

# 2021 Index

## IEEE Open Journal of Vehicular Technology

### Vol. 2

This index covers all technical items—papers, correspondence, reviews, etc.—that appeared in this periodical during 2021, and items from previous years that were commented upon or corrected in 2021. 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, 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, year, and inclusive pages. Note that the item title is found only under the primary entry in the Author Index.

#### AUTHOR INDEX

##### A

**Al Akkad, N.**, *see* Saad, M., *OJVT* 2021 125-139  
**Al Ghouwayel, A.C.**, *see* Saad, M., *OJVT* 2021 125-139  
**Alexiou, A.**, *see* Boulogeorgos, A.A., *OJVT* 2021 94-110  
**Alouini, M.**, *see* Matracia, M., *OJVT* 2021 194-206  
**Alouini, M.**, *see* Nguyen, D.M., *OJVT* 2021 17-44  
**Altunbas, I.**, *see* Erdogan, E., *OJVT* 2021 45-53  
**Ayyanar, R.**, *see* Gupta, A., *OJVT* 2021 448-470

##### B

**Bader, F.**, *see* Saad, M., *OJVT* 2021 125-139  
**Barroso, D.**, *see* Machado, F., *OJVT* 2021 419-435  
**Bartolomeu, P.**, *see* Tesei, A., *OJVT* 2021 162-179  
**Beko, M.**, *see* Tomic, S., *OJVT* 2021 337-344  
**Bhuiya, M.A.**, *see* Sharma, A., *OJVT* 2021 365-376  
**Bohara, V.A.**, *see* Singh, G., *OJVT* 2021 235-248  
**Boulogeorgos, A.A.**, and Alexiou, A., Coverage Analysis of Reconfigurable Intelligent Surface Assisted THz Wireless Systems; *OJVT* 2021 94-110  
**Bruck, L.**, Haycock, B., and Emadi, A., A Review of Driving Simulation Technology and Applications; *OJVT* 2021 1-16  
**Bruckner, S.**, *see* Sippel, E., *OJVT* 2021 207-217  
**Butt, M.M.**, Pantelidou, A., and Kovacs, I.Z., ML-Assisted UE Positioning: Performance Analysis and 5G Architecture Enhancements; *OJVT* 2021 377-388

##### C

**Caudill, D.**, *see* Hughes, A., *OJVT* 2021 180-193  
**Chakraborty, S.**, *see* Gupta, A., *OJVT* 2021 448-470  
**Chatzinotas, S.**, *see* Mayouche, A., *OJVT* 2021 321-336  
**Cheng, S.**, Liu, J., and Wang, L., Controlling Interference Structure and Transmit Power of Aerial Small Cells by Hybrid Affinity Propagation Clustering and Reinforcement Learning; *OJVT* 2021 412-418  
**Chuang, J.**, *see* Hughes, A., *OJVT* 2021 180-193  
**Cui, J.**, Yetgin, H., Liu, D., Zhang, J., Ng, S.X., and Hanzo, L., Twin-Component Near-Pareto Routing Optimization for AANETs in the North-Atlantic Region Relying on Real Flight Statistics; *OJVT* 2021 346-364  
**Cui, J.**, Liu, D., Zhang, J., Yetgin, H., Ng, S.X., Maunder, R., and Hanzo, L., Minimum-Delay Routing for Integrated Aeronautical *Ad Hoc* Networks Relying on Real Flight Data in the North-Atlantic Region; *OJVT* 2021 310-320

##### D

**Di Mauro, L.**, *see* Tesei, A., *OJVT* 2021 162-179  
**Duan, Y.**, *see* Tang, J., *OJVT* 2021 261-271

##### E

**El-Khamy, S.**, Elragal, H.M., and Polus, R.A., Index Modulation Multiple-Access (IMMA): Efficient Techniques for Downlink Millimeter Waves Outdoor Channel; *OJVT* 2021 403-411  
**Elragal, H.M.**, *see* El-Khamy, S., *OJVT* 2021 403-411  
**Emadi, A.**, *see* Bruck, L., *OJVT* 2021 1-16  
**Emadi, A.**, *see* Machado, F., *OJVT* 2021 419-435  
**Erdogan, E.**, Altunbas, I., Kabaoglu, N., and Yanikomeroğlu, H., A Cognitive Radio Enabled RF/FSO Communication Model for Aerial Relay Networks: Possible Configurations and Opportunities; *OJVT* 2021 45-53

##### F

**Ferreira, J.**, *see* Tesei, A., *OJVT* 2021 162-179  
**Fukatsu, R.**, *see* Li, Z., *OJVT* 2021 78-93  
**Funfgeld, S.**, *see* Thorgeirsson, A.T., *OJVT* 2021 151-161

##### G

**Gauterin, F.**, *see* Thorgeirsson, A.T., *OJVT* 2021 151-161  
**Geiss, J.**, *see* Sippel, E., *OJVT* 2021 207-217  
**Gentile, C.**, *see* Hughes, A., *OJVT* 2021 180-193  
**Groschel, P.**, *see* Sippel, E., *OJVT* 2021 207-217  
**Gui, G.**, *see* Hirose, H., *OJVT* 2021 67-77  
**Gupta, A.**, Ayyanar, R., and Chakraborty, S., Novel Electric Vehicle Traction Architecture With 48 V Battery and Multi-Input, High Conversion Ratio Converter for High and Variable DC-Link Voltage; *OJVT* 2021 448-470

