Jin He

List of Publications by Year
in descending order

67 papers	1,139 citations	430754 18 h-index	434063 31 g-index
67 all docs	67 docs citations	67 times ranked	1053 citing authors

#	Article	IF	Citations
1	Enhanced photo-response performance of Cu_2O-based graded heterojunction optoelectronic devices with a Ga_2O_3 buffer layer. Journal of Materials Chemistry C, 2022, 10, 5505-5513.	2.7	6
2	A Multi-Classification Hybrid Quantum Neural Network Using an All-Qubit Multi-Observable Measurement Strategy. Entropy, 2022, 24, 394.	1.1	16
3	EvoMBN: Evolving Multi-Branch Networks on Myocardial Infarction Diagnosis Using 12-Lead Electrocardiograms. Biosensors, 2022, 12, 15.	2.3	11
4	Graph representation-based machine learning framework for predicting electronic band structures of quantum-confined nanostructures. Science China Materials, 2022, 65, 3157-3170.	3.5	5
5	A Multilayer Neural Network Merging Image Preprocessing and Pattern Recognition by Integrating Diffusion and Drift Memristors. IEEE Transactions on Cognitive and Developmental Systems, 2021, 13, 645-656.	2.6	26
6	A K‐band high‐gain power amplifier with slow‐wave transmission‐line transformer in 130‐nm RF CMOS. International Journal of Circuit Theory and Applications, 2021, 49, 1347-1357.	1.3	3
7	Machine learning method for tight-binding Hamiltonian parameterization from ab-initio band structure. Npj Computational Materials, 2021, 7, .	3.5	30
8	Steep-Slope Transistors Based on Chiral Graphene Nanoribbons With Intrinsic Cold Source. IEEE Transactions on Electron Devices, 2021, 68, 4123-4128.	1.6	8
9	A K-Band Active Up/Down Bidirectional Mixer in 130-nm CMOS. , 2021, , .		4
10	MFB-CBRNN: A Hybrid Network for MI Detection Using 12-Lead ECGs. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 503-514.	3.9	78
11	A Real Time QRS Detection Algorithm Based on ET and PD Controlled Threshold Strategy. Sensors, 2020, 20, 4003.	2.1	21
12	Fully memristive spiking-neuron learning framework and its applications on pattern recognition and edge detection. Neurocomputing, 2020, 403, 80-87.	3.5	24
13	Asia-Pacific Lightning Location Network (APLLN) and Preliminary Performance Assessment. Remote Sensing, 2020, 12, 1537.	1.8	11
14	Multi-information fusion neural networks for arrhythmia automatic detection. Computer Methods and Programs in Biomedicine, 2020, 193, 105479.	2.6	45
15	The reconstruction of the symmetry between sublattices: a strategy to improve the transport properties of edge-defective graphene nanoribbon transistors. Physical Chemistry Chemical Physics, 2020, 22, 18265-18271.	1.3	3
16	Classification of VLF/LF Lightning Signals Using Sensors and Deep Learning Methods. Sensors, 2020, 20, 1030.	2.1	27
17	A D-band CMOS power amplifier for short-range data center communication. IEICE Electronics Express, 2020, 17, 20200159-20200159.	0.3	5
18	Acceleration of LSTM With Structured Pruning Method on FPGA. IEEE Access, 2019, 7, 62930-62937.	2.6	27

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19	A 2.5-Gb/s CMOS optical receiver with wide dynamic range using dual AGCs. Analog Integrated Circuits and Signal Processing, 2019, 101, 229-235.	0.9	0
20	Wave-Function Symmetry Mechanism of Quantum-Well States in Graphene Nanoribbon Heterojunctions. Physical Review Applied, 2019, 12, .	1.5	4
21	A ${K}$ -Band High-Gain and Low-Noise Folded CMOS Mixer Using Current-Reuse and Cross-Coupled Techniques. IEEE Access, 2019, 7, 133218-133226.	2.6	18
22	A 22.5-30.5GHz CMOS Power Amplifier Using Pole-tuning Technique for 5G Applications. , 2019, , .		1
23	A novel ECG signal compression method using spindle convolutional auto-encoder. Computer Methods and Programs in Biomedicine, 2019, 175, 139-150.	2.6	44
24	Influence of Compact Memristors' Stability on Machine Learning. IEEE Access, 2019, 7, 47472-47478.	2.6	15
25	Monitor-Based Spiking Recurrent Network for the Representation of Complex Dynamic Patterns. International Journal of Neural Systems, 2019, 29, 1950006.	3.2	21
26	The MBPEP: a deep ensemble pruning algorithm providing high quality uncertainty prediction. Applied Intelligence, 2019, 49, 2942-2955.	3.3	18
27	Interface Coupling as a Crucial Factor for Spatial Localization of Electronic States in a Heterojunction of Graphene Nanoribbons. Physical Review Applied, 2019, 11, .	1.5	8
28	A K-Band High-Gain LNA in 0.13-µm RF CMOS. , 2019, , .		3
29	Strain engineering of chevron graphene nanoribbons. Journal of Applied Physics, 2019, 125, .	1.1	7
30	Efficient Multispike Learning for Spiking Neural Networks Using Probability-Modulated Timing Method. IEEE Transactions on Neural Networks and Learning Systems, 2019, 30, 1984-1997.	7.2	13
31	A hardware friendly unsupervised memristive neural network with weight sharing mechanism. Neurocomputing, 2019, 332, 193-202.	3.5	29
32	Activating impurity effect in edge nitrogen-doped chevron graphene nanoribbons. Journal of Physics Communications, 2018, 2, 045028.	0.5	8
33	A 28 GHz LNA using defected ground structure for 5G application. Microwave and Optical Technology Letters, 2018, 60, 1067-1072.	0.9	18
34	Micro-Strip Line 90˜ Phase Shifter with Double Ground Slots for D-Band Applications. Journal of Circuits, Systems and Computers, 2018, 27, 1850192.	1.0	3
35	Real-Time Multilead Convolutional Neural Network for Myocardial Infarction Detection. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 1434-1444.	3.9	124
36	Dielectric Engineering With the Environment Material in 2-D Semiconductor Devices. IEEE Journal of the Electron Devices Society, 2018, 6, 325-331.	1.2	5

