Deming Zhang

List of Publications by Year
in descending order

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168	4,101	147566	143772
papers	citations	31 h-index	57 g-index

170	170	170	2897
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Magnetic Random-Access Memory-Based Approximate Computing: An overview. IEEE Nanotechnology Magazine, 2022, 16, 25-32.	0.9	1
2	Developments and applications of tunneling magnetoresistance sensors. Tsinghua Science and Technology, 2022, 27, 443-454.	4.1	28
3	Generation and Control of Terahertz Spin Currents in Topologyâ€Induced 2D Ferromagnetic Fe₃GeTe₂|Bi₂Te₃ Heterostructures. Advanced Materials, 2022, 34, e2106172.	11.1	39
4	Femtosecond laser-assisted switching in perpendicular magnetic tunnel junctions with double-interface free layer. Science China Information Sciences, 2022, 65, 1.	2.7	2
5	Ionization and Displacement Damage on Nanostructure of Spinâ€“Orbit Torque Magnetic Tunnel Junction. IEEE Transactions on Nuclear Science, 2022, 69, 43-49.	1.2	5
6	A Novel Computing-in-Memory Platform Based on Hybrid Spintronic/CMOS Memory. IEEE Transactions on Electron Devices, 2022, 69, 1698-1705.	1.6	15
7	A Spintronic In-Memory Computing Network for Efficient Hamming Codec Implementation. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 2086-2090.	2.2	5
8	Promising spin caloritronics and spin diode effects based on 1T-FeCl₂ nanotube devices. Journal of Materials Chemistry C, 2022, 10, 607-615.	2.7	9
9	Phase-Change Controlled Magnetic Tunnel Junction for Multifunctional In-Sensor Computing. IEEE Electron Device Letters, 2022, 43, 482-485.	2.2	7
10	A Machine Learning Attack-Resilient Strong PUF Leveraging the Process Variation of MRAM. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 2712-2716.	2.2	6
11	Role of spin-lattice coupling in ultrafast demagnetization and all optical helicity-independent single-shot switching in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Gd</mml:mi><mml:mrow><mml:mn>1</mml:mn> alloys. Physical Review B, 2022, 105, .	1.1	14
12	Controlled Switching of the Number of Skyrmions in a Magnetic Nanodot by Electric Fields. Advanced Materials, 2022, 34, e2107908.	11.1	19
13	Accelerating Graph-Connected Component Computation With Emerging Processing-In-Memory Architecture. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, 41, 5333-5342.	1.9	5
14	Forecasting the outcome of spintronic experiments with Neural Ordinary Differential Equations. Nature Communications, 2022, 13, 1016.	5.8	17
15	High On/Off Ratio Spintronic Multiâ€Level Memory Unit for Deep Neural Network. Advanced Science, 2022, 9, e2103357.	5.6	7
16	Generation and Control of Terahertz Spin Currents in Topologyâ€Induced 2D Ferromagnetic Fe₃GeTe₂|Bi₂Te₃ Heterostructures (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 T	11.1	2
17	Controlled Switching of the Number of Skyrmions in a Magnetic Nanodot by Electric Fields (Adv.) Tj ETQq1 1 0.784314 rgBT /Overloc	11.1	8
18	Robust Mobility Enhancement and Comprehensive Reliability Evaluation for Amorphous InGaZnO TFT by Double Layers With Quantum Well Structures. IEEE Transactions on Electron Devices, 2022, 69, 1876-1882.	1.6	0

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19	Stateful implication logic based on perpendicular magnetic tunnel junctions. Science China Information Sciences, 2022, 65, 1.	2.7	10
20	Observation of magnetic droplets in magnetic tunnel junctions. Science China: Physics, Mechanics and Astronomy, 2022, 65, .	2.0	11
21	Anomalous Thermal-Assisted Spinâ€“Orbit Torque-Induced Magnetization Switching for Energy-Efficient Logic-in-Memory. ACS Nano, 2022, 16, 8264-8272.	7.3	9
