Wenhao Song

List of Publications by Year
in descending order

25 papers	4,693 citations	471371 17 h-index	752573 20 g-index
25 all docs	25 docs citations	25 times ranked	3415 citing authors

#	Article	IF	Citations
1	Analogue signal and image processing with large memristor crossbars. Nature Electronics, 2018, 1, 52-59.	13.1	879
2	Fully memristive neural networks for pattern classification with unsupervised learning. Nature Electronics, 2018, 1, 137-145.	13.1	787
3	Efficient and self-adaptive in-situ learning in multilayer memristor neural networks. Nature Communications, 2018, 9, 2385.	5.8	575
4	Long short-term memory networks in memristor crossbar arrays. Nature Machine Intelligence, 2019, 1, 49-57.	8.3	288
5	Reinforcement learning with analogue memristor arrays. Nature Electronics, 2019, 2, 115-124.	13.1	247
6	Three-dimensional memristor circuits as complex neural networks. Nature Electronics, 2020, 3, 225-232.	13.1	242
7	Threshold Switching of Ag or Cu in Dielectrics: Materials, Mechanism, and Applications. Advanced Functional Materials, 2018, 28, 1704862.	7.8	239
8	An artificial spiking afferent nerve based on Mott memristors for neurorobotics. Nature Communications, 2020, 11, 51.	5.8	217
9	Brain-inspired computing with memristors: Challenges in devices, circuits, and systems. Applied Physics Reviews, 2020, 7, .	5.5	217
10	Gate-tunable van der Waals heterostructure for reconfigurable neural network vision sensor. Science Advances, 2020, 6, eaba6173.	4.7	202
11	In situ training of feed-forward and recurrent convolutional memristor networks. Nature Machine Intelligence, 2019, 1, 434-442.	8.3	201
12	Capacitive neural network with neuro-transistors. Nature Communications, 2018, 9, 3208.	5.8	199
13	Reservoir Computing Using Diffusive Memristors. Advanced Intelligent Systems, 2019, 1, 1900084.	3.3	147
14	Artificial Neural Network (ANN) to Spiking Neural Network (SNN) Converters Based on Diffusive Memristors. Advanced Electronic Materials, 2019, 5, 1900060.	2.6	92
15	Integration and Co-design of Memristive Devices and Algorithms for Artificial Intelligence. IScience, 2020, 23, 101809.	1.9	49
16	A Dynamical Compact Model of Diffusive and Drift Memristors for Neuromorphic Computing. Advanced Electronic Materials, 2022, 8, 2100696.	2.6	19
17	Timing Selector: Using Transient Switching Dynamics to Solve the Sneak Path Issue of Crossbar Arrays. Small Science, 2022, 2, 2100072.	5.8	18
18	An energy-efficient and high-throughput bitwise CNN on sneak-path-free digital ReRAM crossbar. , 2017, , .		17

#	Article	IF	Citations
19	Experimental Demonstration of Conversion-Based SNNs with 1T1R Mott Neurons for Neuromorphic Inference. , 2019, , .		17
20	Large Memristor Crossbars for Analog Computing. , 2018, , .		14
21	Threshold Switching: Threshold Switching of Ag or Cu in Dielectrics: Materials, Mechanism, and Applications (Adv. Funct. Mater. 6/2018). Advanced Functional Materials, 2018, 28, 1870036.	7.8	10
22	Learning with Resistive Switching Neural Networks. , 2019, , .		6
23	Memristor-CMOS Analog Coprocessor for Acceleration of High-Performance Computing Applications. ACM Journal on Emerging Technologies in Computing Systems, 2018, 14, 1-30.	1.8	5
24	Unconventional computing with diffusive memristors. , 2018, , .		4
25	A compact model for selectors based on metal doped electrolyte. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	2