##### H

**Han, C.**, *see* Zhang, X., *OJVT* 2021 111-124  
**Hanzo, L.**, *see* Cui, J., *OJVT* 2021 346-364  
**Hanzo, L.**, *see* Cui, J., *OJVT* 2021 310-320  
**Haycock, B.**, *see* Bruck, L., *OJVT* 2021 1-16  
**He, H.**, *see* Ye, Q., *OJVT* 2021 272-288  
**He, H.**, *see* Ye, Q., *OJVT* 2021 345  
**Heath, R.W.**, *see* Kumari, P., *OJVT* 2021 218-234  
**Hehn, M.**, *see* Sippel, E., *OJVT* 2021 207-217  
**Hijazi, H.**, *see* Saad, M., *OJVT* 2021 125-139  
**Hirose, H.**, Ohtsuki, T., and Gui, G., Deep Learning-Based Channel Estimation for Massive MIMO Systems With Pilot Contamination; *OJVT* 2021 67-77  
**Hua, W.**, *see* Lee, C.H.T., *OJVT* 2021 471-485  
**Hughes, A.**, Jun, S.Y., Gentile, C., Caudill, D., Chuang, J., Senic, J., and Michelson, D.G., Measuring the Impact of Beamwidth on the Correlation Distance of 60 GHz Indoor and Outdoor Channels; *OJVT* 2021 180-193

##### I

**Iriio, L.**, and Oliveira, R., A Comparative Evaluation of Probabilistic and Deep Learning Approaches for Vehicular Trajectory Prediction; *OJVT* 2021 140-150  
**Iyer, L.V.**, *see* Lee, C.H.T., *OJVT* 2021 471-485

## J

- Jiang, C.**, *see* Lee, C.H.T., *OJVT* 2021 471-485  
**Jin, J.**, *see* Tang, J., *OJVT* 2021 261-271  
**Jun, S.Y.**, *see* Hughes, A., *OJVT* 2021 180-193

## K

- Kabaoglu, N.**, *see* Erdogan, E., *OJVT* 2021 45-53  
**Kaieda, Y.**, *see* Yu, T., *OJVT* 2021 436-447  
**Khodaparast, S.S.**, Lu, X., Wang, P., and Nguyen, U.T., Deep Reinforcement Learning Based Energy Efficient Multi-UAV Data Collection for IoT Networks; *OJVT* 2021 249-260  
**Kishk, M.A.**, *see* Matracia, M., *OJVT* 2021 194-206  
**Kishk, M.A.**, *see* Nguyen, D.M., *OJVT* 2021 17-44  
**Kollmeyer, P.**, *see* Machado, F., *OJVT* 2021 419-435  
**Kovacs, I.Z.**, *see* Butt, M.M., *OJVT* 2021 377-388  
**Kumari, P.**, Mezghani, A., and Heath, R.W., JCR70: A Low-Complexity Millimeter-Wave Proof-of-Concept Platform for a Fully-Digital SIMO Joint Communication-Radar; *OJVT* 2021 218-234

## L

- Lattuca, D.**, *see* Tesei, A., *OJVT* 2021 162-179  
**Lee, C.H.T.**, Hua, W., Long, T., Jiang, C., and Iyer, L.V., A Critical Review of Emerging Technologies for Electric and Hybrid Vehicles; *OJVT* 2021 471-485  
**Lee, Y.L.**, Qin, D., Wang, L., and Sim, G.H., 6G Massive Radio Access Networks: Key Applications, Requirements and Challenges; *OJVT* 2021 54-66  
**Li, Z.**, Yu, T., Fukatsu, R., Tran, G.K., and Sakaguchi, K., Towards Safe Automated Driving: Design of Software-Defined Dynamic MmWave V2X Networks and PoC Implementation; *OJVT* 2021 78-93  
**Liu, D.**, *see* Cui, J., *OJVT* 2021 346-364  
**Liu, D.**, *see* Cui, J., *OJVT* 2021 310-320  
**Liu, J.**, *see* Cheng, S., *OJVT* 2021 412-418  
**Liu, Z.**, *see* Singh, G., *OJVT* 2021 235-248  
**Long, T.**, *see* Lee, C.H.T., *OJVT* 2021 471-485  
**Lu, X.**, *see* Khodaparast, S.S., *OJVT* 2021 249-260  
**Luise, M.**, *see* Tesei, A., *OJVT* 2021 162-179

## M

- Machado, F.**, Kollmeyer, P., Barroso, D., and Emadi, A., Multi-Speed Gearboxes for Battery Electric Vehicles: Current Status and Future Trends; *OJVT* 2021 419-435  
**Martins, W.A.**, *see* Mayouche, A., *OJVT* 2021 321-336  
**Matracia, M.**, Kishk, M.A., and Alouini, M., Coverage Analysis for UAV-Assisted Cellular Networks in Rural Areas; *OJVT* 2021 194-206  
**Mauder, R.**, *see* Cui, J., *OJVT* 2021 310-320  
**Mayouche, A.**, Martins, W.A., Tsinos, C.G., Chatzinotas, S., and Ottersten, B.O., Multi-Antenna Data-Driven Eavesdropping Attacks and Symbol-Level Precoding Countermeasures; *OJVT* 2021 321-336  
**Mezghani, A.**, *see* Kumari, P., *OJVT* 2021 218-234  
**Michelson, D.G.**, *see* Hughes, A., *OJVT* 2021 180-193

## N

- Narimani, M.**, *see* Ramezani, A., *OJVT* 2021 389-402  
**Ng, S.X.**, *see* Cui, J., *OJVT* 2021 346-364  
**Ng, S.X.**, *see* Cui, J., *OJVT* 2021 310-320  
**Nguyen, D.M.**, Kishk, M.A., and Alouini, M., Modeling and Analysis of Dynamic Charging for EVs: A Stochastic Geometry Approach; *OJVT* 2021 17-44  
**Nguyen, U.T.**, *see* Khodaparast, S.S., *OJVT* 2021 249-260  
**Nusrat, R.**, *see* Sharma, A., *OJVT* 2021 365-376

