, H.*, +, *LSP 2020 286-290*

Interpolation
All-Pass Filter Design Using Blaschke Interpolation. *Appaiah, K.*, +, *LSP 2020 226-230*
Convexifying Sparse Interpolation With Infinitely Wide Neural Networks: An Atomic Norm Approach. *Kumar, A.*, +, *LSP 2020 2114-2118*
Direction-of-Arrival Estimation of Coherent Signals via Coprime Array Interpolation. *Zheng, Z.*, +, *LSP 2020 585-589*
Fractional Power Spectrum and Fractional Correlation Estimations for Non-uniform Sampling. *Ma, J.*, +, *LSP 2020 930-934*
High-Precision Trajectory Data Reconstruction for TT&C Systems Using LS B-Spline Approximation. *Sun, J.*, +, *LSP 2020 895-899*
Iterative Reconstruction of Signals on Graph. *Brugnoli, E.*, +, *LSP 2020 76-80*

Invariance
Estimation of Linear Space-Invariant Dynamics. *Naumer, H.*, +, *LSP 2020 2154-2158*

Inverse problems
A Universal Technique for Analysing Discrete Super-Resolution Algorithms. *Qiao, H., LSP 2020 1829-1833*
Plug-and-Play ISTA Converges With Kernel Denoisers. *Gavaskar, R.G.*, +, *LSP 2020 610-614*

Solving RED With Weighted Proximal Methods. *Hong, T.*, +, *LSP 2020 501-505*

Inverse transforms

Fractional Power Spectrum and Fractional Correlation Estimations for Non-uniform Sampling. *Ma, J.*, +, *LSP 2020 930-934*

Inverters

Nonlinear Signal-Filtering Technique With Real-Time Gain Booster for Feedback System Applications. *Kim, S.*, +, *LSP 2020 2183-2187*

Ionosphere

A Provably Convergent Projected Gradient-Type Algorithm for TDOA-Based Geolocation Under the Quasi-Parabolic Ionosphere Model. *Huang, S.*, +, *LSP 2020 1335-1339*

Iterative methods

A Double EP-Based Proposal for Turbo Equalization. *Santos, I.*, +, *LSP 2020 121-125*

A New Recurrent Plug-and-Play Prior Based on the Multiple Self-Similarity Network. *Song, G.*, +, *LSP 2020 451-455*

A Sparse Conjugate Gradient Adaptive Filter. *Lee, C.*, +, *LSP 2020 1000-1004*

An Efficient Nonlinear Dichotomous Coordinate Descent Adaptive Algorithm Based on Random Fourier Features. *Chen, T.*, +, *LSP 2020 1804-1808*

An Off-Grid STAP Algorithm Based On Local Mesh Splitting With Bistatic Radar System. *He, P.*, +, *LSP 2020 1355-1359*

Analytical Geometry Calibration for Acoustic Transceiver Arrays. *Hu, D.*, +, *LSP 2020 1979-1983*

CAPPA: Continuous-Time Accelerated Proximal Point Algorithm for Sparse Recovery. *Garg, K.*, +, *LSP 2020 1760-1764*

Cappedℓ_p-Norm LDA for Outliers Robust Dimension Reduction. *Wang, Z.*, +, *LSP 2020 1315-1319*

Convolutional Approximate Message-Passing. *Takeuchi, K., LSP 2020 416-420*

Design of Constant Modulus Discrete Phase Radar Waveforms Subject to Multi-Spectral Constraints. *Yang, J.*, +, *LSP 2020 875-879*

Double-Attentive Principle Component Analysis. *Wu, D.*, +, *LSP 2020 1814-1818*

Frequency-Domain Entropy-Based Blind Support Recovery from Multiple Measurement Vectors. *Zhu, Y.*, +, *LSP 2020 980-984*

Greedy Algorithms for Hybrid Compressed Sensing. *Tai, C.*, +, *LSP 2020 2059-2063*

Importance Densities for Particle Filtering Using Iterated Conditional Expectations. *Hostettler, R.*, +, *LSP 2020 211-215*

Iterative Reconstruction of Signals on Graph. *Brugnoli, E.*, +, *LSP 2020 76-80*

Low-Complexity Joint Transmit and Receive Beamforming for MIMO Radar With Multi-Targets. *Zhou, J.*, +, *LSP 2020 1410-1414*

Message Passing Based Robust Target Localization in Distributed MIMO Radars in the Presence of Outliers. *Yu, Z.*, +, *LSP 2020 2168-2172*

Non-Negative Transfer Learning With Consistent Inter-Domain Distribution. *Peng, Z.*, +, *LSP 2020 1720-1724*

On the Steady State Performance of the Kalman Filter Applied to Acoustical Systems. *Fabry, J.*, +, *LSP 2020 1854-1858*

Phase Retrieval With Learning Unfolded Expectation Consistent Signal Recovery Algorithm. *Wang, C.*, +, *LSP 2020 780-784*

Plug-and-Play ISTA Converges With Kernel Denoisers. *Gavaskar, R.G.*, +, *LSP 2020 610-614*

Progressive Colorization via Iterative Generative Models. *Zhou, J.*, +, *LSP 2020 2054-2058*

Provable Convergence of Plug-and-Play Priors With MMSE Denoisers. *Xu, X.*, +, *LSP 2020 1280-1284*

Rank-One Matrix Approximation With ℓ_p-Norm for Image Inpainting. *Li, X.P.*, +, *LSP 2020 680-684*

Saturation Based Iterative Approach for Single Image Dehazing. *Lu, Z.*, +, *LSP 2020 665-669*

Self-Supervised Light Field Reconstruction Using Shearlet Transform and Cycle Consistency. *Gao, Y.*, +, *LSP 2020 1425-1429*

Self-Weighting and Hypergraph Regularization for Multi-view Spectral Clustering. *Hao, W.*, +, *LSP 2020 1325-1329*

Stacked Bayesian Matching Pursuit for One-Bit Compressed Sensing. *Chae, J.*, +, *LSP 2020 550-554*

Superpixel Segmentation Using Dynamic and Iterative Spanning Forest. *Belem, F.C.*, +, *LSP 2020 1440-1444*

Variational Denoising Autoencoders and Least-Squares Policy Iteration for Statistical Dialogue Managers. *Diakoloukas, V.*, +, *LSP 2020 960-964*

J

Jamming

Intelligent Reflecting Surfaces Assisted Secure Transmission Without Eavesdropper's CSI. *Wang, H.*, +, *LSP 2020 1300-1304*

Joint Design of Transmit Waveform and Mismatch Filter in the Presence of Interrupted Sampling Repeater Jamming. *Zhou, K.*, +, *LSP 2020 1610-1614*

Legitimate Surveillance via Jamming in Multichannel Relaying System. *Hu, G.*, +, *LSP 2020 1879-1883*

QoS-Based Robust Cooperative-Jamming-Aided Beamforming for Correlated Wiretap Channels. *Xu, S.*, +, *LSP 2020 216-220*

K

Kalman filters

A Double EP-Based Proposal for Turbo Equalization. *Santos, I.*, +, *LSP 2020 121-125*

A Factor Graph-Based Distributed Consensus Kalman Filter. *Wang, S.*, +, *LSP 2020 2039-2043*

A Mnemonic Kalman Filter for Non-Linear Systems With Extensive Temporal Dependencies. *Jung, S.*, +, *LSP 2020 1005-1009*

A New Robust Kalman Filter With Adaptive Estimate of Time-Varying Measurement Bias. *Huang, Y.*, +, *LSP 2020 700-704*

An Adaptive Kinematic Filter Extended by the Additionally Measured Velocity or Acceleration. *Chernoguz, N., LSP 2020 1430-1434*

Asymptotic Analysis of the Convergence Time of Autoregressive Kalman Filters. *Locubiche-Serra, S.*, +, *LSP 2020 820-824*

Cooperative Parameter Estimation on the Unit Sphere Using a Network of Diffusion Particle Filters. *de Figueredo, C.G.*, +, *LSP 2020 715-719*

Efficient Tracking of Sparse Signals via an Earth Mover's Distance Dynamics Regularizer. *Bertrand, N.P.*, +, *LSP 2020 1120-1124*

Interactive-Multiple-Model Algorithm Based on Minimax Particle Filtering. *Lim, J.*, +, *LSP 2020 36-40*

On the Steady State Performance of the Kalman Filter Applied to Acoustical Systems. *Fabry, J.*, +, *LSP 2020 1854-1858*

Robust Unscented Unbiased Minimum-Variance Estimator for Nonlinear System Dynamic State Estimation With Unknown Inputs. *Zheng, Z.*, +, *LSP 2020 376-380*

Suboptimal Kalman Filtering in Triplet Markov Models Using Model Order Reduction. *Lehmann, F.*, +, *LSP 2020 1100-1104*

Karhunen-Loeve transforms

Variable Macropixel Spectral-Spatial Transforms With Intra- and Inter-Color Decorrelations for Arbitrary RGB CFA-Sampled Raw Images. *Suzuki, T.*, +, *LSP 2020 466-470*

Knowledge acquisition

Learning Unbiased Zero-Shot Semantic Segmentation Networks Via Transductive Transfer. *Lv, F.*, +, *LSP 2020 1640-1644*

L

Learning (artificial intelligence)

A*t*-Distribution Based Operator for Enhancing Out of Distribution Robustness of Neural Network Classifiers. *Antonello, N.*, +, *LSP 2020 1070-1074*

A Complete Discriminative Tensor Representation Learning for Two-Dimensional Correlation Analysis. *Gao, L.*, +, *LSP 2020 1894-1898*

A Deep Learning Approach in the Discrete Cosine Transform Domain to Median Filtering Forensics. *Zhang, J.*, +, *LSP 2020 276-280*

A Sensitive Stylistic Approach to Identify Fake News on Social Networking. *de Oliveira, N.R.*, +, *LSP 2020 1250-1254*

A Sparse Robust Adaptive Filtering Algorithm Based on the*q*-Rényi Kernel Function. *Zhang, Y.*, +, *LSP 2020 476-480*

ABSNet: Aesthetics-Based Saliency Network Using Multi-Task Convolutional Network. *Liu, J.*, +, *LSP 2020 2014-2018*
Accurate and Reliable Facial Expression Recognition Using Advanced Softmax Loss With Fixed Weights. *Jiang, P.*, +, *LSP 2020 725-729*
Adaptively Leverage Unlabeled Tracklets Based on Part Attention Model for Few-Example Re-ID. *Han, J.*, +, *LSP 2020 2074-2078*
Addressing Missing Labels in Large-Scale Sound Event Recognition Using a Teacher-Student Framework With Loss Masking. *Fonseca, E.*, +, *LSP 2020 1235-1239*
Adversarial Feature Learning and Unsupervised Clustering Based Speech Synthesis for Found Data With Acoustic and Textual Noise. *Yang, S.*, +, *LSP 2020 1730-1734*
Adversarial Transfer Learning for Deep Learning Based Automatic Modulation Classification. *Bu, K.*, +, *LSP 2020 880-884*
Amphibian Sounds Generating Network Based on Adversarial Learning. *Park, S.*, +, *LSP 2020 640-644*
An Identity-Preserved Model for Face Sketch-Photo Synthesis. *Lin, Y.*, +, *LSP 2020 1095-1099*
An Information-Theoretic Approach to Personalized Explainable Machine Learning. *Jung, A.*, +, *LSP 2020 825-829*
An Intriguing Struggle of CNNs in JPEG Steganalysis and the OneHot Solution. *Yousfi, Y.*, +, *LSP 2020 830-834*
AsNet: Asymmetrical Network for Learning Rich Features in Person Re-Identification. *Zhang, S.*, +, *LSP 2020 850-854*
Association Loss for Visual Object Detection. *Xu, D.*, +, *LSP 2020 1435-1439*
Attention Aggregation Encoder-Decoder Network Framework for Stereo Matching. *Zhang, Y.*, +, *LSP 2020 760-764*
Attentive Feedback Feature Pyramid Network for Shadow Detection. *Kim, J.*, +, *LSP 2020 1964-1968*
AutoHR: A Strong End-to-End Baseline for Remote Heart Rate Measurement With Neural Searching. *Yu, Z.*, +, *LSP 2020 1245-1249*
Automatic Waveform Recognition of Overlapping LPI Radar Signals Based on Multi-Instance Multi-Label Learning. *Pan, Z.*, +, *LSP 2020 1275-1279*
BayesCap: A Bayesian Approach to Brain Tumor Classification Using Capsule Networks. *Afshar, P.*, +, *LSP 2020 2024-2028*
CAPPA: Continuous-Time Accelerated Proximal Point Algorithm for Sparse Recovery. *Garg, K.*, +, *LSP 2020 1760-1764*
Cappedℓ_p-Norm LDA for Outliers Robust Dimension Reduction. *Wang, Z.*, +, *LSP 2020 1315-1319*
Class-Prototype Discriminative Network for Generalized Zero-Shot Learning. *Huang, S.*, +, *LSP 2020 301-305*
CNN-Based Learnable Gammatone Filterbank and Equal-Loudness Normalization for Environmental Sound Classification. *Park, H.*, +, *LSP 2020 411-415*
Combining of Multiple Deep Networks via Ensemble Generalization Loss, Based on MRI Images, for Alzheimer's Disease Classification. *Choi, J.Y.*, +, *LSP 2020 206-210*
Consensus Based Distributed Sparse Bayesian Learning by Fast Marginal Likelihood Maximization. *Manss, C.*, +, *LSP 2020 2119-2123*
Convexifying Sparse Interpolation With Infinitely Wide Neural Networks: An Atomic Norm Approach. *Kumar, A.*, +, *LSP 2020 2114-2118*
Cost-Sensitive Canonical Correlation Analysis for Semi-Supervised Multi-View Learning. *Wan, J.*, +, *LSP 2020 1330-1334*
CTBRNN: A Novel Deep-Learning Based Signal Sequence Detector for Communications Systems. *Sun, L.*, +, *LSP 2020 21-25*
Cumulative Rain Density Sensing Network for Single Image Derain. *Peng, L.*, +, *LSP 2020 406-410*
Curriculum Enhanced Supervised Attention Network for Person Re-Identification. *Zhu, X.*, +, *LSP 2020 1665-1669*
Custom Domain Adaptation: A New Method for Cross-Subject, EEG-Based Cognitive Load Recognition. *Jimenez-Guarneros, M.*, +, *LSP 2020 750-754*
Deep Filtering: Signal Extraction and Reconstruction Using Complex Time-Frequency Filters. *Mack, W.*, +, *LSP 2020 61-65*
Deep Multi-Level Wavelet-CNN Denoiser Prior for Restoring Blurred Image With Cauchy Noise. *Wu, T.*, +, *LSP 2020 1635-1639*
Disentangled Adversarial Autoencoder for Subject-Invariant Physiological Feature Extraction. *Han, M.*, +, *LSP 2020 1565-1569*
DMA Regularization: Enhancing Discriminability of Neural Networks by Decreasing the Minimal Angle. *Wang, Z.*, +, *LSP 2020 2089-2093*
Document Image Binarization Using Dual Discriminator Generative Adversarial Networks. *De, R.*, +, *LSP 2020 1090-1094*
Dual Back-Projection-Based Internal Learning for Blind Super-Resolution. *Kim, J.*, +, *LSP 2020 1190-1194*
Dual Path Denoising Network for Real Photographic Noise. *Jang, Y.I.*, +, *LSP 2020 860-864*
Effect of the Latent Structure on Clustering With GANs. *Mishra, D.*, +, *LSP 2020 900-904*
Efficient Parameter-Free Adaptive Multi-Modal Hashing. *Zheng, C.*, +, *LSP 2020 1270-1274*
Efficient Particle Scale Space for Robust Tracking. *Li, S.*, +, *LSP 2020 371-375*
Fast Steganalysis Method for VoIP Streams. *Yang, H.*, +, *LSP 2020 286-290*
Generalized Zero-Shot Learning With Multi-Channel Gaussian Mixture VAE. *Shao, J.*, +, *LSP 2020 456-460*
GFNet: Gate Fusion Network With Res2Net for Detecting Salient Objects in RGB-D Images. *Zhou, W.*, +, *LSP 2020 800-804*
Gram-Schmidt-Based Sparsification for Kernel Dictionary. *Bueno, A.A.*, +, *LSP 2020 1130-1134*
Graph Regularized Deep Discrete Hashing for Multi-Label Image Retrieval. *Wan, J.*, +, *LSP 2020 1994-1998*
Grouped Multi-Scale Network for Real-World Image Denoising. *Song, Y.*, +, *LSP 2020 2124-2128*
Identity-Aware Face Super-Resolution for Low-Resolution Face Recognition. *Chen, J.*, +, *LSP 2020 645-649*
Image Editing via Segmentation Guided Self-Attention Network. *Zhang, J.*, +, *LSP 2020 1605-1609*
Improved Covariance Matrix Estimation With an Application in Portfolio Optimization. *Deshmukh, S.*, +, *LSP 2020 985-989*
Improving GANs for Speech Enhancement. *Phan, H.*, +, *LSP 2020 1700-1704*
Layer-Wise Adaptive Updating for Few-Shot Image Classification. *Qin, Y.*, +, *LSP 2020 2044-2048*
Learning Local and Global Priors for JPEG Image Artifacts Removal. *Li, J.*, +, *LSP 2020 2134-2138*
Learning Temporal Relations from Semantic Neighbors for Acoustic Scene Classification. *Zhang, L.*, +, *LSP 2020 950-954*
Learning Unbiased Zero-Shot Semantic Segmentation Networks Via Transductive Transfer. *Lv, F.*, +, *LSP 2020 1640-1644*
Learning With Learned Loss Function: Speech Enhancement With Quality-Net to Improve Perceptual Evaluation of Speech Quality. *Fu, S.*, +, *LSP 2020 26-30*
Lightweight Deep CNN for Natural Image Matting via Similarity-Preserving Knowledge Distillation. *Yoon, D.*, +, *LSP 2020 2139-2143*
Low-Rank Regularized Deep Collaborative Matrix Factorization for Micro-Video Multi-Label Classification. *Su, Y.*, +, *LSP 2020 740-744*
Manipulating Template Pixels for Model Adaptation of Siamese Visual Tracking. *Li, Z.*, +, *LSP 2020 1690-1694*
Matrix Capsule Convolutional Projection for Deep Feature Learning. *Xiang, C.*, +, *LSP 2020 1899-1903*
Model Parameter Learning for Real-Time High-Resolution Image Enhancement. *Song, Y.*, +, *LSP 2020 1844-1848*
Modeling Prosodic Phrasing With Multi-Task Learning in Tacotron-Based TTS. *Liu, R.*, +, *LSP 2020 1470-1474*
Multi-Task Adapters for On-Device Audio Inference. *Tagliasacchi, M.*, +, *LSP 2020 630-634*
Multi-Task WaveRNN With an Integrated Architecture for Cross-Lingual Voice Conversion. *Zhou, Y.*, +, *LSP 2020 1310-1314*
Multi-View Robust Feature Learning for Data Clustering. *Zhao, L.*, +, *LSP 2020 1750-1754*
Multiscale Convolutional Fusion Network for Non-Lambertian Photometric Stereo. *Ren, J.*, +, *LSP 2020 1929-1933*

Non-Negative Transfer Learning With Consistent Inter-Domain Distribution. *Peng, Z.*, +, *LSP 2020 1720-1724*
Novel Feature Selection Method Using Bhattacharyya Distance for Neural Networks Based Automatic Modulation Classification. *Shah, M.H.*, +, *LSP 2020 106-110*
Novel Parameter Estimation and Radar Detection Approaches for Multiple Point-Like Targets: Designs and Comparisons. *Addabbo, P.*, +, *LSP 2020 1789-1793*
Occluded Thermal Face Recognition Using Bag of CNN (*Bo*CNN). *Kumar, S.*, +, *LSP 2020 975-979*
On Mean Absolute Error for Deep Neural Network Based Vector-to-Vector Regression. *Qi, J.*, +, *LSP 2020 1485-1489*
On the Duality Between Network Flows and Network Lasso. *Jung, A., LSP 2020 940-944*
On the Identifiability of Transform Learning for Non-Negative Matrix Factorization. *Zhang, S.*, +, *LSP 2020 1555-1559*
Out-of-Distribution Detection for Reliable Face Recognition. *Yu, C.*, +, *LSP 2020 710-714*
Periocular Recognition in the Wild With Generalized Label Smoothing Regularization. *Jung, Y.G.*, +, *LSP 2020 1455-1459*
Phase Retrieval With Learning Unfolded Expectation Consistent Signal Recovery Algorithm. *Wang, C.*, +, *LSP 2020 780-784*
Progressive Motion Representation Distillation With Two-Branch Networks for Egocentric Activity Recognition. *Liu, T.*, +, *LSP 2020 1320-1324*
Quantizing Oriented Object Detection Network via Outlier-Aware Quantization and IoU Approximation. *Zhao, M.*, +, *LSP 2020 1914-1918*
Recursive CSI Quantization of Time-Correlated MIMO Channels by Deep Learning Classification. *Schwarz, S., LSP 2020 1799-1803*
Restoration of Lossy JPEG-Compressed Brain MR Images Using Cross-Domain Neural Networks. *Chung, K.J.*, +, *LSP 2020 141-145*
RGB-T Saliency Detection via Low-Rank Tensor Learning and Unified Collaborative Ranking. *Huang, L.*, +, *LSP 2020 1585-1589*
Robust Prediction When Features are Missing. *Liu, X.*, +, *LSP 2020 720-724*
Self-Supervised Light Field Reconstruction Using Shearlet Transform and Cycle Consistency. *Gao, Y.*, +, *LSP 2020 1425-1429*
Separation of Nonlinearly Mixed Sources Using End-to-End Deep Neural Networks. *Zamani, H.*, +, *LSP 2020 101-105*
Single Image Super-Resolution Using Fire Modules With Asymmetric Configuration. *Kim, H.*, +, *LSP 2020 516-519*
Smooth Incremental Learning of Correlation Filters for Visual Tracking. *Guo, J.*, +, *LSP 2020 336-340*
Speaker Attractor Network: Generalizing Speech Separation to Unseen Numbers of Sources. *Jiang, F.*, +, *LSP 2020 1859-1863*
Spectro-Temporal Attention-Based Voice Activity Detection. *Lee, Y.*, +, *LSP 2020 131-135*
Temporally Refined Graph U-Nets for Human Shape and Pose Estimation From Monocular Videos. *Zhao, Y.*, +, *LSP 2020 1949-1953*
Tensor Denoising Using Low-Rank Tensor Train Decomposition. *Gong, X.*, +, *LSP 2020 1685-1689*
The Global Geometry of Centralized and Distributed Low-rank Matrix Recovery Without Regularization. *Li, S.*, +, *LSP 2020 1400-1404*
The Role of Neural Network Activation Functions. *Parhi, R.*, +, *LSP 2020 1779-1783*
Time-Domain Multi-Modal Bone/Air Conducted Speech Enhancement. *Yu, C.*, +, *LSP 2020 1035-1039*
Towards Privacy-Preserving Domain Adaptation. *Kim, Y.*, +, *LSP 2020 1675-1679*
Tracking Performance of Online Stochastic Learners. *Vlaski, S.*, +, *LSP 2020 1385-1389*
Universal Data Anomaly Detection via Inverse Generative Adversary Network. *Mestav, K.R.*, +, *LSP 2020 511-515*
Variational Denoising Autoencoders and Least-Squares Policy Iteration for Statistical Dialogue Managers. *Diakoloukas, V.*, +, *LSP 2020 960-964*
Vein-Based Biometric Verification Using Densely-Connected Convolutional Autoencoder. *Kuzu, R.S.*, +, *LSP 2020 1869-1873*
VRFCNN: Virtual Reference Frame Generation Network for Quality SHVC. *Ding, Q.*, +, *LSP 2020 2049-2053*
WaveCRN: An Efficient Convolutional Recurrent Neural Network for End-to-End Speech Enhancement. *Hsieh, T.*, +, *LSP 2020 2149-2153*