22	An All-Electric Neural Device and Network Based on Laterally Coupled Nanomagnets for Binary Image Recognitions. IEEE Transactions on Electron Devices, 2022, 69, 3130-3134.	1.6	1
23	A Mini Tutorial of Processing in Memory: From Principles, Devices to Prototypes. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 3044-3050.	2.2	3
24	Multiple modes of perpendicular magnetization switching scheme in single spinâ€“orbit torque device. Chinese Physics B, 2022, 31, 107501.	0.7	2
25	Picosecond optospintronic tunnel junctions. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	25
26	Flexible Control of Broadband Polarization in a Spintronic Terahertz Emitter Integrated with Liquid Crystal and Metasurface. ACS Applied Materials & Interfaces, 2022, 14, 32646-32656.	4.0	10
27	Time-Division Multiplexing Ising Computer Using Single Stochastic Magnetic Tunneling Junction. IEEE Transactions on Electron Devices, 2022, 69, 4700-4707.	1.6	1
28	Spin manipulation by giant valley-Zeeman spin-orbit field in atom-thick WSe2. Applied Physics Reviews, 2022, 9, .	5.5	10
29	Toward Energy-Efficient STT-MRAM Design With Multi-Modes Reconfiguration. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 2633-2639.	2.2	9
30	Unconventional applications of skyrmions. , 2021, , 393-416.		0
31	SpinLiM: Spin Orbit Torque Memory for Ternary Neural Networks Based on the Logic-in-Memory Architecture. , 2021, , .		6
32	Theoretical Conditions for Field-Free Magnetization Switching Induced by Spin-Orbit Torque and Dzyaloshinskiiâ€“Moriya Interaction. IEEE Electron Device Letters, 2021, 42, 148-151.	2.2	5
33	Experimental demonstration of voltage-gated spin-orbit torque switching in an antiferromagnet/ferromagnet structure. Physical Review B, 2021, 103, .	1.1	14
34	Fast Tunable Biological Fluorescence Detection Device with Integrable Liquid Crystal Filter. Crystals, 2021, 11, 272.	1.0	1
35	Prediction of crossing nodal-lines and large intrinsic spin Hall conductivity in topological Dirac semimetal Ta3As family. Npj Computational Materials, 2021, 7, .	3.5	14
36	Exploiting Carbon Nanotube FET and Magnetic Tunneling Junction for Near-Memory-Computing Paradigm. IEEE Transactions on Electron Devices, 2021, 68, 1975-1979.	1.6	20

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37	Experimental Demonstration of NAND-Like Spin-Torque Memory Unit. IEEE Electron Device Letters, 2021, 42, 513-516.	2.2	18
38	Field-Free Deterministic Magnetization Switching Induced by Interlaced Spinâ€“Orbit Torques. ACS Applied Materials & Interfaces, 2021, 13, 20763-20769.	4.0	7
39	Multi-order Nonlinearities and Resulting Coherent Oscillations of the States in Quantum Dot-Mechanical Resonator Hybrid System. , 2021, , .		0
40	Ultrafast and Energy-Efficient Ferrimagnetic XNOR Logic Gates for Binary Neural Networks. IEEE Electron Device Letters, 2021, 42, 621-624.	2.2	6
41	Optimal Design of DDR3 STT-MRAM Memory. , 2021, , .		0
42	Brief Industry Paper: optimizing Memory Efficiency of Graph Neural Networks on Edge Computing Platforms. , 2021, , .		7
43	Recent progress of integrated circuits and optoelectronic chips. Science China Information Sciences, 2021, 64, 1.	2.7	56
44	Proposal of High Density Two-Bits-Cell Based NAND-Like Magnetic Random Access Memory. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1665-1669.	2.2	2
45	Fully Single Event Double Node Upset Tolerant Design for Magnetic Random Access Memory. , 2021, , .		7