## O

- Ohtsuki, T.**, *see* Hirose, H., *OJVT* 2021 67-77  
**Oliveira, R.**, *see* Irio, L., *OJVT* 2021 140-150  
**Ottersten, B.O.**, *see* Mayouche, A., *OJVT* 2021 321-336

## P

- Pagano, P.**, *see* Tesei, A., *OJVT* 2021 162-179  
**Palicot, J.**, *see* Saad, M., *OJVT* 2021 125-139  
**Pandey, A.**, and Yadav, S., Joint Impact of Nodes Mobility and Imperfect Channel Estimates on the Secrecy Performance of Cognitive Radio Vehicular Networks Over Nakagami-*m* Fading Channels; *OJVT* 2021 289-309  
**Pantelidou, A.**, *see* Butt, M.M., *OJVT* 2021 377-388  
**Polus, R.A.**, *see* El-Khamy, S., *OJVT* 2021 403-411

## Q

- Qin, D.**, *see* Lee, Y.L., *OJVT* 2021 54-66  
**Qu, K.**, *see* Ye, Q., *OJVT* 2021 272-288  
**Qu, K.**, *see* Ye, Q., *OJVT* 2021 345

## R

- Ramezani, A.**, and Narimani, M., An Efficient PCB Based Magnetic Coupler Design for Electric Vehicle Wireless Charging; *OJVT* 2021 389-402

## S

- Saad, M.**, Al Akkad, N., Hijazi, H., Al Ghouwayel, A.C., Bader, F., and Palicot, J., Novel MIMO Technique for Wireless Terabits Systems in Sub-THz Band; *OJVT* 2021 125-139  
**Sakaguchi, K.**, *see* Yu, T., *OJVT* 2021 436-447  
**Sakaguchi, K.**, *see* Li, Z., *OJVT* 2021 78-93  
**Scheubner, S.**, *see* Thorgeirsson, A.T., *OJVT* 2021 151-161  
**Senic, J.**, *see* Hughes, A., *OJVT* 2021 180-193  
**Sharma, A.**, Nusrat, R., Bhuiya, M.A., and Youssef, M.Z., Hardware-in-the-Loop Validation of Different Power Train Topologies' Models in Electric Vehicles: A Plug-and-Play Capability; *OJVT* 2021 365-376  
**Shen, X.**, *see* Ye, Q., *OJVT* 2021 272-288  
**Shen, X.**, *see* Ye, Q., *OJVT* 2021 345  
**Shi, W.**, *see* Ye, Q., *OJVT* 2021 272-288  
**Shi, W.**, *see* Ye, Q., *OJVT* 2021 345  
**Sim, G.H.**, *see* Lee, Y.L., *OJVT* 2021 54-66  
**Singh, G.**, Srivastava, A., Bohara, V.A., and Liu, Z., Downlink Performance of Optical Power Domain NOMA for Beyond 5G Enabled V2X Networks; *OJVT* 2021 235-248  
**Sippel, E.**, Geiss, J., Bruckner, S., Groschel, P., Hehn, M., and Vossiek, M., Exchanging Bandwidth With Aperture Size in Wireless Indoor Localization - Or Why 5G/6G Systems With Antenna Arrays Can Outperform UWB Solutions; *OJVT* 2021 207-217  
**Srivastava, A.**, *see* Singh, G., *OJVT* 2021 235-248

## T

- Takaku, Y.**, *see* Yu, T., *OJVT* 2021 436-447  
**Tang, J.**, Duan, Y., Zhou, Y., and Jin, J., Distributed Slice Selection-Based Computation Offloading for Intelligent Vehicular Networks; *OJVT* 2021 261-271  
**Tardo, A.**, *see* Tesei, A., *OJVT* 2021 162-179  
**Tesei, A.**, Lattuca, D., Tardo, A., Di Mauro, L., Pagano, P., Luise, M., Bartolomeu, P., and Ferreira, J., Securing Seaport Logistic Vehicles Using a Distributed Ledger-Based Credential Management System; *OJVT* 2021 162-179  
**Thorgeirsson, A.T.**, Scheubner, S., Funfgeld, S., and Gauterin, F., Probabilistic Prediction of Energy Demand and Driving Range for Electric Vehicles With Federated Learning; *OJVT* 2021 151-161  
**Tomic, S.**, and Beko, M., A New Perspective on Range and Directional Localization Problem; *OJVT* 2021 337-344

**Tran, G.K.**, *see* Li, Z., *OJVT* 2021 78-93  
**Trsinos, C.G.**, *see* Mayouche, A., *OJVT* 2021 321-336

## V

**Vossiek, M.**, *see* Sippel, E., *OJVT* 2021 207-217

## W

**Wang, L.**, *see* Cheng, S., *OJVT* 2021 412-418  
**Wang, L.**, *see* Lee, Y.L., *OJVT* 2021 54-66  
**Wang, P.**, *see* Khodaparast, S.S., *OJVT* 2021 249-260  
**Wang, X.**, *see* Zhang, X., *OJVT* 2021 111-124

