

Wei D Lu

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

194
papers

23,817
citations

71
h-index

154
g-index

209
ext. papers

27,250
ext. citations

11
avg, IF

7.47
L-index

#	Paper	IF	Citations
194	Memristor-Based Binarized Spiking Neural Networks: Challenges and Applications.. <i>IEEE Nanotechnology Magazine</i> , 2022 , 2-11	1.7	5
193	Memristive Computing Devices and Applications. <i>Kluwer International Series in Electronic Materials: Science and Technology</i> , 2022 , 5-32		
192	Analog Computation with RRAM and Supporting Circuits 2022 , 17-32		
191	Physical Unclonable Function Systems Based on Pattern Transfer of Fingerprint-Like Patterns. <i>IEEE Electron Device Letters</i> , 2022 , 43, 655-658	4.4	
190	Dynamic resistive switching devices for neuromorphic computing. <i>Semiconductor Science and Technology</i> , 2022 , 37, 024003	1.8	2
189	Memristive technologies for data storage, computation, encryption, and radio-frequency communication. <i>Science</i> , 2022 , 376,	33.3	24
188	How to Build a Memristive Integrate-and-Fire Model for Spiking Neuronal Signal Generation. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2021 , 68, 4837-4850	3.9	9
187	Memristors Based on (Zr, Hf, Nb, Ta, Mo, W) High-Entropy Oxides. <i>Advanced Electronic Materials</i> , 2021 , 7, 2001258	6.4	9
186	Neural connectivity inference with spike-timing dependent plasticity network. <i>Science China Information Sciences</i> , 2021 , 64, 1	3.4	0
185	Neural Functional Connectivity Reconstruction with Second-Order Memristor Network. <i>Advanced Intelligent Systems</i> , 2021 , 3, 2000276	6	2
184	Memristive Stochastic Computing for Deep Learning Parameter Optimization. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2021 , 68, 1650-1654	3.5	11
183	TAICHI: A Tiled Architecture for In-memory Computing and Heterogeneous Integration. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2021 , 1-1	3.5	2
182	Hierarchical architectures in reservoir computing systems. <i>Neuromorphic Computing and Engineering</i> , 2021 , 1, 014006		1
181	A high-speed MIM resistive memory cell with an inherent vanadium selector. <i>Applied Materials Today</i> , 2020 , 21, 100848	6.6	7
180	Memory Devices: Filament-Free Bulk Resistive Memory Enables Deterministic Analogue Switching (Adv. Mater. 45/2020). <i>Advanced Materials</i> , 2020 , 32, 2070339	24	
179	Memristor networks for real-time neural activity analysis. <i>Nature Communications</i> , 2020 , 11, 2439	17.4	50
178	A Real-Time Retinomorphoc Simulator Using a Conductance-Based Discrete Neuronal Network 2020 , ,		2

177	A Fully Integrated Reprogrammable CMOS-RRAM Compute-in-Memory Coprocessor for Neuromorphic Applications. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , 2020 , 1-1	2.4	12
176	A Crossbar-Based In-Memory Computing Architecture. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2020 , 67, 4224-4232	3.9	7
175	Vector multiplications using memristive devices and applications thereof 2020 , 221-254		1
174	Power-efficient combinatorial optimization using intrinsic noise in memristor Hopfield neural networks. <i>Nature Electronics</i> , 2020 , 3, 409-418	28.4	79
173	Quantitative, Dynamic TaOx Memristor/Resistive Random Access Memory Model. <i>ACS Applied Electronic Materials</i> , 2020 , 2, 701-709	4	17
172	Nanoscale resistive switching devices for memory and computing applications. <i>Nano Research</i> , 2020 , 13, 1228-1243	10	53
171	Near infrared neuromorphic computing via upconversion-mediated optogenetics. <i>Nano Energy</i> , 2020 , 67, 104262	17.1	21
170	Adaptive Synaptic Memory via Lithium Ion Modulation in RRAM Devices. <i>Small</i> , 2020 , 16, e2003964	11	21
169	Filament-Free Bulk Resistive Memory Enables Deterministic Analogue Switching. <i>Advanced Materials</i> , 2020 , 32, e2003984	24	43
168	Stabilization of Mode-Dependent Impulsive Hybrid Systems Driven by DFA With Mixed-Mode Effects. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2020 , 31, 1616-1625	10.3	7
167	Nanoionic Resistive-Switching Devices. <i>Advanced Electronic Materials</i> , 2019 , 5, 1900184	6.4	27
166	In Situ Nano-thermomechanical Experiment Reveals Brittle to Ductile Transition in Silicon Nanowires. <i>Nano Letters</i> , 2019 , 19, 5327-5334	11.5	17
165	A fully integrated reprogrammable memristor-CMOS system for efficient multiply-accumulate operations. <i>Nature Electronics</i> , 2019 , 2, 290-299	28.4	281
164	Temporal data classification and forecasting using a memristor-based reservoir computing system. <i>Nature Electronics</i> , 2019 , 2, 480-487	28.4	125
163	Memristors and Memristive Devices for Neuromorphic Computing 2019 , 369-389		2
162	Charge Transition of Oxygen Vacancies during Resistive Switching in Oxide-Based RRAM. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 11579-11586	9.5	42
161	RRAM Solutions for Stochastic Computing 2019 , 153-164		3
160	A Deep Neural Network Accelerator Based on Tiled RRAM Architecture 2019 ,		27

