Kurtis D Cantley

List of Publications by Year
in descending order

27	542	1163117 8	996975 15
papers	citations	h-index	g-index

27	27	27	762
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hebbian Learning in Spiking Neural Networks With Nanocrystalline Silicon TFTs and Memristive Synapses. IEEE Nanotechnology Magazine, 2011, 10, 1066-1073.	2.0	142
2	Neural Learning Circuits Utilizing Nano-Crystalline Silicon Transistors and Memristors. IEEE Transactions on Neural Networks and Learning Systems, 2012, 23, 565-573.	11.3	110
3	Graphene Foam as a Three-Dimensional Platform for Myotube Growth. ACS Biomaterials Science and Engineering, 2016, 2, 1234-1241.	5.2	64
4	Influence of Bandstructure and Channel Structure on the Inversion Layer Capacitance of Silicon and GaAs MOSFETs. IEEE Transactions on Electron Devices, 2008, 55, 904-908.	3.0	43
5	Spike-Timing-Dependent Plasticity Using Biologically Realistic Action Potentials and Low-Temperature Materials. IEEE Nanotechnology Magazine, 2013, 12, 450-459.	2.0	28
6	SPICE macromodel of silicon-on-insulator-field-effect-transistor-based biological sensors. Sensors and Actuators B: Chemical, 2012, 161, 163-170.	7.8	27
7	Performance Analysis of III-V Materials in a Double-Gate nano-MOSFET. , 2007, , .		22
8	Submicron Ambipolar Nanocrystalline Silicon Thin-Film Transistors and Inverters. IEEE Transactions on Electron Devices, 2012, 59, 359-366.	3.0	18
9	SPICE simulation of nanoscale non-crystalline silicon TFTs in spiking neuron circuits. , 2010, , .		11
10	Logic Gates and Ring Oscillators Based on Ambipolar Nanocrystalline-Silicon TFTs. Active and Passive Electronic Components, 2013, 2013, 1-7.	0.3	11
11	Hydrogenated amorphous silicon nanowire transistors with Schottky barrier source/drain junctions. Applied Physics Letters, 2010, 97, .	3.3	8
12	Spike timing-dependent synaptic plasticity using memristors and nano-crystalline silicon TFT memories. , 2011, , .		8
13	Ambipolar nano-crystalline-silicon TFTs with submicron dimensions and reduced threshold voltage shift. , 2011, , .		7
14	Modeling Memristor Radiation Interaction Events and the Effect on Neuromorphic Learning Circuits. , 2018, , .		7
15	A CMOS synapse design implementing tunable asymmetric spike timing-dependent plasticity. , 2017, , .		6
16	Investigation of Tunneling Current in $hbox{SiO}_{2}/ hbox{HfO}_{2}$ Gate Stacks for Flash Memory Applications. IEEE Transactions on Electron Devices, 2011, 58, 4189-4195.	3.0	5
17	Spatio-temporal pattern recognition in neural circuits with memory-transistor-driven memristive synapses. , 2017, , .		5
18	Learning Behavior of Memristor-Based Neuromorphic Circuits in the Presence of Radiation. , 2019, , .		3

#	Article	IF	Citations
19	Measurement of Signalâ€toâ€Noise Ratio In Grapheneâ€based Passive Microelectrode Arrays. Electroanalysis, 2019, 31, 991-1001.	2.9	3
20	Nanoscale Transistors: Physics and Materials. Materials Research Society Symposia Proceedings, 2006, 958, 1.	0.1	2
21	Submicron ambipolar nanocrystalline-silicon TFTs with high-K gate dielectrics. , 2011, , .		2
22	Noise effects in field-effect transistor biological sensor detection circuits. , 2012, , .		2
23	Low-Temperature Fabrication of Spiking Soma Circuits Using Nanocrystalline-Silicon TFTs. IEEE Transactions on Neural Networks and Learning Systems, 2013, 24, 1466-1472.	11.3	2
24	Radiation Effect on Learning Behavior in Memristor-Based Neuromorphic Circuit. , 2019, , .		2
25	A Model for $R(t)$ Elements and $R(t)$ -Based Spike-Timing-Dependent Plasticity With Basic Circuit Examples. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 4206-4216.	11.3	2
26	Effects of memristive synapse radiation interactions on learning in spiking neural networks. SN Applied Sciences, 2021, 3, 1.	2.9	2
27	Neuron Circuit Failure and Pattern Learning in Electronic Spiking Neural Networks. Electronics (Switzerland), 2022, 11, 1392.	3.1	0