## Y

**Yadav, S.**, *see* Pandey, A., *OJVT* 2021 289-309  
**Yanikomeroglu, H.**, *see* Erdogan, E., *OJVT* 2021 45-53  
**Ye, Q.**, Shi, W., Qu, K., He, H., Zhuang, W., and Shen, X., Joint RAN Slicing and Computation Offloading for Autonomous Vehicular Networks: A Learning-Assisted Hierarchical Approach; *OJVT* 2021 272-288  
**Ye, Q.**, Shi, W., Qu, K., He, H., Zhuang, W., and Shen, X., Corrections to "Joint RAN Slicing and Computation Offloading for Autonomous Vehicular Networks: A Learning-Assisted Hierarchical Approach" [2021 doi: 10.1109/OJVT.2021.3089083]; *OJVT* 2021 345  
**Yetgin, H.**, *see* Cui, J., *OJVT* 2021 346-364  
**Yetgin, H.**, *see* Cui, J., *OJVT* 2021 310-320  
**Youssef, M.Z.**, *see* Sharma, A., *OJVT* 2021 365-376  
**Yu, T.**, Takaku, Y., Kaieda, Y., and Sakaguchi, K., Design and PoC Implementation of Mmwave-Based Offloading-Enabled UAV Surveillance System; *OJVT* 2021 436-447  
**Yu, T.**, *see* Li, Z., *OJVT* 2021 78-93

## Z

**Zhang, J.**, *see* Cui, J., *OJVT* 2021 346-364  
**Zhang, J.**, *see* Cui, J., *OJVT* 2021 310-320  
**Zhang, X.**, Han, C., and Wang, X., Dual-Radio-Assisted (DRA) MAC Protocols for Distributed Terahertz Networks; *OJVT* 2021 111-124  
**Zhou, Y.**, *see* Tang, J., *OJVT* 2021 261-271  
**Zhuang, W.**, *see* Ye, Q., *OJVT* 2021 272-288  
**Zhuang, W.**, *see* Ye, Q., *OJVT* 2021 345

## SUBJECT INDEX

## Numeric

**3G mobile communication**

ML-Assisted UE Positioning: Performance Analysis and 5G Architecture Enhancements. *Butt, M.M.*, +, *OJVT* 2021 377-388

**5G mobile communication**

Exchanging Bandwidth With Aperture Size in Wireless Indoor Localization - Or Why 5G/6G Systems With Antenna Arrays Can Outperform UWB Solutions. *Sippel, E.*, +, *OJVT* 2021 207-217  
 ML-Assisted UE Positioning: Performance Analysis and 5G Architecture Enhancements. *Butt, M.M.*, +, *OJVT* 2021 377-388  
 Towards Safe Automated Driving: Design of Software-Defined Dynamic MmWave V2X Networks and PoC Implementation. *Li, Z.*, +, *OJVT* 2021 78-93

**6G mobile communication**

6G Massive Radio Access Networks: Key Applications, Requirements and Challenges. *Lee, Y.L.*, +, *OJVT* 2021 54-66  
 Dual-Radio-Assisted (DRA) MAC Protocols for Distributed Terahertz Networks. *Zhang, X.*, +, *OJVT* 2021 111-124

Exchanging Bandwidth With Aperture Size in Wireless Indoor Localization - Or Why 5G/6G Systems With Antenna Arrays Can Outperform UWB Solutions. *Sippel, E.*, +, *OJVT* 2021 207-217  
 ML-Assisted UE Positioning: Performance Analysis and 5G Architecture Enhancements. *Butt, M.M.*, +, *OJVT* 2021 377-388

## A

**Access protocols**

Dual-Radio-Assisted (DRA) MAC Protocols for Distributed Terahertz Networks. *Zhang, X.*, +, *OJVT* 2021 111-124

**Ad hoc networks**

Minimum-Delay Routing for Integrated Aeronautical *Ad Hoc* Networks Relying on Real Flight Data in the North-Atlantic Region. *Cui, J.*, +, *OJVT* 2021 310-320  
 Twin-Component Near-Pareto Routing Optimization for AANETs in the North-Atlantic Region Relying on Real Flight Statistics. *Cui, J.*, +, *OJVT* 2021 346-364

**Aircraft communication**

Minimum-Delay Routing for Integrated Aeronautical *Ad Hoc* Networks Relying on Real Flight Data in the North-Atlantic Region. *Cui, J.*, +, *OJVT* 2021 310-320  
 Twin-Component Near-Pareto Routing Optimization for AANETs in the North-Atlantic Region Relying on Real Flight Statistics. *Cui, J.*, +, *OJVT* 2021 346-364

**Aircraft power systems**

Deep Reinforcement Learning Based Energy Efficient Multi-UAV Data Collection for IoT Networks. *Khodaparast, S.S.*, +, *OJVT* 2021 249-260

**Analog-digital conversion**

JCR70: A Low-Complexity Millimeter-Wave Proof-of-Concept Platform for a Fully-Digital SIMO Joint Communication-Radar. *Kumari, P.*, +, *OJVT* 2021 218-234

**Antenna arrays**

Multi-Antenna Data-Driven Eavesdropping Attacks and Symbol-Level Pre-coding Countermeasures. *Mayouche, A.*, +, *OJVT* 2021 321-336

**Aperture antennas**

Exchanging Bandwidth With Aperture Size in Wireless Indoor Localization - Or Why 5G/6G Systems With Antenna Arrays Can Outperform UWB Solutions. *Sippel, E.*, +, *OJVT* 2021 207-217

**Array signal processing**

Dual-Radio-Assisted (DRA) MAC Protocols for Distributed Terahertz Networks. *Zhang, X.*, +, *OJVT* 2021 111-124

**Artificial intelligence**

6G Massive Radio Access Networks: Key Applications, Requirements and Challenges. *Lee, Y.L.*, +, *OJVT* 2021 54-66  
 Distributed Slice Selection-Based Computation Offloading for Intelligent Vehicular Networks. *Tang, J.*, +, *OJVT* 2021 261-271

**Authorization**

Securing Seaport Logistic Vehicles Using a Distributed Ledger-Based Credential Management System. *Tesei, A.*, +, *OJVT* 2021 162-179

**Automotive electric vehicles**

Modeling and Analysis of Dynamic Charging for EVs: A Stochastic Geometry Approach. *Nguyen, D.M.*, +, *OJVT* 2021 17-44