159	Ionic modulation and ionic coupling effects in MoS devices for neuromorphic computing. <i>Nature Materials</i> , 2019 , 18, 141-148	27	262
158	Recommended Methods to Study Resistive Switching Devices. <i>Advanced Electronic Materials</i> , 2019 , 5, 1800143	6.4	297
157	Parasitic Effect Analysis in Memristor-Array-Based Neuromorphic Systems. <i>IEEE Nanotechnology Magazine</i> , 2018 , 17, 184-193	2.6	46
156	Optogenetics-Inspired Tunable Synaptic Functions in Memristors. <i>ACS Nano</i> , 2018 , 12, 1242-1249	16.7	142
155	The future of electronics based on memristive systems. <i>Nature Electronics</i> , 2018 , 1, 22-29	28.4	813
154	Field-Programmable Crossbar Array (FPCA) for Reconfigurable Computing. <i>IEEE Transactions on Multi-Scale Computing Systems</i> , 2018 , 4, 698-710		24
153	On-Demand Reconfiguration of Nanomaterials: When Electronics Meets Ionics. <i>Advanced Materials</i> , 2018 , 30, 1702770	24	116
152	Neuromorphic Computing Using Memristor Crossbar Networks: A Focus on Bio-Inspired Approaches. <i>IEEE Nanotechnology Magazine</i> , 2018 , 12, 6-18	1.7	27
151	A general memristor-based partial differential equation solver. <i>Nature Electronics</i> , 2018 , 1, 411-420	28.4	112
150	K-means Data Clustering with Memristor Networks. <i>Nano Letters</i> , 2018 , 18, 4447-4453	11.5	68
149	Hardware Acceleration of Simulated Annealing of Spin Glass by RRAM Crossbar Array 2018 ,		16
148	MoS Memristors Exhibiting Variable Switching Characteristics toward Biorealistic Synaptic Emulation. <i>ACS Nano</i> , 2018 , 12, 9240-9252	16.7	119
147	Self-Limited and Forming-Free CBRAM Device With Double Al ₂ O ₃ ALD Layers. <i>IEEE Electron Device Letters</i> , 2018 , 39, 1512-1515	4.4	14
146	RRAM fabric for neuromorphic and reconfigurable compute-in-memory systems 2018 ,		3
145	Neuromorphic computing with memristive devices. <i>Science China Information Sciences</i> , 2018 , 61, 1	3.4	18
144	Feature extraction and analysis using memristor networks 2018 ,		2
143	Abnormal Multiple Charge Memory States in Exfoliated Few-Layer WSe Transistors. <i>ACS Nano</i> , 2017 , 11, 1091-1102	16.7	30
142	Ge nanowire photodetector with high photoconductive gain epitaxially integrated on Si substrate. <i>Applied Physics Letters</i> , 2017 , 110, 173104	3.4	30

