Wei D Lu

List of Publications by Year
in descending order

205 papers	30,581 citations	7069 78 h-index	5663 162 g-index
209 all docs	209 docs citations	209 times ranked	21385 citing authors

#	ARTICLE	IF	CITATIONS
1	TAICHI: A Tiled Architecture for In-Memory Computing and Heterogeneous Integration. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 559-563.	2.2	5
2	Memristive Computing Devices and Applications. Kluwer International Series in Electronic Materials: Science and Technology, 2022, , 5-32.	0.3	0
3	Investigating Selectorless Property within Niobium Devices for Storage Applications. ACS Applied Materials & Interfaces, 2022, 14, 2343-2350.	4.0	10
4	Memristor-Based Binarized Spiking Neural Networks: Challenges and applications. IEEE Nanotechnology Magazine, 2022, 16, 14-23.	0.9	39
5	Device Variation Effects on Neural Network Inference Accuracy in Analog In-Memory Computing Systems. Advanced Intelligent Systems, 2022, 4, 2100199.	3.3	12
6	Tuning Resistive Switching Behavior by Controlling Internal Ionic Dynamics for Biorealistic Implementation of Synaptic Plasticity. Advanced Electronic Materials, 2022, 8, .	2.6	7
7	Physical Unclonable Function Systems Based on Pattern Transfer of Fingerprint-Like Patterns. IEEE Electron Device Letters, 2022, 43, 655-658.	2.2	2
8	Dynamical memristors for higher-complexity neuromorphic computing. Nature Reviews Materials, 2022, 7, 575-591.	23.3	155
9	Dynamic resistive switching devices for neuromorphic computing. Semiconductor Science and Technology, 2022, 37, 024003.	1.0	12
10	Memristive technologies for data storage, computation, encryption, and radio-frequency communication. Science, 2022, 376, .	6.0	220
11	Memristors Based on (Zr, Hf, Nb, Ta, Mo, W) High-Entropy Oxides. Advanced Electronic Materials, 2021, 7, 2001258.	2.6	22
12	Neural connectivity inference with spike-timing dependent plasticity network. Science China Information Sciences, 2021, 64, 1.	2.7	6
13	Kinetic Monte Carlo Simulation of Lithium Dendrite Growth in Lithium-ion Battery. , 2021, , .		1
14	Device Non-Ideality Effects and Architecture-Aware Training in RRAM In-Memory Computing Modules. , 2021, , .		4
15	Neural Functional Connectivity Reconstruction with Second-Order Memristor Network. Advanced Intelligent Systems, 2021, 3, 2000276.	3.3	9
16	Memristive Stochastic Computing for Deep Learning Parameter Optimization. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1650-1654.	2.2	19
17	Hierarchical architectures in reservoir computing systems. Neuromorphic Computing and Engineering, 2021, 1, 014006.	2.8	14
18	How to Build a Memristive Integrate-and-Fire Model for Spiking Neuronal Signal Generation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 4837-4850.	3.5	30

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19	Stabilization of Mode-Dependent Impulsive Hybrid Systems Driven by DFA With Mixed-Mode Effects. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 1616-1625.	7.2	10
20	Near infrared neuromorphic computing via upconversion-mediated optogenetics. Nano Energy, 2020, 67, 104262.	8.2	50
21	Adaptive Synaptic Memory via Lithium Ion Modulation in RRAM Devices. Small, 2020, 16, e2003964.	5.2	46
22	Filamentâ€Free Bulk Resistive Memory Enables Deterministic Analogue Switching. Advanced Materials, 2020, 32, e2003984.	11.1	83
23	A high-speed MIM resistive memory cell with an inherent vanadium selector. Applied Materials Today, 2020, 21, 100848.	2.3	11
24	Memory Devices: Filamentâ€Free Bulk Resistive Memory Enables Deterministic Analogue Switching (Adv.) Tj ETQq0 0 0 rgBT /Overlock 1	11.1	1
25	Memristor networks for real-time neural activity analysis. Nature Communications, 2020, 11, 2439.	5.8	108
26	A Real-Time Retinomorphic Simulator Using a Conductance-Based Discrete Neuronal Network. , 2020, , .		8
27	A Fully Integrated Reprogrammable CMOS-RRAM Compute-in-Memory Coprocessor for Neuromorphic Applications. IEEE Journal on Exploratory Solid-State Computational Devices and Circuits, 2020, 6, 36-44.	1.1	20
28	A Crossbar-Based In-Memory Computing Architecture. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 4224-4232.	3.5	15
29	Vector multiplications using memristive devices and applications thereof. , 2020, , 221-254.		2
30	Power-efficient combinatorial optimization using intrinsic noise in memristor Hopfield neural networks. Nature Electronics, 2020, 3, 409-418.	13.1	196
31	Quantitative, Dynamic TaO$_x$ Memristor/Resistive Random Access Memory Model. ACS Applied Electronic Materials, 2020, 2, 701-709.	2.0	38
32	Nanoscale resistive switching devices for memory and computing applications. Nano Research, 2020, 13, 1228-1243.	5.8	91
33	Deep Neural Network Mapping and Performance Analysis on Tiled RRAM Architecture. , 2020, , .		2
34	RRAM fabric for neuromorphic and reconfigurable compute-in-memory systems. , 2019, , .		1
35	In Situ Nano-thermomechanical Experiment Reveals Brittle to Ductile Transition in Silicon Nanowires. Nano Letters, 2019, 19, 5327-5334.	4.5	34
36	A fully integrated reprogrammable memristorâ€"CMOS system for efficient multiplyâ€"accumulate operations. Nature Electronics, 2019, 2, 290-299.	13.1	469

