

Yimao Cai

List of Publications by Year in descending order

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24
papers

1,327
citations

567281

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docs citations

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times ranked

1865
citing authors

#	ARTICLE	IF	CITATIONS
1	Ion Gated Synaptic Transistors Based on 2D van der Waals Crystals with Tunable Diffusive Dynamics. <i>Advanced Materials</i> , 2018, 30, e1800195.	21.0	368
2	Engineering incremental resistive switching in TaO _x -based memristors for brain-inspired computing. <i>Nanoscale</i> , 2016, 8, 14015-14022.	5.6	271
3	Memory materials and devices: From concept to application. <i>Informa-Materially</i> , 2020, 2, 261-290.	17.3	181
4	Novel Vertical 3D Structure of TaO _x -based RRAM with Self-localized Switching Region by Sidewall Electrode Oxidation. <i>Scientific Reports</i> , 2016, 6, 21020.	3.3	72
5	A flexible organic resistance memory device for wearable biomedical applications. <i>Nanotechnology</i> , 2016, 27, 275206.	2.6	67
6	Improvement of HfO _x -Based RRAM Device Variation by Inserting ALD TiN Buffer Layer. <i>IEEE Electron Device Letters</i> , 2018, 39, 819-822.	3.9	57
7	Multifunctional Nanoionic Devices Enabling Simultaneous Heterosynaptic Plasticity and Efficient In-Memory Boolean Logic. <i>Advanced Electronic Materials</i> , 2017, 3, 1700032.	5.1	56
8	A New Dynamic Selector Based on the Bipolar RRAM for the Crossbar Array Application. <i>IEEE Transactions on Electron Devices</i> , 2012, 59, 2277-2280.	3.0	39
9	Modulation of nonlinear resistive switching behavior of a TaO _x -based resistive device through interface engineering. <i>Nanotechnology</i> , 2017, 28, 055204.	2.6	35
10	Record Low-Power Organic RRAM With Sub-20-nA Reset Current. <i>IEEE Electron Device Letters</i> , 2013, 34, 223-225.	3.9	34
11	In-memory computing with emerging nonvolatile memory devices. <i>Science China Information Sciences</i> , 2021, 64, 1.	4.3	31
12	Self-Activation Neural Network Based on Self-Selective Memory Device With Rectified Multilevel States. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 4166-4171.	3.0	23
13	Bipolar to unipolar mode transition and imitation of metaplasticity in oxide based memristors with enhanced ionic conductivity. <i>Journal of Applied Physics</i> , 2018, 124, .	2.5	19
14	Self-selection effects and modulation of TaO _x resistive switching random access memory with bottom electrode of highly doped Si. <i>Journal of Applied Physics</i> , 2016, 119, 195302.	2.5	17
15	A Memristor-Based In-Memory Computing Network for Hamming Code Error Correction. <i>IEEE Electron Device Letters</i> , 2019, 40, 1080-1083.	3.9	17
16	Tolerance of intrinsic device variation in fuzzy restricted Boltzmann machine network based on memristive nano-synapses. <i>Nano Futures</i> , 2017, 1, 015003.	2.2	11
17	A TaO _x -Based RRAM with Improved Uniformity and Excellent Analog Characteristics by Local Dopant Engineering. <i>Electronics (Switzerland)</i> , 2021, 10, 2451.	3.1	9
18	Microscopic origin of read current noise in TaO _x -based resistive switching memory by ultra-low temperature measurement. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	8

#	ARTICLE	IF	CITATIONS
19	Thermal effect in ultra-high density 3D vertical and horizontal RRAM array. Physica Scripta, 2019, 94, 045001.	2.5	8
20	Adaptive Random Number Generator Based on RRAM Intrinsic Fluctuation for Reinforcement Learning. , 2020, , .		2
21	Enhancement of HfO2 Based RRAM Performance Through Hexagonal Boron Nitride Interface Layer. , 2018, , .		1
22	Non-Linear Resistive Switching Characteristics in HFO2-Based RRAM with Low-Dimensional Material Engineered Interface. , 2021, , .		1
23	Study on High-Resistance State Instability of TaOx-Based RRAM. , 2018, , .		0
24	Investigation of Non-Linear Selection Effect on RRAM based Neuromorphic Computing Array with Passive Selective Element. , 2021, , .		0