Least mean squares methods
An Adaptive Algorithm for Active Vibration Control of Parameter-Varying Systems With a New Online Secondary Path Estimation Method. *Zheng, H.*, +, *LSP 2020 705-709*
Complementary Mean-Square Analysis of CNLMS Algorithm Using Pseudo-Energy-Conservation Method. *Zhang, S.*, +, *LSP 2020 1345-1349*
Diffusion LMS With Communication Delays: Stability and Performance Analysis. *Hua, F.*, +, *LSP 2020 730-734*
Gram-Schmidt-Based Sparsification for Kernel Dictionary. *Bueno, A.A.*, +, *LSP 2020 1130-1134*
Joint $\mathbb{SO}(3)$-Spectral Domain Filtering of Spherical Signals in the Presence of Anisotropic Noise. *Aslam, A.*, +, *LSP 2020 2109-2113*
Kernel Recursive Least Squares Algorithm Based on the Nyström Method With*k*-Means Sampling. *Zhang, T.*, +, *LSP 2020 361-365*
Least Squared Relative Error Estimator for RSS Based Localization With Unknown Transmit Power. *Shi, J.*, +, *LSP 2020 1165-1169*
Neural Network-Optimized Channel Estimator and Training Signal Design for MIMO Systems With Few-Bit ADCs. *Nguyen, D.H.N., LSP 2020 1370-1374*
Nyström Kernel Algorithm Under Generalized Maximum Correntropy Criterion. *Zhang, T.*, +, *LSP 2020 1535-1539*
On the Convexity of Bit Depth Allocation for Linear MMSE Estimation in Wireless Sensor Networks. *Arce, F.d.l.H.*, +, *LSP 2020 291-295*
Provable Convergence of Plug-and-Play Priors With MMSE Denoisers. *Xu, X.*, +, *LSP 2020 1280-1284*
Real Signal Equalization for OQAM. *Akbar, M.N.*, +, *LSP 2020 11-15*

Least squares approximations
A New Diffusion Variable Spatial Regularized QRRLS Algorithm. *Chu, Y.*, +, *LSP 2020 995-999*
A Sparse Conjugate Gradient Adaptive Filter. *Lee, C.*, +, *LSP 2020 1000-1004*
Efficient Joint Localization and Synchronization in Distributed MIMO Radars. *Kazemi, S.A.R.*, +, *LSP 2020 1200-1204*
Improved Kernel Recursive Least Squares Algorithm Based Online Prediction for Nonstationary Time Series. *Guo, J.*, +, *LSP 2020 1365-1369*
Message Passing Based Robust Target Localization in Distributed MIMO Radars in the Presence of Outliers. *Yu, Z.*, +, *LSP 2020 2168-2172*
Rank-One Matrix Approximation With ℓ_p-Norm for Image Inpainting. *Li, X.P.*, +, *LSP 2020 680-684*
Robust Hierarchical-Optimization RLS Against Sparse Outliers. *Slavakis, K.*, +, *LSP 2020 171-175*
Robust Unscented Unbiased Minimum-Variance Estimator for Nonlinear System Dynamic State Estimation With Unknown Inputs. *Zheng, Z.*, +, *LSP 2020 376-380*
Sparse Wavelet Networks. *Sadri, A.R.*, +, *LSP 2020 111-115*
Variational Denoising Autoencoders and Least-Squares Policy Iteration for Statistical Dialogue Managers. *Diakoloukas, V.*, +, *LSP 2020 960-964*

Light scattering
Haze Removal by Modeling the Scattering Properties of the Medium. *Wang, R.*, +, *LSP 2020 1155-1159*

Lighting
Multiscale Convolutional Fusion Network for Non-Lambertian Photometric Stereo. *Ren, J.*, +, *LSP 2020 1929-1933*
Unsupervised Low-Light Image Enhancement Using Bright Channel Prior. *Lee, H.*, +, *LSP 2020 251-255*

Linear programming
Privacy-Preserving Distributed Maximum Consensus. *Venkategowda, N.K.D.*, +, *LSP 2020 1839-1843*

Linear systems
Estimation of Linear Space-Invariant Dynamics. *Naumer, H.*, +, *LSP 2020 2154-2158*

Load flow
Overloaded Branch Chains Induced by False Data Injection Attack in Smart Grid. *Peng, D.*, +, *LSP 2020 426-430*

Location based services
Cognitive Resource Allocation for Target Tracking in Location-Aware Radar Networks. *Liu, X.*, +, *LSP 2020 650-654*
Log normal distribution
Least Squared Relative Error Estimator for RSS Based Localization With Unknown Transmit Power. *Shi, J.*, +, *LSP 2020 1165-1169*
Loudness
CNN-Based Learnable Gammatone Filterbank and Equal-Loudness Normalization for Environmental Sound Classification. *Park, H.*, +, *LSP 2020 411-415*
Loudspeakers
Analytical Geometry Calibration for Acoustic Transceiver Arrays. *Hu, D.*, +, *LSP 2020 1979-1983*
Low-pass filters
Robust Analytical Design of Optimal Equiripple Lowpass FIR Filters. *Zahradnik, P., LSP 2020 755-759*
Lungs
A Level Set Based Unified Framework for Pulmonary Nodule Segmentation. *Roy, R.*, +, *LSP 2020 1465-1469*

M

M-sequences
On the Generation of Long Binary Sequences With Record-Breaking PSL Values. *Dimitrov, M.*, +, *LSP 2020 1904-1908*
Machine control
Nonlinear Signal-Filtering Technique With Real-Time Gain Booster for Feedback System Applications. *Kim, S.*, +, *LSP 2020 2183-2187*
Mammography
Simultaneous Segmentation and Classification of Mass Region From Mammograms Using a Mixed-Supervision Guided Deep Model. *Shen, T.*, +, *LSP 2020 196-200*
Markov processes
A Joint Markov Model for Communities, Connectivity and Signals Defined Over Graphs. *Colonnese, S.*, +, *LSP 2020 1160-1164*
A Mnemonic Kalman Filter for Non-Linear Systems With Extensive Temporal Dependencies. *Jung, S.*, +, *LSP 2020 1005-1009*
An Insight Into the Gibbs Sampler: Keep the Samples or Drop Them?. *Boissy, J.*, +, *LSP 2020 2069-2073*
Dynamic Markov Chain Monte Carlo-Based Spectrum Sensing. *Wang, Z.*, +, *LSP 2020 1380-1384*
Efficient Bayesian Sequential Classification Under the Markov Assumption for Various Loss Functions. *Rademacher, P.*, +, *LSP 2020 401-405*
Multiple Norms and Boundary Constraint Enforced Image Deblurring via Efficient MCMC Algorithm. *Xu, J.*, +, *LSP 2020 41-45*
On the Steady State Performance of the Kalman Filter Applied to Acoustical Systems. *Fabry, J.*, +, *LSP 2020 1854-1858*
Suboptimal Kalman Filtering in Triplet Markov Models Using Model Order Reduction. *Lehmann, F.*, +, *LSP 2020 1100-1104*
Variable Splitting Methods for Constrained State Estimation in Partially Observed Markov Processes. *Gao, R.*, +, *LSP 2020 1305-1309*
Mathematical analysis
A Hybrid Downlink NOMA With OFDM and OFDM-IM for Beyond 5G Wireless Networks. *Tusha, A.*, +, *LSP 2020 491-495*
Mathematical programming
Range-Angle Decoupling and Estimation for FDA-MIMO Radar via Atomic Norm Minimization and Accelerated Proximal Gradient. *Tang, W.*, +, *LSP 2020 366-370*
Range-Doppler Sidelobe Suppression for Pulsed Radar Based on Golay Complementary Codes. *Wu, Z.*, +, *LSP 2020 1205-1209*
Semidefinite Programming Methods for Alleviating Clock Synchronization Bias and Sensor Position Errors in TDOA Localization. *Zou, Y.*, +, *LSP 2020 241-245*
Sparse Array Design for Adaptive Beamforming via Semidefinite Relaxation. *Zheng, Z.*, +, *LSP 2020 925-929*
Matrix algebra
(ℓ_1,ℓ_2)-RIP and Projected Back-Projection Reconstruction for Phase-Only Measurements. *Feuillen, T.*, +, *LSP 2020 396-400*
A Promising Nonlinear Dimensionality Reduction Method: Kernel-Based Within Class Collaborative Preserving Discriminant Projection. *Hu, H.*, +, *LSP 2020 2034-2038*
Auto-Tuning Spectral Clustering for Speaker Diarization Using Normalized Maximum Eigengap. *Park, T.J.*, +, *LSP 2020 381-385*
Compressed Arrays and Hybrid Channel Sensing: A Cramér-Rao Bound Based Analysis. *Koochakzadeh, A.*, +, *LSP 2020 1395-1399*
Compressed Channel Estimation for Intelligent Reflecting Surface-Assisted Millimeter Wave Systems. *Wang, P.*, +, *LSP 2020 905-909*
Consensus Based Distributed Spectral Radius Estimation. *Muniraju, G.*, +, *LSP 2020 1045-1049*
Convolutional Approximate Message-Passing. *Takeuchi, K., LSP 2020 416-420*
Filter Design for Two-Channel Filter Banks on Directed Bipartite Graphs. *Tay, D.B., LSP 2020 2094-2098*
Flow-Based Independent Vector Analysis for Blind Source Separation. *Nugraha, A.A.*, +, *LSP 2020 2173-2177*
Generalization Error Bounds for Kernel Matrix Completion and Extrapolation. *Gimenez-Febrer, P.*, +, *LSP 2020 326-330*
Integer DCT Approximation With Arbitrary Size and Adjustable Precision. *Thomaz, L.A.*, +, *LSP 2020 965-969*
Localization of Near-Field Sources for Exact Source-Sensor Spatial Geometry. *He, J.*, +, *LSP 2020 1040-1044*
Malicious User Detection in Non-Orthogonal Multiple Access Based on Spectrum Analysis. *Xia, S.*, +, *LSP 2020 1390-1394*
Matrix Capsule Convolutional Projection for Deep Feature Learning. *Xiang, C.*, +, *LSP 2020 1899-1903*
Message Passing Based Joint Channel and User Activity Estimation for Uplink Grant-Free Massive MIMO Systems With Low-Precision ADCs. *Zou, Q.*, +, *LSP 2020 506-510*
Modeling Label Dependencies for Audio Tagging With Graph Convolutional Network. *Wang, H.*, +, *LSP 2020 1560-1564*
Neural Network-Optimized Channel Estimator and Training Signal Design for MIMO Systems With Few-Bit ADCs. *Nguyen, D.H.N., LSP 2020 1370-1374*
Primary Quantization Matrix Estimation of Double Compressed JPEG Images via CNN. *Niu, Y.*, +, *LSP 2020 191-195*
Rank-One Matrix Approximation With ℓ_p-Norm for Image Inpainting. *Li, X.P.*, +, *LSP 2020 680-684*
Robust Hierarchical-Optimization RLS Against Sparse Outliers. *Slavakis, K.*, +, *LSP 2020 171-175*
Selecting Optimal Completion to Partial Matrix via Self-Validation. *Wang, X.*, +, *LSP 2020 1265-1269*
Self-Weighting and Hypergraph Regularization for Multi-view Spectral Clustering. *Hao, W.*, +, *LSP 2020 1325-1329*
Sensing Performance of Multi-Antenna Energy Detector With Temporal Signal Correlation in Cognitive Vehicular Networks. *Song, K.*, +, *LSP 2020 1050-1054*
Tensor Denoising Using Low-Rank Tensor Train Decomposition. *Gong, X.*, +, *LSP 2020 1685-1689*
The Global Geometry of Centralized and Distributed Low-rank Matrix Recovery Without Regularization. *Li, S.*, +, *LSP 2020 1400-1404*
Matrix decomposition
Active Speaker Detection and Localization in Videos Using Low-Rank and Kernelized Sparsity. *Pu, J.*, +, *LSP 2020 865-869*
Joint DOD and DOA Estimation in Slow-Time MIMO Radar via PARAFAC Decomposition. *Xu, F.*, +, *LSP 2020 1495-1499*
Low-Rank Regularized Deep Collaborative Matrix Factorization for Micro-Video Multi-Label Classification. *Su, Y.*, +, *LSP 2020 740-744*
Near-Convex Archetypal Analysis. *De Handschutter, P.*, +, *LSP 2020 81-85*
Nearest Kronecker Product Decomposition Based Generalized Maximum Correntropy and Generalized Hyperbolic Secant Robust Adaptive Filters. *Bhattacharjee, S.S.*, +, *LSP 2020 1525-1529*
On Recoverability of Randomly Compressed Tensors With Low CP Rank. *Ibrahim, S.*, +, *LSP 2020 1125-1129*
On the Identifiability of Transform Learning for Non-Negative Matrix Factorization. *Zhang, S.*, +, *LSP 2020 1555-1559*

Rank-One Matrix Approximation With ℓ_p-Norm for Image Inpainting. *Li, X.P.*, +, *LSP 2020 680-684*
Robust CP Tensor Factorization With Skew Noise. *Huang, X.*, +, *LSP 2020 785-789*

Matrix inversion
An Efficient Nonlinear Dichotomous Coordinate Descent Adaptive Algorithm Based on Random Fourier Features. *Chen, T.*, +, *LSP 2020 1804-1808*
Convolutional Approximate Message-Passing. *Takeuchi, K., LSP 2020 416-420*
On the Convexity of Bit Depth Allocation for Linear MMSE Estimation in Wireless Sensor Networks. *Arce, F.d.l.H.*, +, *LSP 2020 291-295*

Maximum likelihood detection
A Multifamily GLRT for CFAR Detection of Signals in a Union of Subspaces. *Socheleau, F., LSP 2020 2104-2108*

Maximum likelihood estimation
A Multifamily GLRT for CFAR Detection of Signals in a Union of Subspaces. *Socheleau, F., LSP 2020 2104-2108*
A New Diffusion Variable Spatial Regularized QRRLS Algorithm. *Chu, Y.*, +, *LSP 2020 995-999*
A Provably Convergent Projected Gradient-Type Algorithm for TDOA-Based Geolocation Under the Quasi-Parabolic Ionosphere Model. *Huang, S.*, +, *LSP 2020 1335-1339*
An Approximate ML Estimator for Moving Target Localization in Distributed MIMO Radars. *Kazemi, S.A.R.*, +, *LSP 2020 1595-1599*
Consensus Based Distributed Sparse Bayesian Learning by Fast Marginal Likelihood Maximization. *Manss, C.*, +, *LSP 2020 2119-2123*
Efficient Bayesian Sequential Classification Under the Markov Assumption for Various Loss Functions. *Rademacher, P.*, +, *LSP 2020 401-405*
Energy Distribution of Multiple Target Signal With Application to Target Counting. *Guruacharya, S.*, +, *LSP 2020 431-435*
Estimation of Linear Space-Invariant Dynamics. *Naumer, H.*, +, *LSP 2020 2154-2158*
Linear Regression Without Correspondences via Concave Minimization. *Peng, L.*, +, *LSP 2020 1580-1584*
Maximum Likelihood Estimation for Disk Image Parameters. *Kornilov, M.V., LSP 2020 1480-1484*
Negative Binomial Matrix Factorization. *Gouvert, O.*, +, *LSP 2020 815-819*
Non Zero Mean Adaptive Cosine Estimator and Application to Hyperspectral Imaging. *Vincent, F.*, +, *LSP 2020 1989-1993*
Novel Parameter Estimation and Radar Detection Approaches for Multiple Point-Like Targets: Designs and Comparisons. *Addabbo, P.*, +, *LSP 2020 1789-1793*
Optimal Decision Rules for Simple Hypothesis Testing Under General Criterion Involving Error Probabilities. *Dulek, B.*, +, *LSP 2020 261-265*
Range and Bearing Data Fusion for Precise Convex Network Localization. *Soares, C.*, +, *LSP 2020 670-674*
Robust Unscented Unbiased Minimum-Variance Estimator for Nonlinear System Dynamic State Estimation With Unknown Inputs. *Zheng, Z.*, +, *LSP 2020 376-380*
Semidefinite Programming Methods for Alleviating Clock Synchronization Bias and Sensor Position Errors in TDOA Localization. *Zou, Y.*, +, *LSP 2020 241-245*
Three-Dimensional Rigid Body Localization in the Presence of Clock Offsets. *Ke, X.*, +, *LSP 2020 96-100*

Mean square error methods
Estimation of Linear Space-Invariant Dynamics. *Naumer, H.*, +, *LSP 2020 2154-2158*
Learning Blind Pixelwise Affine Image Denoiser With Single Noisy Images. *Byun, J.*, +, *LSP 2020 1105-1109*
On Mean Absolute Error for Deep Neural Network Based Vector-to-Vector Regression. *Qi, J.*, +, *LSP 2020 1485-1489*
Primary Quantization Matrix Estimation of Double Compressed JPEG Images via CNN. *Niu, Y.*, +, *LSP 2020 191-195*
Sparse Signal Reconstruction Using Blind Super-Resolution With Arbitrary Sampling. *Hezave, H.*, +, *LSP 2020 615-619*

Measurement errors
High-Precision Trajectory Data Reconstruction for TT&C Systems Using LS B-Spline Approximation. *Sun, J.*, +, *LSP 2020 895-899*
Robust Gaussian Approximate Fixed-Interval Smoother With Outlier Detection. *Chen, Y.*, +, *LSP 2020 1505-1509*

Measurement uncertainty
Robust Gaussian Approximate Fixed-Interval Smoother With Outlier Detection. *Chen, Y.*, +, *LSP 2020 1505-1509*

Median filters
A Deep Learning Approach in the Discrete Cosine Transform Domain to Median Filtering Forensics. *Zhang, J.*, +, *LSP 2020 276-280*

Medical image processing
A 4D Basis and Sampling Scheme for the Tensor Encoded Multi-Dimensional Diffusion MRI Signal. *Bates, A.P.*, +, *LSP 2020 790-794*
A Fast Image Fusion With Discrete Cosine Transform. *Wang, M.*, +, *LSP 2020 990-994*
A Level Set Based Unified Framework for Pulmonary Nodule Segmentation. *Roy, R.*, +, *LSP 2020 1465-1469*
A Secure and Privacy-Preserving Technique Based on Contrast-Enhancement Reversible Data Hiding and Plaintext Encryption for Medical Images. *Yang, Y.*, +, *LSP 2020 256-260*
AutoHR: A Strong End-to-End Baseline for Remote Heart Rate Measurement With Neural Searching. *Yu, Z.*, +, *LSP 2020 1245-1249*
B-Scan Attentive CNN for the Classification of Retinal Optical Coherence Tomography Volumes. *Das, V.*, +, *LSP 2020 1025-1029*
BayesCap: A Bayesian Approach to Brain Tumor Classification Using Capsule Networks. *Afshar, P.*, +, *LSP 2020 2024-2028*
Combining of Multiple Deep Networks via Ensemble Generalization Loss, Based on MRI Images, for Alzheimer's Disease Classification. *Choi, J.Y.*, +, *LSP 2020 206-210*
Min-Max Average Pooling Based Filter for Impulse Noise Removal. *Satti, P.*, +, *LSP 2020 1475-1479*
Minkowski-Algebra-Based Super-Sparse Array Design for Super-Resolution Ultrasound Imaging. *Mahurkar, A.G.*, +, *LSP 2020 1060-1064*
MRI and SPECT Image Fusion Using a Weighted Parameter Adaptive Dual Channel PCNN. *Panigrahy, C.*, +, *LSP 2020 690-694*
Multi-Frame Super-Resolution Combining Demons Registration and Regularized Bayesian Reconstruction. *do Nascimento, T.P.*, +, *LSP 2020 2009-2013*
Restoration of Lossy JPEG-Compressed Brain MR Images Using Cross-Domain Neural Networks. *Chung, K.J.*, +, *LSP 2020 141-145*
Simultaneous Segmentation and Classification of Mass Region From Mammograms Using a Mixed-Supervision Guided Deep Model. *Shen, T.*, +, *LSP 2020 196-200*

Medical signal processing
A New Approach to Gaussian Signal Smoothing: Application to ECG Components Separation. *Kheirati Roonizi, A., LSP 2020 1924-1928*
Attentive RNN-Based Network to Fuse 12-Lead ECG and Clinical Features for Improved Myocardial Infarction Diagnosis. *Prabhakararao, E.*, +, *LSP 2020 2029-2033*
Custom Domain Adaptation: A New Method for Cross-Subject, EEG-Based Cognitive Load Recognition. *Jimenez-Guarneros, M.*, +, *LSP 2020 750-754*
Disentangled Adversarial Autoencoder for Subject-Invariant Physiological Feature Extraction. *Han, M.*, +, *LSP 2020 1565-1569*
Vital Sign Extraction in the Presence of Radar Mutual Interference. *Liu, Z.*, +, *LSP 2020 1745-1749*
Wavelet Based Waveform Distortion Measures for Assessment of Denoised EEG Quality With Reference to Noise-Free EEG Signal. *Saini, M.*, +, *LSP 2020 1260-1264*

