

2020 Index

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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.

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High-Resolution All-Digital Transmit Beamformer for High-Frequency and Wearable Ultrasound Imaging Systems. *Sheng, D., +, TVLSI Feb. 2020 492-502*

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A Twofold Lookup Table Architecture for Efficient Approximation of Activation Functions. *Xie, Y., +, TVLSI Dec. 2020 2540-2550*

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Conflux—An Asynchronous Two-to-One Multiplexor for Time-Division Multiplexing and Clockless, Tokenless Readout. *Hoff, J.R., TVLSI Feb. 2020 503-515*

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A Predictive Model for Fluid-Control Codesign of Paper-Based Digital Biochips Following a Machine Learning Approach. *Datta, P., +, TVLSI Dec. 2020 2584-2597*

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Analysis of the Impact of Process Variations and Manufacturing Defects on the Performance of Carbon-Nanotube FETs. *Banerjee, S., +, TVLSI June 2020 1513-1526*

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A 3.15-mW +16.0-dBm IIP3 22-dB CG Inductively Source Degenerated Balun-LNA Mixer With Integrated Transformer-Based Gate Inductor and IM2 Injection Technique. *Vitee, N., +, TVLSI March 2020 700-713*

Band-pass filters

Vital-Sign Processing Receiver With Clutter Elimination Using Servo Feedback Loop for UWB Pulse Radar System. *Chang, C., +, TVLSI Jan. 2020 292-296*

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A 2–24-GHz 360° Full-Span Differential Vector Modulator Phase Rotator With Transformer-Based Poly-Phase Quadrature Network. *Li, T., +, TVLSI Dec. 2020 2623-2635*

Bayes methods

Asymptotically Linear Analysis and Gate Probability Allocation Schemes in Probabilistic Circuits. *Tan, L., +, TVLSI Feb. 2020 596-606*

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A 300-mV Auto Shutdown Comparator-Based Continuous Time $\Delta\Sigma$ Modulator. *Somappa, L., +, TVLSI Aug. 2020 1920-1924*

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Programmable Daisy chaining of Microelectrodes to Secure Bioassay IP in MEDA Biochips. *Liang, T., +, TVLSI May 2020 1269-1282*

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The Mesochronous Dual-Clock FIFO Buffer. *Konstantinou, D., +, TVLSI Jan. 2020 302-306*

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A Discrete-Time MOS Parametric Amplifier-Based Chopped Signal Demodulator. *Joshi, A., +, TVLSI Nov. 2020 2268-2279*

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Power Distribution Attacks in Multitenant FPGAs. *Provenglos, G., +, TVLSI Dec. 2020 2685-2698*

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