46	Sub-ns Field-Free Switching in Perpendicular Magnetic Tunnel Junctions by the Interplay of Spin Transfer and Orbit Torques. IEEE Electron Device Letters, 2021, 42, 704-707.	2.2	33
47	Weak Kondo effect in the monocrystalline transition metal dichalcogenide <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Zr</mml:mi><mml:msub><mml:mi>Te</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>		
48	All-optical Helicity-Independent Switching State Diagram in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Gd</mml:mi></mml:math> - <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Fe</mml:mi></mml:math> - <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Co</	1.5	23
49	Field-free spin-orbit torque-induced switching ofÂperpendicular magnetization in a ferrimagnetic layer with a vertical composition gradient. Nature Communications, 2021, 12, 4555.	5.8	105
50	Experimental Demonstration of Angle-Dependent GMR Effect in Py/WSeâ„‚/Co Spin Valve Structure. IEEE Transactions on Electron Devices, 2021, 68, 3690-3695.	1.6	2
51	Variability Study of Toggle Spin Torques Magnetic Random Access Memory. IEEE Transactions on Magnetics, 2021, 57, 1-5.	1.2	2
52	Anisotropic bilinear magnetoresistance in (110) <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>SrTi</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> -based two-dimensional electron gas. Physical Review B, 2021, 104, .	1.1	4
53	Spintronics for Energy- Efficient Computing: An Overview and Outlook. Proceedings of the IEEE, 2021, 109, 1398-1417.	16.4	112
54	Manipulating density of magnetic skyrmions via multilayer repetition and thermal annealing. Physical Review B, 2021, 104, .	1.1	12

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55	Separation of emission mechanisms in spintronic terahertz emitters. Physical Review B, 2021, 104, .	1.1	22
56	Phase-change-assisted spin-transfer torque switching in perpendicular magnetic tunnel junctions. Applied Physics Letters, 2021, 119, .	1.5	22
57	Spintronic Computing-in-Memory Architecture Based on Voltage-Controlled Spinâ€“Orbit Torque Devices for Binary Neural Networks. IEEE Transactions on Electron Devices, 2021, 68, 4944-4950.	1.6	13
58	A Reconfigurable Arbiter MPUF With High Resistance Against Machine Learning Attack. IEEE Transactions on Magnetics, 2021, 57, 1-7.	1.2	7
59	Tunable Tunneling Magnetoresistance in van der Waals Magnetic Tunnel Junctions with 1T-CrTe₂ Electrodes. ACS Applied Materials & Interfaces, 2021, 13, 1214-1221.	4.0	33
60	A Novel Multi-Context Non-Volatile Content-Addressable Memory Cell and Multi-Level Architecture for High Reliability and Density. , 2021, , .		0
61	A Computing-in-memory Scheme with Series Bit-cell in STT-MRAM for Efficient Multi-bit Analog Multiplication. , 2021, , .		3
62	Optimized LRU Algorithm for STT-MRAM/SRAM Hybrid Cache Architecture. , 2021, , .		0
63	Radiation Hardened Design of STT-MRAM with High Recoverability from Double Node Upset. , 2021, , .		0
64	Time Division Multiplexing Ising Computer Using Single Tunable True Random Number Generator Based on Spin Torque Nano-Oscillator. , 2021, , .		6
65	Computational Study for Spin-orbit Torque Magnetic Random Access Memory. , 2021, , .		3
66	Design of Magnetic Non-Volatile TCAM With Priority-Decision in Memory Technology for High Speed, Low Power, and High Reliability. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 464-474.	3.5	20
67	Towards Spintronics Nonvolatile Caches. Springer Series in Advanced Microelectronics, 2020, , 1-28.	0.3	2
68	A Self-Timed Voltage-Mode Sensing Scheme With Successive Sensing and Checking for STT-MRAM. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 1602-1614.	3.5	29