**Automotive engineering**

Multi-Speed Gearboxes for Battery Electric Vehicles: Current Status and Future Trends. *Machado, F.*, +, *OJVT* 2021 419-435

**Autonomous aerial vehicles**

6G Massive Radio Access Networks: Key Applications, Requirements and Challenges. *Lee, Y.L.*, +, *OJVT* 2021 54-66  
 A Cognitive Radio Enabled RF/FSO Communication Model for Aerial Relay Networks: Possible Configurations and Opportunities. *Erdogan, E.*, +, *OJVT* 2021 45-53  
 Coverage Analysis for UAV-Assisted Cellular Networks in Rural Areas. *Matracia, M.*, +, *OJVT* 2021 194-206  
 Deep Reinforcement Learning Based Energy Efficient Multi-UAV Data Collection for IoT Networks. *Khodaparast, S.S.*, +, *OJVT* 2021 249-260

**Autonomous vehicles**

Corrections to “Joint RAN Slicing and Computation Offloading for Autonomous Vehicular Networks: A Learning-Assisted Hierarchical Approach” [2021 doi: 10.1109/OJVT.2021.3089083]. *Ye, Q., +, OJVT 2021 345*

**B****Batteries**

A Critical Review of Emerging Technologies for Electric and Hybrid Vehicles. *Lee, C.H.T., +, OJVT 2021 471-485*

Novel Electric Vehicle Traction Architecture With 48 V Battery and Multi-Input, High Conversion Ratio Converter for High and Variable DC-Link Voltage. *Gupta, A., +, OJVT 2021 448-470*

Probabilistic Prediction of Energy Demand and Driving Range for Electric Vehicles With Federated Learning. *Thorgeirsson, A.T., +, OJVT 2021 151-161*

**Battery powered vehicles**

Modeling and Analysis of Dynamic Charging for EVs: A Stochastic Geometry Approach. *Nguyen, D.M., +, OJVT 2021 17-44*

Multi-Speed Gearboxes for Battery Electric Vehicles: Current Status and Future Trends. *Machado, F., +, OJVT 2021 419-435*

**Bayes methods**

A Comparative Evaluation of Probabilistic and Deep Learning Approaches for Vehicular Trajectory Prediction. *Irio, L., +, OJVT 2021 140-150*

**Belief networks**

A Comparative Evaluation of Probabilistic and Deep Learning Approaches for Vehicular Trajectory Prediction. *Irio, L., +, OJVT 2021 140-150*

**C****Cellular radio**

Coverage Analysis for UAV-Assisted Cellular Networks in Rural Areas. *Matracia, M., +, OJVT 2021 194-206*

**Channel coding**

Multi-Antenna Data-Driven Eavesdropping Attacks and Symbol-Level Precoding Countermeasures. *Mayouche, A., +, OJVT 2021 321-336*

**Channel estimation**

Deep Learning-Based Channel Estimation for Massive MIMO Systems With Pilot Contamination. *Hirose, H., +, OJVT 2021 67-77*

Joint Impact of Nodes Mobility and Imperfect Channel Estimates on the Secrecy Performance of Cognitive Radio Vehicular Networks Over Nakagami- $m$  Fading Channels. *Pandey, A., +, OJVT 2021 289-309*

**Circuit simulation**

Hardware-in-the-Loop Validation of Different Power Train Topologies' Models in Electric Vehicles: A Plug-and-Play Capability. *Sharma, A., +, OJVT 2021 365-376*

**Cloud computing**

Distributed Slice Selection-Based Computation Offloading for Intelligent Vehicular Networks. *Tang, J., +, OJVT 2021 261-271*

Joint RAN Slicing and Computation Offloading for Autonomous Vehicular Networks: A Learning-Assisted Hierarchical Approach. *Ye, Q., +, OJVT 2021 272-288*

**Cognitive radio**

A Cognitive Radio Enabled RF/FSO Communication Model for Aerial Relay Networks: Possible Configurations and Opportunities. *Erdogan, E., +, OJVT 2021 45-53*

Joint Impact of Nodes Mobility and Imperfect Channel Estimates on the Secrecy Performance of Cognitive Radio Vehicular Networks Over Nakagami- $m$  Fading Channels. *Pandey, A., +, OJVT 2021 289-309*

**Coils**

An Efficient PCB Based Magnetic Coupler Design for Electric Vehicle Wireless Charging. *Ramezani, A., +, OJVT 2021 389-402*

**Combinatorial mathematics**

Twin-Component Near-Pareto Routing Optimization for AANETs in the North-Atlantic Region Relying on Real Flight Statistics. *Cui, J., +, OJVT 2021 346-364*

**Computational modeling**

Probabilistic Prediction of Energy Demand and Driving Range for Electric Vehicles With Federated Learning. *Thorgeirsson, A.T., +, OJVT 2021 151-161*

**Computer architecture**

Novel Electric Vehicle Traction Architecture With 48 V Battery and Multi-Input, High Conversion Ratio Converter for High and Variable DC-Link Voltage. *Gupta, A., +, OJVT 2021 448-470*

**Control engineering computing**

Deep Reinforcement Learning Based Energy Efficient Multi-UAV Data Collection for IoT Networks. *Khodaparast, S.S., +, OJVT 2021 249-260*

**Convex programming**

Joint RAN Slicing and Computation Offloading for Autonomous Vehicular Networks: A Learning-Assisted Hierarchical Approach. *Ye, Q., +, OJVT 2021 272-288*

**Convolutional neural nets**

Deep Learning-Based Channel Estimation for Massive MIMO Systems With Pilot Contamination. *Hirose, H., +, OJVT 2021 67-77*