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37	Temporal data classification and forecasting using a memristor-based reservoir computing system. Nature Electronics, 2019, 2, 480-487.	13.1	309
38	Nanoionic Resistive‐Switching Devices. Advanced Electronic Materials, 2019, 5, 1900184.	2.6	41
39	Charge Transition of Oxygen Vacancies during Resistive Switching in Oxide-Based RRAM. ACS Applied Materials & Interfaces, 2019, 11, 11579-11586.	4.0	82
40	RRAM Solutions for Stochastic Computing. , 2019, , 153-164.		5
41	A Deep Neural Network Accelerator Based on Tiled RRAM Architecture. , 2019, , .		46
42	Ionic modulation and ionic coupling effects in MoS2 devices for neuromorphic computing. Nature Materials, 2019, 18, 141-148.	13.3	426
43	Recommended Methods to Study Resistive Switching Devices. Advanced Electronic Materials, 2019, 5, 1800143.	2.6	452
44	Memristors and Memristive Devices forÂNeuromorphic Computing. , 2019, , 369-389.		2
45	Parasitic Effect Analysis in Memristor-Array-Based Neuromorphic Systems. IEEE Nanotechnology Magazine, 2018, 17, 184-193.	1.1	76
46	Optogenetics-Inspired Tunable Synaptic Functions in Memristors. ACS Nano, 2018, 12, 1242-1249.	7.3	205
47	The future of electronics based on memristive systems. Nature Electronics, 2018, 1, 22-29.	13.1	1,369
48	Field-Programmable Crossbar Array (FPCA) for Reconfigurable Computing. IEEE Transactions on Multi-Scale Computing Systems, 2018, 4, 698-710.	2.5	28
49	On‐Demand Reconfiguration of Nanomaterials: When Electronics Meets Ionics. Advanced Materials, 2018, 30, 1702770.	11.1	152
50	Hardware Acceleration of Simulated Annealing of Spin Glass by RRAM Crossbar Array. , 2018, , .		25
51	MoS$_2$ Memristors Exhibiting Variable Switching Characteristics toward Biorealistic Synaptic Emulation. ACS Nano, 2018, 12, 9240-9252.	7.3	191
52	Self-Limited and Forming-Free CBRAM Device With Double Al$_2$O$_3$ ALD Layers. IEEE Electron Device Letters, 2018, 39, 1512-1515.	2.2	21
53	RRAM fabric for neuromorphic and reconfigurable compute-in-memory systems. , 2018, , .		3
54	Neuromorphic computing with memristive devices. Science China Information Sciences, 2018, 61, 1.	2.7	35