69	Modulation of thermal stability and spinâ€“orbit torque in IrMn/CoFeB/MgO structures through atom thick W insertion. Applied Physics Letters, 2020, 117, .	1.5	13
70	Field-Free 3T2SOT MRAM for Non-Volatile Cache Memories. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 4660-4669.	3.5	17
71	Exchange bias switching in an antiferromagnet/ferromagnet bilayer driven by spinâ€“orbit torque. Nature Electronics, 2020, 3, 757-764.	13.1	99
72	Reliability Analysis and Performance Evaluation of STT-MRAM-Based Physical Unclonable Function. Spin, 2020, 10, .	0.6	6

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73	Compact Modeling and Analysis of Voltage-Gated Spin-Orbit Torque Magnetic Tunnel Junction. IEEE Access, 2020, 8, 50792-50800.	2.6	46
74	Magnetic Nonvolatile SRAM Based on Voltage-Gated Spin-Orbit-Torque Magnetic Tunnel Junctions. IEEE Transactions on Electron Devices, 2020, 67, 1965-1971.	1.6	15
75	Advanced Spin Orbit Torque Magnetic Random Access Memory with Field-Free Switching Schemes (Invited). , 2020, , .		3
76	Addressing Failure and Aging Degradation in MRAM/MeRAM-on-FDSOI Integration. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 239-250.	3.5	10
77	eSLAM. , 2019, , .		47
78	Hardware Acceleration Implementation of Sparse Coding Algorithm With Spintronic Devices. IEEE Nanotechnology Magazine, 2019, 18, 518-531.	1.1	15
79	CORN: In-Buffer Computing for Binary Neural Network. , 2019, , .		11
80	Compact Model for Negative Capacitance Enhanced Spintronics Devices. IEEE Transactions on Electron Devices, 2019, 66, 2795-2801.	1.6	4
81	Skyrmion-Induced Memristive Magnetic Tunnel Junction for Ternary Neural Network. IEEE Journal of the Electron Devices Society, 2019, 7, 529-533.	1.2	13
82	All Perpendicular Spin Nano-Oscillators with Composite Free Layer. Spin, 2019, 09, 1940010.	0.6	1
83	Low-Power, High-Speed and High-Density Magnetic Non-Volatile SRAM Design with Voltage-Gated Spin-Orbit Torque. , 2019, , .		1
84	Process Variation-Resilient STT-MTJ based TRNG using Linear Correcting Codes. , 2019, , .		7
85	Effects of Gamma Irradiation on Magnetic Properties of Double-Interface CoFeB/MgO Multifilms. IEEE Transactions on Nuclear Science, 2019, 66, 77-81.	1.2	9
86	An STT-MRAM Based in Memory Architecture for Low Power Integral Computing. IEEE Transactions on Computers, 2019, 68, 617-623.	2.4	10
87	A Novel MTJ-Based Non-Volatile Ternary Content-Addressable Memory for High-Speed, Low-Power, and High-Reliable Search Operation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 1454-1464.	3.5	35
88	Exploiting Spin-Orbit Torque Devices As Reconfigurable Logic for Circuit Obfuscation. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2019, 38, 57-69.	1.9	21
89	Magnetization Dynamics Modulated by Dzyaloshinskii-Moriya Interaction in the Double-Interface Spin-Transfer Torque Magnetic Tunnel Junction. Nanoscale Research Letters, 2019, 14, 315.	3.1	7
90	A compact skyrmionic leakyâ€“integrateâ€“fire spiking neuron device. Nanoscale, 2018, 10, 6139-6146.	2.8	96

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91	Long-distance propagation of short-wavelength spin waves. Nature Communications, 2018, 9, 738.	5.8	181
92	Negative Capacitance Enhanced All Spin Logic Devices With an Ultra-Low 1 mV Working Voltage. IEEE Journal of the Electron Devices Society, 2018, 6, 245-249.	1.2	9
93	High-Density NAND-Like Spin Transfer Torque Memory With Spin Orbit Torque Erase Operation. IEEE Electron Device Letters, 2018, 39, 343-346.	2.2	119