**Cooperative communication**

Corrections to “Joint RAN Slicing and Computation Offloading for Autonomous Vehicular Networks: A Learning-Assisted Hierarchical Approach” [2021 doi: 10.1109/OJVT.2021.3089083]. *Ye, Q., +, OJVT 2021 345*

Joint RAN Slicing and Computation Offloading for Autonomous Vehicular Networks: A Learning-Assisted Hierarchical Approach. *Ye, Q., +, OJVT 2021 272-288*

**Covariance matrices**

Deep Learning-Based Channel Estimation for Massive MIMO Systems With Pilot Contamination. *Hirose, H., +, OJVT 2021 67-77*

**D****Data handling**

A Comparative Evaluation of Probabilistic and Deep Learning Approaches for Vehicular Trajectory Prediction. *Irio, L., +, OJVT 2021 140-150*

**DC-DC power converters**

Novel Electric Vehicle Traction Architecture With 48 V Battery and Multi-Input, High Conversion Ratio Converter for High and Variable DC-Link Voltage. *Gupta, A., +, OJVT 2021 448-470*

**Decoding**

Multi-Antenna Data-Driven Eavesdropping Attacks and Symbol-Level Precoding Countermeasures. *Mayouche, A., +, OJVT 2021 321-336*

**Deep learning**

Corrections to “Joint RAN Slicing and Computation Offloading for Autonomous Vehicular Networks: A Learning-Assisted Hierarchical Approach” [2021 doi: 10.1109/OJVT.2021.3089083]. *Ye, Q., +, OJVT 2021 345*

**Deep learning (artificial intelligence)**

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**Design engineering**

A Review of Driving Simulation Technology and Applications. *Bruck, L., +, OJVT 2021 1-16*

**Directed graphs**

Minimum-Delay Routing for Integrated Aeronautical *Ad Hoc* Networks Relying on Real Flight Data in the North-Atlantic Region. *Cui, J., +, OJVT 2021 310-320*

**Direction-of-arrival estimation**

A New Perspective on Range and Directional Localization Problem. *Tomic, S., +, OJVT 2021 337-344*

Dual-Radio-Assisted (DRA) MAC Protocols for Distributed Terahertz Networks. *Zhang, X., +, OJVT 2021 111-124*

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**Diversity reception**

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Joint Impact of Nodes Mobility and Imperfect Channel Estimates on the Secrecy Performance of Cognitive Radio Vehicular Networks Over Nakagami- $m$  Fading Channels. *Pandey, A.*, +, *OJVT 2021 289-309*

## E

### Electric machines

A Critical Review of Emerging Technologies for Electric and Hybrid Vehicles. *Lee, C.H.T.*, +, *OJVT 2021 471-485*

### Electric vehicle charging

Modeling and Analysis of Dynamic Charging for EVs: A Stochastic Geometry Approach. *Nguyen, D.M.*, +, *OJVT 2021 17-44*

### Electric vehicles

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Probabilistic Prediction of Energy Demand and Driving Range for Electric Vehicles With Federated Learning. *Thorgerisson, A.T.*, +, *OJVT 2021 151-161*

### Electromagnetic wave attenuation

Coverage Analysis of Reconfigurable Intelligent Surface Assisted THz Wireless Systems. *Boulogeorgos, A.A.*, +, *OJVT 2021 94-110*

### Electromagnetic wave reflection

Coverage Analysis of Reconfigurable Intelligent Surface Assisted THz Wireless Systems. *Boulogeorgos, A.A.*, +, *OJVT 2021 94-110*

### Energy conservation

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### Energy harvesting

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### Error statistics

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### Evolutionary computation

Twin-Component Near-Pareto Routing Optimization for AANETs in the North-Atlantic Region Relying on Real Flight Statistics. *Cui, J.*, +, *OJVT 2021 346-364*

## F

### Fading channels

Measuring the Impact of Beamwidth on the Correlation Distance of 60 GHz Indoor and Outdoor Channels. *Hughes, A.*, +, *OJVT 2021 180-193*

### Feature extraction

Deep Learning-Based Channel Estimation for Massive MIMO Systems With Pilot Contamination. *Hirose, H.*, +, *OJVT 2021 67-77*

### Filtering theory

Novel MIMO Technique for Wireless Terabits Systems in Sub-THz Band. *Saad, M.*, +, *OJVT 2021 125-139*

### Free-space optical communication

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### Freight containers

Securing Seaport Logistic Vehicles Using a Distributed Ledger-Based Credential Management System. *Tesei, A.*, +, *OJVT 2021 162-179*

### Frequency division multiple access

Index Modulation Multiple-Access (IMMA): Efficient Techniques for Downlink Millimeter Waves Outdoor Channel. *El-Khamy, S.*, +, *OJVT 2021 403-411*

## G

### Gears

Multi-Speed Gearboxes for Battery Electric Vehicles: Current Status and Future Trends. *Machado, F.*, +, *OJVT 2021 419-435*

### Genetic algorithms

Twin-Component Near-Pareto Routing Optimization for AANETs in the North-Atlantic Region Relying on Real Flight Statistics. *Cui, J.*, +, *OJVT 2021 346-364*

### Geometry

Coverage Analysis for UAV-Assisted Cellular Networks in Rural Areas. *Matracia, M.*, +, *OJVT 2021 194-206*

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### Gradient methods

Deep Reinforcement Learning Based Energy Efficient Multi-UAV Data Collection for IoT Networks. *Khodaparast, S.S.*, +, *OJVT 2021 249-260*

## H

### Hardware-in-the-loop simulation

Hardware-in-the-Loop Validation of Different Power Train Topologies' Models in Electric Vehicles: A Plug-and-Play Capability. *Sharma, A.*, +, *OJVT 2021 365-376*