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37	Lossless medical image compression using geometry-adaptive partitioning and least square-based prediction. Medical and Biological Engineering and Computing, 2018, 56, 957-966.	1.6	16
38	Local Modification of Defective Edge Hamiltonian for Graphene Nanoribbon Devices. , 2018, , .		0
39	Back-Propagation Neural Network based on Analog Memristive Synapse. , 2018, , .		0
40	A D-Band Amplifier in 65 nm Bulk CMOS for Short-Distance Data Center Communication. IEEE Access, 2018, 6, 53191-53200.	2.6	8
41	Multiple-feature-branch convolutional neural network for myocardial infarction diagnosis using electrocardiogram. Biomedical Signal Processing and Control, 2018, 45, 22-32.	3.5	116
42	A broadband CMOS amplifier in D band using pole-tuning technique with T-type network. , 2018, , .		1
43	Restraining Strategy of the Stoneâ€"Wales Defect Effect on Graphene Nanoribbon MOSFETs. IEEE Electron Device Letters, 2018, 39, 1092-1095.	2.2	11
44	Graphene Nanoribbon Tunnel Field-Effect Transistor via Segmented Edge Saturation. IEEE Transactions on Electron Devices, 2017, 64, 2694-2701.	1.6	20
45	Threeâ€dimensional separate descendantâ€based SPIHT algorithm for fast compression of highâ€resolution medical image sequences. IET Image Processing, 2017, 11, 80-87.	1.4	19
46	Highly Sensitive Bilayer Phosphorene Nanoribbon Pressure Sensor Based on the Energy Gap Modulation Mechanism: A Theoretical Study. IEEE Electron Device Letters, 2017, 38, 1313-1316.	2.2	15
47	A Versatile and Accurate Compact Model of Memristor With Equivalent Resistor Topology. IEEE Electron Device Letters, 2017, 38, 1367-1370.	2.2	14
48	Multiâ€valued logic design methodology with double negative differential resistance transistors. Micro and Nano Letters, 2017, 12, 738-743.	0.6	5
49	A sub-terahertz multi-pixel imaging system with surface wave resonator for isolation. , 2017, , .		0
50	A D-band SPST switch using parallel-stripline swap with defected ground structure. IEICE Electronics Express, 2017, 14, 20171104-20171104.	0.3	6
51	Scaling Effect of Phosphorene Nanoribbon - Uncovering the Origin of Asymmetric Current Transport. Scientific Reports, 2016, 6, 38009.	1.6	11
52	Novel Strategy of Edge Saturation Hamiltonian for Graphene Nanoribbon Devices. IEEE Transactions on Electron Devices, 2016, 63, 4514-4520.	1.6	10
53	A Numerical Study on Graphene Nanoribbon Heterojunction Dual-Material Gate Tunnel FET. IEEE Electron Device Letters, 2016, 37, 1354-1357.	2.2	32
54	Novel Near-Lossless Compression Algorithm for Medical Sequence Images with Adaptive Block-Based Spatial Prediction. Journal of Digital Imaging, 2016, 29, 706-715.	1.6	17

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55	The Dual Effects of Gate Dielectric Constant in Tunnel FETs. IEEE Journal of the Electron Devices Society, 2016, 4, 445-450.	1.2	11
56	Accurate modeling of three-port center-tapped octagonal inductors for SPDT switch design in 0.13-Î¼m BiCMOS. , 2016, , .		1
57	Prior knowledge input neural network method for GFET description. Journal of Computational Electronics, 2016, 15, 911-918.	1.3	5
58	Energy gap tunable graphene antidot nanoribbon MOSFET: A uniform multiscale analysis from band structure to transport properties. Carbon, 2016, 101, 143-151.	5.4	27
59	A Fully-Integrated D-Band Frequency Synthesizer in 0.13-Î¼m SiGe BiCMOS. Journal of Circuits, Systems and Computers, 2016, 25, 1640010.	1.0	0
60	150-GHz SPDT switch with rat-race coupler topology in 0.13-Î¼m SiGe BiCMOS. , 2015, , .		0
61	Cross-Sectional Shape Effects of Gate-All-Around Nanowire Field-Effect Transistors. Journal of Computational and Theoretical Nanoscience, 2015, 12, 5171-5178.	0.4	0
62	Effects of Fin shape on sub-10Ânm FinFETs. Journal of Computational Electronics, 2015, 14, 515-523.	1.3	13
63	Band Structure Effects in Extremely Scaled Silicon Nanowire MOSFETs With Different Cross Section Shapes. IEEE Transactions on Electron Devices, 2015, 62, 3547-3553.	1.6	22
64	Negative differential resistance in graphene nanoribbon superlattice fieldâ€effect transistors. Micro and Nano Letters, 2015, 10, 400-403.	0.6	9
65	A Novel Barrier Controlled Tunnel FET. IEEE Electron Device Letters, 2014, 35, 798-800.	2.2	56
66	SVM-Based Synthetic Fingerprint Discrimination Algorithm and Quantitative Optimization Strategy. PLoS ONE, 2014, 9, e111099.	1.1	5
67	A <scp>24â€GHz</scp> active up/down bidirectional mixer in 130â€nm <scp>RF CMOS</scp>. International Journal of RF and Microwave Computer-Aided Engineering, 0, , .	0.8	0