Memory architecture
A Fast Parallel Particle Filter for Shared Memory Systems. *Varsi, A.*, +, *LSP 2020 1570-1574*

Mesh generation
Temporally Refined Graph U-Nets for Human Shape and Pose Estimation From Monocular Videos. *Zhao, Y.*, +, *LSP 2020 1949-1953*

Message passing
A Factor Graph-Based Distributed Consensus Kalman Filter. *Wang, S.*, +, *LSP 2020 2039-2043*
A Low-Complexity Joint User Activity, Channel and Data Estimation for Grant-Free Massive MIMO Systems. *Zou, Q.*, +, *LSP 2020 1290-1294*
Convergence Analysis of Gaussian SPAWN Under High-Order Graphical Models. *Li, B.*, +, *LSP 2020 1725-1729*
Convolutional Approximate Message-Passing. *Takeuchi, K., LSP 2020 416-420*
Message Passing Based Joint Channel and User Activity Estimation for Uplink Grant-Free Massive MIMO Systems With Low-Precision ADCs. *Zou, Q.*, +, *LSP 2020 506-510*
Message Passing Based Robust Target Localization in Distributed MIMO Radars in the Presence of Outliers. *Yu, Z.*, +, *LSP 2020 2168-2172*
Microphone arrays
Analytical Geometry Calibration for Acoustic Transceiver Arrays. *Hu, D.*, +, *LSP 2020 1979-1983*
Beamforming With Small-Spacing Microphone Arrays Using Constrained/Generalized LASSO. *Wang, X.*, +, *LSP 2020 356-360*
Microphones
Subband Aware CNN for Cell-Phone Recognition. *Lin, X.*, +, *LSP 2020 605-609*
Millimeter wave antennas
Transform Domain Precoding (TDP) for 5G Evolution and 6G. *Liu, W.*, +, *LSP 2020 1145-1149*
Millimeter wave communication
Compressed Arrays and Hybrid Channel Sensing: A Cramér-Rao Bound Based Analysis. *Koochakzadeh, A.*, +, *LSP 2020 1395-1399*
Compressed Channel Estimation for Intelligent Reflecting Surface-Assisted Millimeter Wave Systems. *Wang, P.*, +, *LSP 2020 905-909*
Transform Domain Precoding (TDP) for 5G Evolution and 6G. *Liu, W.*, +, *LSP 2020 1145-1149*
MIMO communication
A Low-Complexity Joint User Activity, Channel and Data Estimation for Grant-Free Massive MIMO Systems. *Zou, Q.*, +, *LSP 2020 1290-1294*
Enhancing mmWave DOA Estimation by Cumulative Power Gradient At Low SNR. *Tian, L.*, +, *LSP 2020 1974-1978*
Hybrid Massive MIMO Two-Way Relaying With Users and Relay Hardware Impairments. *Sharma, E.*, +, *LSP 2020 486-490*
Interleaved Training for Intelligent Surface-Assisted Wireless Communications. *Zhang, C.*, +, *LSP 2020 1774-1778*
Massive MIMO With Ternary ADCs. *Zhang, C.*, +, *LSP 2020 271-275*
Message Passing Based Joint Channel and User Activity Estimation for Uplink Grant-Free Massive MIMO Systems With Low-Precision ADCs. *Zou, Q.*, +, *LSP 2020 506-510*
Neural Network-Optimized Channel Estimator and Training Signal Design for MIMO Systems With Few-Bit ADCs. *Nguyen, D.H.N., LSP 2020 1370-1374*
Recursive CSI Quantization of Time-Correlated MIMO Channels by Deep Learning Classification. *Schwarz, S., LSP 2020 1799-1803*
MIMO radar
A Virtual Nested MIMO Array Exploiting Fourth Order Difference Coarray. *Fu, Z.*, +, *LSP 2020 1140-1144*
An Approximate ML Estimator for Moving Target Localization in Distributed MIMO Radars. *Kazemi, S.A.R.*, +, *LSP 2020 1595-1599*
Angle Estimation of Weak Scatterers Using Improved MUSIC for Bistatic MIMO Radar. *Wang, Y.*, +, *LSP 2020 2164-2167*
Efficient Joint Localization and Synchronization in Distributed MIMO Radars. *Kazemi, S.A.R.*, +, *LSP 2020 1200-1204*
Joint DOD and DOA Estimation in Slow-Time MIMO Radar via PARAFAC Decomposition. *Xu, F.*, +, *LSP 2020 1495-1499*
Low-Complexity Joint Transmit and Receive Beamforming for MIMO Radar With Multi-Targets. *Zhou, J.*, +, *LSP 2020 1410-1414*
Manifold Optimization for Joint Design of MIMO-STAP Radars. *Li, J.*, +, *LSP 2020 1969-1973*
Message Passing Based Robust Target Localization in Distributed MIMO Radars in the Presence of Outliers. *Yu, Z.*, +, *LSP 2020 2168-2172*
Range-Angle Decoupling and Estimation for FDA-MIMO Radar via Atomic Norm Minimization and Accelerated Proximal Gradient. *Tang, W.*, +, *LSP 2020 366-370*
Minimax techniques
Hidden Convexity in Robust Waveform and Receive Filter Bank Optimization Under Range Unambiguous Clutter. *Du, X.*, +, *LSP 2020 885-889*
Min-Max Average Pooling Based Filter for Impulse Noise Removal. *Satti, P.*, +, *LSP 2020 1475-1479*
Optimal Decision Rules for Simple Hypothesis Testing Under General Criterion Involving Error Probabilities. *Dulek, B.*, +, *LSP 2020 261-265*
Minimization
A Variational Pansharpening Method Based on Gradient Sparse Representation. *Tian, X.*, +, *LSP 2020 1180-1184*
An Exploratory Method for Smooth/Transient Decomposition. *Bayram, I., LSP 2020 890-894*
CAPPA: Continuous-Time Accelerated Proximal Point Algorithm for Sparse Recovery. *Garg, K.*, +, *LSP 2020 1760-1764*
Direction-of-Arrival Estimation of Coherent Signals via Coprime Array Interpolation. *Zheng, Z.*, +, *LSP 2020 585-589*
Gridless Direction of Arrival Estimation Exploiting Sparse Linear Array. *Chen, T.*, +, *LSP 2020 1625-1629*
Improved Covariance Matrix Estimation With an Application in Portfolio Optimization. *Deshmukh, S.*, +, *LSP 2020 985-989*
Joint Design of Transmit Waveform and Mismatch Filter in the Presence of Interrupted Sampling Repeater Jamming. *Zhou, K.*, +, *LSP 2020 1610-1614*
Linear Regression Without Correspondences via Concave Minimization. *Peng, L.*, +, *LSP 2020 1580-1584*
Massive MIMO With Ternary ADCs. *Zhang, C.*, +, *LSP 2020 271-275*
One-Bit Symbol-Level Precoding for MU-MISO Downlink With Intelligent Reflecting Surface. *Wang, S.*, +, *LSP 2020 1784-1788*
Practical Cover Selection for Steganography. *Wang, Z.*, +, *LSP 2020 71-75*
Range-Angle Decoupling and Estimation for FDA-MIMO Radar via Atomic Norm Minimization and Accelerated Proximal Gradient. *Tang, W.*, +, *LSP 2020 366-370*
Rank-One Matrix Approximation With ℓ_p-Norm for Image Inpainting. *Li, X.P.*, +, *LSP 2020 680-684*
Uniqueness Guarantee of Solutions of Tensor Tubal-Rank Minimization Problem. *Zhang, F.*, +, *LSP 2020 540-544*
MISO communication
Intelligent Reflecting Surfaces Assisted Secure Transmission Without Eavesdropper's CSI. *Wang, H.*, +, *LSP 2020 1300-1304*
One-Bit Symbol-Level Precoding for MU-MISO Downlink With Intelligent Reflecting Surface. *Wang, S.*, +, *LSP 2020 1784-1788*
Mixture models
Generalized Zero-Shot Learning With Multi-Channel Gaussian Mixture VAE. *Shao, J.*, +, *LSP 2020 456-460*
Mobile computing
Lightweight Deep CNN for Natural Image Matting via Similarity-Preserving Knowledge Distillation. *Yoon, D.*, +, *LSP 2020 2139-2143*
Mobile handsets
Subband Aware CNN for Cell-Phone Recognition. *Lin, X.*, +, *LSP 2020 605-609*
Mobile radio
Sensing Performance of Multi-Antenna Energy Detector With Temporal Signal Correlation in Cognitive Vehicular Networks. *Song, K.*, +, *LSP 2020 1050-1054*
Modulation
Adversarial Transfer Learning for Deep Learning Based Automatic Modulation Classification. *Bu, K.*, +, *LSP 2020 880-884*
Novel Feature Selection Method Using Bhattacharyya Distance for Neural Networks Based Automatic Modulation Classification. *Shah, M.H.*, +, *LSP 2020 106-110*
Molecular biophysics
Generalizing the Statistical Analysis of Objects' Spatial Coupling in Bioimaging. *Mukherjee, S.*, +, *LSP 2020 1085-1089*

Monte Carlo methods
(ℓ_1,ℓ_2)-RIP and Projected Back-Projection Reconstruction for Phase-Only Measurements. *Feuillen, T.*, +, *LSP 2020 396-400*
A 4D Basis and Sampling Scheme for the Tensor Encoded Multi-Dimensional Diffusion MRI Signal. *Bates, A.P.*, +, *LSP 2020 790-794*
A Fast Parallel Particle Filter for Shared Memory Systems. *Varsi, A.*, +, *LSP 2020 1570-1574*
An Insight Into the Gibbs Sampler: Keep the Samples or Drop Them?. *Boissy, J.*, +, *LSP 2020 2069-2073*
Dynamic Markov Chain Monte Carlo-Based Spectrum Sensing. *Wang, Z.*, +, *LSP 2020 1380-1384*
Kernel Recursive Least Squares Algorithm Based on the Nyström Method With*k*-Means Sampling. *Zhang, T.*, +, *LSP 2020 361-365*
Multiple Norms and Boundary Constraint Enforced Image Deblurring via Efficient MCMC Algorithm. *Xu, J.*, +, *LSP 2020 41-45*
Multivariate Correlated Rayleigh Fading With MRC and Applications to Wireless Secrecy. *Le, K.N., LSP 2020 1010-1014*
Nyström Kernel Algorithm Under Generalized Maximum Correntropy Criterion. *Zhang, T.*, +, *LSP 2020 1535-1539*
Motion compensation
Deformable 3D Convolution for Video Super-Resolution. *Ying, X.*, +, *LSP 2020 1500-1504*
Multi-access systems
Malicious User Detection in Non-Orthogonal Multiple Access Based on Spectrum Analysis. *Xia, S.*, +, *LSP 2020 1390-1394*
Multi-agent systems
Fractional-Order Correntropy Adaptive Filters for Distributed Processing of α-Stable Signals. *Gogineni, V.C.*, +, *LSP 2020 1884-1888*
Privacy-Preserving Distributed Maximum Consensus. *Venkategowda, N.K.D.*, +, *LSP 2020 1839-1843*
Multilayer perceptrons
Amphibian Sounds Generating Network Based on Adversarial Learning. *Park, S.*, +, *LSP 2020 640-644*
Quantizing Oriented Object Detection Network via Outlier-Aware Quantization and IoU Approximation. *Zhao, M.*, +, *LSP 2020 1914-1918*
Multimedia computing
A Novel Anti-Collusion Audio Fingerprinting Scheme Based on Fourier Coefficients Reversing. *Li, M.*, +, *LSP 2020 1794-1798*

N

Natural language processing
A Sensitive Stylistic Approach to Identify Fake News on Social Networking. *de Oliveira, N.R.*, +, *LSP 2020 1250-1254*
Multi-Task WaveRNN With an Integrated Architecture for Cross-Lingual Voice Conversion. *Zhou, Y.*, +, *LSP 2020 1310-1314*
Semi-Supervised Seq2seq Joint-Stochastic-Approximation Autoencoders With Applications to Semantic Parsing. *Song, Y.*, +, *LSP 2020 31-35*
Network theory (graphs)
On the Duality Between Network Flows and Network Lasso. *Jung, A., LSP 2020 940-944*
Neural network architecture
A*t*-Distribution Based Operator for Enhancing Out of Distribution Robustness of Neural Network Classifiers. *Antonello, N.*, +, *LSP 2020 1070-1074*
Interlayer Selective Attention Network for Robust Personalized Wake-Up Word Detection. *Lim, H.*, +, *LSP 2020 126-130*
Learning Local and Global Priors for JPEG Image Artifacts Removal. *Li, J.*, +, *LSP 2020 2134-2138*
The Role of Neural Network Activation Functions. *Parhi, R.*, +, *LSP 2020 1779-1783*
Neural networks
A Self-Reasoning Framework for Anomaly Detection Using Video-Level Labels. *Zaheer, M.Z.*, +, *LSP 2020 1705-1709*
ABSNet: Aesthetics-Based Saliency Network Using Multi-Task Convolutional Network. *Liu, J.*, +, *LSP 2020 2014-2018*
Attention Aggregation Encoder-Decoder Network Framework for Stereo Matching. *Zhang, Y.*, +, *LSP 2020 760-764*
AutoHR: A Strong End-to-End Baseline for Remote Heart Rate Measurement With Neural Searching. *Yu, Z.*, +, *LSP 2020 1245-1249*
BayesCap: A Bayesian Approach to Brain Tumor Classification Using Capsule Networks. *Afshar, P.*, +, *LSP 2020 2024-2028*
CANet: Concatenated Attention Neural Network for Image Restoration. *Tian, Y.*, +, *LSP 2020 1615-1619*
Convexifying Sparse Interpolation With Infinitely Wide Neural Networks: An Atomic Norm Approach. *Kumar, A.*, +, *LSP 2020 2114-2118*
Curriculum Enhanced Supervised Attention Network for Person Re-Identification. *Zhu, X.*, +, *LSP 2020 1665-1669*
Custom Domain Adaptation: A New Method for Cross-Subject, EEG-Based Cognitive Load Recognition. *Jimenez-Guarneros, M.*, +, *LSP 2020 750-754*
Deep Filtering: Signal Extraction and Reconstruction Using Complex Time-Frequency Filters. *Mack, W.*, +, *LSP 2020 61-65*
Deep Spectral-Spatial Network for Single Image Deblurring. *Lim, S.*, +, *LSP 2020 835-839*
Detecting Replay Attacks Using Multi-Channel Audio: A Neural Network-Based Method. *Gong, Y.*, +, *LSP 2020 920-924*
DMA Regularization: Enhancing Discriminability of Neural Networks by Decreasing the Minimal Angle. *Wang, Z.*, +, *LSP 2020 2089-2093*
DOA Estimation Method Based on Cascaded Neural Network for Two Closely Spaced Sources. *Guo, Y.*, +, *LSP 2020 570-574*
Document Image Binarization Using Dual Discriminator Generative Adversarial Networks. *De, R.*, +, *LSP 2020 1090-1094*
Effect of the Latent Structure on Clustering With GANs. *Mishra, D.*, +, *LSP 2020 900-904*
Efficient Particle Scale Space for Robust Tracking. *Li, S.*, +, *LSP 2020 371-375*
Efficient Proposals: Scale Estimation for Object Proposals in Pedestrian Detection Tasks. *Qiu, J.*, +, *LSP 2020 855-859*
Flow-Based Independent Vector Analysis for Blind Source Separation. *Nugraha, A.A.*, +, *LSP 2020 2173-2177*
Generated Data With Sparse Regularized Multi-Pseudo Label for Person Re-Identification. *Huang, L.*, +, *LSP 2020 391-395*
Graph Regularized Deep Discrete Hashing for Multi-Label Image Retrieval. *Wan, J.*, +, *LSP 2020 1994-1998*
Grouped Multi-Scale Network for Real-World Image Denoising. *Song, Y.*, +, *LSP 2020 2124-2128*
Hierarchical Neural Architecture Search for Single Image Super-Resolution. *Guo, Y.*, +, *LSP 2020 1255-1259*
Identity-Aware Face Super-Resolution for Low-Resolution Face Recognition. *Chen, J.*, +, *LSP 2020 645-649*
Learning to Distort Images Using Generative Adversarial Networks. *Chen, L.*, +, *LSP 2020 2144-2148*
Learning Unbiased Zero-Shot Semantic Segmentation Networks Via Transductive Transfer. *Lv, F.*, +, *LSP 2020 1640-1644*
Low-Rank Regularized Deep Collaborative Matrix Factorization for Micro-Video Multi-Label Classification. *Su, Y.*, +, *LSP 2020 740-744*
Model-Aided Deep Neural Network for Source Number Detection. *Yang, Y.*, +, *LSP 2020 91-95*
MRI and SPECT Image Fusion Using a Weighted Parameter Adaptive Dual Channel PCNN. *Panigrahy, C.*, +, *LSP 2020 690-694*
Neural Network-Optimized Channel Estimator and Training Signal Design for MIMO Systems With Few-Bit ADCs. *Nguyen, D.H.N., LSP 2020 1370-1374*
Novel Feature Selection Method Using Bhattacharyya Distance for Neural Networks Based Automatic Modulation Classification. *Shah, M.H.*, +, *LSP 2020 106-110*
On Mean Absolute Error for Deep Neural Network Based Vector-to-Vector Regression. *Qi, J.*, +, *LSP 2020 1485-1489*
Online Automatic Speech Recognition With Listen, Attend and Spell Model. *Hsiao, R.*, +, *LSP 2020 1889-1893*
Provable Convergence of Plug-and-Play Priors With MMSE Denoisers. *Xu, X.*, +, *LSP 2020 1280-1284*
Pseudo Label Based on Multiple Clustering for Unsupervised Cross-Domain Person Re-Identification. *Chen, S.*, +, *LSP 2020 1460-1464*

Psychoacoustic Calibration of Loss Functions for Efficient End-to-End Neural Audio Coding. *Zhen, K.*, +, *LSP 2020 2159-2163*
Recursive CSI Quantization of Time-Correlated MIMO Channels by Deep Learning Classification. *Schwarz, S., LSP 2020 1799-1803*
SFNet: A Computationally Efficient Source Filter Model Based Neural Speech Synthesis. *MV, A.R.*, +, *LSP 2020 1170-1174*
Simple Yet Effective Way for Improving the Performance of Lossy Image Compression. *Yeo, Y.*, +, *LSP 2020 530-534*
Speaker Attractor Network: Generalizing Speech Separation to Unseen Numbers of Sources. *Jiang, F.*, +, *LSP 2020 1859-1863*
Spectro-Temporal Attention-Based Voice Activity Detection. *Lee, Y.*, +, *LSP 2020 131-135*
Surprise-Based JND Estimation for Images. *Wang, H.*, +, *LSP 2020 181-185*
Universal Data Anomaly Detection via Inverse Generative Adversary Network. *Mestav, K.R.*, +, *LSP 2020 511-515*
Unsupervised Feature Learning for Speech Using Correspondence and Siamese Networks. *Last, P.*, +, *LSP 2020 421-425*
Unsupervised Low-Light Image Enhancement Using Bright Channel Prior. *Lee, H.*, +, *LSP 2020 251-255*
Variable Rate Deep Image Compression With Modulated Autoencoder. *Yang, F.*, +, *LSP 2020 331-335*
Variational Denoising Autoencoders and Least-Squares Policy Iteration for Statistical Dialogue Managers. *Diakoloukas, V.*, +, *LSP 2020 960-964*
Voice Conversion for Whispered Speech Synthesis. *Cotescu, M.*, +, *LSP 2020 186-190*

Neurophysiology
Generalizing the Statistical Analysis of Objects' Spatial Coupling in Bioimaging. *Mukherjee, S.*, +, *LSP 2020 1085-1089*

Nonlinear control systems
Modeling Nonlinear Processes Using the Radial Basis Function-Based State-Dependent Autoregressive Models. *Zhou, Y.*, +, *LSP 2020 1600-1604*
Nonlinear Signal-Filtering Technique With Real-Time Gain Booster for Feedback System Applications. *Kim, S.*, +, *LSP 2020 2183-2187*

Nonlinear distortion
Global Optimization for Recovery of Clipped Signals Corrupted With Poisson-Gaussian Noise. *Marmin, A.*, +, *LSP 2020 970-974*

Nonlinear filters
Cooperative Parameter Estimation on the Unit Sphere Using a Network of Diffusion Particle Filters. *de Figueredo, C.G.*, +, *LSP 2020 715-719*
Diffusion Collaborative Feedback Particle Filter. *Xia, W.*, +, *LSP 2020 1185-1189*
Interactive-Multiple-Model Algorithm Based on Minimax Particle Filtering. *Lim, J.*, +, *LSP 2020 36-40*
Robust Unscented Unbiased Minimum-Variance Estimator for Nonlinear System Dynamic State Estimation With Unknown Inputs. *Zheng, Z.*, +, *LSP 2020 376-380*

Nonlinear programming
A Provably Convergent Projected Gradient-Type Algorithm for TDOA-Based Geolocation Under the Quasi-Parabolic Ionosphere Model. *Huang, S.*, +, *LSP 2020 1335-1339*
One-Bit Symbol-Level Precoding for MU-MISO Downlink With Intelligent Reflecting Surface. *Wang, S.*, +, *LSP 2020 1784-1788*

Nonlinear systems
Kernel Recursive Least Squares Algorithm Based on the Nyström Method With*k*-Means Sampling. *Zhang, T.*, +, *LSP 2020 361-365*

Notch filters
Deep Filtering: Signal Extraction and Reconstruction Using Complex Time-Frequency Filters. *Mack, W.*, +, *LSP 2020 61-65*

Numerical analysis
Convolutional Approximate Message-Passing. *Takeuchi, K., LSP 2020 416-420*
Privacy-Preserving Distributed Maximum Consensus. *Venkategowda, N.K.D.*, +, *LSP 2020 1839-1843*
Variable Splitting Methods for Constrained State Estimation in Partially Observed Markov Processes. *Gao, R.*, +, *LSP 2020 1305-1309*

Numerical stability
Clustering Event Streams With Low Rank Hawkes Processes. *Turkmen, A.C.*, +, *LSP 2020 1575-1579*