94	Addressing the Thermal Issues of STT-MRAM From Compact Modeling to Design Techniques. IEEE Nanotechnology Magazine, 2018, 17, 345-352.	1.1	33
95	Direct Observation of Domain-Wall Surface Tension by Deflating or Inflating a Magnetic Bubble. Physical Review Applied, 2018, 9, .	1.5	27
96	A Fast and Power-Efficient Hardware Architecture for Visual Feature Detection in Affine-SIFT. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 3362-3375.	3.5	7
97	Skyrmions in Magnetic Tunnel Junctions. ACS Applied Materials & Interfaces, 2018, 10, 16887-16892.	4.0	68
98	Dynamics of a magnetic skyrmionium driven by spin waves. Applied Physics Letters, 2018, 112, .	1.5	43
99	Current-induced magnetization switching in atom-thick tungsten engineered perpendicular magnetic tunnel junctions with large tunnel magnetoresistance. Nature Communications, 2018, 9, 671.	5.8	259
100	Skyrmion Racetrack Memory With Random Information Update/Deletion/Insertion. IEEE Transactions on Electron Devices, 2018, 65, 87-95.	1.6	41
101	Exploring Hybrid STT-MTJ/CMOS Energy Solution in Near-/Sub-Threshold Regime for IoT Applications. IEEE Transactions on Magnetics, 2018, 54, 1-9.	1.2	18
102	Extrinsic pinning of magnetic domain walls in CoFeB-MgO nanowires with perpendicular anisotropy. AIP Advances, 2018, 8, .	0.6	11
103	Interface control of domain wall depinning field. AIP Advances, 2018, 8, .	0.6	4
104	Demonstration of Multi-State Memory Device Combining Resistive and Magnetic Switching Behaviors. IEEE Electron Device Letters, 2018, 39, 684-687.	2.2	14
105	Self-Adaptive Write Circuit for Magnetic Tunneling Junction Memory With Voltage-Controlled Magnetic Anisotropy Effect. IEEE Nanotechnology Magazine, 2018, 17, 492-499.	1.1	15
106	A Novel 15T-4MTJ based Non-volatile Ternary Content-Addressable Memory Cell for High-Speed, Low-Power and High-Reliable Search Operation. , 2018, , .		3
107	A spin orbit torque based true random number generator with real-time optimization. , 2018, , .		6
108	A Computing Efficient Hardware Architecture for Sparse Deep Neural Network Computing. , 2018, , .		1

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109	Variation-Resilient True Random Number Generators Based on Multiple STT-MTJs. IEEE Nanotechnology Magazine, 2018, 17, 1270-1281.	1.1	24
110	Anomalous Hall and Nernst Effects in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi>Co</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi>Ti</mml:mi><mml:mi>Sn</mml:m and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi>Co</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi>Ti</mml:mi><mml:m mathvariant="normal. Physical Review Applied, 2018, 10, .	1.5	24
111	Enhancement of Perpendicular Magnetic Anisotropy Through Fe Insertion at the CoFe/W Interface. IEEE Transactions on Magnetics, 2018, 54, 1-5.	1.2	6
112	Optically Tunable Magnetoresistance Effect: From Mechanism to Novel Device Application. Materials, 2018, 11, 47.	1.3	16
113	Design and Fabrication of Full Wheatstone-Bridge-Based Angular GMR Sensors. Sensors, 2018, 18, 1832.	2.1	30
114	Design and Data Management for Magnetic Racetrack Memory. , 2018, , .		2
115	NEAR: A Novel Energy Aware Replacement Policy for STT-MRAM LLCs. , 2018, , .		0
116	Write Energy Optimization for STT-MRAM Cache with Data Pattern Characterization. , 2018, , .		2
117	Radiation-Hardening Techniques for Spin Orbit Torque-MRAM Peripheral Circuitry. IEEE Transactions on Magnetics, 2018, 54, 1-5.	1.2	11
118	Compact Modeling and Evaluation of Magnetic Skyrmion-Based Racetrack Memory. IEEE Transactions on Electron Devices, 2017, 64, 1060-1068.	1.6	26