141	Multifunctional Nanoionic Devices Enabling Simultaneous Heterosynaptic Plasticity and Efficient In-Memory Boolean Logic. <i>Advanced Electronic Materials</i> , 2017 , 3, 1700032	6.4	43
140	Experimental Demonstration of Feature Extraction and Dimensionality Reduction Using Memristor Networks. <i>Nano Letters</i> , 2017 , 17, 3113-3118	11.5	128
139	Emulation of synaptic metaplasticity in memristors. <i>Nanoscale</i> , 2017 , 9, 45-51	7.7	56
138	Temporal Learning Using Second-Order Memristors. <i>IEEE Nanotechnology Magazine</i> , 2017 , 16, 721-723	2.6	24
137	Sparse coding with memristor networks. <i>Nature Nanotechnology</i> , 2017 , 12, 784-789	28.7	388
136	Real-Time Observation of the Electrode-Size-Dependent Evolution Dynamics of the Conducting Filaments in a SiO Layer. <i>ACS Nano</i> , 2017 , 11, 4097-4104	16.7	55
135	Electronic and optical properties of oxygen vacancies in amorphous TaO from first principles. <i>Nanoscale</i> , 2017 , 9, 1120-1127	7.7	34
134	Scaling behavior of nanoimprint and nanoprinting lithography for producing nanostructures of molybdenum disulfide. <i>Microsystems and Nanoengineering</i> , 2017 , 3, 17053	7.7	10
133	Epsilon-greedy strategy for online dictionary learning with realistic memristor array constraints 2017 ,		2
132	In-situ Observation of Cu Filaments Evolution in SiO ₂ layer. <i>Microscopy and Microanalysis</i> , 2017 , 23, 1622-1623	16.2	1523
131	Memristive computing devices and applications. <i>Journal of Electroceramics</i> , 2017 , 39, 4-20	1.5	30
130	Perovskite Films: Iodine Vacancy Redistribution in Organic-Inorganic Halide Perovskite Films and Resistive Switching Effects (Adv. Mater. 29/2017). <i>Advanced Materials</i> , 2017 , 29,	24	1
129	Metal/Ion Interactions Induced p-i-n Junction in Methylammonium Lead Triiodide Perovskite Single Crystals. <i>Journal of the American Chemical Society</i> , 2017 , 139, 17285-17288	16.4	25
128	Iodine Vacancy Redistribution in Organic-Inorganic Halide Perovskite Films and Resistive Switching Effects. <i>Advanced Materials</i> , 2017 , 29, 1700527	24	185
127	Formation of Self-Connected SiGe Lateral Nanowires and Pyramids on Rib-Patterned Si(1 1 10) Substrate. <i>Nanoscale Research Letters</i> , 2017 , 12, 70	5	2
126	Reservoir computing using dynamic memristors for temporal information processing. <i>Nature Communications</i> , 2017 , 8, 2204	17.4	277
125	Hybrid neural network using binary RRAM devices 2017 ,		1
124	Feature Extraction Using Memristor Networks. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2016 , 27, 2327-2336	10.3	54