O

Object detection
A Multi-Target Track-Before-Detect Particle Filter Using Superpositional Data in Non-Gaussian Noise. *Ito, N.*, +, *LSP 2020 1075-1079*
A Self-Reasoning Framework for Anomaly Detection Using Video-Level Labels. *Zaheer, M.Z.*, +, *LSP 2020 1705-1709*
A Tunable Detector for Distributed Target Detection in the Situation of Signal Mismatch. *Tang, P.*, +, *LSP 2020 151-155*
ABSNet: Aesthetics-Based Saliency Network Using Multi-Task Convolutional Network. *Liu, J.*, +, *LSP 2020 2014-2018*
An Improved CA-CFAR Method for Ship Target Detection in Strong Clutter Using UHF Radar. *Kuang, C.*, +, *LSP 2020 1445-1449*
Association Loss for Visual Object Detection. *Xu, D.*, +, *LSP 2020 1435-1439*
Asymmetric Deeply Fused Network for Detecting Salient Objects in RGB-D Images. *Liu, C.*, +, *LSP 2020 1620-1624*
Attentive Feedback Feature Pyramid Network for Shadow Detection. *Kim, J.*, +, *LSP 2020 1964-1968*
Cooperative Parameter Estimation on the Unit Sphere Using a Network of Diffusion Particle Filters. *de Figueredo, C.G.*, +, *LSP 2020 715-719*
Correlation Filtering-Based Hashing for Fine-Grained Image Retrieval. *Ma, L.*, +, *LSP 2020 2129-2133*
Efficient Particle Scale Space for Robust Tracking. *Li, S.*, +, *LSP 2020 371-375*
Efficient Proposals: Scale Estimation for Object Proposals in Pedestrian Detection Tasks. *Qiu, J.*, +, *LSP 2020 855-859*
FANet: Features Adaptation Network for 360° Omnidirectional Salient Object Detection. *Huang, M.*, +, *LSP 2020 1819-1823*
FAST: Fast and Accurate Scale Estimation for Tracking. *Ma, H.*, +, *LSP 2020 161-165*
GFNet: Gate Fusion Network With Res2Net for Detecting Salient Objects in RGB-D Images. *Zhou, W.*, +, *LSP 2020 800-804*
Manipulating Template Pixels for Model Adaptation of Siamese Visual Tracking. *Li, Z.*, +, *LSP 2020 1690-1694*
Matrix Capsule Convolutional Projection for Deep Feature Learning. *Xiang, C.*, +, *LSP 2020 1899-1903*
Motion Context Network for Weakly Supervised Object Detection in Videos. *Jin, R.*, +, *LSP 2020 1864-1868*
Non Zero Mean Adaptive Cosine Estimator and Application to Hyperspectral Imaging. *Vincent, F.*, +, *LSP 2020 1989-1993*
Persymmetric Adaptive Detection With Reduced-Dimension Approach. *Zhang, J.*, +, *LSP 2020 565-569*
Power-Law Processor Over Segmentation for Variable Length Transients Detection. *Shin, D.*, +, *LSP 2020 1065-1069*
Progressive Motion Representation Distillation With Two-Branch Networks for Egocentric Activity Recognition. *Liu, T.*, +, *LSP 2020 1320-1324*
Quantizing Oriented Object Detection Network via Outlier-Aware Quantization and IoU Approximation. *Zhao, M.*, +, *LSP 2020 1914-1918*
Relation R-CNN: A Graph Based Relation-Aware Network for Object Detection. *Chen, S.*, +, *LSP 2020 1680-1684*
RGB-T Saliency Detection via Low-Rank Tensor Learning and Unified Collaborative Ranking. *Huang, L.*, +, *LSP 2020 1585-1589*
Self-Similarity Action Proposal. *Liu, X.*, +, *LSP 2020 2064-2068*
Triple-Complementary Network for RGB-D Salient Object Detection. *Huang, R.*, +, *LSP 2020 775-779*

Object recognition
Curriculum Enhanced Supervised Attention Network for Person Re-Identification. *Zhu, X.*, +, *LSP 2020 1665-1669*
Generalized Zero-Shot Learning With Multi-Channel Gaussian Mixture VAE. *Shao, J.*, +, *LSP 2020 456-460*

Object tracking
Efficient Particle Scale Space for Robust Tracking. *Li, S.*, +, *LSP 2020 371-375*
FAST: Fast and Accurate Scale Estimation for Tracking. *Ma, H.*, +, *LSP 2020 161-165*
Manipulating Template Pixels for Model Adaptation of Siamese Visual Tracking. *Li, Z.*, +, *LSP 2020 1690-1694*

Smooth Incremental Learning of Correlation Filters for Visual Tracking. *Guo, J.*, +, *LSP 2020 336-340*

Observers

Nonlinear Signal-Filtering Technique With Real-Time Gain Booster for Feedback System Applications. *Kim, S.*, +, *LSP 2020 2183-2187*

Oceanographic techniques

Parameter-Adaptive Compensation (PAC) for Processing Underwater Selective Absorption. *Liu, J.*, +, *LSP 2020 2178-2182*

Robust Multipath Time-Delay Estimation of Broadband Source Using a Vertical Line Array in Deep Water. *Li, H.*, +, *LSP 2020 51-55*

Octrees

Intra-Frame Compression of Point Cloud Geometry Using Dyadic Decomposition. *Peixoto, E., LSP 2020 246-250*

OFDM modulation

A Hybrid Downlink NOMA With OFDM and OFDM-IM for Beyond 5G Wireless Networks. *Tusha, A.*, +, *LSP 2020 491-495*

Generalized Constructions of Complementary Sets of Sequences of Lengths Non-Power-of-Two. *Wang, G.*, +, *LSP 2020 136-140*

Partial FFT Demodulation Scheme Based on Fast Convolution Structure. *Lin, X.*, +, *LSP 2020 1934-1938*

Optical correlation

Adaptive Complexity for Pixel-Value-Ordering Based Reversible Data Hiding. *Pan, Z.*, +, *LSP 2020 915-919*

Optical filters

Variable Macropixel Spectral-Spatial Transforms With Intra- and Inter-Color Decorrelations for Arbitrary RGB CFA-Sampled Raw Images. *Suzuki, T.*, +, *LSP 2020 466-470*

Optical tomography

B-Scan Attentive CNN for the Classification of Retinal Optical Coherence Tomography Volumes. *Das, V.*, +, *LSP 2020 1025-1029*

Optimization

A New Approach to Gaussian Signal Smoothing: Application to ECG Components Separation. *Kheirati Roonizi, A., LSP 2020 1924-1928*

A Variational Pansharpening Method Based on Gradient Sparse Representation. *Tian, X.*, +, *LSP 2020 1180-1184*

A Virtual Nested MIMO Array Exploiting Fourth Order Difference Coarray. *Fu, Z.*, +, *LSP 2020 1140-1144*

Active Speaker Detection and Localization in Videos Using Low-Rank and Kernelized Sparsity. *Pu, J.*, +, *LSP 2020 865-869*

Analytical Geometry Calibration for Acoustic Transceiver Arrays. *Hu, D.*, +, *LSP 2020 1979-1983*

CAPPA: Continuous-Time Accelerated Proximal Point Algorithm for Sparse Recovery. *Garg, K.*, +, *LSP 2020 1760-1764*

Cappedℓ_p-Norm LDA for Outliers Robust Dimension Reduction. *Wang, Z.*, +, *LSP 2020 1315-1319*

CEC: Cluster Embedding Coding for H.264 Steganography. *Wang, Y.*, +, *LSP 2020 955-959*

Cognitive Resource Allocation for Target Tracking in Location-Aware Radar Networks. *Liu, X.*, +, *LSP 2020 650-654*

Compressed Arrays and Hybrid Channel Sensing: A Cramér-Rao Bound Based Analysis. *Koochakzadeh, A.*, +, *LSP 2020 1395-1399*

Consensus Based Distributed Sparse Bayesian Learning by Fast Marginal Likelihood Maximization. *Manss, C.*, +, *LSP 2020 2119-2123*

Design of Constant Modulus Discrete Phase Radar Waveforms Subject to Multi-Spectral Constraints. *Yang, J.*, +, *LSP 2020 875-879*

Dual Back-Projection-Based Internal Learning for Blind Super-Resolution. *Kim, J.*, +, *LSP 2020 1190-1194*

Enhanced Matrix CFAR Detection With Dimensionality Reduction of Riemannian Manifold. *Yang, Z.*, +, *LSP 2020 2084-2088*

Joint Amplitude and Phase Refinement for Monaural Source Separation. *Masuyama, Y.*, +, *LSP 2020 1939-1943*

Large Database Compression Based on Perceived Information. *Maugey, T.*, +, *LSP 2020 1735-1739*

Learning Blind Pixelwise Affine Image Denoiser With Single Noisy Images. *Byun, J.*, +, *LSP 2020 1105-1109*

Learning With Learned Loss Function: Speech Enhancement With Quality-Net to Improve Perceptual Evaluation of Speech Quality. *Fu, S.*, +, *LSP 2020 26-30*

Manifold Optimization for Joint Design of MIMO-STAP Radars. *Li, J.*, +, *LSP 2020 1969-1973*

Modeling Nonlinear Processes Using the Radial Basis Function-Based State-Dependent Autoregressive Models. *Zhou, Y.*, +, *LSP 2020 1600-1604*

Multi-Delay Sparse Approach to Residual Crosstalk Reduction for Blind Source Separation. *Emura, S.*, +, *LSP 2020 1630-1634*

Multi-Task Adapters for On-Device Audio Inference. *Tagliasacchi, M.*, +, *LSP 2020 630-634*

Non-Negative Transfer Learning With Consistent Inter-Domain Distribution. *Peng, Z.*, +, *LSP 2020 1720-1724*

On the Duality Between Network Flows and Network Lasso. *Jung, A., LSP 2020 940-944*

On the Identifiability of Transform Learning for Non-Negative Matrix Factorization. *Zhang, S.*, +, *LSP 2020 1555-1559*

Online Spectrogram Inversion for Low-Latency Audio Source Separation. *Magron, P.*, +, *LSP 2020 306-310*

Optimal Parameter Design for Estimation Theoretic Secure Broadcast. *Goken, C.*, +, *LSP 2020 281-285*

Overloaded Branch Chains Induced by False Data Injection Attack in Smart Grid. *Peng, D.*, +, *LSP 2020 426-430*

Plug-and-Play ISTA Converges With Kernel Denoisers. *Gavaskar, R.G.*, +, *LSP 2020 610-614*

QoS-Based Robust Cooperative-Jamming-Aided Beamforming for Correlated Wiretap Channels. *Xu, S.*, +, *LSP 2020 216-220*

Quantizing Oriented Object Detection Network via Outlier-Aware Quantization and IoU Approximation. *Zhao, M.*, +, *LSP 2020 1914-1918*

Reduced Complexity Recursive Grassmannian Quantization. *Schwarz, S.*, +, *LSP 2020 321-325*

Robust Analytical Design of Optimal Equiripple Lowpass FIR Filters. *Zahradnik, P., LSP 2020 755-759*

Robust Hierarchical-Optimization RLS Against Sparse Outliers. *Slavakis, K.*, +, *LSP 2020 171-175*

Smooth Incremental Learning of Correlation Filters for Visual Tracking. *Guo, J.*, +, *LSP 2020 336-340*

Stacked Bayesian Matching Pursuit for One-Bit Compressed Sensing. *Chae, J.*, +, *LSP 2020 550-554*

Stochastic Gradient Population Monte Carlo. *El-Laham, Y.*, +, *LSP 2020 46-50*

Superpixel Segmentation Using Dynamic and Iterative Spanning Forest. *Belem, F.C.*, +, *LSP 2020 1440-1444*

Tracking Performance of Online Stochastic Learners. *Vlaski, S.*, +, *LSP 2020 1385-1389*

Variable Splitting Methods for Constrained State Estimation in Partially Observed Markov Processes. *Gao, R.*, +, *LSP 2020 1305-1309*

P

Parallel architectures

A Fast Parallel Particle Filter for Shared Memory Systems. *Varsi, A.*, +, *LSP 2020 1570-1574*

Complexity Scalable Bitplane Image Coding With Parallel Coefficient Processing. *de Cea-Dominguez, C.*, +, *LSP 2020 840-844*

Parallel processing

A Fast Parallel Particle Filter for Shared Memory Systems. *Varsi, A.*, +, *LSP 2020 1570-1574*

Min-Max Average Pooling Based Filter for Impulse Noise Removal. *Satti, P.*, +, *LSP 2020 1475-1479*

Parameter estimation

A Novel Parameter Estimation for Polynomial Phase Signals Using the Spectrum Phase. *Jiang, X.*, +, *LSP 2020 1919-1923*

Asymptotic Analysis of the Convergence Time of Autoregressive Kalman Filters. *Locubiche-Serra, S.*, +, *LSP 2020 820-824*

Clustering Event Streams With Low Rank Hawkes Processes. *Turkmen, A.C.*, +, *LSP 2020 1575-1579*

Continuous Approximation Based Dimension-Reduced Estimation for Arbitrary Sampling. *Zhao, C.*, +, *LSP 2020 1080-1084*

Cooperative Parameter Estimation on the Unit Sphere Using a Network of Diffusion Particle Filters. *de Figueredo, C.G.*, +, *LSP 2020 715-719*

Modeling Nonlinear Processes Using the Radial Basis Function-Based State-Dependent Autoregressive Models. *Zhou, Y.*, +, *LSP 2020 1600-1604*

Partial differential equations

A PDE Model for Smooth Surface Reconstruction from 2D Parallel Slices. *Zou, Q., LSP 2020 1015-1019*

Particle filtering (numerical methods)

A Fast Parallel Particle Filter for Shared Memory Systems. *Varsi, A.*, +, *LSP 2020 1570-1574*

A Multi-Target Track-Before-Detect Particle Filter Using Superpositional Data in Non-Gaussian Noise. *Ito, N.*, +, *LSP 2020 1075-1079*

Cooperative Parameter Estimation on the Unit Sphere Using a Network of Diffusion Particle Filters. *de Figueredo, C.G.*, +, *LSP 2020 715-719*

Diffusion Collaborative Feedback Particle Filter. *Xia, W.*, +, *LSP 2020 1185-1189*

Efficient Particle Scale Space for Robust Tracking. *Li, S.*, +, *LSP 2020 371-375*

Importance Densities for Particle Filtering Using Iterated Conditional Expectations. *Hostettler, R.*, +, *LSP 2020 211-215*

Interactive-Multiple-Model Algorithm Based on Minimax Particle Filtering. *Lim, J.*, +, *LSP 2020 36-40*

Patient monitoring

AutoHR: A Strong End-to-End Baseline for Remote Heart Rate Measurement With Neural Searching. *Yu, Z.*, +, *LSP 2020 1245-1249*

Pattern classification

A*t*-Distribution Based Operator for Enhancing Out of Distribution Robustness of Neural Network Classifiers. *Antonello, N.*, +, *LSP 2020 1070-1074*

Adversarial Transfer Learning for Deep Learning Based Automatic Modulation Classification. *Bu, K.*, +, *LSP 2020 880-884*

Convexifying Sparse Interpolation With Infinitely Wide Neural Networks: An Atomic Norm Approach. *Kumar, A.*, +, *LSP 2020 2114-2118*

Disentangled Adversarial Autoencoder for Subject-Invariant Physiological Feature Extraction. *Han, M.*, +, *LSP 2020 1565-1569*

Low-Rank Regularized Deep Collaborative Matrix Factorization for Micro-Video Multi-Label Classification. *Su, Y.*, +, *LSP 2020 740-744*

Modeling Label Dependencies for Audio Tagging With Graph Convolutional Network. *Wang, H.*, +, *LSP 2020 1560-1564*

Novel Feature Selection Method Using Bhattacharyya Distance for Neural Networks Based Automatic Modulation Classification. *Shah, M.H.*, +, *LSP 2020 106-110*

Pattern clustering

Cappedℓ_p-Norm LDA for Outliers Robust Dimension Reduction. *Wang, Z.*, +, *LSP 2020 1315-1319*

Clustering Event Streams With Low Rank Hawkes Processes. *Turkmen, A.C.*, +, *LSP 2020 1575-1579*

Deep Clustering With Variational Autoencoder. *Lim, K.*, +, *LSP 2020 231-235*

Effect of the Latent Structure on Clustering With GANs. *Mishra, D.*, +, *LSP 2020 900-904*

Hypergraph Spectral Clustering for Point Cloud Segmentation. *Zhang, S.*, +, *LSP 2020 1655-1659*

Multi-View Robust Feature Learning for Data Clustering. *Zhao, L.*, +, *LSP 2020 1750-1754*

Node-Adaptive Multi-Graph Fusion Using Extreme Value Theory. *Zhang, J.*, +, *LSP 2020 351-355*

On the Duality Between Network Flows and Network Lasso. *Jung, A., LSP 2020 940-944*

Periocular Recognition in the Wild With Generalized Label Smoothing Regularization. *Jung, Y.G.*, +, *LSP 2020 1455-1459*

Pseudo Label Based on Multiple Clustering for Unsupervised Cross-Domain Person Re-Identification. *Chen, S.*, +, *LSP 2020 1460-1464*

Self-Weighting and Hypergraph Regularization for Multi-view Spectral Clustering. *Hao, W.*, +, *LSP 2020 1325-1329*

Pedestrians

Efficient Proposals: Scale Estimation for Object Proposals in Pedestrian Detection Tasks. *Qiu, J.*, +, *LSP 2020 855-859*

Permanent magnet motors

Nonlinear Signal-Filtering Technique With Real-Time Gain Booster for Feedback System Applications. *Kim, S.*, +, *LSP 2020 2183-2187*

Phase coding

Design of Constant Modulus Discrete Phase Radar Waveforms Subject to Multi-Spectral Constraints. *Yang, J.*, +, *LSP 2020 875-879*

Phase locked loops

Temporal Localization of Non-Static Digital Videos Using the Electrical Network Frequency. *Fernandez-Menduina, S.*, +, *LSP 2020 745-749*

Phase modulation

Joint DOD and DOA Estimation in Slow-Time MIMO Radar via PARAFAC Decomposition. *Xu, F.*, +, *LSP 2020 1495-1499*

Phase noise

(ℓ_1,ℓ_2)-RIP and Projected Back-Projection Reconstruction for Phase-Only Measurements. *Feuillen, T.*, +, *LSP 2020 396-400*

Phase shift keying

One-Bit Symbol-Level Precoding for MU-MISO Downlink With Intelligent Reflecting Surface. *Wang, S.*, +, *LSP 2020 1784-1788*

Rank-One Detector for Kronecker-Structured Constant Modulus Constellations. *E-Asim, F.*, +, *LSP 2020 1420-1424*

Photometry

Multiscale Convolutional Fusion Network for Non-Lambertian Photometric Stereo. *Ren, J.*, +, *LSP 2020 1929-1933*

Photoplethysmography

AutoHR: A Strong End-to-End Baseline for Remote Heart Rate Measurement With Neural Searching. *Yu, Z.*, +, *LSP 2020 1245-1249*

Poisson distribution

Negative Binomial Matrix Factorization. *Gouvert, O.*, +, *LSP 2020 815-819*

Polynomial approximation

Robust Analytical Design of Optimal Equiripple Lowpass FIR Filters. *Zahradnik, P., LSP 2020 755-759*

Polynomials

A Novel Parameter Estimation for Polynomial Phase Signals Using the Spectrum Phase. *Jiang, X.*, +, *LSP 2020 1919-1923*

Design of Constant Modulus Discrete Phase Radar Waveforms Subject to Multi-Spectral Constraints. *Yang, J.*, +, *LSP 2020 875-879*

Design of Nonsubsampled Graph Filter Banks via Lifting Schemes. *Jiang, J.*, +, *LSP 2020 441-445*

Pose estimation

Integral Knowledge Distillation for Multi-Person Pose Estimation. *Xu, X.*, +, *LSP 2020 436-440*

Temporally Refined Graph U-Nets for Human Shape and Pose Estimation From Monocular Videos. *Zhao, Y.*, +, *LSP 2020 1949-1953*

Power engineering computing

Overloaded Branch Chains Induced by False Data Injection Attack in Smart Grid. *Peng, D.*, +, *LSP 2020 426-430*

Power generation dispatch

Overloaded Branch Chains Induced by False Data Injection Attack in Smart Grid. *Peng, D.*, +, *LSP 2020 426-430*

Power generation economics

Overloaded Branch Chains Induced by False Data Injection Attack in Smart Grid. *Peng, D.*, +, *LSP 2020 426-430*

Power system security

Overloaded Branch Chains Induced by False Data Injection Attack in Smart Grid. *Peng, D.*, +, *LSP 2020 426-430*

Precoding

Enhancing mmWave DOA Estimation by Cumulative Power Gradient At Low SNR. *Tian, L.*, +, *LSP 2020 1974-1978*

One-Bit Symbol-Level Precoding for MU-MISO Downlink With Intelligent Reflecting Surface. *Wang, S.*, +, *LSP 2020 1784-1788*

Recursive CSI Quantization of Time-Correlated MIMO Channels by Deep Learning Classification. *Schwarz, S., LSP 2020 1799-1803*

Transform Domain Precoding (TDP) for 5G Evolution and 6G. *Liu, W.*, +, *LSP 2020 1145-1149*

Prediction theory

3D Point Cloud Attribute Compression via Graph Prediction. *Gu, S.*, +, *LSP 2020 176-180*

Principal component analysis

Convolutional PCA for Multiple Time Series. *Li, X., LSP 2020 1450-1454*

Double-Attentive Principle Component Analysis. *Wu, D.*, +, *LSP 2020 1814-1818*

Online Reweighted Least Squares Robust PCA. *Rontogiannis, A.A.*, +, *LSP 2020 1340-1344*

Probability

A Correlation Detection Method of Low SNR Based on Multi-Channelization. *Nie, D.*, +, *LSP 2020 1375-1379*

A Mnemonic Kalman Filter for Non-Linear Systems With Extensive Temporal Dependencies. *Jung, S.*, +, *LSP 2020 1005-1009*

A New Diffusion Variable Spatial Regularized QRRLS Algorithm. *Chu, Y.*, +, *LSP 2020 995-999*

Automatic Waveform Recognition of Overlapping LPI Radar Signals Based on Multi-Instance Multi-Label Learning. *Pan, Z.*, +, *LSP 2020 1275-1279*

Chebyshev Center Computation on Probability Simplex With α-Divergence Measure. *Candan, C., LSP 2020 1515-1519*

Cross Term Decay in Multiplicative Processors. *Chavali, V.*, +, *LSP 2020 56-60*

Energy Distribution of Multiple Target Signal With Application to Target Counting. *Guruacharya, S.*, +, *LSP 2020 431-435*

Estimating the Number of Sinusoids in Additive Sub-Gaussian Noise With Finite Measurements. *Qiao, H., LSP 2020 1225-1229*