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55	Feature extraction and analysis using memristor networks. , 2018, , .		4
56	Neuromorphic Computing Using Memristor Crossbar Networks: A Focus on Bio-Inspired Approaches. IEEE Nanotechnology Magazine, 2018, 12, 6-18.	0.9	42
57	A general memristor-based partial differential equation solver. Nature Electronics, 2018, 1, 411-420.	13.1	183
58	K-means Data Clustering with Memristor Networks. Nano Letters, 2018, 18, 4447-4453.	4.5	88
59	Abnormal Multiple Charge Memory States in Exfoliated Few-Layer WSe_2 Transistors. ACS Nano, 2017, 11, 1091-1102.	7.3	42
60	Ge nanowire photodetector with high photoconductive gain epitaxially integrated on Si substrate. Applied Physics Letters, 2017, 110, .	1.5	36
61	Multifunctional Nanoionic Devices Enabling Simultaneous Heterosynaptic Plasticity and Efficient Inâ€Memory Boolean Logic. Advanced Electronic Materials, 2017, 3, 1700032.	2.6	56
62	Experimental Demonstration of Feature Extraction and Dimensionality Reduction Using Memristor Networks. Nano Letters, 2017, 17, 3113-3118.	4.5	158
63	Emulation of synaptic metaplasticity in memristors. Nanoscale, 2017, 9, 45-51.	2.8	73
64	Temporal Learning Using Second-Order Memristors. IEEE Nanotechnology Magazine, 2017, 16, 721-723.	1.1	27
65	Sparse coding with memristor networks. Nature Nanotechnology, 2017, 12, 784-789.	15.6	510
66	Real-Time Observation of the Electrode-Size-Dependent Evolution Dynamics of the Conducting Filaments in a SiO_2 Layer. ACS Nano, 2017, 11, 4097-4104.	7.3	79
67	Electronic and optical properties of oxygen vacancies in amorphous Ta_2O_5 from first principles. Nanoscale, 2017, 9, 1120-1127.	2.8	45
68	Scaling behavior of nanoimprint and nanoprinting lithography for producing nanostructures of molybdenum disulfide. Microsystems and Nanoengineering, 2017, 3, 17053.	3.4	14
69	In-situ Observation of Cu Filaments Evolution in SiO2 layer. Microscopy and Microanalysis, 2017, 23, 1622-1623.	0.2	0
70	Memristive computing devices and applications. Journal of Electroceramics, 2017, 39, 4-20.	0.8	47
71	Perovskite Films: Iodine Vacancy Redistribution in Organicâ€"Inorganic Halide Perovskite Films and Resistive Switching Effects (Adv. Mater. 29/2017). Advanced Materials, 2017, 29, .	11.1	1
72	Metal/Ion Interactions Induced pâ€"iâ€"n Junction in Methylammonium Lead Triiodide Perovskite Single Crystals. Journal of the American Chemical Society, 2017, 139, 17285-17288.	6.6	32

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73	Iodine Vacancy Redistribution in Organicâ€"Inorganic Halide Perovskite Films and Resistive Switching Effects. Advanced Materials, 2017, 29, 1700527.	11.1	268
74	Formation of Self-Connected Si0.8Ge0.2 Lateral Nanowires and Pyramids on Rib-Patterned Si(1 1 10) Substrate. Nanoscale Research Letters, 2017, 12, 70.	3.1	2
75	Reservoir computing using dynamic memristors for temporal information processing. Nature Communications, 2017, 8, 2204.	5.8	547
76	Hybrid neural network using binary RRAM devices. , 2017, , .		2
77	Epsilon-greedy strategy for online dictionary learning with realistic memristor array constraints. , 2017, , .		2
78	Single-Readout High-Density Memristor Crossbar. Scientific Reports, 2016, 6, 18863.	1.6	42
79	Device nonideality effects on image reconstruction using memristor arrays. , 2016, , .		12
80	Progress in the Characterizations and Understanding of Conducting Filaments in Resistive Switching Devices. IEEE Nanotechnology Magazine, 2016, 15, 465-472.	1.1	32
81	Nanoscale electrochemistry using dielectric thin films as solid electrolytes. Nanoscale, 2016, 8, 13828-13837.	2.8	126
82	Periodic Orbits Analysis in a Class of Planar LiÃ©nard Systems with State-Triggered Jumps. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2016, 26, 1650153.	0.7	1
83	In Situ Nanoscale Electric Field Control of Magnetism by Nanoionics. Advanced Materials, 2016, 28, 7658-7665.	11.1	52
84	Electrochemistry at the Nanoscale. Nanoscale, 2016, 8, 13825-13827.	2.8	5
85	Vertical Ge/Si Core/Shell Nanowire Junctionless Transistor. Nano Letters, 2016, 16, 420-426.	4.5	43
86	Very Low-Programming-Current RRAM With Self-Rectifying Characteristics. IEEE Electron Device Letters, 2016, 37, 404-407.	2.2	96
87	Tuning Ionic Transport in Memristive Devices by Graphene with Engineered Nanopores. ACS Nano, 2016, 10, 3571-3579.	7.3	139
88	Feature Extraction Using Memristor Networks. IEEE Transactions on Neural Networks and Learning Systems, 2016, 27, 2327-2336.	7.2	62
89	Photoelectric characteristics of Schottky diode based on a Ge/Si core/shell nanowire. , 2015, , .		0
90	Switching Memory: An Optoelectronic Resistive Switching Memory with Integrated Demodulating and Arithmetic Functions (Adv. Mater. 17/2015). Advanced Materials, 2015, 27, 2812-2812.	11.1	0