123	Periodic Orbits Analysis in a Class of Planar Liñard Systems with State-Triggered Jumps. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2016 , 26, 1650153	2	1
122	In Situ Nanoscale Electric Field Control of Magnetism by Nanoionics. <i>Advanced Materials</i> , 2016 , 28, 7658-65	4.4	44
121	Vertical Ge/Si Core/Shell Nanowire Junctionless Transistor. <i>Nano Letters</i> , 2016 , 16, 420-6	11.5	33
120	Very Low-Programming-Current RRAM With Self-Rectifying Characteristics. <i>IEEE Electron Device Letters</i> , 2016 , 37, 404-407	4.4	80
119	Tuning Ionic Transport in Memristive Devices by Graphene with Engineered Nanopores. <i>ACS Nano</i> , 2016 , 10, 3571-9	16.7	106
118	Single-Readout High-Density Memristor Crossbar. <i>Scientific Reports</i> , 2016 , 6, 18863	4.9	36
117	Device nonideality effects on image reconstruction using memristor arrays 2016 ,		9
116	Progress in the Characterizations and Understanding of Conducting Filaments in Resistive Switching Devices. <i>IEEE Nanotechnology Magazine</i> , 2016 , 15, 465-472	2.6	25
115	Nanoscale electrochemistry using dielectric thin films as solid electrolytes. <i>Nanoscale</i> , 2016 , 8, 13828-37	7.7	102
114	Experimental demonstration of a second-order memristor and its ability to biorealistically implement synaptic plasticity. <i>Nano Letters</i> , 2015 , 15, 2203-11	11.5	356
113	A Low-Power Variation-Aware Adaptive Write Scheme for Access-Transistor-Free Memristive Memory. <i>ACM Journal on Emerging Technologies in Computing Systems</i> , 2015 , 12, 1-18	1.7	10
112	Nanoimprint-Assisted Shear Exfoliation (NASE) for Producing Multilayer MoS ₂ Structures as Field-Effect Transistor Channel Arrays. <i>ACS Nano</i> , 2015 , 9, 8773-85	16.7	36
111	Defect considerations for robust sparse coding using memristor arrays 2015 ,		2
110	Switching Memory: An Optoelectronic Resistive Switching Memory with Integrated Demodulating and Arithmetic Functions (Adv. Mater. 17/2015). <i>Advanced Materials</i> , 2015 , 27, 2812-2812	24	
109	Data Clustering using Memristor Networks. <i>Scientific Reports</i> , 2015 , 5, 10492	4.9	75
108	Utilizing multiple state variables to improve the dynamic range of analog switching in a memristor. <i>Applied Physics Letters</i> , 2015 , 107, 173105	3.4	67
107	Temporal information encoding in dynamic memristive devices. <i>Applied Physics Letters</i> , 2015 , 107, 193104	3.4	11
106	Biorealistic Implementation of Synaptic Functions with Oxide Memristors through Internal Ionic Dynamics. <i>Advanced Functional Materials</i> , 2015 , 25, 4290-4299	15.6	270

105	Memristive Physically Evolving Networks Enabling the Emulation of Heterosynaptic Plasticity. <i>Advanced Materials</i> , 2015 , 27, 7720-7	24	110
104	An optoelectronic resistive switching memory with integrated demodulating and arithmetic functions. <i>Advanced Materials</i> , 2015 , 27, 2797-803	24	131
103	Efficient in-memory computing architecture based on crossbar arrays 2015 ,		51
102	Guest Editorial Solid-state Memristive Devices and Systems. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , 2015 , 5, 121-122	5.2	
101	FPAA/Memristor Hybrid Computing Infrastructure. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2015 , 62, 906-915	3.9	14
100	Conduction mechanism of a TaO(x)-based selector and its application in crossbar memory arrays. <i>Nanoscale</i> , 2015 , 7, 4964-70	7.7	38
99	Efficient Si Nanowire Array Transfer via Bi-Layer Structure Formation Through Metal-Assisted Chemical Etching. <i>Advanced Functional Materials</i> , 2014 , 24, 1949-1955	15.6	8
98	Crossbar RRAM Arrays: Selector Device Requirements During Read Operation. <i>IEEE Transactions on Electron Devices</i> , 2014 , 61, 1369-1376	2.9	149
97	3-D Vertical Dual-Layer Oxide Memristive Devices. <i>IEEE Transactions on Electron Devices</i> , 2014 , 61, 2581-2583	2.9	5
96	Analog signal processing on a FPAA/memristor hybrid circuit 2014 ,		2
95	Pattern recognition with memristor networks 2014 ,		20
94	Random telegraph noise and resistance switching analysis of oxide based resistive memory. <i>Nanoscale</i> , 2014 , 6, 400-4	7.7	97
93	Tuning resistive switching characteristics of tantalum oxide memristors through Si doping. <i>ACS Nano</i> , 2014 , 8, 10262-9	16.7	85
92	Oxide resistive memory with functionalized graphene as built-in selector element. <i>Advanced Materials</i> , 2014 , 26, 3693-9	24	61
91	Electrochemical dynamics of nanoscale metallic inclusions in dielectrics. <i>Nature Communications</i> , 2014 , 5, 4232	17.4	411
90	Comprehensive physical model of dynamic resistive switching in an oxide memristor. <i>ACS Nano</i> , 2014 , 8, 2369-76	16.7	301
89	Memristive devices for stochastic computing 2014 ,		32
88	Electronic properties of tantalum pentoxide polymorphs from first-principles calculations. <i>Applied Physics Letters</i> , 2014 , 105, 202108	3.4	23