Measure-Transformed MVDR Beamforming. *Yazdi, N.*, +, *LSP 2020 1959-1963*

Modeling Label Dependencies for Audio Tagging With Graph Convolutional Network. *Wang, H.*, +, *LSP 2020 1560-1564*

Multidimensional Variational Line Spectra Estimation. *Zhang, Q.*, +, *LSP 2020 945-949*

Multivariate Correlated Rayleigh Fading With MRC and Applications to Wireless Secrecy. *Le, K.N., LSP 2020 1010-1014*

Novel Feature Selection Method Using Bhattacharyya Distance for Neural Networks Based Automatic Modulation Classification. *Shah, M.H.*, +, *LSP 2020 106-110*

Nyström Kernel Algorithm Under Generalized Maximum Correntropy Criterion. *Zhang, T.*, +, *LSP 2020 1535-1539*

Optimal Parameter Design for Estimation Theoretic Secure Broadcast. *Goken, C.*, +, *LSP 2020 281-285*

QoS-Based Robust Cooperative-Jamming-Aided Beamforming for Correlated Wiretap Channels. *Xu, S.*, +, *LSP 2020 216-220*

Secrecy Outage Analysis Over Random Beamforming Transmission With User Scheduling: Collusion vs. Exclusion. *Bao, T.*, +, *LSP 2020 1295-1299*

Sensing Performance of Multi-Antenna Energy Detector With Temporal Signal Correlation in Cognitive Vehicular Networks. *Song, K.*, +, *LSP 2020 1050-1054*

Statistical Properties of Kendall's Tau Under Contaminated Gaussian Model With Applications in Random Signal Detection. *Lai, H.*, +, *LSP 2020 655-659*

Vital Sign Extraction in the Presence of Radar Mutual Interference. *Liu, Z.*, +, *LSP 2020 1745-1749*

Pulse compression

Joint Design of Transmit Waveform and Mismatch Filter in the Presence of Interrupted Sampling Repeater Jamming. *Zhou, K.*, +, *LSP 2020 1610-1614*

Q

QR codes

The Nested QR Code. *Chou, G.*, +, *LSP 2020 1230-1234*

Quadratic programming

Combining of Multiple Deep Networks via Ensemble Generalization Loss, Based on MRI Images, for Alzheimer's Disease Classification. *Choi, J.Y.*, +, *LSP 2020 206-210*

Privacy-Preserving Constrained Quadratic Optimization With Fisher Information. *Farokhi, F., LSP 2020 545-549*

Sparse Array Design for Adaptive Beamforming via Semidefinite Relaxation. *Zheng, Z.*, +, *LSP 2020 925-929*

Quadrature amplitude modulation

Real Signal Equalization for OQAM. *Akbar, M.N.*, +, *LSP 2020 11-15*

Quality of experience

Synthesized View Quality Assessment Using Feature Matching and Superpixel Difference. *Mahmoudpour, S.*, +, *LSP 2020 1650-1654*

Quality of service

Intelligent Reflecting Surfaces Assisted Secure Transmission Without Eavesdropper's CSI. *Wang, H.*, +, *LSP 2020 1300-1304*

QoS-Based Robust Cooperative-Jamming-Aided Beamforming for Correlated Wiretap Channels. *Xu, S.*, +, *LSP 2020 216-220*

Quantization (signal)

Adaptive Debanding Filter. *Tu, Z.*, +, *LSP 2020 1715-1719*

Adaptive Lagrangian Multiplier for Quantization Parameter Cascading in HEVC Hierarchical Coding. *Jia, L.*, +, *LSP 2020 1220-1224*

Genetic Algorithm Based Rate Control for AV1. *Fang, M.*, +, *LSP 2020 520-524*

Interleaved Training for Intelligent Surface-Assisted Wireless Communications. *Zhang, C.*, +, *LSP 2020 1774-1778*

Massive MIMO With Ternary ADCs. *Zhang, C.*, +, *LSP 2020 271-275*

Primary Quantization Matrix Estimation of Double Compressed JPEG Images via CNN. *Niu, Y.*, +, *LSP 2020 191-195*

Quantizing Oriented Object Detection Network via Outlier-Aware Quantization and IoU Approximation. *Zhao, M.*, +, *LSP 2020 1914-1918*

Simple Yet Effective Way for Improving the Performance of Lossy Image Compression. *Yeo, Y.*, +, *LSP 2020 530-534*

R

Radar antennas

Low-Complexity Joint Transmit and Receive Beamforming for MIMO Radar With Multi-Targets. *Zhou, J.*, +, *LSP 2020 1410-1414*

Radar clutter

An Improved CA-CFAR Method for Ship Target Detection in Strong Clutter Using UHF Radar. *Kuang, C.*, +, *LSP 2020 1445-1449*

An Off-Grid STAP Algorithm Based On Local Mesh Splitting With Bistatic Radar System. *He, P.*, +, *LSP 2020 1355-1359*

Enhanced Matrix CFAR Detection With Dimensionality Reduction of Riemannian Manifold. *Yang, Z.*, +, *LSP 2020 2084-2088*

Hidden Convexity in Robust Waveform and Receive Filter Bank Optimization Under Range Unambiguous Clutter. *Du, X.*, +, *LSP 2020 885-889*

Manifold Optimization for Joint Design of MIMO-STAP Radars. *Li, J.*, +, *LSP 2020 1969-1973*

Radar computing

Automatic Waveform Recognition of Overlapping LPI Radar Signals Based on Multi-Instance Multi-Label Learning. *Pan, Z.*, +, *LSP 2020 1275-1279*

Novel Parameter Estimation and Radar Detection Approaches for Multiple Point-Like Targets: Designs and Comparisons. *Addabbo, P.*, +, *LSP 2020 1789-1793*

Radar detection

A Tunable Detector for Distributed Target Detection in the Situation of Signal Mismatch. *Tang, P.*, +, *LSP 2020 151-155*

An Improved CA-CFAR Method for Ship Target Detection in Strong Clutter Using UHF Radar. *Kuang, C.*, +, *LSP 2020 1445-1449*

Design of Constant Modulus Discrete Phase Radar Waveforms Subject to Multi-Spectral Constraints. *Yang, J.*, +, *LSP 2020 875-879*

Enhanced Matrix CFAR Detection With Dimensionality Reduction of Riemannian Manifold. *Yang, Z.*, +, *LSP 2020 2084-2088*

Novel Parameter Estimation and Radar Detection Approaches for Multiple Point-Like Targets: Designs and Comparisons. *Addabbo, P.*, +, *LSP 2020 1789-1793*

Radar imaging

An Improved CA-CFAR Method for Ship Target Detection in Strong Clutter Using UHF Radar. *Kuang, C.*, +, *LSP 2020 1445-1449*

Radar interference

Design of Constant Modulus Discrete Phase Radar Waveforms Subject to Multi-Spectral Constraints. *Yang, J.*, +, *LSP 2020 875-879*

Low-Complexity Joint Transmit and Receive Beamforming for MIMO Radar With Multi-Targets. *Zhou, J.*, +, *LSP 2020 1410-1414*

Novel Parameter Estimation and Radar Detection Approaches for Multiple Point-Like Targets: Designs and Comparisons. *Addabbo, P.*, +, *LSP 2020 1789-1793*

Range-Doppler Sidelobe Suppression for Pulsed Radar Based on Golay Complementary Codes. *Wu, Z.*, +, *LSP 2020 1205-1209*

Vital Sign Extraction in the Presence of Radar Mutual Interference. *Liu, Z.*, +, *LSP 2020 1745-1749*

Radar signal processing

A Virtual Nested MIMO Array Exploiting Fourth Order Difference Coarray. *Fu, Z.*, +, *LSP 2020 1140-1144*

An Exploratory Method for Smooth/Transient Decomposition. *Bayram, I., LSP 2020 890-894*

An Off-Grid STAP Algorithm Based On Local Mesh Splitting With Bistatic Radar System. *He, P.*, +, *LSP 2020 1355-1359*

Automatic Waveform Recognition of Overlapping LPI Radar Signals Based on Multi-Instance Multi-Label Learning. *Pan, Z.*, +, *LSP 2020 1275-1279*

Frequency Estimation in Coherent, Periodic Pulse Trains. *Clarkson, I.V.L.*, +, *LSP 2020 1415-1419*

Joint Design of Transmit Waveform and Mismatch Filter in the Presence of Interrupted Sampling Repeater Jamming. *Zhou, K.*, +, *LSP 2020 1610-1614*

Joint DOD and DOA Estimation in Slow-Time MIMO Radar via PARAFAC Decomposition. *Xu, F.*, +, *LSP 2020 1495-1499*

Manifold Optimization for Joint Design of MIMO-STAP Radars. *Li, J.*, +, *LSP 2020 1969-1973*

Novel Parameter Estimation and Radar Detection Approaches for Multiple Point-Like Targets: Designs and Comparisons. *Addabbo, P.*, +, *LSP 2020 1789-1793*

Novel Second-Order Statistics of the Chirp Cyclostationary Signals. *Miao, H.*, +, *LSP 2020 910-914*

Range-Angle Decoupling and Estimation for FDA-MIMO Radar via Atomic Norm Minimization and Accelerated Proximal Gradient. *Tang, W.*, +, *LSP 2020 366-370*

Toeplitz Structured Covariance Matrix Estimation for Radar Applications. *Du, X.*, +, *LSP 2020 595-599*

Vital Sign Extraction in the Presence of Radar Mutual Interference. *Liu, Z.*, +, *LSP 2020 1745-1749*

Radar target recognition

Novel Parameter Estimation and Radar Detection Approaches for Multiple Point-Like Targets: Designs and Comparisons. *Addabbo, P.*, +, *LSP 2020 1789-1793*

Radar theory

An Approximate ML Estimator for Moving Target Localization in Distributed MIMO Radars. *Kazemi, S.A.R.*, +, *LSP 2020 1595-1599*

Radar tracking

An Approximate ML Estimator for Moving Target Localization in Distributed MIMO Radars. *Kazemi, S.A.R.*, +, *LSP 2020 1595-1599*

Cognitive Resource Allocation for Target Tracking in Location-Aware Radar Networks. *Liu, X.*, +, *LSP 2020 650-654*

Message Passing Based Robust Target Localization in Distributed MIMO Radars in the Presence of Outliers. *Yu, Z.*, +, *LSP 2020 2168-2172*

Radar transmitters

Automatic Waveform Recognition of Overlapping LPI Radar Signals Based on Multi-Instance Multi-Label Learning. *Pan, Z.*, +, *LSP 2020 1275-1279*

Radial basis function networks

Modeling Nonlinear Processes Using the Radial Basis Function-Based State-Dependent Autoregressive Models. *Zhou, Y.*, +, *LSP 2020 1600-1604*

Radio direction-finding

A Provably Convergent Projected Gradient-Type Algorithm for TDOA-Based Geolocation Under the Quasi-Parabolic Ionosphere Model. *Huang, S.*, +, *LSP 2020 1335-1339*

Radio links

Interleaved Training for Intelligent Surface-Assisted Wireless Communications. *Zhang, C.*, +, *LSP 2020 1774-1778*

Radio networks

A Robust Affine Projection Algorithm Against Impulsive Noise. *Jeong, J.J., LSP 2020 1530-1534*

Convergence Analysis of Gaussian SPAWN Under High-Order Graphical Models. *Li, B.*, +, *LSP 2020 1725-1729*

Radio Frequency Fingerprint Extraction Based on Multi-Dimension Approximate Entropy. *Sun, L.*, +, *LSP 2020 471-475*

Radio repeaters

Joint Design of Transmit Waveform and Mismatch Filter in the Presence of Interrupted Sampling Repeater Jamming. *Zhou, K.*, +, *LSP 2020 1610-1614*

Radio spectrum management

A Family of Single-Channel Spectrally-Null-Constrained Sequences With Low Correlation. *Tian, L.*, +, *LSP 2020 1645-1649*

Dynamic Markov Chain Monte Carlo-Based Spectrum Sensing. *Wang, Z.*, +, *LSP 2020 1380-1384*

Malicious User Detection in Non-Orthogonal Multiple Access Based on Spectrum Analysis. *Xia, S.*, +, *LSP 2020 1390-1394*

Radio transceivers

Hidden Convexity in Robust Waveform and Receive Filter Bank Optimization Under Range Unambiguous Clutter. *Du, X.*, +, *LSP 2020 885-889*

Radio transmitters

Intelligent Reflecting Surfaces Assisted Secure Transmission Without Eavesdropper's CSI. *Wang, H.*, +, *LSP 2020 1300-1304*

Legitimate Surveillance via Jamming in Multichannel Relaying System. *Hu, G.*, +, *LSP 2020 1879-1883*

Radio Frequency Fingerprint Extraction Based on Multi-Dimension Approximate Entropy. *Sun, L.*, +, *LSP 2020 471-475*

Radiocommunication

Quantitative Relationship Between Localization Accuracy and Location Privacy Level in Wireless Localization System. *Shi, X.*, +, *LSP 2020 1055-1059*

Rain

Dually Connected Deraining Net Using Pixel-Wise Attention. *Ren, W.*, +, *LSP 2020 316-320*

Random processes

(ℓ_1,ℓ_2)-RIP and Projected Back-Projection Reconstruction for Phase-Only Measurements. *Feuillen, T.*, +, *LSP 2020 396-400*

A Joint Markov Model for Communities, Connectivity and Signals Defined Over Graphs. *Colonnese, S.*, +, *LSP 2020 1160-1164*

Efficient Bayesian Sequential Classification Under the Markov Assumption for Various Loss Functions. *Rademacher, P.*, +, *LSP 2020 401-405*

Gradient of Error Probability of*M*-ary Hypothesis Testing Problems Under Multivariate Gaussian Noise. *Jeong, M.*, +, *LSP 2020 1909-1913*

Malicious User Detection in Non-Orthogonal Multiple Access Based on Spectrum Analysis. *Xia, S.*, +, *LSP 2020 1390-1394*

On the Product of Two Correlated Complex Gaussian Random Variables. *Li, Y.*, +, *LSP 2020 16-20*

Sensing Performance of Multi-Antenna Energy Detector With Temporal Signal Correlation in Cognitive Vehicular Networks. *Song, K.*, +, *LSP 2020 1050-1054*

Tracking Performance of Online Stochastic Learners. *Vlaski, S.*, +, *LSP 2020 1385-1389*

Rate distortion theory

Adaptive Lagrangian Multiplier for Quantization Parameter Cascading in HEVC Hierarchical Coding. *Jia, L.*, +, *LSP 2020 1220-1224*

CEC: Cluster Embedding Coding for H.264 Steganography. *Wang, Y.*, +, *LSP 2020 955-959*

Light Field Compression Using Global Multiplane Representation and Two-Step Prediction. *Chen, Y.*, +, *LSP 2020 1135-1139*

Reduced Complexity Recursive Grassmannian Quantization. *Schwarz, S.*, +, *LSP 2020 321-325*

Variable Rate Deep Image Compression With Modulated Autoencoder. *Yang, F.*, +, *LSP 2020 331-335*

Rational functions

Global Optimization for Recovery of Clipped Signals Corrupted With Poisson-Gaussian Noise. *Marmin, A.*, +, *LSP 2020 970-974*

Rayleigh channels

Interleaved Training for Intelligent Surface-Assisted Wireless Communications. *Zhang, C.*, +, *LSP 2020 1774-1778*

Multivariate Correlated Rayleigh Fading With MRC and Applications to Wireless Secrecy. *Le, K.N., LSP 2020 1010-1014*

Real-time systems

Real-Time 3D Face Alignment Using an Encoder-Decoder Network With an Efficient Deconvolution Layer. *Ning, X.*, +, *LSP 2020 1944-1948*

SFNet: A Computationally Efficient Source Filter Model Based Neural Speech Synthesis. *MV, A.R.*, +, *LSP 2020 1170-1174*

Receiving antennas

Low-Complexity Joint Transmit and Receive Beamforming for MIMO Radar With Multi-Targets. *Zhou, J.*, +, *LSP 2020 1410-1414*

Recommender systems

An Information-Theoretic Approach to Personalized Explainable Machine Learning. *Jung, A.*, +, *LSP 2020 825-829*

Recurrent neural networks

A Mnemonic Kalman Filter for Non-Linear Systems With Extensive Temporal Dependencies. *Jung, S.*, +, *LSP 2020 1005-1009*

A New Recurrent Plug-and-Play Prior Based on the Multiple Self-Similarity Network. *Song, G.*, +, *LSP 2020 451-455*

Accelerating RNN Transducer Inference via Adaptive Expansion Search. *Kim, J.*, +, *LSP 2020 2019-2023*

Attentive RNN-Based Network to Fuse 12-Lead ECG and Clinical Features for Improved Myocardial Infarction Diagnosis. *Prabhakararao, E.*, +, *LSP 2020 2029-2033*

CTBRNN: A Novel Deep-Learning Based Signal Sequence Detector for Communications Systems. *Sun, L.*, +, *LSP 2020 21-25*

Memory Attention: Robust Alignment Using Gating Mechanism for End-to-End Speech Synthesis. *Lee, J.Y.*, +, *LSP 2020 2004-2008*

Multi-Task WaveRNN With an Integrated Architecture for Cross-Lingual Voice Conversion. *Zhou, Y.*, +, *LSP 2020 1310-1314*

Separation of Nonlinearly Mixed Sources Using End-to-End Deep Neural Networks. *Zamani, H.*, +, *LSP 2020 101-105*

WaveCRN: An Efficient Convolutional Recurrent Neural Network for End-to-End Speech Enhancement. *Hsieh, T.*, +, *LSP 2020 2149-2153*

Recursive estimation

A New Diffusion Variable Spatial Regularized QRRLS Algorithm. *Chu, Y.*, +, *LSP 2020 995-999*

Kernel Recursive Least Squares Algorithm Based on the Nyström Method With*k*-Means Sampling. *Zhang, T.*, +, *LSP 2020 361-365*

Nyström Kernel Algorithm Under Generalized Maximum Correntropy Criterion. *Zhang, T.*, +, *LSP 2020 1535-1539*

Robust Hierarchical-Optimization RLS Against Sparse Outliers. *Slavakis, K.*, +, *LSP 2020 171-175*

Reduced order systems

Suboptimal Kalman Filtering in Triplet Markov Models Using Model Order Reduction. *Lehmann, F.*, +, *LSP 2020 1100-1104*

Regression analysis

A Novel Parameter Estimation for Polynomial Phase Signals Using the Spectrum Phase. *Jiang, X.*, +, *LSP 2020 1919-1923*

Blind Quality Index of Depth Images Based on Structural Statistics for View Synthesis. *Huang, Y.*, +, *LSP 2020 685-689*

CAPPA: Continuous-Time Accelerated Proximal Point Algorithm for Sparse Recovery. *Garg, K.*, +, *LSP 2020 1760-1764*

HRTF Selection by Anthropometric Regression for Improving Horizontal Localization Accuracy. *Spagnol, S., LSP 2020 590-594*

Importance Densities for Particle Filtering Using Iterated Conditional Expectations. *Hostettler, R.*, +, *LSP 2020 211-215*

Linear Regression Without Correspondences via Concave Minimization. *Peng, L.*, +, *LSP 2020 1580-1584*

On Mean Absolute Error for Deep Neural Network Based Vector-to-Vector Regression. *Qi, J.*, +, *LSP 2020 1485-1489*

Robust Hierarchical-Optimization RLS Against Sparse Outliers. *Slavakis, K.*, +, *LSP 2020 171-175*

Robust Unscented Unbiased Minimum-Variance Estimator for Nonlinear System Dynamic State Estimation With Unknown Inputs. *Zheng, Z.*, +, *LSP 2020 376-380*

Sequential Poisson Regression in Diffusion Networks. *Dedecius, K.*, +, *LSP 2020 625-629*

Sparse Wavelet Networks. *Sadri, A.R.*, +, *LSP 2020 111-115*

Relaxation theory

Global Optimization for Recovery of Clipped Signals Corrupted With Poisson-Gaussian Noise. *Marmin, A.*, +, *LSP 2020 970-974*

Relay networks (telecommunication)

Hybrid Massive MIMO Two-Way Relaying With Users and Relay Hardware Impairments. *Sharma, E.*, +, *LSP 2020 486-490*

Legitimate Surveillance via Jamming in Multichannel Relaying System. *Hu, G.*, +, *LSP 2020 1879-1883*

Multivariate Correlated Rayleigh Fading With MRC and Applications to Wireless Secrecy. *Le, K.N., LSP 2020 1010-1014*

Reliability

Accurate and Reliable Facial Expression Recognition Using Advanced Softmax Loss With Fixed Weights. *Jiang, P.*, +, *LSP 2020 725-729*

Mahalanobis Based Point to Distribution Metric for Point Cloud Geometry Quality Evaluation. *Javaheri, A.*, +, *LSP 2020 1350-1354*

Remote sensing

A Variational Pansharpening Method Based on Gradient Sparse Representation. *Tian, X.*, +, *LSP 2020 1180-1184*

Rendering (computer graphics)

Simple Yet Effective Way for Improving the Performance of Depth Map Super-Resolution. *Yeo, Y.*, +, *LSP 2020 2099-2103*

Synthesized View Quality Assessment Using Feature Matching and Superpixel Difference. *Mahmoudpour, S.*, +, *LSP 2020 1650-1654*

Resource allocation

Cognitive Resource Allocation for Target Tracking in Location-Aware Radar Networks. *Liu, X.*, +, *LSP 2020 650-654*

Legitimate Surveillance via Jamming in Multichannel Relaying System. *Hu, G.*, +, *LSP 2020 1879-1883*

Multi-Task Adapters for On-Device Audio Inference. *Tagliasacchi, M.*, +, *LSP 2020 630-634*

Retinal recognition

Joint Over and Under Exposures Correction by Aggregated Retinex Propagation for Image Enhancement. *Ma, L.*, +, *LSP 2020 1210-1214*

Reverberation

Adaptive Reverberation Absorption Using Non-Stationary Masking Components Detection for Intelligibility Improvement. *Zucatelli, G.*, +, *LSP 2020 1-5*

Analytical Geometry Calibration for Acoustic Transceiver Arrays. *Hu, D.*, +, *LSP 2020 1979-1983*

Multi-Delay Sparse Approach to Residual Crosstalk Reduction for Blind Source Separation. *Emura, S.*, +, *LSP 2020 1630-1634*

Riccati equations

On the Steady State Performance of the Kalman Filter Applied to Acoustical Systems. *Fabry, J.*, +, *LSP 2020 1854-1858*

