

Hun-Seok Kim

List of Publications by Year in descending order

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49
papers

1,224
citations

516561

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docs citations

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times ranked

1191
citing authors

#	ARTICLE	IF	CITATIONS
1	A Light-Tolerant Wireless Neural Recording IC for Motor Prediction With Near-Infrared-Based Power and Data Telemetry. IEEE Journal of Solid-State Circuits, 2022, 57, 1061-1074.	3.5	19
2	Versa: A 36-Core Systolic Multiprocessor With Dynamically Reconfigurable Interconnect and Memory. IEEE Journal of Solid-State Circuits, 2022, 57, 986-998.	3.5	4
3	OFDM-Guided Deep Joint Source Channel Coding for Wireless Multipath Fading Channels. IEEE Transactions on Cognitive Communications and Networking, 2022, 8, 584-599.	4.9	29
4	A Power-Efficient Brain-Machine Interface System With a Sub-mw Feature Extraction and Decoding ASIC Demonstrated in Nonhuman Primates. IEEE Transactions on Biomedical Circuits and Systems, 2022, 16, 395-408.	2.7	6
5	A low-power communication scheme for wireless, 1000 channel brain-machine interfaces. Journal of Neural Engineering, 2022, 19, 036037.	1.8	6
6	RRAM-DNN: An RRAM and Model-Compression Empowered All-Weights-On-Chip DNN Accelerator. IEEE Journal of Solid-State Circuits, 2021, 56, 1105-1115.	3.5	18
7	Bridging the "Last Millimeter" Gap of Brain-Machine Interfaces via Near-Infrared Wireless Power Transfer and Data Communications. ACS Photonics, 2021, 8, 1430-1438.	3.2	23
8	An Ultra-Low-Power Image Signal Processor for Hierarchical Image Recognition With Deep Neural Networks. IEEE Journal of Solid-State Circuits, 2021, 56, 1071-1081.	3.5	7
9	Physical Layer Secret Key Generation Using Joint Interference and Phase Shift Keying Modulation. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 2673-2685.	2.9	8
10	A Light Tolerant Neural Recording IC for Near-Infrared-Powered Free Floating Motes. , 2021, 2021, .		7
11	Versa: A Dataflow-Centric Multiprocessor with 36 Systolic ARM Cortex-M4F Cores and a Reconfigurable Crossbar-Memory Hierarchy in 28nm. , 2021, , .		2
12	HTNN: Deep Learning in Heterogeneous Transform Domains with Sparse-Orthogonal Weights. , 2021, , .		1
13	An Artificial Neural Network System for Photon-Based Active Interrogation Applications. IEEE Access, 2021, 9, 119871-119880.	2.6	8
14	A 40-nm Ultra-Low Leakage Voltage-Stacked SRAM for Intelligent IoT Sensors. IEEE Solid-State Circuits Letters, 2021, 4, 14-17.	1.3	9
15	Millimeter-Scale Node-to-Node Radio Using a Carrier Frequency-Interlocking IF Receiver for a Fully Integrated $4 \times 4 \text{ mm}^3$ Wireless Sensor Node. IEEE Journal of Solid-State Circuits, 2020, 55, 1128-1138.	3.5	11
16	Interactive-Multiple-Model Algorithm Based on Minimax Particle Filtering. IEEE Signal Processing Letters, 2020, 27, 36-40.	2.1	22
17	Minimax particle filtering for tracking a highly maneuvering target. International Journal of Robust and Nonlinear Control, 2020, 30, 636-651.	2.1	8
18	A low-power band of neuronal spiking activity dominated by local single units improves the performance of brain-machine interfaces. Nature Biomedical Engineering, 2020, 4, 973-983.	11.6	73