87	Memristive Devices: Switching Effects, Modeling, and Applications 2014 , 195-221		4
86	. <i>IEEE Electron Device Letters</i> , 2014 , 35, 1239-1241	4.4	30
85	A Native Stochastic Computing Architecture Enabled by Memristors. <i>IEEE Nanotechnology Magazine</i> , 2014 , 13, 283-293	2.6	67
84	A resistance-switchable and ferroelectric metal-organic framework. <i>Journal of the American Chemical Society</i> , 2014 , 136, 17477-83	16.4	85
83	Chapter 2:High Performance, Low Power Nanowire Transistor Devices. <i>RSC Smart Materials</i> , 2014 , 54-110.6		1
82	Chapter 1:Semiconductor Nanowire Growth and Integration. <i>RSC Smart Materials</i> , 2014 , 1-53	0.6	12
81	Crossbar RRAM Arrays: Selector Device Requirements During Write Operation. <i>IEEE Transactions on Electron Devices</i> , 2014 , 61, 2820-2826	2.9	116
80	Transparent, high-performance thin-film transistors with an InGaZnO/aligned-SnO ₂ -nanowire composite and their application in photodetectors. <i>Advanced Materials</i> , 2014 , 26, 7399-404	24	91
79	Retention failure analysis of metal-oxide based resistive memory. <i>Applied Physics Letters</i> , 2014 , 105, 1135-1140	3.10	33
78	Memristors and Memristive Devices for Neuromorphic Computing 2014 , 129-149		6
77	Nanoscale resistive switching devices: mechanisms and modeling. <i>Nanoscale</i> , 2013 , 5, 10076-92	7.7	197
76	Vertical nanowire heterojunction devices based on a clean Si/Ge interface. <i>Nano Letters</i> , 2013 , 13, 5521-71.5	11.5	30
75	Interference and memory capacity effects in memristive systems. <i>Applied Physics Letters</i> , 2013 , 102, 0831-0836	3.16	15
74	Building Neuromorphic Circuits with Memristive Devices. <i>IEEE Circuits and Systems Magazine</i> , 2013 , 13, 56-73	3.2	76
73	Stochastic memristive devices for computing and neuromorphic applications. <i>Nanoscale</i> , 2013 , 5, 5872-87.7	8.7	276
72	Oxide heterostructure resistive memory. <i>Nano Letters</i> , 2013 , 13, 2908-15	11.5	151
71	MoS ₂ transistors fabricated via plasma-assisted nanoprinting of few-layer MoS ₂ flakes into large-area arrays. <i>ACS Nano</i> , 2013 , 7, 5870-81	16.7	104
70	Post-Annealing Treatments and Interface Effects on Anomalous Magnetic Characteristics of HfO _x Film. <i>Integrated Ferroelectrics</i> , 2013 , 141, 145-153	0.8	1