RSSI

Least Squared Relative Error Estimator for RSS Based Localization With Unknown Transmit Power. *Shi, J.*, +, *LSP 2020 1165-1169*

S

Sampling methods

Kernel Recursive Least Squares Algorithm Based on the Nyström Method With*k*-Means Sampling. *Zhang, T.*, +, *LSP 2020 361-365*

Satellite navigation

Range and Bearing Data Fusion for Precise Convex Network Localization. *Soares, C.*, +, *LSP 2020 670-674*

Search problems

Efficient Generation of Low Autocorrelation Binary Sequences. *Dimitrov, M.*, +, *LSP 2020 341-345*

Enhancing mmWave DOA Estimation by Cumulative Power Gradient At Low SNR. *Tian, L.*, +, *LSP 2020 1974-1978*

Low-Complexity Joint Transmit and Receive Beamforming for MIMO Radar With Multi-Targets. *Zhou, J.*, +, *LSP 2020 1410-1414*

Reduced Complexity Recursive Grassmannian Quantization. *Schwarz, S.*, +, *LSP 2020 321-325*

The Global Geometry of Centralized and Distributed Low-rank Matrix Recovery Without Regularization. *Li, S.*, +, *LSP 2020 1400-1404*

Security of data

A Novel Anti-Collusion Audio Fingerprinting Scheme Based on Fourier Coefficients Reversing. *Li, M.*, +, *LSP 2020 1794-1798*

A Self-Reasoning Framework for Anomaly Detection Using Video-Level Labels. *Zaheer, M.Z.*, +, *LSP 2020 1705-1709*

Detecting Replay Attacks Using Multi-Channel Audio: A Neural Network-Based Method. *Gong, Y.*, +, *LSP 2020 920-924*
Overloaded Branch Chains Induced by False Data Injection Attack in Smart Grid. *Peng, D.*, +, *LSP 2020 426-430*
Universal Data Anomaly Detection via Inverse Generative Adversary Network. *Mestav, K.R.*, +, *LSP 2020 511-515*

Sensitivity analysis
Manifold Sensitivity Analysis of Frequency Diverse Array. *Liao, T.*, +, *LSP 2020 1020-1024*

Sensor arrays
A New Approach to Construct Virtual Array With Increased Degrees of Freedom for Moving Sparse Arrays. *Li, S.*, +, *LSP 2020 805-809*
Minkowski-Algebra-Based Super-Sparse Array Design for Super-Resolution Ultrasound Imaging. *Mahurkar, A.G.*, +, *LSP 2020 1060-1064*

Sensor fusion
A Deep Learning Approach in the Discrete Cosine Transform Domain to Median Filtering Forensics. *Zhang, J.*, +, *LSP 2020 276-280*
Classification-Aided Multitarget Tracking Using the Sum-Product Algorithm. *Gaglione, D.*, +, *LSP 2020 1710-1714*
Distributed Detection of Sparse Signals With Censoring Sensors Via Locally Most Powerful Test. *Li, C.*, +, *LSP 2020 346-350*
Multiobject Fusion With Minimum Information Loss. *Gao, L.*, +, *LSP 2020 201-205*
Node-Adaptive Multi-Graph Fusion Using Extreme Value Theory. *Zhang, J.*, +, *LSP 2020 351-355*
Range and Bearing Data Fusion for Precise Convex Network Localization. *Soares, C.*, +, *LSP 2020 670-674*

Sensor placement
Semidefinite Programming Methods for Alleviating Clock Synchronization Bias and Sensor Position Errors in TDOA Localization. *Zou, Y.*, +, *LSP 2020 241-245*

Sensors
Extended Nested Arrays for Consecutive Virtual Aperture Enhancement. *Ren, S.*, +, *LSP 2020 575-579*

Sequences
A Family of Single-Channel Spectrally-Null-Constrained Sequences With Low Correlation. *Tian, L.*, +, *LSP 2020 1645-1649*
Generalized Constructions of Complementary Sets of Sequences of Lengths Non-Power-of-Two. *Wang, G.*, +, *LSP 2020 136-140*

Sequential estimation
Sequential Poisson Regression in Diffusion Networks. *Dedecius, K.*, +, *LSP 2020 625-629*

Set theory
A Level Set Based Unified Framework for Pulmonary Nodule Segmentation. *Roy, R.*, +, *LSP 2020 1465-1469*
Binary Complementary Sequence Set With Low Correlation Zone. *Liu, T.*, +, *LSP 2020 1550-1554*
Selecting Optimal Completion to Partial Matrix via Self-Validation. *Wang, X.*, +, *LSP 2020 1265-1269*

Shape recognition
Temporally Refined Graph U-Nets for Human Shape and Pose Estimation From Monocular Videos. *Zhao, Y.*, +, *LSP 2020 1949-1953*

Shared memory systems
A Fast Parallel Particle Filter for Shared Memory Systems. *Varsi, A.*, +, *LSP 2020 1570-1574*

Ships
An Improved CA-CFAR Method for Ship Target Detection in Strong Clutter Using UHF Radar. *Kuang, C.*, +, *LSP 2020 1445-1449*

Signal classification
A Deep Learning Approach in the Discrete Cosine Transform Domain to Median Filtering Forensics. *Zhang, J.*, +, *LSP 2020 276-280*
Adversarial Transfer Learning for Deep Learning Based Automatic Modulation Classification. *Bu, K.*, +, *LSP 2020 880-884*
Angle Estimation of Weak Scatterers Using Improved MUSIC for Bistatic MIMO Radar. *Wang, Y.*, +, *LSP 2020 2164-2167*
Attentive RNN-Based Network to Fuse 12-Lead ECG and Clinical Features for Improved Myocardial Infarction Diagnosis. *Prabhakararao, E.*, +, *LSP 2020 2029-2033*
Automatic Waveform Recognition of Overlapping LPI Radar Signals Based on Multi-Instance Multi-Label Learning. *Pan, Z.*, +, *LSP 2020 1275-1279*
CNN-Based Learnable Gammatone Filterbank and Equal-Loudness Normalization for Environmental Sound Classification. *Park, H.*, +, *LSP 2020 411-415*
Continuous Approximation Based Dimension-Reduced Estimation for Arbitrary Sampling. *Zhao, C.*, +, *LSP 2020 1080-1084*
Custom Domain Adaptation: A New Method for Cross-Subject, EEG-Based Cognitive Load Recognition. *Jimenez-Guarneros, M.*, +, *LSP 2020 750-754*
Direction-of-Arrival Estimation of Coherent Signals via Coprime Array Interpolation. *Zheng, Z.*, +, *LSP 2020 585-589*
DOA Estimation Method Based on Cascaded Neural Network for Two Closely Spaced Sources. *Guo, Y.*, +, *LSP 2020 570-574*
Efficient Bayesian Sequential Classification Under the Markov Assumption for Various Loss Functions. *Rademacher, P.*, +, *LSP 2020 401-405*
Extended Nested Arrays for Consecutive Virtual Aperture Enhancement. *Ren, S.*, +, *LSP 2020 575-579*
Fast Steganalysis Method for VoIP Streams. *Yang, H.*, +, *LSP 2020 286-290*

Signal denoising
A Direct Construction of$q$-ary Even Length Z-Complementary Pairs Using Generalized Boolean Functions. *Adhikary, A.R.*, +, *LSP 2020 146-150*
Adversarial Feature Learning and Unsupervised Clustering Based Speech Synthesis for Found Data With Acoustic and Textual Noise. *Yang, S.*, +, *LSP 2020 1730-1734*
CNN-Based Learnable Gammatone Filterbank and Equal-Loudness Normalization for Environmental Sound Classification. *Park, H.*, +, *LSP 2020 411-415*
Design of Nonsubsampled Graph Filter Banks via Lifting Schemes. *Jiang, J.*, +, *LSP 2020 441-445*
Estimation of Linear Space-Invariant Dynamics. *Naumer, H.*, +, *LSP 2020 2154-2158*
Joint Amplitude and Phase Refinement for Monaural Source Separation. *Masuyama, Y.*, +, *LSP 2020 1939-1943*
Period Determination in Cyclo-Stationary Signals by Autocorrelation and Ramanujan Subspaces. *Saatci, E.*, +, *LSP 2020 266-270*
Solving RED With Weighted Proximal Methods. *Hong, T.*, +, *LSP 2020 501-505*
Spectro-Temporal Attention-Based Voice Activity Detection. *Lee, Y.*, +, *LSP 2020 131-135*
Tensor Denoising Using Low-Rank Tensor Train Decomposition. *Gong, X.*, +, *LSP 2020 1685-1689*
Time-Domain Multi-Modal Bone/Air Conducted Speech Enhancement. *Yu, C.*, +, *LSP 2020 1035-1039*
Universal Frame Thresholding. *Cosentino, R.*, +, *LSP 2020 1115-1119*
Variational Denoising Autoencoders and Least-Squares Policy Iteration for Statistical Dialogue Managers. *Diakoloukas, V.*, +, *LSP 2020 960-964*
Vital Sign Extraction in the Presence of Radar Mutual Interference. *Liu, Z.*, +, *LSP 2020 1745-1749*
WaveCRN: An Efficient Convolutional Recurrent Neural Network for End-to-End Speech Enhancement. *Hsieh, T.*, +, *LSP 2020 2149-2153*
Wavelet Based Waveform Distortion Measures for Assessment of Denoised EEG Quality With Reference to Noise-Free EEG Signal. *Saini, M.*, +, *LSP 2020 1260-1264*

Signal detection
(ℓ_1,ℓ_2)-RIP and Projected Back-Projection Reconstruction for Phase-Only Measurements. *Feuillen, T.*, +, *LSP 2020 396-400*
A Correlation Detection Method of Low SNR Based on Multi-Channelization. *Nie, D.*, +, *LSP 2020 1375-1379*
A Multi-Target Track-Before-Detect Particle Filter Using Superpositional Data in Non-Gaussian Noise. *Ito, N.*, +, *LSP 2020 1075-1079*
CTBRNN: A Novel Deep-Learning Based Signal Sequence Detector for Communications Systems. *Sun, L.*, +, *LSP 2020 21-25*
Distributed Detection of Sparse Signals With Censoring Sensors Via Locally Most Powerful Test. *Li, C.*, +, *LSP 2020 346-350*
Malicious User Detection in Non-Orthogonal Multiple Access Based on Spectrum Analysis. *Xia, S.*, +, *LSP 2020 1390-1394*

Massive MIMO With Ternary ADCs. *Zhang, C.*, +, *LSP 2020 271-275*
Model-Aided Deep Neural Network for Source Number Detection. *Yang, Y.*, +, *LSP 2020 91-95*
Persymmetric Adaptive Detection With Reduced-Dimension Approach. *Zhang, J.*, +, *LSP 2020 565-569*
Power-Law Processor Over Segmentation for Variable Length Transients Detection. *Shin, D.*, +, *LSP 2020 1065-1069*
Rank-One Detector for Kronecker-Structured Constant Modulus Constellations. *E-Asim, F.*, +, *LSP 2020 1420-1424*
Sensing Performance of Multi-Antenna Energy Detector With Temporal Signal Correlation in Cognitive Vehicular Networks. *Song, K.*, +, *LSP 2020 1050-1054*
Statistical Behavior of Teager-Kaiser Energy Operator in Presence of White Gaussian Noise. *Preaux, Y.*, +, *LSP 2020 635-639*
Statistical Properties of Kendall's Tau Under Contaminated Gaussian Model With Applications in Random Signal Detection. *Lai, H.*, +, *LSP 2020 655-659*

Signal processing
A Fast Method for Estimating Frequencies of Multiple Sinusoidals. *Serbes, A.*, +, *LSP 2020 386-390*
A Joint Markov Model for Communities, Connectivity and Signals Defined Over Graphs. *Colonnese, S.*, +, *LSP 2020 1160-1164*
A Novel Parameter Estimation for Polynomial Phase Signals Using the Spectrum Phase. *Jiang, X.*, +, *LSP 2020 1919-1923*
Doppler Estimation Based on Dual-HFM Signal and Speed Spectrum Scanning. *Wei, R.*, +, *LSP 2020 1740-1744*
Filter Design for Two-Channel Filter Banks on Directed Bipartite Graphs. *Tay, D.B., LSP 2020 2094-2098*
Gram-Schmidt-Based Sparsification for Kernel Dictionary. *Bueno, A.A.*, +, *LSP 2020 1130-1134*
Improved Covariance Matrix Estimation With an Application in Portfolio Optimization. *Deshmukh, S.*, +, *LSP 2020 985-989*
Informed Histogram-Based Watermarking. *Hua, G.*, +, *LSP 2020 236-240*
Linear Regression Without Correspondences via Concave Minimization. *Peng, L.*, +, *LSP 2020 1580-1584*
Local and Global Graph Approaches to Image Colorization. *Sugawara, M.*, +, *LSP 2020 765-769*
On the Product of Two Correlated Complex Gaussian Random Variables. *Li, Y.*, +, *LSP 2020 16-20*
Real Signal Equalization for OQAM. *Akbar, M.N.*, +, *LSP 2020 11-15*

Signal processing equipment
An Exploratory Method for Smooth/Transient Decomposition. *Bayram, I., LSP 2020 890-894*

Signal reconstruction
(ℓ_1,ℓ_2)-RIP and Projected Back-Projection Reconstruction for Phase-Only Measurements. *Feuillen, T.*, +, *LSP 2020 396-400*
A Novel Time-Frequency Technique for Mode Retrieval Based on Linear Chirp Approximation. *Laurent, N.*, +, *LSP 2020 935-939*
An Off-Grid STAP Algorithm Based On Local Mesh Splitting With Bistatic Radar System. *He, P.*, +, *LSP 2020 1355-1359*
Deep Filtering: Signal Extraction and Reconstruction Using Complex Time-Frequency Filters. *Mack, W.*, +, *LSP 2020 61-65*
Design of Nonsubsampled Graph Filter Banks via Lifting Schemes. *Jiang, J.*, +, *LSP 2020 441-445*
Frequency-Domain Entropy-Based Blind Support Recovery from Multiple Measurement Vectors. *Zhu, Y.*, +, *LSP 2020 980-984*
Global Optimization for Recovery of Clipped Signals Corrupted With Poisson-Gaussian Noise. *Marmin, A.*, +, *LSP 2020 970-974*
Greedy Algorithms for Hybrid Compressed Sensing. *Tai, C.*, +, *LSP 2020 2059-2063*
Iterative Reconstruction of Signals on Graph. *Brugnoli, E.*, +, *LSP 2020 76-80*
Matrix and Tensor Completion in Multiway Delay Embedded Space Using Tensor Train, With Application to Signal Reconstruction. *Sedighin, F.*, +, *LSP 2020 810-814*
Maximum Entropy-Based Interference-Plus-Noise Covariance Matrix Reconstruction for Robust Adaptive Beamforming. *Mohammadzadeh, S.*, +, *LSP 2020 845-849*
Multi-Task WaveRNN With an Integrated Architecture for Cross-Lingual Voice Conversion. *Zhou, Y.*, +, *LSP 2020 1310-1314*
Online Spectrogram Inversion for Low-Latency Audio Source Separation. *Magron, P.*, +, *LSP 2020 306-310*
Pre-Training Audio Representations With Self-Supervision. *Tagliasacchi, M.*, +, *LSP 2020 600-604*
Sparse Signal Reconstruction Using Blind Super-Resolution With Arbitrary Sampling. *Hezave, H.*, +, *LSP 2020 615-619*
Stacked Bayesian Matching Pursuit for One-Bit Compressed Sensing. *Chae, J.*, +, *LSP 2020 550-554*
Wavelet Based Waveform Distortion Measures for Assessment of Denoised EEG Quality With Reference to Noise-Free EEG Signal. *Saini, M.*, +, *LSP 2020 1260-1264*

Signal representation
A Novel Time-Frequency Technique for Mode Retrieval Based on Linear Chirp Approximation. *Laurent, N.*, +, *LSP 2020 935-939*
CNN-Based Learnable Gammatone Filterbank and Equal-Loudness Normalization for Environmental Sound Classification. *Park, H.*, +, *LSP 2020 411-415*
Compressed Channel Estimation for Intelligent Reflecting Surface-Assisted Millimeter Wave Systems. *Wang, P.*, +, *LSP 2020 905-909*
Continuous Approximation Based Dimension-Reduced Estimation for Arbitrary Sampling. *Zhao, C.*, +, *LSP 2020 1080-1084*
Deep Filtering: Signal Extraction and Reconstruction Using Complex Time-Frequency Filters. *Mack, W.*, +, *LSP 2020 61-65*
Design of Nonsubsampled Graph Filter Banks via Lifting Schemes. *Jiang, J.*, +, *LSP 2020 441-445*
Fully Adaptive Ridge Detection Based on STFT Phase Information. *Colominas, M.A.*, +, *LSP 2020 620-624*
Interlayer Selective Attention Network for Robust Personalized Wake-Up Word Detection. *Lim, H.*, +, *LSP 2020 126-130*
Joint $\mathbb{SO}(3)$-Spectral Domain Filtering of Spherical Signals in the Presence of Anisotropic Noise. *Aslam, A.*, +, *LSP 2020 2109-2113*
On the Zeros of Ramanujan Filters. *Kulkarni, P.*, +, *LSP 2020 735-739*
Pre-Training Audio Representations With Self-Supervision. *Tagliasacchi, M.*, +, *LSP 2020 600-604*
The Support Uncertainty Principle and the Graph Rihaczek Distribution: Revisited and Improved. *Stankovic, L., LSP 2020 1030-1034*
Universal Frame Thresholding. *Cosentino, R.*, +, *LSP 2020 1115-1119*

Signal resolution
Corrections to "Three-Stream Network With Bidirectional Self-Attention for Action Recognition in Extreme Low Resolution Videos". *Purwanto, D.*, +, *LSP 2020 2188*
DOA Estimation Method Based on Cascaded Neural Network for Two Closely Spaced Sources. *Guo, Y.*, +, *LSP 2020 570-574*

Signal restoration
Projected Gradient Descent for Non-Convex Sparse Spike Estimation. *Traonmilin, Y.*, +, *LSP 2020 1110-1114*
The Failure Case of Phase Transition for Penalized Problems in Corrupted Sensing. *Zhang, H.*, +, *LSP 2020 555-559*
Vital Sign Extraction in the Presence of Radar Mutual Interference. *Liu, Z.*, +, *LSP 2020 1745-1749*

Signal sampling
Continuous Approximation Based Dimension-Reduced Estimation for Arbitrary Sampling. *Zhao, C.*, +, *LSP 2020 1080-1084*
Design of Nonsubsampled Graph Filter Banks via Lifting Schemes. *Jiang, J.*, +, *LSP 2020 441-445*
Dynamic Markov Chain Monte Carlo-Based Spectrum Sensing. *Wang, Z.*, +, *LSP 2020 1380-1384*
Fractional Power Spectrum and Fractional Correlation Estimations for Non-uniform Sampling. *Ma, J.*, +, *LSP 2020 930-934*
Greedy Algorithms for Hybrid Compressed Sensing. *Tai, C.*, +, *LSP 2020 2059-2063*
Iterative Reconstruction of Signals on Graph. *Brugnoli, E.*, +, *LSP 2020 76-80*

Joint Design of Transmit Waveform and Mismatch Filter in the Presence of Interrupted Sampling Repeater Jamming. *Zhou, K.*, +, *LSP 2020 1610-1614*
On the Convexity of Bit Depth Allocation for Linear MMSE Estimation in Wireless Sensor Networks. *Arce, F.d.l.H.*, +, *LSP 2020 291-295*
Sparse Signal Reconstruction Using Blind Super-Resolution With Arbitrary Sampling. *Hezave, H.*, +, *LSP 2020 615-619*
The Support Uncertainty Principle and the Graph Rihaczek Distribution: Revisited and Improved. *Stankovic, L., LSP 2020 1030-1034*

Single photon emission computed tomography
MRI and SPECT Image Fusion Using a Weighted Parameter Adaptive Dual Channel PCNN. *Panigrahy, C.*, +, *LSP 2020 690-694*

Singular value decomposition
Estimating the Number of Sinusoids in Additive Sub-Gaussian Noise With Finite Measurements. *Qiao, H., LSP 2020 1225-1229*
Tensor Denoising Using Low-Rank Tensor Train Decomposition. *Gong, X.*, +, *LSP 2020 1685-1689*

Smart power grids
Overloaded Branch Chains Induced by False Data Injection Attack in Smart Grid. *Peng, D.*, +, *LSP 2020 426-430*

Smoothing methods
A Double EP-Based Proposal for Turbo Equalization. *Santos, I.*, +, *LSP 2020 121-125*
A Joint Markov Model for Communities, Connectivity and Signals Defined Over Graphs. *Colonnese, S.*, +, *LSP 2020 1160-1164*
A New Approach to Gaussian Signal Smoothing: Application to ECG Components Separation. *Kheirati Roonizi, A., LSP 2020 1924-1928*
Adaptive Debanding Filter. *Tu, Z.*, +, *LSP 2020 1715-1719*
Extended Nested Arrays for Consecutive Virtual Aperture Enhancement. *Ren, S.*, +, *LSP 2020 575-579*
Gaussian-Adaptive Bilateral Filter. *Chen, B.*, +, *LSP 2020 1670-1674*
Model-Aided Deep Neural Network for Source Number Detection. *Yang, Y.*, +, *LSP 2020 91-95*
Robust Gaussian Approximate Fixed-Interval Smoother With Outlier Detection. *Chen, Y.*, +, *LSP 2020 1505-1509*
Variable Splitting Methods for Constrained State Estimation in Partially Observed Markov Processes. *Gao, R.*, +, *LSP 2020 1305-1309*

Social networking (online)
A Sensitive Stylistic Approach to Identify Fake News on Social Networking. *de Oliveira, N.R.*, +, *LSP 2020 1250-1254*
CNN-Based Fast Source Device Identification. *Mandelli, S.*, +, *LSP 2020 1285-1289*

Solid modeling
Multiscale Convolutional Fusion Network for Non-Lambertian Photometric Stereo. *Ren, J.*, +, *LSP 2020 1929-1933*

Sonar
Novel Second-Order Statistics of the Chirp Cyclostationary Signals. *Miao, H.*, +, *LSP 2020 910-914*