119	Epitaxial Growth of Aligned and Continuous Carbon Nanofibers from Carbon Nanotubes. ACS Nano, 2017, 11, 1257-1263.	7.3	23
120	In-Memory Processing Paradigm for Bitwise Logic Operations in STTâ€“MRAM. IEEE Transactions on Magnetics, 2017, 53, 1-4.	1.2	36
121	Reliability-Enhanced Hybrid CMOS/MTJ Logic Circuit Architecture. IEEE Transactions on Magnetics, 2017, 53, 1-5.	1.2	18
122	Interfacial Perpendicular Magnetic Anisotropy in Sub-20 nm Tunnel Junctions for Large-Capacity Spin-Transfer Torque Magnetic Random-Access Memory. IEEE Magnetics Letters, 2017, 8, 1-5.	0.6	25
123	Modeling for Spin-FET and Design of Spin-FET-Based Logic Gates. IEEE Transactions on Magnetics, 2017, 53, 1-6.	1.2	11
124	A true random number generator based on parallel STT-MTJs. , 2017, , .		31
125	Reliability-Enhanced Separated Pre-Charge Sensing Amplifier for Hybrid CMOS/MTJ Logic Circuits. IEEE Transactions on Magnetics, 2017, 53, 1-5.	1.2	19
126	High Tunnel Magnetoresistance in Mo/CoFe/MgO Magnetic Tunnel Junction: A First-Principles Study. IEEE Transactions on Magnetics, 2017, 53, 1-4.	1.2	4

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127	Performance Evaluation and Optimization of Single Layer MoS2Double Gate Transistors With Schottky Barrier Contacts. IEEE Transactions on Electron Devices, 2017, 64, 2999-3006.	1.6	4
128	A microwave field-driven transistor-like skyrmionic device with the microwave current-assisted skyrmion creation. Journal of Applied Physics, 2017, 122, .	1.1	24
129	Gate-Driven Pure Spin Current in Graphene. Physical Review Applied, 2017, 8, .	1.5	39
130	Stateful Reconfigurable Logic via a Single-Voltage-Gated Spin Hall-Effect Driven Magnetic Tunnel Junction in a Spintronic Memory. IEEE Transactions on Electron Devices, 2017, 64, 4295-4301.	1.6	76
131	Anomalous Nernst effect in Ir22Mn78/Co20Fe60B20/MgO layers with perpendicular magnetic anisotropy. Applied Physics Letters, 2017, 111, .	1.5	24
132	Skyrmion dynamics in width-varying nanotracks and implications for skyrmionic applications. Applied Physics Letters, 2017, 111, .	1.5	29
133	Unraveling the Characteristic Shape for Magnetic Field Effects in Polymerâ€“Fullerene Solar Cells. ACS Omega, 2017, 2, 7777-7783.	1.6	4
134	Large voltage-controlled magnetic anisotropy in the SrTiO3/Fe/Cu structure. Applied Physics Letters, 2017, 111, 152403.	1.5	16
135	Ultrabroadband spin-wave propagation in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> thin films. Physical Review B, 2017, 96, .	1.1	18
136	Pseudo-Differential Sensing Framework for STT-MRAM: A Cross-Layer Perspective. IEEE Transactions on Computers, 2017, 66, 531-544.	2.4	9
137	Robust Ultra-Low Power Non-Volatile Logic-in-Memory Circuits in FD-SOI Technology. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 847-857.	3.5	85
138	Reconfigurable processing in memory architecture based on spin orbit torque. , 2017, , .		3
139	Novel Magnetic Tunneling Junction Memory Cell With Negative Capacitance-Amplified Voltage-Controlled Magnetic Anisotropy Effect. IEEE Transactions on Electron Devices, 2017, 64, 4919-4927.	1.6	6
140	Scaling Study of Spin-Hall-Assisted Spin Transfer Torque Driven Magnetization Switching in the Presence of Dzyaloshinskiiâ€“Moriya Interaction. IEEE Nanotechnology Magazine, 2017, 16, 1138-1142.	1.1	14
141	Frequency modulation of spin torque nano oscillator with voltage controlled magnetic anisotropy effect. , 2017, , .		0
142	Interfacial property tuning of heavy metal/CoFeB for large density STT-MRAM. , 2017, , .		2
143	Thermosiphon: A thermal aware NUCA architecture for write energy reduction of the STT-MRAM based LLCs. , 2017, , .		1