69	Latch-up based bidirectional npn selector for bipolar resistance-change memory. <i>Applied Physics Letters</i> , 2013 , 103, 033505	3.4	19
68	Memristive analog arithmetic within cellular arrays 2012 ,		3
67	Complementary resistive switching in tantalum oxide-based resistive memory devices. <i>Applied Physics Letters</i> , 2012 , 100, 203112	3.4	170
66	Electrochemical metallization cellsBlending nanoionics into nanoelectronics?. <i>MRS Bulletin</i> , 2012 , 37, 124-130	3.2	96
65	A functional hybrid memristor crossbar-array/CMOS system for data storage and neuromorphic applications. <i>Nano Letters</i> , 2012 , 12, 389-95	11.5	639
64	Modeling and implementation of oxide memristors for neuromorphic applications 2012 ,		8
63	Observation of conducting filament growth in nanoscale resistive memories. <i>Nature Communications</i> , 2012 , 3, 732	17.4	782
62	Observation of conductance quantization in oxide-based resistive switching memory. <i>Advanced Materials</i> , 2012 , 24, 3941-6	24	190
61	Improvement of RRAM Device Performance Through On-Chip Resistors. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1430, 149		2
60	Ambipolar inverters using SnO thin-film transistors with balanced electron and hole mobilities. <i>Applied Physics Letters</i> , 2012 , 100, 263502	3.4	72
59	Device and SPICE modeling of RRAM devices. <i>Nanoscale</i> , 2011 , 3, 3833-40	7.7	72
58	Short-term memory to long-term memory transition in a nanoscale memristor. <i>ACS Nano</i> , 2011 , 5, 7669-7676	16.7	645
57	Time-dependency of the threshold voltage in memristive devices 2011 ,		13
56	Andreev tunneling enhanced by Coulomb oscillations in superconductor-semiconductor hybrid Ge/Si nanowire devices. <i>Physical Review B</i> , 2011 , 84,	3.3	7
55	Controlled 3D buckling of silicon nanowires for stretchable electronics. <i>ACS Nano</i> , 2011 , 5, 672-8	16.7	176
54	Two-terminal resistive switches (memristors) for memory and logic applications 2011 ,		68
53	Synaptic behaviors and modeling of a metal oxide memristive device. <i>Applied Physics A: Materials Science and Processing</i> , 2011 , 102, 857-863	2.6	271
52	CMOS-integrated memristors for neuromorphic architectures 2011 ,		2

51	Esaki tunnel diodes based on vertical Si-Ge nanowire heterojunctions. <i>Applied Physics Letters</i> , 2011 , 99, 092108	3-4	29
50	Organic vapor discrimination with chemiresistor arrays of temperature modulated tin-oxide nanowires and thiolate-monolayer-protected gold nanoparticles. <i>Nanotechnology</i> , 2011 , 22, 125501	3-4	7
49	Ultrafast Optical-Pump Terahertz-Probe Spectroscopy of Oriented Ge and Ge/Si Core/Shell Nanowires 2011 ,		1
48	Growth and electrical properties of Al-catalyzed Si nanowires. <i>Applied Physics Letters</i> , 2011 , 98, 033108	3-4	12
47	ITO nanowires and nanoparticles for transparent films. <i>MRS Bulletin</i> , 2011 , 36, 782-788	3-2	53
46	Hierarchical 3D Nanostructure Organization for Next-Generation Devices 2011 , 205-248		1
45	Nanoscale resistive memory with intrinsic diode characteristics and long endurance. <i>Applied Physics Letters</i> , 2010 , 96, 053106	3-4	134
44	Resistance switching in polycrystalline BiFeO ₃ thin films. <i>Applied Physics Letters</i> , 2010 , 97, 042101	3-4	129
43	Strong and tunable spin-orbit coupling of one-dimensional holes in Ge/Si core/shell nanowires. <i>Nano Letters</i> , 2010 , 10, 2956-60	11.5	79
42	Si Memristive devices applied to memory and neuromorphic circuits 2010 ,		21
41	Nanoscale memristor device as synapse in neuromorphic systems. <i>Nano Letters</i> , 2010 , 10, 1297-301	11.5	2772
40	Spatial confinement of carriers and tunable band structures in InAs/InP-core-shell nanowires. <i>Chemical Physics Letters</i> , 2010 , 495, 261-265	2.5	22
39	Radio frequency nanowire resonators and in situ frequency tuning. <i>Applied Physics Letters</i> , 2009 , 94, 203104	3-4	18
38	Radio-Frequency Operation of Transparent Nanowire Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , 2009 , 30, 730-732	4-4	15
37	Room temperature magnetic exchange coupling in multiferroic BaTiO ₃ /CoFe ₂ O ₄ magnetoelectric superlattice. <i>Journal of Materials Science</i> , 2009 , 44, 5143-5148	4-3	22
36	High-density crossbar arrays based on a Si memristive system. <i>Nano Letters</i> , 2009 , 9, 870-4	11.5	441
35	Programmable resistance switching in nanoscale two-terminal devices. <i>Nano Letters</i> , 2009 , 9, 496-500	11.5	235
34	Nanowire based electronics: Challenges and prospects 2009 ,		2