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91	Data Clustering using Memristor Networks. Scientific Reports, 2015, 5, 10492.	1.6	100
92	Utilizing multiple state variables to improve the dynamic range of analog switching in a memristor. Applied Physics Letters, 2015, 107, .	1.5	88
93	Temporal information encoding in dynamic memristive devices. Applied Physics Letters, 2015, 107, .	1.5	13
94	Biorealistic Implementation of Synaptic Functions with Oxide Memristors through Internal Ionic Dynamics. Advanced Functional Materials, 2015, 25, 4290-4299.	7.8	360
95	Memristive Physically Evolving Networks Enabling the Emulation of Heterosynaptic Plasticity. Advanced Materials, 2015, 27, 7720-7727.	11.1	139
96	An Optoelectronic Resistive Switching Memory with Integrated Demodulating and Arithmetic Functions. Advanced Materials, 2015, 27, 2797-2803.	11.1	174
97	Efficient in-memory computing architecture based on crossbar arrays. , 2015, , .		81
98	Guest Editorial Solid-state Memristive Devices and Systems. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2015, 5, 121-122.	2.7	0
99	Characterizations and understanding of conducting filaments in resistive switching devices. , 2015, , .		0
100	FPAA/Memristor Hybrid Computing Infrastructure. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 906-915.	3.5	17
101	Conduction mechanism of a TaO_x-based selector and its application in crossbar memory arrays. Nanoscale, 2015, 7, 4964-4970.	2.8	42
102	Experimental Demonstration of a Second-Order Memristor and Its Ability to Biorealistically Implement Synaptic Plasticity. Nano Letters, 2015, 15, 2203-2211.	4.5	473
103	A Low-Power Variation-Aware Adaptive Write Scheme for Access-Transistor-Free Memristive Memory. ACM Journal on Emerging Technologies in Computing Systems, 2015, 12, 1-18.	1.8	10
104	Nanoimprint-Assisted Shear Exfoliation (NASE) for Producing Multilayer MoS_2 Structures as Field-Effect Transistor Channel Arrays. ACS Nano, 2015, 9, 8773-8785.	7.3	48
105	Defect consideratons for robust sparse coding using memristor arrays. , 2015, , .		4
106	Memristive devices for stochastic computing. , 2014, , .		41
107	Electronic properties of tantalum pentoxide polymorphs from first-principles calculations. Applied Physics Letters, 2014, 105, 202108.	1.5	30
108	Memristive Devices: Switching Effects, Modeling, and Applications. , 2014, , 195-221.		4