## I

### Indoor navigation

Exchanging Bandwidth With Aperture Size in Wireless Indoor Localization - Or Why 5G/6G Systems With Antenna Arrays Can Outperform UWB Solutions. *Sippel, E.*, +, *OJVT 2021 207-217*

### Indoor radio

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### Induction machines

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### Inductive power transmission

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### Inference mechanisms

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### Interference

Controlling Interference Structure and Transmit Power of Aerial Small Cells by Hybrid Affinity Propagation Clustering and Reinforcement Learning. *Cheng, S.*, +, *OJVT 2021 412-418*

### Internet of Things

Deep Reinforcement Learning Based Energy Efficient Multi-UAV Data Collection for IoT Networks. *Khodaparast, S.S.*, +, *OJVT 2021 249-260*

## L

### Learning (artificial intelligence)

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#### Least mean squares methods

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#### Light interference

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#### Logistics

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#### Long Term Evolution

Towards Safe Automated Driving: Design of Software-Defined Dynamic MmWave V2X Networks and PoC Implementation. *Li, Z.*, +, *OJVT 2021 78-93*

## M

#### Magnetic gears

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#### Marine engineering

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#### Markov processes

Deep Reinforcement Learning Based Energy Efficient Multi-UAV Data Collection for IoT Networks. *Khodaparast, S.S.*, +, *OJVT 2021 249-260*

#### Mathematical analysis

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#### Mechanical engineering computing

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#### Millimeter wave communication

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#### Millimeter wave radar

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#### MIMO communication

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#### Mobile computing

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#### Mobile radio

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#### Mobile robots

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#### Mobility management (mobile radio)

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#### Multi-access systems

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#### Multi-agent systems

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#### Multipath channels

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## N

#### Nakagami channels

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#### Nonorthogonal multiple access

Downlink Performance of Optical Power Domain NOMA for Beyond 5G Enabled V2X Networks. *Singh, G.*, +, *OJVT 2021 235-248*

## O

#### OFDM modulation

Index Modulation Multiple-Access (IMMA): Efficient Techniques for Downlink Millimeter Waves Outdoor Channel. *El-Khamy, S.*, +, *OJVT 2021 403-411*

#### Optical links

Downlink Performance of Optical Power Domain NOMA for Beyond 5G Enabled V2X Networks. *Singh, G.*, +, *OJVT 2021 235-248*

## P

#### Pareto optimization

Twin-Component Near-Pareto Routing Optimization for AANETs in the North-Atlantic Region Relying on Real Flight Statistics. *Cui, J.*, +, *OJVT 2021 346-364*

#### Permanent magnet machines

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#### Position measurement

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#### Power control

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#### Power demand

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#### Power transmission (mechanical)

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#### Precoding

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**Prediction algorithms**

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**Printed circuit design**

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**Printed circuits**

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**Probabilistic logic**

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**Probability**

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**Propulsion**

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**Prototypes**

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**Q****Quadrature amplitude modulation**

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**Quality of service**

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**R****Radar receivers**

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**Radio access networks**

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**Radio links**

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**Radio spectrum management**

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**Radio transceivers**

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**Radiofrequency interference**

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**Radiowave propagation**

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**Rapid prototyping**

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**Rayleigh channels**

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**Real-time systems**

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**Receiving antennas**

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**Recurrent neural networks**

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**Regression analysis**

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**Reinforcement learning**

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**Relay networks (telecommunication)**

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**Reluctance motors**

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**Resource allocation**

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**Road safety**

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**Road vehicle radar**

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**Roads**

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**S****Satellite communication**

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**Sea ports**

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**Sensor placement**

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**Ships**

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**SIMO communication**

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**Smart cities**

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**Software defined networking**

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**Space division multiplexing**

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**Statistical analysis**

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**Stochastic processes**

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**Stochastic programming**

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**Streaming media**

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**Surveillance**

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**Synchronization**

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**Synchronous machines**

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**Telecommunication network reliability**

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Minimum-Delay Routing for Integrated Aeronautical *Ad Hoc* Networks Relying on Real Flight Data in the North-Atlantic Region. *Cui, J.*, +, *OJVT 2021 310-320*

Twin-Component Near-Pareto Routing Optimization for AANETs in the North-Atlantic Region Relying on Real Flight Statistics. *Cui, J.*, +, *OJVT 2021 346-364*

**Telecommunication network topology**

6G Massive Radio Access Networks: Key Applications, Requirements and Challenges. *Lee, Y.L.*, +, *OJVT 2021 54-66*

**Telecommunication power management**

6G Massive Radio Access Networks: Key Applications, Requirements and Challenges. *Lee, Y.L.*, +, *OJVT 2021 54-66*

**Telecommunication scheduling**

Joint RAN Slicing and Computation Offloading for Autonomous Vehicular Networks: A Learning-Assisted Hierarchical Approach. *Ye, Q.*, +, *OJVT 2021 272-288*

Towards Safe Automated Driving: Design of Software-Defined Dynamic MmWave V2X Networks and PoC Implementation. *Li, Z.*, +, *OJVT 2021 78-93*

**Telecommunication security**

A Cognitive Radio Enabled RF/FSO Communication Model for Aerial Relay Networks: Possible Configurations and Opportunities. *Erdogan, E.*, +, *OJVT 2021 45-53*

Multi-Antenna Data-Driven Eavesdropping Attacks and Symbol-Level Precoding Countermeasures. *Mayouche, A.*, +, *OJVT 2021 321-336*

**Telecommunication traffic**

Towards Safe Automated Driving: Design of Software-Defined Dynamic MmWave V2X Networks and PoC Implementation. *Li, Z.*, +, *OJVT 2021 78-93*

