Hyung-Won Kim

List of Publications by Year
in descending order

89	831	566801 15	642321 23
papers	citations	h-index	g-index

89	89	89	631
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Centralized Threshold Key Generation Protocol Based on Shamir Secret Sharing and HMAC Authentication. Sensors, 2022, 22, 331.	2.1	8
2	Optimal Architecture of Floating-Point Arithmetic for Neural Network Training Processors. Sensors, 2022, 22, 1230.	2.1	5
3	Security Requirements and Challenges of 6G Technologies and Applications. Sensors, 2022, 22, 1969.	2.1	60
4	Vision and research directions of 6G technologies and applications. Journal of King Saud University - Computer and Information Sciences, 2022, 34, 2419-2442.	2.7	22
5	Multi-Zone Authentication and Privacy-Preserving Protocol (MAPP) Based on the Bilinear Pairing Cryptography for 5G-V2X. Sensors, 2021, 21, 665.	2.1	13
6	Highly Reliable MAC Protocol Based on Associative Acknowledgement for Vehicular Network. Electronics (Switzerland), 2021, 10, 382.	1.8	2
7	Design of Power-Efficient Training Accelerator for Convolution Neural Networks. Electronics (Switzerland), 2021, 10, 787.	1.8	9
8	Multi-Agent Deep Reinforcement Learning Based Distributed Resource Allocation. , 2021, , .		1
9	Current Multiplier Based Synapse and Neuron Circuits for Compact SNN Chip. , 2021, , .		4
10	A Low-Power Spiking Neural Network Chip Based on a Compact LIF Neuron and Binary Exponential Charge Injector Synapse Circuits. Sensors, 2021, 21, 4462.	2.1	12
11	Coexistence of volatile and non-volatile resistive switching in Ni/SiO₂/Pt memristor device controlled from different current compliances. Semiconductor Science and Technology, 2021, 36, 095031.	1.0	8
12	A Key Management Protocol Based on the Hash Chain Key Generation for Securing LoRaWAN Networks. Sensors, 2021, 21, 5838.	2.1	10
13	CNN Accelerator with Minimal On-Chip Memory Based on Hierarchical Array. , 2021, , .		5
14	A Digitally Controlled Analog kernel for Convolutional Neural Networks. , 2021, , .		1
15	Improving Performance of CNN Based Vehicle Detection and Tracking by Median Algorithm. , 2021, , .		1
16	A Switched Capacitor Voltage Converter With Exponentially Sized Capacitor Banks for Wide Load Range. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 2049-2053.	2.2	0
17	An Ultra-Wide Load Range Voltage Converter Using Proactive Phase Frequency Modulation for IoT Sensors. Sensors, 2020, 20, 6279.	2.1	1
18	Patient Monitoring by Abnormal Human Activity Recognition Based on CNN Architecture. Electronics (Switzerland), 2020, 9, 1993.	1.8	36

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19	Current and future developments to improve 5G-NewRadio performance in vehicle-to-everything communications. Telecommunication Systems, 2020, 75, 331-353.	1.6	25
20	Comparative Experiments of V2X Security Protocol Based on Hash Chain Cryptography. Sensors, 2020, 20, 5719.	2.1	15
21	Matrix-Based Dynamic Authentication With Conditional Privacy-Preservation for Vehicular Network Security. IEEE Access, 2020, 8, 200883-200896.	2.6	4
22	Optimization of Spiking Neural Networks Based on Binary Streamed Rate Coding. Electronics (Switzerland), 2020, 9, 1599.	1.8	3
23	Multi-Hop Dynamic Map Data Propagation Algorithm for Clustered Vehicular Networks. Electronics (Switzerland), 2020, 9, 1728.	1.8	1
24	A Scalable and Secure Group Key Management Method for Secure V2V Communication. Sensors, 2020, 20, 6137.	2.1	9
25	BH-MAC: An efficient Hybrid MAC Protocol for Vehicular Communication. , 2020, , .		9
26	5G-V2X: standardization, architecture, use cases, network-slicing, and edge-computing. Wireless Networks, 2020, 26, 6015-6041.	2.0	63
27	A Multi-Hop Data Dissemination Algorithm for Vehicular Communication. Computers, 2020, 9, 25.	2.1	12
28	Low Power Spiking Neural Network Circuit with Compact Synapse and Neuron Cells. , 2020, , .		1
29	Optimizing 5G in V2X Communications. Advances in Systems Analysis, Software Engineering, and High Performance Computing Book Series, 2020, , 269-308.	0.5	2
30	Network-Wide Throughput Optimization for Highway Vehicle-To-Vehicle Communications. Electronics (Switzerland), 2019, 8, 830.	1.8	4
31	A Decentralized Lightweight Authentication and Privacy Protocol for Vehicular Networks. IEEE Access, 2019, 7, 119689-119705.	2.6	33
32	Packet Rate Adaptation Protocol Based on Bloom Filter for Hidden Node Avoidance in Vehicular Ad-Hoc Networks. IEEE Access, 2019, 7, 137446-137460.	2.6	10
33	Design Optimization for Low-Power Reconfigurable Switched-Capacitor DC-DC Voltage Converter. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 4079-4092.	3.5	16
34	Low-Power Scheduling for Time Synchronization Protocols in A Wireless Sensor Networks. , 2019, 3, 1-4.		16
35	Reference-Free Dynamic Voltage Scaler Based on Swapping Switched-Capacitors. Energies, 2019, 12, 625.	1.6	1
36	A cooperative V2X MAC protocol for vehicular networks. Eurasip Journal on Wireless Communications and Networking, 2019, 2019, .	1.5	10