33	Mechanical properties of vapor-liquid-solid synthesized silicon nanowires. <i>Nano Letters</i> , 2009 , 9, 3934-9	11.5	316
32	Nanowire Transistor Performance Limits and Applications. <i>IEEE Transactions on Electron Devices</i> , 2008 , 55, 2859-2876	2.9	250
31	Si/a-Si core/shell nanowires as nonvolatile crossbar switches. <i>Nano Letters</i> , 2008 , 8, 386-91	11.5	211
30	CMOS compatible nanoscale nonvolatile resistance switching memory. <i>Nano Letters</i> , 2008 , 8, 392-7	11.5	338
29	Branched SnO ₂ nanowires on metallic nanowire backbones for ethanol sensors application. <i>Applied Physics Letters</i> , 2008 , 92, 102101	3.4	90
28	Semiconductor nanowire devices. <i>Nano Today</i> , 2008 , 3, 12-22	17.9	252
27	Doping-dependent electrical characteristics of SnO ₂ nanowires. <i>Small</i> , 2008 , 4, 451-4	11	93
26	Nanostructured thin films made by dewetting method of layer-by-layer assembly. <i>Nano Letters</i> , 2007 , 7, 3266-73	11.5	110
25	Nanoelectronics from the bottom up. <i>Nature Materials</i> , 2007 , 6, 841-50	27	1290
24	Versatile Metal Oxide Nanowire Devices Achieved via Controlled Doping. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1018, 1		2
23	Nonvolatile Resistive Switching Devices Based on Nanoscale Metal/Amorphous Silicon/Crystalline Silicon Junctions. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 997, 1		1
22	Fully transparent thin-film transistor devices based on SnO ₂ nanowires. <i>Nano Letters</i> , 2007 , 7, 2463-9	11.5	260
21	Transparent metallic Sb-doped SnO ₂ nanowires. <i>Applied Physics Letters</i> , 2007 , 90, 222107	3.4	122
20	Self-Assembly for Semiconductor Industry. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2007 , 20, 421-431	2.6	24
19	Semiconductor nanowires. <i>Journal Physics D: Applied Physics</i> , 2006 , 39, R387-R406	3	653
18	High-performance transparent conducting oxide nanowires. <i>Nano Letters</i> , 2006 , 6, 2909-15	11.5	176
17	Ge/Si nanowire heterostructures as high-performance field-effect transistors. <i>Nature</i> , 2006 , 441, 489-93	50.4	1262
16	Coherent single charge transport in molecular-scale silicon nanowires. <i>Nano Letters</i> , 2005 , 5, 1143-6	11.5	143

15	One-dimensional hole gas in germanium/silicon nanowire heterostructures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 10046-51	11.5	401
14	Single-crystal metallic nanowires and metal/semiconductor nanowire heterostructures. <i>Nature</i> , 2004 , 430, 61-5	50.4	879
13	Synthesis and Fabrication of High-Performance n-Type Silicon Nanowire Transistors. <i>Advanced Materials</i> , 2004 , 16, 1890-1893	24	383
12	Real-time detection of electron tunnelling in a quantum dot. <i>Nature</i> , 2003 , 423, 422-5	50.4	311
11	Superconducting single-electron transistor coupled to a locally tunable electromagnetic environment. <i>Applied Physics Letters</i> , 2002 , 81, 4976-4978	3.4	5
10	Charge transport processes in a superconducting single-electron transistor coupled to a microstrip transmission line. <i>Physical Review B</i> , 2002 , 65,	3.3	11
9	X-ray diffraction and Raman scattering study of SrBi ₂ Ta ₂ O ₉ ceramics and thin films with Bi ₃ TiNbO ₉ addition. <i>Applied Physics Letters</i> , 2001 , 79, 3827-3829	3.4	22
8	Single-electron transistor strongly coupled to an electrostatically defined quantum dot. <i>Applied Physics Letters</i> , 2000 , 77, 2746-2748	3.4	18
7	Controlled deposition of individual single-walled carbon nanotubes on chemically functionalized templates. <i>Chemical Physics Letters</i> , 1999 , 303, 125-129	2.5	457
6	Device Variation Effects on Neural Network Inference Accuracy in Analog In-Memory Computing Systems. <i>Advanced Intelligent Systems</i> , 2100199	6	3
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