Li Qiang Zhu

List of Publications by Year
in descending order

58 papers	3,050 citations	218677 26 h-index	155660 55 g-index
61 all docs	61 docs citations	61 times ranked	2194 citing authors

#	Article	IF	Citations
1	Proton gated oxide neuromorphic transistors with bionic vision enhancement and information decoding. Journal of Materials Chemistry C, 2022, 10, 7241-7250.	5.5	11
2	Flexible Nanocellulose Gated Pseudo-Diode for Neuromorphic Electronic Applications. IEEE Electron Device Letters, 2022, 43, 737-740.	3.9	5
3	2022 roadmap on neuromorphic devices and applications research in China. Neuromorphic Computing and Engineering, 2022, 2, 042501.	5.9	4
4	Aqueous solution processed mesoporous silica-gated photo-perception neuromorphic transistor. Journal of Materials Science, 2021, 56, 4316-4327.	3.7	8
5	Mimicking Neurotransmitter Activity and Realizing Algebraic Arithmetic on Flexible Protein-Gated Oxide Neuromorphic Transistors. ACS Applied Materials & Interfaces, 2021, 13, 7784-7791.	8.0	12
6	Highly sensitive flexible tactile perceptual interactive platform with functions of Braille code recognition. Journal Physics D: Applied Physics, 2021, 54, 375102.	2.8	4
7	Poly (vinyl alcohol)/graphene oxide hybrid electrolyte gated oxide neuron transistors for multifunctional logic applications. Journal Physics D: Applied Physics, 2020, 53, 115106.	2.8	7
8	Albumen based protein gated bioinspired neuromorphic transistors with learning abilities. Organic Electronics, 2020, 87, 105961.	2.6	10
9	Artificial Tactile Perceptual Neuron with Nociceptive and Pressure Decoding Abilities. ACS Applied Materials & Interfaces, 2020, 12, 26258-26266.	8.0	55
10	Global modulatory heterosynaptic mechanisms in bio-polymer electrolyte gated oxide neuron transistors. Journal Physics D: Applied Physics, 2020, 53, 435105.	2.8	12
11	Flexible Poly(Vinyl Alcohol)â€“Graphene Oxide Hybrid Nanocomposite Based Cognitive Memristor with Pavlovianâ€Conditioned Reflex Activities. Advanced Electronic Materials, 2020, 6, 1901402.	5.1	31
12	Ionic synergetically coupled electrolyte-gated transistors for neuromorphic engineering applications. , 2020, , 145-177.		1
13	Brain-inspired biodegradable pectin based proton conductor gated electronic synapse. Organic Electronics, 2020, 82, 105782.	2.6	11
14	Threshold-Tunable, Spike-Rate-Dependent Plasticity Originating from Interfacial Proton Gating for Pattern Learning and Memory. ACS Applied Materials & Interfaces, 2020, 12, 7833-7839.	8.0	41
15	Bio-polysaccharide electrolyte gated photoelectric synergic coupled oxide neuromorphic transistor with Pavlovian activities. Journal of Materials Chemistry C, 2020, 8, 2780-2789.	5.5	30
16	Synaptic metaplasticity of protonic/electronic coupled oxide neuromorphic transistor. Organic Electronics, 2019, 74, 304-308.	2.6	19
17	Oxide Neuromorphic Transistors Gated by Polyvinyl Alcohol Solid Electrolytes with Ultralow Power Consumption. ACS Applied Materials & Interfaces, 2019, 11, 28352-28358.	8.0	46
18	Flexible oxide neuromorphic transistors with synaptic learning functions. Journal Physics D: Applied Physics, 2019, 52, 405101.	2.8	7

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19	Bilayered Oxideâ€Based Cognitive Memristor with Brainâ€Inspired Learning Activities. Advanced Electronic Materials, 2019, 5, 1900439.	5.1	43
20	Low-voltage protonic/photonic synergic coupled oxide phototransistor. Organic Electronics, 2019, 71, 31-35.	2.6	21
21	Role of Oxygen Vacancies at the TiO₂/HfO₂ Interface in Flexible Oxideâ€Based Resistive Switching Memory. Advanced Electronic Materials, 2019, 5, 1800833.	5.1	105
22	Ionotronic Neuromorphic Devices for Bionic Neural Network Applications. Physica Status Solidi - Rapid Research Letters, 2019, 13, .	2.4	16
23	Chitosan-Based Polysaccharide-Gated Flexible Indium Tin Oxide Synaptic Transistor with Learning Abilities. ACS Applied Materials & Interfaces, 2018, 10, 16881-16886.	8.0	120
24	Organic/inorganic hybrid low-voltage flexible oxide transistor gated with biodegradable electrolyte. Organic Electronics, 2018, 56, 82-88.	2.6	9
25	Hodgkinâ€“Huxley Artificial Synaptic Membrane Based on Protonic/Electronic Hybrid Neuromorphic Transistors. Advanced Biology, 2018, 2, 1700198.	3.0	41
26	Activity dependent post-tetanic potentiation of starch-based biopolymer electrolyte gated oxide synaptic transistors. Journal Physics D: Applied Physics, 2018, 51, 495401.	2.8	7
27	Restickable Oxide Neuromorphic Transistors with Spikeâ€Timingâ€Dependent Plasticity and Pavlovian Associative Learning Activities. Advanced Functional Materials, 2018, 28, 1804025.	14.9	139
28	Dendrite Integration Mimicked on Starch-Based Electrolyte-Gated Oxide Dendrite Transistors. ACS Applied Materials & Interfaces, 2018, 10, 40008-40013.	8.0	49
29	Pseudo-diode based on protonic/electronic hybrid oxide transistor. Journal of Applied Physics, 2018, 123, 025304.	2.5	1
30	Electrolyte Gated Oxide Pseudodiode for Inhibitory Synapse Applications. Advanced Electronic Materials, 2018, 4, 1800371.	5.1	14
31	Starch-based biopolymer electrolyte gated oxide synaptic transistors. Organic Electronics, 2018, 61, 312-317.	2.6	24
32	Activity Dependent Synaptic Plasticity Mimicked on Indiumâ€“Tinâ€“Oxide Electric-Double-Layer Transistor. ACS Applied Materials & Interfaces, 2017, 9, 37064-37069.	8.0	46
33	Mixed protonic and electronic conductors hybrid oxide synaptic transistors. Journal of Applied Physics, 2017, 121, .	2.5	26
34	Humidity-Dependent Synaptic Plasticity for Proton Gated Oxide Synaptic Transistor. IEEE Electron Device Letters, 2017, 38, 1248-1251.	3.9	23
35	Chitosan-Based Electrolyte Gated Low Voltage Oxide Transistor With a Coplanar Modulatory Terminal. IEEE Electron Device Letters, 2017, 38, 322-325.	3.9	8
36	Protonâ€Conducting Graphene Oxideâ€Coupled Neuron Transistors for Brainâ€Inspired Cognitive Systems. Advanced Materials, 2016, 28, 3557-3563.	21.0	226