Source separation
Deep Filtering: Signal Extraction and Reconstruction Using Complex Time-Frequency Filters. *Mack, W.*, +, *LSP 2020 61-65*
Joint Amplitude and Phase Refinement for Monaural Source Separation. *Masuyama, Y.*, +, *LSP 2020 1939-1943*
On the Identifiability of Transform Learning for Non-Negative Matrix Factorization. *Zhang, S.*, +, *LSP 2020 1555-1559*
Online Spectrogram Inversion for Low-Latency Audio Source Separation. *Magron, P.*, +, *LSP 2020 306-310*
Speaker Attractor Network: Generalizing Speech Separation to Unseen Numbers of Sources. *Jiang, F.*, +, *LSP 2020 1859-1863*
WaveCRN: An Efficient Convolutional Recurrent Neural Network for End-to-End Speech Enhancement. *Hsieh, T.*, +, *LSP 2020 2149-2153*

Space-time adaptive processing
An Off-Grid STAP Algorithm Based On Local Mesh Splitting With Bistatic Radar System. *He, P.*, +, *LSP 2020 1355-1359*
Manifold Optimization for Joint Design of MIMO-STAP Radars. *Li, J.*, +, *LSP 2020 1969-1973*

Sparse matrices
A Sparse Conjugate Gradient Adaptive Filter. *Lee, C.*, +, *LSP 2020 1000-1004*
Active Speaker Detection and Localization in Videos Using Low-Rank and Kernelized Sparsity. *Pu, J.*, +, *LSP 2020 865-869*
Online Reweighted Least Squares Robust PCA. *Rontogiannis, A.A.*, +, *LSP 2020 1340-1344*

Spatiotemporal phenomena
Progressive Motion Representation Distillation With Two-Branch Networks for Egocentric Activity Recognition. *Liu, T.*, +, *LSP 2020 1320-1324*

Speaker recognition
Active Speaker Detection and Localization in Videos Using Low-Rank and Kernelized Sparsity. *Pu, J.*, +, *LSP 2020 865-869*
Analytical Geometry Calibration for Acoustic Transceiver Arrays. *Hu, D.*, +, *LSP 2020 1979-1983*
Auto-Tuning Spectral Clustering for Speaker Diarization Using Normalized Maximum Eigengap. *Park, T.J.*, +, *LSP 2020 381-385*
SFNet: A Computationally Efficient Source Filter Model Based Neural Speech Synthesis. *MV, A.R.*, +, *LSP 2020 1170-1174*
Voice Conversion for Whispered Speech Synthesis. *Cotescu, M.*, +, *LSP 2020 186-190*

Spectral analysis
Design of Constant Modulus Discrete Phase Radar Waveforms Subject to Multi-Spectral Constraints. *Yang, J.*, +, *LSP 2020 875-879*
Design of Nonsubsampled Graph Filter Banks via Lifting Schemes. *Jiang, J.*, +, *LSP 2020 441-445*
Joint $\mathbb{SO}(3)$-Spectral Domain Filtering of Spherical Signals in the Presence of Anisotropic Noise. *Aslam, A.*, +, *LSP 2020 2109-2113*
Malicious User Detection in Non-Orthogonal Multiple Access Based on Spectrum Analysis. *Xia, S.*, +, *LSP 2020 1390-1394*
Multidimensional Variational Line Spectra Estimation. *Zhang, Q.*, +, *LSP 2020 945-949*
The Support Uncertainty Principle and the Graph Rihaczek Distribution: Revisited and Improved. *Stankovic, L., LSP 2020 1030-1034*

Speech coding
Adversarial Feature Learning and Unsupervised Clustering Based Speech Synthesis for Found Data With Acoustic and Textual Noise. *Yang, S.*, +, *LSP 2020 1730-1734*
Fast Steganalysis Method for VoIP Streams. *Yang, H.*, +, *LSP 2020 286-290*
Multi-Task WaveRNN With an Integrated Architecture for Cross-Lingual Voice Conversion. *Zhou, Y.*, +, *LSP 2020 1310-1314*

Speech enhancement
Adversarial Feature Learning and Unsupervised Clustering Based Speech Synthesis for Found Data With Acoustic and Textual Noise. *Yang, S.*, +, *LSP 2020 1730-1734*
Improving GANs for Speech Enhancement. *Phan, H.*, +, *LSP 2020 1700-1704*
Joint Amplitude and Phase Refinement for Monaural Source Separation. *Masuyama, Y.*, +, *LSP 2020 1939-1943*
Learning With Learned Loss Function: Speech Enhancement With Quality-Net to Improve Perceptual Evaluation of Speech Quality. *Fu, S.*, +, *LSP 2020 26-30*
Time-Domain Multi-Modal Bone/Air Conducted Speech Enhancement. *Yu, C.*, +, *LSP 2020 1035-1039*
WaveCRN: An Efficient Convolutional Recurrent Neural Network for End-to-End Speech Enhancement. *Hsieh, T.*, +, *LSP 2020 2149-2153*

Speech intelligibility
Adaptive Reverberation Absorption Using Non-Stationary Masking Components Detection for Intelligibility Improvement. *Zucatelli, G.*, +, *LSP 2020 1-5*
Learning With Learned Loss Function: Speech Enhancement With Quality-Net to Improve Perceptual Evaluation of Speech Quality. *Fu, S.*, +, *LSP 2020 26-30*

Speech processing
A Novel Modified Mel-DCT Filter Bank Structure With Application to Voice Activity Detection. *Muralishankar, R.*, +, *LSP 2020 1240-1244*

Adaptive Reverberation Absorption Using Non-Stationary Masking Components Detection for Intelligibility Improvement. *Zucatelli, G.*, +, *LSP 2020 1-5*
CNN-Based Learnable Gammatone Filterbank and Equal-Loudness Normalization for Environmental Sound Classification. *Park, H.*, +, *LSP 2020 411-415*
Deep Filtering: Signal Extraction and Reconstruction Using Complex Time-Frequency Filters. *Mack, W.*, +, *LSP 2020 61-65*
Detecting Replay Attacks Using Multi-Channel Audio: A Neural Network-Based Method. *Gong, Y.*, +, *LSP 2020 920-924*
Joint Amplitude and Phase Refinement for Monaural Source Separation. *Masuyama, Y.*, +, *LSP 2020 1939-1943*
Online Spectrogram Inversion for Low-Latency Audio Source Separation. *Magron, P.*, +, *LSP 2020 306-310*
Speaker Attractor Network: Generalizing Speech Separation to Unseen Numbers of Sources. *Jiang, F.*, +, *LSP 2020 1859-1863*
Variational Denoising Autoencoders and Least-Squares Policy Iteration for Statistical Dialogue Managers. *Diakoloukas, V.*, +, *LSP 2020 960-964*

Speech recognition
Accelerating RNN Transducer Inference via Adaptive Expansion Search. *Kim, J.*, +, *LSP 2020 2019-2023*
Adversarial Feature Learning and Unsupervised Clustering Based Speech Synthesis for Found Data With Acoustic and Textual Noise. *Yang, S.*, +, *LSP 2020 1730-1734*
Cross-Informed Domain Adversarial Training for Noise-Robust Wake-Up Word Detection. *Lim, H.*, +, *LSP 2020 1769-1773*
Interlayer Selective Attention Network for Robust Personalized Wake-Up Word Detection. *Lim, H.*, +, *LSP 2020 126-130*
Online Automatic Speech Recognition With Listen, Attend and Spell Model. *Hsiao, R.*, +, *LSP 2020 1889-1893*
Time-Domain Multi-Modal Bone/Air Conducted Speech Enhancement. *Yu, C.*, +, *LSP 2020 1035-1039*
Unsupervised Feature Learning for Speech Using Correspondence and Siamese Networks. *Last, P.*, +, *LSP 2020 421-425*
Voice Conversion for Whispered Speech Synthesis. *Cotescu, M.*, +, *LSP 2020 186-190*

Speech synthesis
Adversarial Feature Learning and Unsupervised Clustering Based Speech Synthesis for Found Data With Acoustic and Textual Noise. *Yang, S.*, +, *LSP 2020 1730-1734*
Memory Attention: Robust Alignment Using Gating Mechanism for End-to-End Speech Synthesis. *Lee, J.Y.*, +, *LSP 2020 2004-2008*
Modeling Prosodic Phrasing With Multi-Task Learning in Tacotron-Based TTS. *Liu, R.*, +, *LSP 2020 1470-1474*
SFNet: A Computationally Efficient Source Filter Model Based Neural Speech Synthesis. *MV, A.R.*, +, *LSP 2020 1170-1174*
Voice Conversion for Whispered Speech Synthesis. *Cotescu, M.*, +, *LSP 2020 186-190*

Splines (mathematics)
High-Precision Trajectory Data Reconstruction for TT&C Systems Using LS B-Spline Approximation. *Sun, J.*, +, *LSP 2020 895-899*
Refinement and Universal Approximation via Sparsely Connected ReLU Convolution Nets. *Heinecke, A.*, +, *LSP 2020 1175-1179*
The Role of Neural Network Activation Functions. *Parhi, R.*, +, *LSP 2020 1779-1783*

Spread spectrum communication
Over-Complete-Dictionary-Based Improved Spread Spectrum Watermarking Security. *Hua, G., LSP 2020 770-774*

State estimation
A Factor Graph-Based Distributed Consensus Kalman Filter. *Wang, S.*, +, *LSP 2020 2039-2043*
Diffusion Collaborative Feedback Particle Filter. *Xia, W.*, +, *LSP 2020 1185-1189*
On the Steady State Performance of the Kalman Filter Applied to Acoustical Systems. *Fabry, J.*, +, *LSP 2020 1854-1858*
Robust Unscented Unbiased Minimum-Variance Estimator for Nonlinear System Dynamic State Estimation With Unknown Inputs. *Zheng, Z.*, +, *LSP 2020 376-380*
Variable Splitting Methods for Constrained State Estimation in Partially Observed Markov Processes. *Gao, R.*, +, *LSP 2020 1305-1309*

State-space methods
Asymptotic Analysis of the Convergence Time of Autoregressive Kalman Filters. *Locubiche-Serra, S.*, +, *LSP 2020 820-824*
Importance Densities for Particle Filtering Using Iterated Conditional Expectations. *Hostettler, R.*, +, *LSP 2020 211-215*

Statistical analysis
A Reduced Reference Metric for Visual Quality Evaluation of Point Cloud Contents. *Viola, I.*, +, *LSP 2020 1660-1664*
An Adaptive Double-Layered Embedding Scheme for MP3 Steganography. *Yang, Y.*, +, *LSP 2020 1984-1988*
An Intriguing Struggle of CNNs in JPEG Steganalysis and the OneHot Solution. *Yousfi, Y.*, +, *LSP 2020 830-834*
Capturing Video Frame Rate Variations via Entropic Differencing. *Madhusudana, P.C.*, +, *LSP 2020 1809-1813*
Generalizing the Statistical Analysis of Objects' Spatial Coupling in Bioimaging. *Mukherjee, S.*, +, *LSP 2020 1085-1089*
Non Zero Mean Adaptive Cosine Estimator and Application to Hyperspectral Imaging. *Vincent, F.*, +, *LSP 2020 1989-1993*
Robust Prediction When Features are Missing. *Liu, X.*, +, *LSP 2020 720-724*
Statistical Behavior of Teager-Kaiser Energy Operator in Presence of White Gaussian Noise. *Preaux, Y.*, +, *LSP 2020 635-639*
Statistical Properties of Kendall's Tau Under Contaminated Gaussian Model With Applications in Random Signal Detection. *Lai, H.*, +, *LSP 2020 655-659*
Variational Denoising Autoencoders and Least-Squares Policy Iteration for Statistical Dialogue Managers. *Diakoloukas, V.*, +, *LSP 2020 960-964*

Statistical distributions
A *t*-Distribution Based Operator for Enhancing Out of Distribution Robustness of Neural Network Classifiers. *Antonello, N.*, +, *LSP 2020 1070-1074*
An Insight Into the Gibbs Sampler: Keep the Samples or Drop Them?. *Boissy, J.*, +, *LSP 2020 2069-2073*
Asymptotical Optimality of Change Point Detection With Unknown Discrete Post-Change Distributions. *Xu, Y.*, +, *LSP 2020 695-699*
Efficient Bayesian Sequential Classification Under the Markov Assumption for Various Loss Functions. *Rademacher, P.*, +, *LSP 2020 401-405*
Energy Distribution of Multiple Target Signal With Application to Target Counting. *Guruacharya, S.*, +, *LSP 2020 431-435*
On Mean Absolute Error for Deep Neural Network Based Vector-to-Vector Regression. *Qi, J.*, +, *LSP 2020 1485-1489*
Stochastic Gradient Population Monte Carlo. *El-Laham, Y.*, +, *LSP 2020 46-50*
Universal Data Anomaly Detection via Inverse Generative Adversary Network. *Mestav, K.R.*, +, *LSP 2020 511-515*

Statistical testing
A Multifamily GLRT for CFAR Detection of Signals in a Union of Subspaces. *Socheleau, F., LSP 2020 2104-2108*
Asymptotical Optimality of Change Point Detection With Unknown Discrete Post-Change Distributions. *Xu, Y.*, +, *LSP 2020 695-699*
Gradient of Error Probability of *M*-ary Hypothesis Testing Problems Under Multivariate Gaussian Noise. *Jeong, M.*, +, *LSP 2020 1909-1913*
Universal Data Anomaly Detection via Inverse Generative Adversary Network. *Mestav, K.R.*, +, *LSP 2020 511-515*

Steganography
An Adaptive Double-Layered Embedding Scheme for MP3 Steganography. *Yang, Y.*, +, *LSP 2020 1984-1988*
An Intriguing Struggle of CNNs in JPEG Steganalysis and the OneHot Solution. *Yousfi, Y.*, +, *LSP 2020 830-834*
CEC: Cluster Embedding Coding for H.264 Steganography. *Wang, Y.*, +, *LSP 2020 955-959*
Fast and Secure Steganography Based on J-UNIWARD. *Su, A.*, +, *LSP 2020 221-225*
Fast Steganalysis Method for VoIP Streams. *Yang, H.*, +, *LSP 2020 286-290*
On Security Enhancement of Steganography via Generative Adversarial Image. *Zhou, L.*, +, *LSP 2020 166-170*
Practical Cover Selection for Steganography. *Wang, Z.*, +, *LSP 2020 71-75*

Stereo image processing
A Stereo Attention Module for Stereo Image Super-Resolution. *Ying, X.*, +, *LSP 2020 496-500*
Attention Aggregation Encoder-Decoder Network Framework for Stereo Matching. *Zhang, Y.*, +, *LSP 2020 760-764*
Learning Temporal Relations from Semantic Neighbors for Acoustic Scene Classification. *Zhang, L.*, +, *LSP 2020 950-954*
Mahalanobis Based Point to Distribution Metric for Point Cloud Geometry Quality Evaluation. *Javaheri, A.*, +, *LSP 2020 1350-1354*
Multiscale Convolutional Fusion Network for Non-Lambertian Photometric Stereo. *Ren, J.*, +, *LSP 2020 1929-1933*
Real-Time 3D Face Alignment Using an Encoder-Decoder Network With an Efficient Deconvolution Layer. *Ning, X.*, +, *LSP 2020 1944-1948*
Synthesized View Quality Assessment Using Feature Matching and Superpixel Difference. *Mahmoudpour, S.*, +, *LSP 2020 1650-1654*
Temporally Refined Graph U-Nets for Human Shape and Pose Estimation From Monocular Videos. *Zhao, Y.*, +, *LSP 2020 1949-1953*
Stochastic processes
Asymptotical Optimality of Change Point Detection With Unknown Discrete Post-Change Distributions. *Xu, Y.*, +, *LSP 2020 695-699*
Kernel Recursive Least Squares Algorithm Based on the Nyström Method With*k*-Means Sampling. *Zhang, T.*, +, *LSP 2020 361-365*
Negative Binomial Matrix Factorization. *Gouvert, O.*, +, *LSP 2020 815-819*
Novel Second-Order Statistics of the Chirp Cyclostationary Signals. *Miao, H.*, +, *LSP 2020 910-914*
Optimal Parameter Design for Estimation Theoretic Secure Broadcast. *Goken, C.*, +, *LSP 2020 281-285*
Phase Retrieval With Learning Unfolded Expectation Consistent Signal Recovery Algorithm. *Wang, C.*, +, *LSP 2020 780-784*
Stochastic Gradient Population Monte Carlo. *El-Laham, Y.*, +, *LSP 2020 46-50*
Tracking Performance of Online Stochastic Learners. *Vlaski, S.*, +, *LSP 2020 1385-1389*
Supervised learning
Dually Connected Deraining Net Using Pixel-Wise Attention. *Ren, W.*, +, *LSP 2020 316-320*
Learning Blind Pixelwise Affine Image Denoiser With Single Noisy Images. *Byun, J.*, +, *LSP 2020 1105-1109*
Learning Dual Transformation Networks for Image Contrast Enhancement. *Zhu, Y.*, +, *LSP 2020 1999-2003*
Pre-Training Audio Representations With Self-Supervision. *Tagliasacchi, M.*, +, *LSP 2020 600-604*
Surface fitting
A PDE Model for Smooth Surface Reconstruction from 2D Parallel Slices. *Zou, Q., LSP 2020 1015-1019*
Surface reconstruction
A PDE Model for Smooth Surface Reconstruction from 2D Parallel Slices. *Zou, Q., LSP 2020 1015-1019*
Surface topography measurement
Neuromorphic Fringe Projection Profilometry. *Mangalore, A.R.*, +, *LSP 2020 1510-1514*
Synchronization
Efficient Joint Localization and Synchronization in Distributed MIMO Radars. *Kazemi, S.A.R.*, +, *LSP 2020 1200-1204*
Semidefinite Programming Methods for Alleviating Clock Synchronization Bias and Sensor Position Errors in TDOA Localization. *Zou, Y.*, +, *LSP 2020 241-245*
Synchronous motors
Nonlinear Signal-Filtering Technique With Real-Time Gain Booster for Feedback System Applications. *Kim, S.*, +, *LSP 2020 2183-2187*

T

Target tracking
A Multi-Target Track-Before-Detect Particle Filter Using Superpositional Data in Non-Gaussian Noise. *Ito, N.*, +, *LSP 2020 1075-1079*
An Approximate ML Estimator for Moving Target Localization in Distributed MIMO Radars. *Kazemi, S.A.R.*, +, *LSP 2020 1595-1599*
An Improved CA-CFAR Method for Ship Target Detection in Strong Clutter Using UHF Radar. *Kuang, C.*, +, *LSP 2020 1445-1449*
Classification-Aided Multitarget Tracking Using the Sum-Product Algorithm. *Gaglione, D.*, +, *LSP 2020 1710-1714*
Cognitive Resource Allocation for Target Tracking in Location-Aware Radar Networks. *Liu, X.*, +, *LSP 2020 650-654*
Cooperative Parameter Estimation on the Unit Sphere Using a Network of Diffusion Particle Filters. *de Figueredo, C.G.*, +, *LSP 2020 715-719*
Diffusion Collaborative Feedback Particle Filter. *Xia, W.*, +, *LSP 2020 1185-1189*
Efficient Particle Scale Space for Robust Tracking. *Li, S.*, +, *LSP 2020 371-375*
Efficient Tracking of Sparse Signals via an Earth Mover's Distance Dynamics Regularizer. *Bertrand, N.P.*, +, *LSP 2020 1120-1124*
Energy Distribution of Multiple Target Signal With Application to Target Counting. *Guruacharya, S.*, +, *LSP 2020 431-435*
Interactive-Multiple-Model Algorithm Based on Minimax Particle Filtering. *Lim, J.*, +, *LSP 2020 36-40*
Message Passing Based Robust Target Localization in Distributed MIMO Radars in the Presence of Outliers. *Yu, Z.*, +, *LSP 2020 2168-2172*
Robust Gaussian Approximate Fixed-Interval Smoother With Outlier Detection. *Chen, Y.*, +, *LSP 2020 1505-1509*
Telecommunication channels
Diffusion LMS With Communication Delays: Stability and Performance Analysis. *Hua, F.*, +, *LSP 2020 730-734*
Partial FFT Demodulation Scheme Based on Fast Convolution Structure. *Lin, X.*, +, *LSP 2020 1934-1938*
Telecommunication computing
Novel Feature Selection Method Using Bhattacharyya Distance for Neural Networks Based Automatic Modulation Classification. *Shah, M.H.*, +, *LSP 2020 106-110*
Recursive CSI Quantization of Time-Correlated MIMO Channels by Deep Learning Classification. *Schwarz, S., LSP 2020 1799-1803*
Subband Aware CNN for Cell-Phone Recognition. *Lin, X.*, +, *LSP 2020 605-609*
Telecommunication network reliability
Intelligent Reflecting Surfaces Assisted Secure Transmission Without Eavesdropper's CSI. *Wang, H.*, +, *LSP 2020 1300-1304*
Interleaved Training for Intelligent Surface-Assisted Wireless Communications. *Zhang, C.*, +, *LSP 2020 1774-1778*
Multivariate Correlated Rayleigh Fading With MRC and Applications to Wireless Secrecy. *Le, K.N., LSP 2020 1010-1014*
Secrecy Outage Analysis Over Random Beamforming Transmission With User Scheduling: Collusion vs. Exclusion. *Bao, T.*, +, *LSP 2020 1295-1299*
Telecommunication power management
Massive MIMO With Ternary ADCs. *Zhang, C.*, +, *LSP 2020 271-275*
On the Convexity of Bit Depth Allocation for Linear MMSE Estimation in Wireless Sensor Networks. *Arce, F.d.l.H.*, +, *LSP 2020 291-295*
Telecommunication scheduling
Secrecy Outage Analysis Over Random Beamforming Transmission With User Scheduling: Collusion vs. Exclusion. *Bao, T.*, +, *LSP 2020 1295-1299*
Telecommunication security
Intelligent Reflecting Surfaces Assisted Secure Transmission Without Eavesdropper's CSI. *Wang, H.*, +, *LSP 2020 1300-1304*
Malicious User Detection in Non-Orthogonal Multiple Access Based on Spectrum Analysis. *Xia, S.*, +, *LSP 2020 1390-1394*
Multivariate Correlated Rayleigh Fading With MRC and Applications to Wireless Secrecy. *Le, K.N., LSP 2020 1010-1014*
Optimal Parameter Design for Estimation Theoretic Secure Broadcast. *Goken, C.*, +, *LSP 2020 281-285*
Over-Complete-Dictionary-Based Improved Spread Spectrum Watermarking Security. *Hua, G., LSP 2020 770-774*
Quantitative Relationship Between Localization Accuracy and Location Privacy Level in Wireless Localization System. *Shi, X.*, +, *LSP 2020 1055-1059*
Radio Frequency Fingerprint Extraction Based on Multi-Dimension Approximate Entropy. *Sun, L.*, +, *LSP 2020 471-475*