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109	Ultralow Sub-1-nA Operating Current Resistive Memory With Intrinsic Non-Linear Characteristics. IEEE Electron Device Letters, 2014, 35, 1239-1241.	2.2	34
110	A Native Stochastic Computing Architecture Enabled by Memristors. IEEE Nanotechnology Magazine, 2014, 13, 283-293.	1.1	85
111	A Resistance-Switchable and Ferroelectric Metal–Organic Framework. Journal of the American Chemical Society, 2014, 136, 17477-17483.	6.6	103
112	High Performance, Low Power Nanowire Transistor Devices. RSC Smart Materials, 2014, , 54-110.	0.1	2
113	Semiconductor Nanowire Growth and Integration. RSC Smart Materials, 2014, , 1-53.	0.1	14
114	Crossbar RRAM Arrays: Selector Device Requirements During Write Operation. IEEE Transactions on Electron Devices, 2014, 61, 2820-2826.	1.6	187
115	Transparent, High–Performance Thin–Film Transistors with an InGaZnO/Aligned–SnO$_2$–Nanowire Composite and their Application in Photodetectors. Advanced Materials, 2014, 26, 7399-7404.	11.1	104
116	Retention failure analysis of metal-oxide based resistive memory. Applied Physics Letters, 2014, 105, 113510.	1.5	42
117	Efficient Si Nanowire Array Transfer via Bi–Layer Structure Formation Through Metal–Assisted Chemical Etching. Advanced Functional Materials, 2014, 24, 1949-1955.	7.8	11
118	Crossbar RRAM Arrays: Selector Device Requirements During Read Operation. IEEE Transactions on Electron Devices, 2014, 61, 1369-1376.	1.6	180
119	3-D Vertical Dual-Layer Oxide Memristive Devices. IEEE Transactions on Electron Devices, 2014, 61, 2581-2583.	1.6	6
120	Analog signal processing on a FPAA/memristor hybrid circuit. , 2014, , .		2
121	Pattern recognition with memristor networks. , 2014, , .		25
122	Random telegraph noise and resistance switching analysis of oxide based resistive memory. Nanoscale, 2014, 6, 400-404.	2.8	129
123	Tuning Resistive Switching Characteristics of Tantalum Oxide Memristors through Si Doping. ACS Nano, 2014, 8, 10262-10269.	7.3	106
124	Oxide Resistive Memory with Functionalized Graphene as Built–in Selector Element. Advanced Materials, 2014, 26, 3693-3699.	11.1	69
125	Electrochemical dynamics of nanoscale metallic inclusions in dielectrics. Nature Communications, 2014, 5, 4232.	5.8	511
126	Comprehensive Physical Model of Dynamic Resistive Switching in an Oxide Memristor. ACS Nano, 2014, 8, 2369-2376.	7.3	388

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127	Memristors and Memristive Devices for Neuromorphic Computing. , 2014, , 129-149.		8
128	Nanoscale resistive switching devices: mechanisms and modeling. Nanoscale, 2013, 5, 10076.	2.8	232
129	Vertical Nanowire Heterojunction Devices Based on a Clean Si/Ge Interface. Nano Letters, 2013, 13, 5521-5527.	4.5	35
130	Interference and memory capacity effects in memristive systems. Applied Physics Letters, 2013, 102, .	1.5	17
131	Building Neuromorphic Circuits with Memristive Devices. IEEE Circuits and Systems Magazine, 2013, 13, 56-73.	2.6	95
132	Going active. Nature Materials, 2013, 12, 93-94.	13.3	23
133	Stochastic memristive devices for computing and neuromorphic applications. Nanoscale, 2013, 5, 5872.	2.8	395
134	Oxide Heterostructure Resistive Memory. Nano Letters, 2013, 13, 2908-2915.	4.5	171
135	MoS_2 Transistors Fabricated *via* Plasma-Assisted Nanoprinting of Few-Layer MoS_2 Flakes into Large-Area Arrays. ACS Nano, 2013, 7, 5870-5881.	7.3	114
136	Post-Annealing Treatments and Interface Effects on Anomalous Magnetic Characteristics of HfOx Film. Integrated Ferroelectrics, 2013, 141, 145-153.	0.3	1
137	Latch-up based bidirectional npn selector for bipolar resistance-change memory. Applied Physics Letters, 2013, 103, .	1.5	21
138	Improvement of RRAM Device Performance Through On-Chip Resistors. Materials Research Society Symposia Proceedings, 2012, 1430, 149.	0.1	2
139	Ambipolar inverters using SnO thin-film transistors with balanced electron and hole mobilities. Applied Physics Letters, 2012, 100, .	1.5	90
140	Memristive analog arithmetic within cellular arrays. , 2012, , .		3
141	Complementary resistive switching in tantalum oxide-based resistive memory devices. Applied Physics Letters, 2012, 100, .	1.5	192
142	Electrochemical metallization cellsâ€"blending nanoionics into nanoelectronics?. MRS Bulletin, 2012, 37, 124-130.	1.7	107
143	A Functional Hybrid Memristor Crossbar-Array/CMOS System for Data Storage and Neuromorphic Applications. Nano Letters, 2012, 12, 389-395.	4.5	745
144	Modeling and implementation of oxide memristors for neuromorphic applications. , 2012, , .		9