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37	RPL Routing Protocol Performance in Smart Grid Applications Based Wireless Sensors: Experimental and Simulated Analysis. Electronics (Switzerland), 2019, 8, 186.	1.8	36
38	Zero-Shot Deep Learning for Media Mining: Person Spotting and Face Clustering in Video Big Data. Electronics (Switzerland), 2019, 8, 1394.	1.8	8
39	Hybrid Concurrent Driving Technique for Large Touch Screen Panels. , 2019, , .		1
40	A Comparative Experimental Analysis of Channel Access Protocols in Vehicular Networks. IEEE Access, 2019, 7, 149433-149443.	2.6	9
41	Power Efficient Current Driver Based on Negative Boosting for High-Speed Lasers. Electronics (Switzerland), 2019, 8, 1309.	1.8	3
42	Energy Efficient Scheduling in Wireless Sensor Networks for Periodic Data Gathering. IEEE Access, 2019, 7, 11410-11426.	2.6	36
43	Image deconvolution using homomorphic technique. Signal, Image and Video Processing, 2019, 13, 703-709.	1.7	7
44	Enhancement of touch screen sensing based on voltage shifting differential offset compensation. Analog Integrated Circuits and Signal Processing, 2018, 94, 205-215.	0.9	1
45	Density Table-Based Synchronization for Multi-Hop Wireless Sensor Networks. IEEE Access, 2018, 6, 1940-1953.	2.6	17
46	A number recognition system with memory optimized convolutional neural network for smart metering devices. , 2018, , .		7
47	Power-Gating Sub-Threshold Source-Coupled Logic (PG-STSCL) circuits for ultra-low-power applications. Microelectronics Journal, 2018, 74, 127-140.	1.1	2
48	FADS: Fast Scheduling and Accurate Drift Compensation for Time Synchronization of Wireless Sensor Networks. IEEE Access, 2018, 6, 65507-65520.	2.6	12
49	Design of Configurable CMOS Capacitive Fingerprint. , 2018, , .		1
50	Design and Investigation of Configurable Source Coupled Logic. , 2018, , .		0
51	An Energy-Efficient Fail Recovery Routing in TDMA MAC Protocol-Based Wireless Sensor Network. Electronics (Switzerland), 2018, 7, 444.	1.8	4
52	Blind image separation using pyramid technique. Eurasip Journal on Image and Video Processing, 2018, 2018, .	1.7	6
53	A Reconfigurable Voltage Converter With Split-Capacitor Charging and Energy Recycling for Ultra-Low-Power Applications. IEEE Access, 2018, 6, 68311-68323.	2.6	7
54	CMOS Capacitive Fingerprint Sensor Based on Differential Sensing Circuit with Noise Cancellation. Sensors, 2018, 18, 2200.	2.1	16

