Wenhao Song

List of Publications by Year in Descending Order

25 papers	2,754 citations	15 h-index	25 g-index
25 ext. papers	3,641 ext. citations	15.5 avg, IF	4.79 L-index

#	Paper	IF	Citations
25	Integration and Co-design of Memristive Devices and Algorithms for Artificial Intelligence. *IScience*, **2020**, 23, 101809	6.1	20
24	Gate-tunable van der Waals heterostructure for reconfigurable neural network vision sensor. *Science Advances*, **2020**, 6, eaba6173	14.3	66
23	Brain-inspired computing with memristors: Challenges in devices, circuits, and systems. *Applied Physics Reviews*, **2020**, 7, 011308	17.3	105
22	Three-dimensional memristor circuits as complex neural networks. *Nature Electronics*, **2020**, 3, 225-232	28.4	112
21	An artificial spiking afferent nerve based on Mott memristors for neurorobotics. *Nature Communications*, **2020**, 11, 51	17.4	105
20	In situ training of feed-forward and recurrent convolutional memristor networks. *Nature Machine Intelligence*, **2019**, 1, 434-442	22.5	93
19	Artificial Neural Network (ANN) to Spiking Neural Network (SNN) Converters Based on Diffusive Memristors. *Advanced Electronic Materials*, **2019**, 5, 1900060	6.4	55
18	Reinforcement learning with analogue memristor arrays. *Nature Electronics*, **2019**, 2, 115-124	28.4	166
17	Reservoir Computing Using Diffusive Memristors. *Advanced Intelligent Systems*, **2019**, 1, 1900084	6	65
16	Learning with Resistive Switching Neural Networks **2019**,		4
15	Experimental Demonstration of Conversion-Based SNNs with 1T1R Mott Neurons for Neuromorphic Inference **2019**,		10
14	Long short-term memory networks in memristor crossbar arrays. *Nature Machine Intelligence*, **2019**, 1, 49-57	22.5	176
13	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	15.6	7
12	Fully memristive neural networks for pattern classification with unsupervised learning. *Nature Electronics*, **2018**, 1, 137-145	28.4	511
11	Threshold Switching of Ag or Cu in Dielectrics: Materials, Mechanism, and Applications. *Advanced Functional Materials*, **2018**, 28, 1704862	15.6	168
10	A compact model for selectors based on metal doped electrolyte. *Applied Physics A: Materials Science and Processing*, **2018**, 124, 1	2.6	2
9	Unconventional computing with diffusive memristors **2018**,		2

8	Large Memristor Crossbars for Analog Computing **2018**,		6
7	Capacitive neural network with neuro-transistors. *Nature Communications*, **2018**, 9, 3208	17.4	132
6	Efficient and self-adaptive in-situ learning in multilayer memristor neural networks. *Nature Communications*, **2018**, 9, 2385	17.4	371
5	Analogue signal and image processing with large memristor crossbars. *Nature Electronics*, **2018**, 1, 52-59	28.4	550
4	Memristor-CMOS Analog Coprocessor for Acceleration of High-Performance Computing Applications. *ACM Journal on Emerging Technologies in Computing Systems*, **2018**, 14, 1-30	1.7	2
3	An energy-efficient and high-throughput bitwise CNN on sneak-path-free digital ReRAM crossbar **2017**,		12
2	Timing Selector: Using Transient Switching Dynamics to Solve the Sneak Path Issue of Crossbar Arrays. *Small Science*,2100072		8
1	A Dynamical Compact Model of Diffusive and Drift Memristors for Neuromorphic Computing. *Advanced Electronic Materials*,2100696	6.4	6