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145	Observation of conducting filament growth in nanoscale resistive memories. Nature Communications, 2012, 3, 732.	5.8	957
146	Observation of Conductance Quantization in Oxide–Based Resistive Switching Memory. Advanced Materials, 2012, 24, 3941-3946.	11.1	217
147	CMOS-integrated memristors for neuromorphic architectures. , 2011, , .		3
148	Esaki tunnel diodes based on vertical Si-Ge nanowire heterojunctions. Applied Physics Letters, 2011, 99, .	1.5	31
149	Device and SPICE modeling of RRAM devices. Nanoscale, 2011, 3, 3833.	2.8	84
150	Short-Term Memory to Long-Term Memory Transition in a Nanoscale Memristor. ACS Nano, 2011, 5, 7669-7676.	7.3	840
151	Time-dependency of the threshold voltage in memristive devices. , 2011, , .		15
152	Andreev tunneling enhanced by Coulomb oscillations in superconductor-semiconductor hybrid Ge/Si nanowire devices. Physical Review B, 2011, 84, .	1.1	7
153	Controlled 3D Buckling of Silicon Nanowires for Stretchable Electronics. ACS Nano, 2011, 5, 672-678.	7.3	192
154	Two-terminal resistive switches (memristors) for memory and logic applications. , 2011, , .		77
155	Synaptic behaviors and modeling of a metal oxide memristive device. Applied Physics A: Materials Science and Processing, 2011, 102, 857-863.	1.1	355
156	Organic vapor discrimination with chemiresistor arrays of temperature modulated tin-oxide nanowires and thiolate-monolayer-protected gold nanoparticles. Nanotechnology, 2011, 22, 125501.	1.3	8
157	Ultrafast Optical-Pump Terahertz-Probe Spectroscopy of Oriented Ge and Ge/Si Core/Shell Nanowires. , 2011, , .		1
158	Growth and electrical properties of Al-catalyzed Si nanowires. Applied Physics Letters, 2011, 98, .	1.5	14
159	ITO nanowires and nanoparticles for transparent films. MRS Bulletin, 2011, 36, 782-788.	1.7	61
160	Hierarchical 3D Nanostructure Organization for Next-Generation Devices. , 2011, , 205-248.		1
161	Nanoscale Memristor Device as Synapse in Neuromorphic Systems. Nano Letters, 2010, 10, 1297-1301.	4.5	3,507
162	Spatial confinement of carriers and tunable band structures in InAs/InP-core–shell nanowires. Chemical Physics Letters, 2010, 495, 261-265.	1.2	22

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163	Nanoscale resistive memory with intrinsic diode characteristics and long endurance. Applied Physics Letters, 2010, 96, .	1.5	144
164	Resistance switching in polycrystalline BiFeO3 thin films. Applied Physics Letters, 2010, 97, .	1.5	139
165	Strong and Tunable Spinâ°Orbit Coupling of One-Dimensional Holes in Ge/Si Core/Shell Nanowires. Nano Letters, 2010, 10, 2956-2960.	4.5	99
166	Si Memristive devices applied to memory and neuromorphic circuits. , 2010, , .		24
167	Radio frequency nanowire resonators and <i>in situ</i> frequency tuning. Applied Physics Letters, 2009, 94, 203104.	1.5	24
168	Radio-Frequency Operation of Transparent Nanowire Thin-Film Transistors. IEEE Electron Device Letters, 2009, 30, 730-732.	2.2	15
169	Room temperature magnetic exchange coupling in multiferroic BaTiO3/CoFe2O4 magnetoelectric superlattice. Journal of Materials Science, 2009, 44, 5143-5148.	1.7	25
170	High-Density Crossbar Arrays Based on a Si Memristive System. Nano Letters, 2009, 9, 870-874.	4.5	507
171	Programmable Resistance Switching in Nanoscale Two-Terminal Devices. Nano Letters, 2009, 9, 496-500.	4.5	272
172	Megahertz frequency characterization of transparent nanowire-based thin-film transistors. , 2009, , .		0
173	Nanowire based electronics: Challenges and prospects. , 2009, , .		3
174	Mechanical Properties of Vaporâ°Liquidâ°Solid Synthesized Silicon Nanowires. Nano Letters, 2009, 9, 3934-3939.	4.5	363
175	Semiconductor nanowire devices. Nano Today, 2008, 3, 12-22.	6.2	277
176	Dopingâ€Dependent Electrical Characteristics of SnO₂ Nanowires. Small, 2008, 4, 451-454.	5.2	99
177	Nanowire Transistor Performance Limits and Applications. IEEE Transactions on Electron Devices, 2008, 55, 2859-2876.	1.6	306
178	Si/a-Si Core/Shell Nanowires as Nonvolatile Crossbar Switches. Nano Letters, 2008, 8, 386-391.	4.5	231
179	CMOS Compatible Nanoscale Nonvolatile Resistance Switching Memory. Nano Letters, 2008, 8, 392-397.	4.5	411
180	Si-based two-terminal resistive switching nonvolatile memory. , 2008, , .		0