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55	An Energy Efficient Charging Technique for Switched Capacitor Voltage Converters With Low-Duty Ratio. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 779-783.	2.2	15
56	84% High efficiency dynamic voltage scaler with nano-second settling time based on charge-pump and BWC-DAC. Microelectronics Journal, 2018, 79, 91-97.	1.1	1
57	Low energy scheduling of minimal active time slots for multi-channel multi-hop convergence wireless sensor networks. , 2017, , .		3
58	Ultra-low power OTA based on bias recycling and subthreshold operation with phase margin enhancement. Microelectronics Journal, 2017, 60, 94-101.	1.1	40
59	IKE hardware engine based on CAM for concurrent processing of massive user sessions. , 2017, , .		1
60	Cost-efficient architecture of IPsec classification engine with TCAM. , 2017, , .		1
61	A novel power reduction technique using wire multiplexing. , 2017, , .		2
62	Nano-second scale dynamic voltage scaler based on charge-pump and BW-DAC. , 2017, , .		0
63	Performance evaluation of buffer sharing routers for Network on Chip. , 2016, , .		1
64	Noise cancellation techniques based on frequency selection OFDM and instrumentation sensing circuit for large touch screens. , 2016, , .		1
65	OFDM and TDM based sensing method for large projected mutual-capacitance touch screens. , 2016, , .		3
66	Differentiator based sensing circuit for efficient noise suppression of projected mutual-capacitance touch screens. , 2016, , .		5
67	New FFT design with enhanced scan rate for frequency division concurrent sensing of mutual-capacitance touch screens. , 2016, , .		4
68	Density-driven scheduling of low power synchronization for wireless sensor networks. , 2016, , .		4
69	Energy optimal scheduling of multi-channel wireless sensor networks for wireless metering. , 2016, , .		5
70	Frequency Selection Concurrent Sensing Technique for High-Performance Touch Screens. Journal of Display Technology, 2016, 12, 1433-1443.	1.3	7
71	Symmetric Signal Reconstruction and Frequency-Division Differential Driving for High Rate Touch Screen Sensing. Journal of Display Technology, 2016, 12, 1423-1432.	1.3	2
72	Ultra low power wide-band mixer circuit based on subthreshold operation for MB-OFDM UWB. Microelectronics Journal, 2016, 50, 29-34.	1.1	8

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73	Modeling of Memristive and Memcapacitive Behaviors in Metal-Oxide Junctions. Scientific World Journal, The, 2015, 2015, 1-16.	0.8	20
74	Concurrent Driving Method with Fast Scan Rate for Large Mutual Capacitance Touch Screens. Journal of Sensors, 2015, 2015, 1-10.	0.6	12
75	Channel assignment with transmission power optimization method for high throughput in multi-access point WLAN. , 2015, , .		6
76	Design of a Frequency Division Concurrent sine wave generator for an efficient touch screen controller SoC. , 2015, , .		6
77	DPSB: Dual port shared buffer mechanism for efficient buffer utilization in Network on Chip routers. , 2015, , .		2
78	Hierarchical MAC protocol with multi-channel allocation for enhancing IEEE 802.11ah relay networks. , 2015, , .		5
79	Dual Sensing with Voltage Shifting Scheme for High Sensitivity Touch Screen Detection. Journal of the Institute of Electronics and Information Engineers, 2015, 52, 71-79.	0.0	5
80	Touch Screen Sensing Circuit with Rotating Auto-Zeroing Offset Cancellation. Journal of Information and Communication Convergence Engineering, 2015, 13, 189-196.	0.2	3
81	Frequency Division Concurrent Sensing Method for High-Speed Detection of Large Touch Screens. The Journal of the Korean Institute of Information and Communication Engineering, 2015, 19, 895-902.	0.1	6
82	Voltage shifting double integration circuit for high sensing resolution of large capacitive touch screen panels. , 2014, , .		5
83	Efficient algorithm for accurate touch detection of large touch screen panels. , 2014, , .		11
84	Utilization-Aware Channel Allocation and Routing for Mesh Networks for Battery-Powered Surveillance Cameras. , 2014, , .		2
85	New modeling technique for memristor devices to cover deviation from memristive theory. , 2014, , .		2
86	Low power routing and channel allocation method of wireless video sensor networks for Internet of Things (IoT). , 2014, , .		17
87	Distributed architecture of touch screen controller SoC for large touch screen panels. , 2014, , .		3
88	The design of 13 bits Î£Î” ADC for a mutual-capacitance large touch screen controller. , 2014, , .		1
89	Efficient Multi-Touch Detection Algorithm for Large Touch Screen Panels. IEIE Transactions on Smart Processing and Computing, 2014, 3, 246-250.	0.3	17