Rui Yang

List of Publications by Year in Descending Order

42 papers	1,396 citations	18 h-index	37 g-index
44 ext. papers	1,680 ext. citations	7.3 avg, IF	4.91 L-index

#	Paper	IF	Citations
42	Electrohydrodynamically Printed Flexible Organic Memristor for Leaky Integrate and Fire Neuron. *IEEE Electron Device Letters*, **2022**, 43, 116-119	4.4	4
41	Single-Crystalline SrTiO3 as Memristive Model System: From Materials Science to Neurological and Psychological Functions. *Kluwer International Series in Electronic Materials: Science and Technology*, **2022**, 333-354		
40	Two-Terminal Neuromorphic Memristors **2022**, 1-46		
39	Bidirectional selector realized through multilayer tunnel barrier engineering. *IEEE Journal of the Electron Devices Society*, **2022**, 1-1	2.3	
38	Environment-friendly regenerated cellulose based flexible memristive device. *Applied Physics Letters*, **2021**, 119, 201904	3.4	1
37	Ordering of oxygen vacancies in LaBaCo2O6-□epitaxial films. *Scripta Materialia*, **2020**, 181, 1-5	5.6	2
36	Electroforming-Free Artificial Synapses Based on Proton Conduction in □MoO3 Films. *Advanced Electronic Materials*, **2020**, 6, 1901290	6.4	8
35	Artificial Synapses Realized by Atomic Switch Technology. *Advances in Atom and Single Molecule Machines*, **2020**, 175-199	0	1
34	Review of resistive switching mechanisms for memristive neuromorphic devices. *Chinese Physics B*, **2020**, 29, 097305	1.2	8
33	Multi-gate memristive synapses realized with the lateral heterostructure of 2D WSe and WO. *Nanoscale*, **2020**, 12, 380-387	7.7	29
32	Implementation of Dropout Neuronal Units Based on Stochastic Memristive Devices in Neural Networks with High Classification Accuracy. *Advanced Science*, **2020**, 7, 2001842	13.6	10
31	Flexible full two-dimensional memristive synapses of graphene/WSeO/graphene. *Physical Chemistry Chemical Physics*, **2020**, 22, 20658-20664	3.6	7
30	Electric field control of resistive switching and magnetization in epitaxial LaBaCoO thin films. *Physical Chemistry Chemical Physics*, **2019**, 21, 8843-8848	3.6	9
29	Memristive Synapses and Neurons for Bioinspired Computing. *Advanced Electronic Materials*, **2019**, 5, 1900287	6.4	66
28	Structure and magnetic properties of highly oriented LaBaCoO films deposited on Si wafers with Pt/Ti buffer layer. *Physical Chemistry Chemical Physics*, **2019**, 21, 22390-22395	3.6	1
27	Forming-free artificial synapses with Ag point contacts at interface. *Journal of Materiomics*, **2019**, 5, 296-302	3.7	11
26	Quasi-Hodgkin-Huxley Neurons with Leaky Integrate-and-Fire Functions Physically Realized with Memristive Devices. *Advanced Materials*, **2019**, 31, e1803849	24	56

25	Artificial Neurons: Quasi-HodgkinHuxley Neurons with Leaky Integrate-and-Fire Functions Physically Realized with Memristive Devices (Adv. Mater. 3/2019). *Advanced Materials*, **2019**, 31, 1970020	24	
24	Bienenstock, Cooper, and Munro Learning Rules Realized in Second-Order Memristors with Tunable Forgetting Rate. *Advanced Functional Materials*, **2019**, 29, 1807316	15.6	38
23	Photonic Potentiation and Electric Habituation in Ultrathin Memristive Synapses Based on Monolayer MoS. *Small*, **2018**, 14, e1800079	11	141
22	Memristive Synapses with Photoelectric Plasticity Realized in ZnO/AlO Heterojunction. *ACS Applied Materials & Interfaces*, **2018**, 10, 6463-6470	9.5	73
21	Optically modulated electric synapses realized with memristors based on ZnO nanorods. *Applied Physics Letters*, **2018**, 113, 061107	3.4	20
20	Synaptic Suppression Triplet-STDP Learning Rule Realized in Second-Order Memristors. *Advanced Functional Materials*, **2018**, 28, 1704455	15.6	132
19	Temperature Difference Triggering Controlled Growth of All-Inorganic Perovskite Nanowire Arrays in Air. *Small*, **2018**, 14, e1803010	11	21
18	Single crystalline SrTiO3 as memristive model system: From materials science to neurological and psychological functions. *Journal of Electroceramics*, **2017**, 39, 210-222	1.5	10
17	Pavlovian conditioning demonstrated with neuromorphic memristive devices. *Scientific Reports*, **2017**, 7, 713	4.9	38
16	Analog and digital Reset processes observed in Pt/CuO/Pt memristive devices. *Solid State Ionics*, **2017**, 303, 161-166	3.3	14
15	Behavioral Plasticity Emulated with Lithium Lanthanum Titanate-Based Memristive Devices: Habituation. *Advanced Electronic Materials*, **2017**, 3, 1700046	6.4	13
14	Coexistence of analog and digital resistive switching in BiFeO3-based memristive devices. *Solid State Ionics*, **2016**, 296, 114-119	3.3	41
13	Mimicking the brain functions of learning, forgetting and explicit/implicit memories with SrTiO-based memristive devices. *Physical Chemistry Chemical Physics*, **2016**, 18, 31796-31802	3.6	31
12	Synaptic Metaplasticity Realized in Oxide Memristive Devices. *Advanced Materials*, **2016**, 28, 377-84	24	164
11	Revival of "dead" memristive devices: case of WO3-x. *Physical Chemistry Chemical Physics*, **2016**, 18, 13923-6	3.6	5
10	Nanoionic devices enabling a multitude of new features. *Nanoscale*, **2016**, 8, 13873-9	7.7	17
9	Pt/WO3/FTO memristive devices with recoverable pseudo-electroforming for time-delay switches in neuromorphic computing. *Physical Chemistry Chemical Physics*, **2016**, 18, 9338-43	3.6	26
8	Nanoionic devices: Interface nanoarchitechtonics for physical property tuning and enhancement. *Japanese Journal of Applied Physics*, **2016**, 55, 1102A4	1.4	12

7	Polarity Reversal in the Bipolar Switching of Anodic TiO2Film. *Journal of the Electrochemical Society*, **2015**, 162, E271-E275	3.9	11
6	Synaptic plasticity and memory functions achieved in a WO3-x-based nanoionics device by using the principle of atomic switch operation. *Nanotechnology*, **2013**, 24, 384003	3.4	92
5	On-demand nanodevice with electrical and neuromorphic multifunction realized by local ion migration. *ACS Nano*, **2012**, 6, 9515-21	16.7	153
4	Oxygen migration process in the interfaces during bipolar resistance switching behavior of WO3□-based nanoionics devices. *Applied Physics Letters*, **2012**, 100, 231603	3.4	43
3	All-ZnO-based transparent resistance random access memory device fully fabricated at room temperature. *Journal Physics D: Applied Physics*, **2011**, 44, 255104	3	52
2	Improvement of resistance switching properties for metal/La0.7Ca0.3MnO3/Pt devices. *Physica Status Solidi (A) Applications and Materials Science*, **2011**, 208, 1041-1046	1.6	15
1	Structural characteristics and resistive switching properties of thermally prepared TiO2 thin films. *Journal of Alloys and Compounds*, **2009**, 486, 458-461	5.7	18