144	Proposal for novel magnetic memory device with spin momentum locking materials. , 2017, , .		1

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145	Failure Analysis in Magnetic Tunnel Junction Nanopillar with Interfacial Perpendicular Magnetic Anisotropy. Materials, 2016, 9, 41.	1.3	72
146	Perspectives of Racetrack Memory for Large-Capacity On-Chip Memory: From Device to System. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 629-638.	3.5	18
147	Spin wave based synapse and neuron for ultra low power neuromorphic computation system. , 2016, , .		2
148	High-Speed, Low-Power, Magnetic Non-Volatile Flip-Flop With Voltage-Controlled, Magnetic Anisotropy Assistance. IEEE Magnetics Letters, 2016, 7, 1-5.	0.6	38
149	Performance evaluation and optimization of single layer MoS<inf>2</inf> double gate transistors with metallic contacts. , 2016, , .		0
150	Temperature Impact Analysis and Access Reliability Enhancement for 1T1MTJ STT-RAM. IEEE Transactions on Reliability, 2016, 65, 1755-1768.	3.5	40
151	Short-Wavelength Spin Waves in Yttrium Iron Garnet Micro-Channels on Silicon. IEEE Magnetics Letters, 2016, 7, 1-4.	0.6	13
152	All Spin Artificial Neural Networks Based on Compound Spintronic Synapse and Neuron. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 828-836.	2.7	84
153	Alleviating Through-Silicon-Via Electromigration for 3-D Integrated Circuits Taking Advantage of Self-Healing Effect. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016, 24, 3310-3322.	2.1	8
154	High-Speed, Low-Power, and Error-Free Asynchronous Write Circuit for STT-MRAM and Logic. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	14
155	Compact Model of Dielectric Breakdown in Spin-Transfer Torque Magnetic Tunnel Junction. IEEE Transactions on Electron Devices, 2016, 63, 1762-1767.	1.6	132
156	Realization of neural coding by stochastic switching of magnetic tunnel junction. , 2015, , .		1
157	Recent progresses of STT memory design and applications. , 2015, , .		0
158	Nonvolatile radiation hardened DICE latch. , 2015, , .		4
159	Tunnel Junction with Perpendicular Magnetic Anisotropy: Status and Challenges. Micromachines, 2015, 6, 1023-1045.	1.4	41
160	Guest Editorial for Special Issue on Emerging Memory Technologiesâ€"Modeling, Design, and Applications for Multi-Scale Computing. IEEE Transactions on Multi-Scale Computing Systems, 2015, 1, 125-126.	2.5	0
161	Synchronous 8-bit Non-Volatile Full-Adder based on Spin Transfer Torque Magnetic Tunnel Junction. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 1757-1765.	3.5	50
162	A High-Speed Robust NVM-TCAM Design Using Body Bias Feedback. , 2015, , .		9

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163	Reconfigurable Codesign of STT-MRAM Under Process Variations in Deeply Scaled Technology. IEEE Transactions on Electron Devices, 2015, 62, 1769-1777.	1.6	135
164	Quantitative modeling of racetrack memory, a tradeoff among area, performance, and power. , 2015, , .		26
165	Compact Model of Subvolume MTJ and Its Design Application at Nanoscale Technology Nodes. IEEE Transactions on Electron Devices, 2015, 62, 2048-2055.	1.6	78
166	An architecture-level cache simulation framework supporting advanced PMA STT-MRAM. , 2015, , .		4
167	Synchronous Non-Volatile Logic Gate Design Based on Resistive Switching Memories. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 443-454.	3.5	90
168	Compact Modeling of Perpendicular-Anisotropy CoFeB/MgO Magnetic Tunnel Junctions. IEEE Transactions on Electron Devices, 2012, 59, 819-826.	1.6	330