**Terahertz metamaterials**

Coverage Analysis of Reconfigurable Intelligent Surface Assisted THz Wireless Systems. *Boulogeorgos, A.A.*, +, *OJVT 2021 94-110*



**Throughput**

Controlling Interference Structure and Transmit Power of Aerial Small Cells by Hybrid Affinity Propagation Clustering and Reinforcement Learning. *Cheng, S.*, +, *OJVT 2021 412-418*

**Time division multiplexing**

Deep Learning-Based Channel Estimation for Massive MIMO Systems With Pilot Contamination. *Hirose, H.*, +, *OJVT 2021 67-77*

**Time-of-arrival estimation**

Exchanging Bandwidth With Aperture Size in Wireless Indoor Localization - Or Why 5G/6G Systems With Antenna Arrays Can Outperform UWB Solutions. *Sippel, E.*, +, *OJVT 2021 207-217*

**Torque**

Multi-Speed Gearboxes for Battery Electric Vehicles: Current Status and Future Trends. *Machado, F.*, +, *OJVT 2021 419-435*

**Traction power supplies**

Novel Electric Vehicle Traction Architecture With 48 V Battery and Multi-Input, High Conversion Ratio Converter for High and Variable DC-Link Voltage. *Gupta, A.*, +, *OJVT 2021 448-470*

**Traffic information systems**

A Comparative Evaluation of Probabilistic and Deep Learning Approaches for Vehicular Trajectory Prediction. *Irio, L.*, +, *OJVT 2021 140-150*

**Trajectory control**

Deep Reinforcement Learning Based Energy Efficient Multi-UAV Data Collection for IoT Networks. *Khodaparast, S.S.*, +, *OJVT 2021 249-260*

**Transmitting antennas**

Exchanging Bandwidth With Aperture Size in Wireless Indoor Localization - Or Why 5G/6G Systems With Antenna Arrays Can Outperform UWB Solutions. *Sippel, E.*, +, *OJVT 2021 207-217*

**Transportation**

Modeling and Analysis of Dynamic Charging for EVs: A Stochastic Geometry Approach. *Nguyen, D.M.*, +, *OJVT 2021 17-44*

**U****Ultra wideband antennas**

Exchanging Bandwidth With Aperture Size in Wireless Indoor Localization - Or Why 5G/6G Systems With Antenna Arrays Can Outperform UWB Solutions. *Sippel, E.*, +, *OJVT 2021 207-217*

**Unmanned aerial vehicles**

Design and PoC Implementation of Mmwave-Based Offloading-Enabled UAV Surveillance System. *Yu, T.*, +, *OJVT 2021 436-447*

**V****Vehicle dynamics**

A Review of Driving Simulation Technology and Applications. *Bruck, L.*, +, *OJVT 2021 1-16*

**Vehicles**

A Comparative Evaluation of Probabilistic and Deep Learning Approaches for Vehicular Trajectory Prediction. *Irio, L.*, +, *OJVT 2021 140-150*

**Vehicular ad hoc networks**

Downlink Performance of Optical Power Domain NOMA for Beyond 5G Enabled V2X Networks. *Singh, G.*, +, *OJVT 2021 235-248*

Joint Impact of Nodes Mobility and Imperfect Channel Estimates on the Secrecy Performance of Cognitive Radio Vehicular Networks Over Nakagami-*m* Fading Channels. *Pandey, A.*, +, *OJVT 2021 289-309*

Securing Seaport Logistic Vehicles Using a Distributed Ledger-Based Credential Management System. *Tesei, A.*, +, *OJVT 2021 162-179*

Towards Safe Automated Driving: Design of Software-Defined Dynamic MmWave V2X Networks and PoC Implementation. *Li, Z.*, +, *OJVT 2021 78-93*

**Virtual reality**

A Review of Driving Simulation Technology and Applications. *Bruck, L.*, +, *OJVT 2021 1-16*

**Voltage**

Novel Electric Vehicle Traction Architecture With 48 V Battery and Multi-Input, High Conversion Ratio Converter for High and Variable DC-Link Voltage. *Gupta, A.*, +, *OJVT 2021 448-470*

**W****Wireless channels**

A Cognitive Radio Enabled RF/FSO Communication Model for Aerial Relay Networks: Possible Configurations and Opportunities. *Erdogan, E.*, +, *OJVT 2021 45-53*

Coverage Analysis of Reconfigurable Intelligent Surface Assisted THz Wireless Systems. *Boulogeorgos, A.A.*, +, *OJVT 2021 94-110*

Deep Learning-Based Channel Estimation for Massive MIMO Systems With Pilot Contamination. *Hirose, H.*, +, *OJVT 2021 67-77*

Distributed Slice Selection-Based Computation Offloading for Intelligent Vehicular Networks. *Tang, J.*, +, *OJVT 2021 261-271*

Index Modulation Multiple-Access (IMMA): Efficient Techniques for Downlink Millimeter Waves Outdoor Channel. *El-Khamy, S.*, +, *OJVT 2021 403-411*

Multi-Antenna Data-Driven Eavesdropping Attacks and Symbol-Level Precoding Countermeasures. *Mayouche, A.*, +, *OJVT 2021 321-336*

**Wireless sensor networks**

A New Perspective on Range and Directional Localization Problem. *Tomic, S.*, +, *OJVT 2021 337-344*

Deep Reinforcement Learning Based Energy Efficient Multi-UAV Data Collection for IoT Networks. *Khodaparast, S.S.*, +, *OJVT 2021 249-260*

**Wires (electric)**

An Efficient PCB Based Magnetic Coupler Design for Electric Vehicle Wireless Charging. *Ramezani, A.*, +, *OJVT 2021 389-402*