Secrecy Outage Analysis Over Random Beamforming Transmission With User Scheduling: Collusion vs. Exclusion. *Bao, T.*, +, *LSP 2020 1295-1299*

Tensors

A 4D Basis and Sampling Scheme for the Tensor Encoded Multi-Dimensional Diffusion MRI Signal. *Bates, A.P.*, +, *LSP 2020 790-794*

A Complete Discriminative Tensor Representation Learning for Two-Dimensional Correlation Analysis. *Gao, L.*, +, *LSP 2020 1894-1898*

Joint DOD and DOA Estimation in Slow-Time MIMO Radar via PARAFAC Decomposition. *Xu, F.*, +, *LSP 2020 1495-1499*

Matrix and Tensor Completion in Multiway Delay Embedded Space Using Tensor Train, With Application to Signal Reconstruction. *Sedighin, F.*, +, *LSP 2020 810-814*

On Recoverability of Randomly Compressed Tensors With Low CP Rank. *Ibrahim, S.*, +, *LSP 2020 1125-1129*

Optimality Verification of Tensor Completion Model via Self-Validation. *Liu, C.*, +, *LSP 2020 1849-1853*

RGB-T Saliency Detection via Low-Rank Tensor Learning and Unified Collaborative Ranking. *Huang, L.*, +, *LSP 2020 1585-1589*

Robust CP Tensor Factorization With Skew Noise. *Huang, X.*, +, *LSP 2020 785-789*

Tensor Denoising Using Low-Rank Tensor Train Decomposition. *Gong, X.*, +, *LSP 2020 1685-1689*

Uniqueness Guarantee of Solutions of Tensor Tubal-Rank Minimization Problem. *Zhang, F.*, +, *LSP 2020 540-544*

Text analysis

A Sensitive Stylistic Approach to Identify Fake News on Social Networking. *de Oliveira, N.R.*, +, *LSP 2020 1250-1254*

Time series

Convolutional PCA for Multiple Time Series. *Li, X., LSP 2020 1450-1454*

Improved Kernel Recursive Least Squares Algorithm Based Online Prediction for Nonstationary Time Series. *Guo, J.*, +, *LSP 2020 1365-1369*

Matrix and Tensor Completion in Multiway Delay Embedded Space Using Tensor Train, With Application to Signal Reconstruction. *Sedighin, F.*, +, *LSP 2020 810-814*

Time-domain analysis

Adaptive Reverberation Absorption Using Non-Stationary Masking Components Detection for Intelligibility Improvement. *Zucatelli, G.*, +, *LSP 2020 1-5*

Consistent ICA: Determined BSS Meets Spectrogram Consistency. *Yatabe, K., LSP 2020 870-874*

Convolutional PCA for Multiple Time Series. *Li, X., LSP 2020 1450-1454*

Power-Law Processor Over Segmentation for Variable Length Transients Detection. *Shin, D.*, +, *LSP 2020 1065-1069*

Time-Domain Multi-Modal Bone/Air Conducted Speech Enhancement. *Yu, C.*, +, *LSP 2020 1035-1039*

Time-frequency analysis

A Novel Time-Frequency Technique for Mode Retrieval Based on Linear Chirp Approximation. *Laurent, N.*, +, *LSP 2020 935-939*

CNN-Based Learnable Gammatone Filterbank and Equal-Loudness Normalization for Environmental Sound Classification. *Park, H.*, +, *LSP 2020 411-415*

Deep Filtering: Signal Extraction and Reconstruction Using Complex Time-Frequency Filters. *Mack, W.*, +, *LSP 2020 61-65*

Fully Adaptive Ridge Detection Based on STFT Phase Information. *Colominas, M.A.*, +, *LSP 2020 620-624*

Joint Amplitude and Phase Refinement for Monaural Source Separation. *Masuyama, Y.*, +, *LSP 2020 1939-1943*

Sparsely Localized Time-Frequency Energy Distributions for Multi-Component LFM Signals. *Moghadasian, S.S.*, +, *LSP 2020 6-10*

The Support Uncertainty Principle and the Graph Rihaczek Distribution: Revisited and Improved. *Stankovic, L., LSP 2020 1030-1034*

Time-of-arrival estimation

A Provably Convergent Projected Gradient-Type Algorithm for TDOA-Based Geolocation Under the Quasi-Parabolic Ionosphere Model. *Huang, S.*, +, *LSP 2020 1335-1339*

Analytical Geometry Calibration for Acoustic Transceiver Arrays. *Hu, D.*, +, *LSP 2020 1979-1983*

Semidefinite Programming Methods for Alleviating Clock Synchronization Bias and Sensor Position Errors in TDOA Localization. *Zou, Y.*, +, *LSP 2020 241-245*

Three-Dimensional Rigid Body Localization in the Presence of Clock Offsets. *Ke, X.*, +, *LSP 2020 96-100*

Time-varying filters

Preconditioned Gradient Descent Algorithm for Inverse Filtering on Spatially Distributed Networks. *Cheng, C.*, +, *LSP 2020 1834-1838*

Time-varying systems

A Robust Affine Projection Algorithm Against Impulsive Noise. *Jeong, J.J., LSP 2020 1530-1534*

Toeplitz matrices

Direction-of-Arrival Estimation of Coherent Signals via Coprime Array Interpolation. *Zheng, Z.*, +, *LSP 2020 585-589*

Estimating the Number of Sinusoids in Additive Sub-Gaussian Noise With Finite Measurements. *Qiao, H., LSP 2020 1225-1229*

Toeplitz Structured Covariance Matrix Estimation for Radar Applications. *Du, X.*, +, *LSP 2020 595-599*

Tracking filters

An Adaptive Kinematic Filter Extended by the Additionally Measured Velocity or Acceleration. *Chernoguz, N., LSP 2020 1430-1434*

Efficient Tracking of Sparse Signals via an Earth Mover's Distance Dynamics Regularizer. *Bertrand, N.P.*, +, *LSP 2020 1120-1124*

Interactive-Multiple-Model Algorithm Based on Minimax Particle Filtering. *Lim, J.*, +, *LSP 2020 36-40*

Traffic engineering computing

Efficient Proposals: Scale Estimation for Object Proposals in Pedestrian Detection Tasks. *Qiu, J.*, +, *LSP 2020 855-859*

Transceivers

Analytical Geometry Calibration for Acoustic Transceiver Arrays. *Hu, D.*, +, *LSP 2020 1979-1983*

Transfer functions

An Adaptive Algorithm for Active Vibration Control of Parameter-Varying Systems With a New Online Secondary Path Estimation Method. *Zheng, H.*, +, *LSP 2020 705-709*

HRTF Selection by Anthropometric Regression for Improving Horizontal Localization Accuracy. *Spagnol, S., LSP 2020 590-594*

Transform coding

Transform Domain Precoding (TDP) for 5G Evolution and 6G. *Liu, W.*, +, *LSP 2020 1145-1149*

Transforms

3D Point Cloud Attribute Compression via Graph Prediction. *Gu, S.*, +, *LSP 2020 176-180*

Joint $\mathbb{SO}(3)$-Spectral Domain Filtering of Spherical Signals in the Presence of Anisotropic Noise. *Aslam, A.*, +, *LSP 2020 2109-2113*

Learning Dual Transformation Networks for Image Contrast Enhancement. *Zhu, Y.*, +, *LSP 2020 1999-2003*

Learning to Distort Images Using Generative Adversarial Networks. *Chen, L.*, +, *LSP 2020 2144-2148*

MRI and SPECT Image Fusion Using a Weighted Parameter Adaptive Dual Channel PCNN. *Panigrahy, C.*, +, *LSP 2020 690-694*

Novel Second-Order Statistics of the Chirp Cyclostationary Signals. *Miao, H.*, +, *LSP 2020 910-914*

On the Identifiability of Transform Learning for Non-Negative Matrix Factorization. *Zhang, S.*, +, *LSP 2020 1555-1559*

Self-Supervised Light Field Reconstruction Using Shearlet Transform and Cycle Consistency. *Gao, Y.*, +, *LSP 2020 1425-1429*

Transient analysis

Power-Law Processor Over Segmentation for Variable Length Transients Detection. *Shin, D.*, +, *LSP 2020 1065-1069*

Transient response

An Adaptive Algorithm for Active Vibration Control of Parameter-Varying Systems With a New Online Secondary Path Estimation Method. *Zheng, H.*, +, *LSP 2020 705-709*

Transmitting antennas

Low-Complexity Joint Transmit and Receive Beamforming for MIMO Radar With Multi-Targets. *Zhou, J.*, +, *LSP 2020 1410-1414*

One-Bit Symbol-Level Precoding for MU-MISO Downlink With Intelligent Reflecting Surface. *Wang, S.*, +, *LSP 2020 1784-1788*

Tree searching

Accelerating RNN Transducer Inference via Adaptive Expansion Search. *Kim, J.*, +, *LSP 2020 2019-2023*

Linear Regression Without Correspondences via Concave Minimization. *Peng, L.*, +, *LSP 2020 1580-1584*

Trees (mathematics)

Hierarchical RANSAC-Based Rotation Averaging. *Gao, X.*, +, *LSP 2020 1874-1878*

SiENet: Siamese Expansion Network for Image Extrapolation. *Zhang, X.*, +, *LSP 2020 1590-1594*

Trellis codes

Fast and Secure Steganography Based on J-UNIWARD. *Su, A.*, +, *LSP 2020 221-225*

Tumors

BayesCap: A Bayesian Approach to Brain Tumor Classification Using Capsule Networks. *Afshar, P.*, +, *LSP 2020 2024-2028*

Simultaneous Segmentation and Classification of Mass Region From Mammograms Using a Mixed-Supervision Guided Deep Model. *Shen, T.*, +, *LSP 2020 196-200*

Turbo codes

A Double EP-Based Proposal for Turbo Equalization. *Santos, I.*, +, *LSP 2020 121-125*

U

Ultrasonic imaging

Minkowski-Algebra-Based Super-Sparse Array Design for Super-Resolution Ultrasound Imaging. *Mahurkar, A.G.*, +, *LSP 2020 1060-1064*

Underwater acoustic communication

Doppler Estimation Based on Dual-HFM Signal and Speed Spectrum Scanning. *Wei, R.*, +, *LSP 2020 1740-1744*

Unsupervised learning

Deep Clustering With Variational Autoencoder. *Lim, K.*, +, *LSP 2020 231-235*

Ground-to-Aerial Viewpoint Localization via Landmark Graphs Matching. *Verde, S.*, +, *LSP 2020 1490-1494*

Learning to Distort Images Using Generative Adversarial Networks. *Chen, L.*, +, *LSP 2020 2144-2148*

Pseudo Label Based on Multiple Clustering for Unsupervised Cross-Domain Person Re-Identification. *Chen, S.*, +, *LSP 2020 1460-1464*

Semi-Supervised Seq2seq Joint-Stochastic-Approximation Autoencoders With Applications to Semantic Parsing. *Song, Y.*, +, *LSP 2020 31-35*

Unsupervised Feature Learning for Speech Using Correspondence and Siamese Networks. *Last, P.*, +, *LSP 2020 421-425*

Unsupervised Low-Light Image Enhancement Using Bright Channel Prior. *Lee, H.*, +, *LSP 2020 251-255*

Weakly-Supervised Sparse Coding With Geometric Prior for Interactive Texture Segmentation. *Quan, Y.*, +, *LSP 2020 116-120*

User interfaces

Interlayer Selective Attention Network for Robust Personalized Wake-Up Word Detection. *Lim, H.*, +, *LSP 2020 126-130*

V

Vector quantization

Fast Steganalysis Method for VoIP Streams. *Yang, H.*, +, *LSP 2020 286-290*

Reduced Complexity Recursive Grassmannian Quantization. *Schwarz, S.*, +, *LSP 2020 321-325*

Vectors

A Double EP-Based Proposal for Turbo Equalization. *Santos, I.*, +, *LSP 2020 121-125*

A Reduced Reference Metric for Visual Quality Evaluation of Point Cloud Contents. *Viola, I.*, +, *LSP 2020 1660-1664*

A Tunable Detector for Distributed Target Detection in the Situation of Signal Mismatch. *Tang, P.*, +, *LSP 2020 151-155*

An Off-Grid STAP Algorithm Based On Local Mesh Splitting With Bistatic Radar System. *He, P.*, +, *LSP 2020 1355-1359*

Angle Estimation of Weak Scatterers Using Improved MUSIC for Bistatic MIMO Radar. *Wang, Y.*, +, *LSP 2020 2164-2167*

Discrete Pseudo-Fractional Hadamard Transform and its Fast Algorithm. *Majorkowska-Mech, D.*, +, *LSP 2020 1195-1199*

Extrapolation-Based Video Retargeting With Backward Warping Using an Image-to-Warping Vector Generation Network. *Cho, S.I.*, +, *LSP 2020 446-450*

Flow-Based Independent Vector Analysis for Blind Source Separation. *Nugraha, A.A.*, +, *LSP 2020 2173-2177*

Gradient of Error Probability of$M$-ary Hypothesis Testing Problems Under Multivariate Gaussian Noise. *Jeong, M.*, +, *LSP 2020 1909-1913*

On Mean Absolute Error for Deep Neural Network Based Vector-to-Vector Regression. *Qi, J.*, +, *LSP 2020 1485-1489*

Stacked Bayesian Matching Pursuit for One-Bit Compressed Sensing. *Chae, J.*, +, *LSP 2020 550-554*

Vibration control

An Adaptive Algorithm for Active Vibration Control of Parameter-Varying Systems With a New Online Secondary Path Estimation Method. *Zheng, H.*, +, *LSP 2020 705-709*

Vibrations

An Adaptive Algorithm for Active Vibration Control of Parameter-Varying Systems With a New Online Secondary Path Estimation Method. *Zheng, H.*, +, *LSP 2020 705-709*

Video codecs

Complexity Scalable Bitplane Image Coding With Parallel Coefficient Processing. *de Cea-Dominguez, C.*, +, *LSP 2020 840-844*

Video coding

Adaptive Lagrangian Multiplier for Quantization Parameter Cascading in HEVC Hierarchical Coding. *Jia, L.*, +, *LSP 2020 1220-1224*

CEC: Cluster Embedding Coding for H.264 Steganography. *Wang, Y.*, +, *LSP 2020 955-959*

Crowdsourcing Based Cross Random Access Point Referencing for Video Coding. *Yu, H.*, +, *LSP 2020 560-564*

Genetic Algorithm Based Rate Control for AV1. *Fang, M.*, +, *LSP 2020 520-524*

Shift-And-Decorrelate Lifting: CAMRA for Lossless Intra Frame CFA Video Compression. *Lee, Y.*, +, *LSP 2020 461-465*

Variable Rate Deep Image Compression With Modulated Autoencoder. *Yang, F.*, +, *LSP 2020 331-335*

Versatile Video Coding Based Quality Scalability With Joint Layer Reference. *HoangVan, X.*, +, *LSP 2020 2079-2083*

VRFCNN: Virtual Reference Frame Generation Network for Quality SHVC. *Ding, Q.*, +, *LSP 2020 2049-2053*

Video recording

Temporal Localization of Non-Static Digital Videos Using the Electrical Network Frequency. *Fernandez-Menduina, S.*, +, *LSP 2020 745-749*

Video signal processing

Adaptive Debanding Filter. *Tu, Z.*, +, *LSP 2020 1715-1719*

Adaptively Leverage Unlabeled Tracklets Based on Part Attention Model for Few-Example Re-ID. *Han, J.*, +, *LSP 2020 2074-2078*

AutoHR: A Strong End-to-End Baseline for Remote Heart Rate Measurement With Neural Searching. *Yu, Z.*, +, *LSP 2020 1245-1249*

Capturing Video Frame Rate Variations via Entropic Differencing. *Madhusudana, P.C.*, +, *LSP 2020 1809-1813*

Deformable 3D Convolution for Video Super-Resolution. *Ying, X.*, +, *LSP 2020 1500-1504*

Extrapolation-Based Video Retargeting With Backward Warping Using an Image-to-Warping Vector Generation Network. *Cho, S.I.*, +, *LSP 2020 446-450*

Learning to Distort Images Using Generative Adversarial Networks. *Chen, L.*, +, *LSP 2020 2144-2148*

Low-Rank Regularized Deep Collaborative Matrix Factorization for Micro-Video Multi-Label Classification. *Su, Y.*, +, *LSP 2020 740-744*

Motion Context Network for Weakly Supervised Object Detection in Videos. *Jin, R.*, +, *LSP 2020 1864-1868*

Progressive Motion Representation Distillation With Two-Branch Networks for Egocentric Activity Recognition. *Liu, T.*, +, *LSP 2020 1320-1324*

Self-Similarity Action Proposal. *Liu, X.*, +, *LSP 2020 2064-2068*

Spatial Enhancement and Temporal Constraint for Weakly Supervised Action Localization. *Qin, X.*, +, *LSP 2020 1520-1524*
Temporal Localization of Non-Static Digital Videos Using the Electrical Network Frequency. *Fernandez-Menduina, S.*, +, *LSP 2020 745-749*
Temporally Refined Graph U-Nets for Human Shape and Pose Estimation From Monocular Videos. *Zhao, Y.*, +, *LSP 2020 1949-1953*
Time-Domain Multi-Modal Bone/Air Conducted Speech Enhancement. *Yu, C.*, +, *LSP 2020 1035-1039*

Video streaming
Versatile Video Coding Based Quality Scalability With Joint Layer Reference. *HoangVan, X.*, +, *LSP 2020 2079-2083*

Video surveillance
A Self-Reasoning Framework for Anomaly Detection Using Video-Level Labels. *Zaheer, M.Z.*, +, *LSP 2020 1705-1709*

Visual perception
ABSNet: Aesthetics-Based Saliency Network Using Multi-Task Convolutional Network. *Liu, J.*, +, *LSP 2020 2014-2018*
Surprise-Based JND Estimation for Images. *Wang, H.*, +, *LSP 2020 181-185*

Vocoders
Multi-Task WaveRNN With an Integrated Architecture for Cross-Lingual Voice Conversion. *Zhou, Y.*, +, *LSP 2020 1310-1314*

Voice activity detection
Spectro-Temporal Attention-Based Voice Activity Detection. *Lee, Y.*, +, *LSP 2020 131-135*

W

Watermarking
Informed Histogram-Based Watermarking. *Hua, G.*, +, *LSP 2020 236-240*
Over-Complete-Dictionary-Based Improved Spread Spectrum Watermarking Security. *Hua, G., LSP 2020 770-774*

Wave functions
Sparse Signal Reconstruction Using Blind Super-Resolution With Arbitrary Sampling. *Hezave, H.*, +, *LSP 2020 615-619*

Waveform analysis
CNN-Based Learnable Gammatone Filterbank and Equal-Loudness Normalization for Environmental Sound Classification. *Park, H.*, +, *LSP 2020 411-415*
Hidden Convexity in Robust Waveform and Receive Filter Bank Optimization Under Range Unambiguous Clutter. *Du, X.*, +, *LSP 2020 885-889*

Wavelet neural nets
Sparse Wavelet Networks. *Sadri, A.R.*, +, *LSP 2020 111-115*

Wavelet transforms
Complexity Scalable Bitplane Image Coding With Parallel Coefficient Processing. *de Cea-Dominguez, C.*, +, *LSP 2020 840-844*
Deep Multi-Level Wavelet-CNN Denoiser Prior for Restoring Blurred Image With Cauchy Noise. *Wu, T.*, +, *LSP 2020 1635-1639*
Shift-And-Decorrelate Lifting: CAMRA for Lossless Intra Frame CFA Video Compression. *Lee, Y.*, +, *LSP 2020 461-465*
Universal Frame Thresholding. *Cosentino, R.*, +, *LSP 2020 1115-1119*
Wavelet Based Waveform Distortion Measures for Assessment of Denoised EEG Quality With Reference to Noise-Free EEG Signal. *Saini, M.*, +, *LSP 2020 1260-1264*

White noise
Beamforming With Small-Spacing Microphone Arrays Using Constrained/Generalized LASSO. *Wang, X.*, +, *LSP 2020 356-360*
SFNet: A Computationally Efficient Source Filter Model Based Neural Speech Synthesis. *MV, A.R.*, +, *LSP 2020 1170-1174*
Statistical Behavior of Teager-Kaiser Energy Operator in Presence of White Gaussian Noise. *Preaux, Y.*, +, *LSP 2020 635-639*

Wiener filters
A Double EP-Based Proposal for Turbo Equalization. *Santos, I.*, +, *LSP 2020 121-125*

Wigner distribution
Sparsely Localized Time-Frequency Energy Distributions for Multi-Component LFM Signals. *Moghadasian, S.S.*, +, *LSP 2020 6-10*

Wireless channels
A Family of Single-Channel Spectrally-Null-Constrained Sequences With Low Correlation. *Tian, L.*, +, *LSP 2020 1645-1649*
Compressed Channel Estimation for Intelligent Reflecting Surface-Assisted Millimeter Wave Systems. *Wang, P.*, +, *LSP 2020 905-909*
Intelligent Reflecting Surfaces Assisted Secure Transmission Without Eavesdropper's CSI. *Wang, H.*, +, *LSP 2020 1300-1304*
Legitimate Surveillance via Jamming in Multichannel Relaying System. *Hu, G.*, +, *LSP 2020 1879-1883*
Malicious User Detection in Non-Orthogonal Multiple Access Based on Spectrum Analysis. *Xia, S.*, +, *LSP 2020 1390-1394*
QoS-Based Robust Cooperative-Jamming-Aided Beamforming for Correlated Wiretap Channels. *Xu, S.*, +, *LSP 2020 216-220*

Wireless LAN
Radio Frequency Fingerprint Extraction Based on Multi-Dimension Approximate Entropy. *Sun, L.*, +, *LSP 2020 471-475*

Wireless sensor networks
Distributed Detection of Sparse Signals With Censoring Sensors Via Locally Most Powerful Test. *Li, C.*, +, *LSP 2020 346-350*
On the Convexity of Bit Depth Allocation for Linear MMSE Estimation in Wireless Sensor Networks. *Arce, F.d.l.H.*, +, *LSP 2020 291-295*
Semidefinite Programming Methods for Alleviating Clock Synchronization Bias and Sensor Position Errors in TDOA Localization. *Zou, Y.*, +, *LSP 2020 241-245*