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181	Branched SnO2 nanowires on metallic nanowire backbones for ethanol sensors application. Applied Physics Letters, 2008, 92, .	1.5	103
182	Nanowire-Based High Speed Transparent and Flexible Thin-Film Transistor Devices. , 2008, , .		0
183	Versatile Metal Oxide Nanowire Devices Achieved via Controlled Doping. Materials Research Society Symposia Proceedings, 2007, 1018, 1.	0.1	2
184	Nonvolatile Resistive Switching Devices Based on Nanoscale Metal/Amorphous Silicon/Crystalline Silicon Junctions. Materials Research Society Symposia Proceedings, 2007, 997, 1.	0.1	1
185	Fully Transparent Thin-Film Transistor Devices Based on SnO2Nanowires. Nano Letters, 2007, 7, 2463-2469.	4.5	285
186	Transparent metallic Sb-doped SnO2 nanowires. Applied Physics Letters, 2007, 90, 222107.	1.5	130
187	Self-Assembly for Semiconductor Industry. IEEE Transactions on Semiconductor Manufacturing, 2007, 20, 421-431.	1.4	30
188	Nanostructured Thin Films Made by Dewetting Method of Layer-By-Layer Assembly. Nano Letters, 2007, 7, 3266-3273.	4.5	118
189	Nanoelectronics from the bottom up. Nature Materials, 2007, 6, 841-850.	13.3	1,419
190	Semiconductor nanowires. Journal Physics D: Applied Physics, 2006, 39, R387-R406.	1.3	709
191	High-Performance Transparent Conducting Oxide Nanowires. Nano Letters, 2006, 6, 2909-2915.	4.5	186
192	Ge/Si nanowire heterostructures as high-performance field-effect transistors. Nature, 2006, 441, 489-493.	13.7	1,401
193	Real-time electron counting in semiconductor nanostructures. , 2005, , .		0
194	Real-time electron counting studies on charge fluctuations in a semiconductor quantum dot (Invited) Tj ETQq0 0 0 rgBT /Overlock 10 Tf		0
195	Coherent Single Charge Transport in Molecular-Scale Silicon Nanowires. Nano Letters, 2005, 5, 1143-1146.	4.5	153
196	One-dimensional hole gas in germanium/silicon nanowire heterostructures. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10046-10051.	3.3	443
197	Single-crystal metallic nanowires and metal/semiconductor nanowire heterostructures. Nature, 2004, 430, 61-65.	13.7	957
198	Synthesis and Fabrication of High-Performance n-Type Silicon Nanowire Transistors. Advanced Materials, 2004, 16, 1890-1893.	11.1	417

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199	Real-time detection of electron tunnelling in a quantum dot. Nature, 2003, 423, 422-425.	13.7	348
200	Superconducting single-electron transistor coupled to a locally tunable electromagnetic environment. Applied Physics Letters, 2002, 81, 4976-4978.	1.5	5
201	Charge transport processes in a superconducting single-electron transistor coupled to a microstrip transmission line. Physical Review B, 2002, 65, .	1.1	11
202	X-ray diffraction and Raman scattering study of SrBi2Ta2O9 ceramics and thin films with Bi3TiNbO9 addition. Applied Physics Letters, 2001, 79, 3827-3829.	1.5	24
203	Single-electron transistor strongly coupled to an electrostatically defined quantum dot. Applied Physics Letters, 2000, 77, 2746-2748.	1.5	20
204	Controlled deposition of individual single-walled carbon nanotubes on chemically functionalized templates. Chemical Physics Letters, 1999, 303, 125-129.	1.2	516
205	Observation of conducting filament growth in nanoscale resistive memories. , 0, .		1