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37	Flexible Metal Oxide/Graphene Oxide Hybrid Neuromorphic Transistors on Flexible Conducting Graphene Substrates. Advanced Materials, 2016, 28, 5878-5885.	21.0	144
38	Flexible Proton-Gated Oxide Synaptic Transistors on Si Membrane. ACS Applied Materials & Interfaces, 2016, 8, 21770-21775.	8.0	55
39	Biodegradable oxide synaptic transistors gated by a biopolymer electrolyte. Journal of Materials Chemistry C, 2016, 4, 7744-7750.	5.5	27
40	Proton gated oxide electric-double-layer transistors for full-swing low voltage inverter applications. RSC Advances, 2016, 6, 1053-1057.	3.6	3
41	Short-Term Synaptic Plasticity Regulation in Solution-Gated Indiumâ€“Galliumâ€“Zinc-Oxide Electric-Double-Layer Transistors. ACS Applied Materials & Interfaces, 2016, 8, 9762-9768.	8.0	81
42	Oxide-based Synaptic Transistors Gated by Solâ€“Gel Silica Electrolytes. ACS Applied Materials & Interfaces, 2016, 8, 3050-3055.	8.0	52
43	Flexible Sensory Platform Based on Oxide-based Neuromorphic Transistors. Scientific Reports, 2015, 5, 18082.	3.3	70
44	Multi-gate synergic modulation in laterally coupled synaptic transistors. Applied Physics Letters, 2015, 107, .	3.3	32
45	Freestanding Artificial Synapses Based on Laterally Protonâ€Coupled Transistors on Chitosan Membranes. Advanced Materials, 2015, 27, 5599-5604.	21.0	352
46	Transient Characteristics for Proton Gating in Laterally Coupled Indiumâ€“Zinc-Oxide Transistors. ACS Applied Materials & Interfaces, 2015, 7, 6205-6210.	8.0	23
47	Paired-pulse facilitation achieved in protonic/electronic hybrid indium gallium zinc oxide synaptic transistors. AIP Advances, 2015, 5, .	1.3	11
48	Indium-zinc-oxide electric-double-layer thin-film transistors for artificial synapse applications. , 2014, , .		1
49	Laterally Coupled Dual-Gate Oxide-Based Transistors on Sodium Alginate Electrolytes. IEEE Electron Device Letters, 2014, 35, 1257-1259.	3.9	42
50	Artificial synapse network on inorganic proton conductor for neuromorphic systems. Nature Communications, 2014, 5, 3158.	12.8	655
51	Proton conducting sodium alginate electrolyte laterally coupled low-voltage oxide-based transistors. Applied Physics Letters, 2014, 104, 133504.	3.3	46
52	Atomic layer deposited Al2O3 films for anti-reflectance and surface passivation applications. Applied Surface Science, 2014, 288, 430-434.	6.1	34
53	Memory and learning behaviors mimicked in nanogranular SiO2-based proton conductor gated oxide-based synaptic transistors. Nanoscale, 2013, 5, 10194.	5.6	72
54	Proton induced multilevel storage capability in self-assembled indium-zinc-oxide thin-film transistors. Applied Physics Letters, 2013, 103, 113503.	3.3	9

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55	Self-assembled dual in-plane gate thin-film transistors gated by nanogranular SiO2 proton conductors for logic applications. Nanoscale, 2013, 5, 1980.	5.6	73
56	Laser directly written junctionless in-plane-gate neuron thin film transistors with AND logic function. Applied Physics Letters, 2013, 102, .	3.3	10
57	Laser patterned junctionless neuron thin-films transistor arrays. , 2013, , .		0
58	Dual Function of Antireflectance and Surface Passivation of Atomic-Layer-Deposited $hbox{Al}_{2}hbox{O}_{3}$ Films. IEEE Electron Device Letters, 2012, 33, 1753-1755.	3.9	13