#	ARTICLE	IF	CITATIONS
19	AA-ResNet: Energy Efficient All-Analog ResNet Accelerator. , 2020, , .		2
20	A 7.3 M Output Non-Zeros/J, 11.7 M Output Non-Zeros/GB Reconfigurable Sparse Matrixâ€“Matrix Multiplication Accelerator. IEEE Journal of Solid-State Circuits, 2020, 55, 933-944.	3.5	12
21	26.9 A 0.19Å—0.17mm² Wireless Neural Recording IC for Motor Prediction with Near-Infrared-Based Power and Data Telemetry. , 2020, 2020, 416-418.		29
22	Transmuter. , 2020, , .		13
23	Low Complexity, Hardware-Efficient Neighbor-Guided SGM Optical Flow for Low-Power Mobile Vision Applications. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 2191-2204.	5.6	5
24	IoT² â€” the Internet of Tiny Things: Realizing mm-Scale Sensors through 3D Die Stacking. , 2019, , .		10
25	An Acoustic Signal Processing Chip With 142-nW Voice Activity Detection Using Mixer-Based Sequential Frequency Scanning and Neural Network Classification. IEEE Journal of Solid-State Circuits, 2019, 54, 3005-3016.	3.5	35
26	A Novel Physical Layer Security Technique Using Master-Slave Full Duplex Communication. , 2019, , .		6
27	A 220- μ W $\hat{\sim}$ 83-dBm 5.8-GHz Third-Harmonic Passive Mixer-First LP-WUR for IEEE 802.11ba. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 2537-2545.	2.9	18
28	Enhanced Interference Rejection Bluetooth Low-Energy Back-Channel Receiver With LO Frequency Hopping. IEEE Journal of Solid-State Circuits, 2019, 54, 2019-2027.	3.5	20
29	A 1920 \times 1080 25-Frames/s 2.4-TOPS/W Low-Power 6-D Vision Processor for Unified Optical Flow and Stereo Depth With Semi-Global Matching. IEEE Journal of Solid-State Circuits, 2019, 54, 1048-1058.	3.5	20
30	Analysis and Design of an Ultra-Low-Power Bluetooth Low-Energy Transmitter With Ring Oscillator-Based ADPLL and 4 \times Frequency Edge Combiner. IEEE Journal of Solid-State Circuits, 2019, 54, 1339-1350.	3.5	49
31	A MURS Band Digital Quadrature Transmitter With Class-B I/Q Cell Sharing for Long Range IoT Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 729-733.	2.2	6
32	OuterSPACE: An Outer Product Based Sparse Matrix Multiplication Accelerator. , 2018, , .		142
33	Analysis of Circuit Noise and Non-Ideal Filtering Impact on Energy Detection Based Ultra-Low-Power Radios Performance. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1924-1928.	2.2	9
34	Always-On 12-nW Acoustic Sensing and Object Recognition Microsystem for Unattended Ground Sensor Nodes. IEEE Journal of Solid-State Circuits, 2018, 53, 261-274.	3.5	45
35	Implementation and Evaluation of Bi-Directional WiFi Back-channel Communication. , 2018, , .		0
36	A 470 μ W $\hat{\sim}$ 92.5dBm OOK/FSK Receiver for IEEE 802.11 WiFi LP-WUR. , 2018, , .		6

#	ARTICLE	IF	CITATIONS
37	Circuit and System Designs of Ultra-Low Power Sensor Nodes With Illustration in a Miniaturized GNSS Logger for Position Tracking: Part I—Analog Circuit Techniques. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 2237-2249.	3.5	25
38	Circuit and System Designs of Ultra-Low Power Sensor Nodes With Illustration in a Miniaturized GNSS Logger for Position Tracking: Part II—Data Communication, Energy Harvesting, Power Management, and Digital Circuits. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 2250-2262.	3.5	18
39	A 335- μ W \sim 72dBm receiver for FSK back-channel embedded in 5.8GHz Wi-Fi OFDM packets. , 2017, , .		4
40	Low complexity optical flow using neighbor-guided semi-global matching. , 2016, , .		7
41	A Dual-Stage, Ultra-Low-Power Acoustic Event Detection System. , 2016, , .		11
42	Hardware-Efficient Neighbor-Guided SGM Optical Flow for Low Power Vision Applications. , 2016, , .		4
43	A 10 mm ³ Inductive Coupling Radio for Syringe-Implantable Smart Sensor Nodes. IEEE Journal of Solid-State Circuits, 2016, 51, 2570-2583.	3.5	25
44	Back-Channel Wireless Communication Embedded in WiFi-Compliant OFDM Packets. IEEE Journal on Selected Areas in Communications, 2016, 34, 3181-3194.	9.7	10
45	Energy-Autonomous Wireless Communication for Millimeter-Scale Internet-of-Things Sensor Nodes. IEEE Journal on Selected Areas in Communications, 2016, 34, 3962-3977.	9.7	38
46	A 380pW dual mode optical wake-up receiver with ambient noise cancellation. , 2016, 2016, .		4
47	Forwarding metamorphosis. Computer Communication Review, 2013, 43, 99-110.	1.5	318
48	Power Optimized PA Clipping for MIMO-OFDM Systems. IEEE Transactions on Wireless Communications, 2011, 10, 2823-2828.	6.1	11
49	Energy-Constrained Link Adaptation for MIMO OFDM Wireless Communication Systems. IEEE Transactions on Wireless Communications, 2010, 9, 2820-2832.	6.1	61