

Sayeef Salahuddin

List of Publications by Year in descending order

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168
papers

12,518
citations

36303

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all docs

174
docs citations

174
times ranked

9551
citing authors

#	ARTICLE	IF	CITATIONS
1	Use of Negative Capacitance to Provide Voltage Amplification for Low Power Nanoscale Devices. Nano Letters, 2008, 8, 405-410.	9.1	1,763
2	Memory leads the way to better computing. Nature Nanotechnology, 2015, 10, 191-194.	31.5	671
3	Negative capacitance in a ferroelectric capacitor. Nature Materials, 2015, 14, 182-186.	27.5	611
4	Deterministic switching of ferromagnetism at room temperature using an electric field. Nature, 2014, 516, 370-373.	27.8	570
5	Room-temperature antiferromagnetic memory resistor. Nature Materials, 2014, 13, 367-374.	27.5	546
6	Enhanced ferroelectricity in ultrathin films grown directly on silicon. Nature, 2020, 580, 478-482.	27.8	486
7	The era of hyper-scaling in electronics. Nature Electronics, 2018, 1, 442-450.	26.0	375
8	Experimental evidence of ferroelectric negative capacitance in nanoscale heterostructures. Applied Physics Letters, 2011, 99, .	3.3	256
9	Spatially resolved steady-state negative capacitance. Nature, 2019, 565, 468-471.	27.8	245
10	Ferroelectric negative capacitance MOSFET: Capacitance tuning & antiferroelectric operation. , 2011, , .		241
11	Sustained Sub-60 mV/decade Switching via the Negative Capacitance Effect in MoS ₂ Transistors. Nano Letters, 2017, 17, 4801-4806.	9.1	237
12	Switching of perpendicularly polarized nanomagnets with spin orbit torque without an external magnetic field by engineering a tilted anisotropy. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10310-10315.	7.1	236
13	Direct Observation of Negative Capacitance in Polycrystalline Ferroelectric HfO ₂ . Advanced Functional Materials, 2016, 26, 8643-8649.	14.9	234
14	Negative Capacitance in Short-Channel FinFETs Externally Connected to an Epitaxial Ferroelectric Capacitor. IEEE Electron Device Letters, 2016, 37, 111-114.	3.9	198
15	Spin Hall effect clocking of nanomagnetic logic without a magnetic field. Nature Nanotechnology, 2014, 9, 59-63.	31.5	193
16	Built-in and induced polarization across LaAlO ₃ /SrTiO ₃ heterojunctions. Nature Physics, 2011, 7, 80-86.	16.7	178
17	Transport Effects on Signal Propagation in Quantum Wires. IEEE Transactions on Electron Devices, 2005, 52, 1734-1742.	3.0	167
18	Sub-60mV-swing negative-capacitance FinFET without hysteresis. , 2015, , .		163

#	ARTICLE	IF	CITATIONS
19	Effects of the Variation of Ferroelectric Properties on Negative Capacitance FET Characteristics. IEEE Transactions on Electron Devices, 2016, 63, 2197-2199.	3.0	160
20	Single crystal functional oxides on silicon. Nature Communications, 2016, 7, 10547.	12.8	156
21	Large resistivity modulation in mixed-phase metallic systems. Nature Communications, 2015, 6, 5959.	12.8	154
22	Analysis and Compact Modeling of Negative Capacitance Transistor with High ON-Current and Negative Output Differential Resistanceâ€™Part II: Model Validation. IEEE Transactions on Electron Devices, 2016, 63, 4986-4992.	3.0	139
23	Improved Subthreshold Swing and Short Channel Effect in FDSOI n-Channel Negative Capacitance Field Effect Transistors. IEEE Electron Device Letters, 2018, 39, 300-303.	3.9	128
24	Ultrafast magnetization reversal by picosecond electrical pulses. Science Advances, 2017, 3, e1603117.	10.3	127
25	Room-Temperature Negative Capacitance in a Ferroelectricâ€™Dielectric Superlattice Heterostructure. Nano Letters, 2014, 14, 5814-5819.	9.1	123
26	Implementing p-bits With Embedded MTJ. IEEE Electron Device Letters, 2017, 38, 1767-1770.	3.9	118
27	Ferroelectric HfO ₂ Memory Transistors With High- <i>I</i> ⁹ Interfacial Layer and Write Endurance Exceeding 10 ¹⁰ Cycles. IEEE Electron Device Letters, 2021, 42, 994-997.	3.9	117
28	Negative Capacitance Behavior in a Leaky Ferroelectric. IEEE Transactions on Electron Devices, 2016, 63, 4416-4422.	3.0	108
29	Ultrathin ferroic HfO ₂ â€™ZrO ₂ superlattice gate stack for advanced transistors. Nature, 2022, 604, 65-71.	27.8	108
30	Negative Capacitance FET With 1.8-nm-Thick Zr-Doped HfO ₂ Oxide. IEEE Electron Device Letters, 2019, 40, 993-996.	3.9	106
31	Negative Capacitance Transistors. Proceedings of the IEEE, 2019, 107, 49-62.	21.3	95
32	Gate Recessed Quasi-Normally OFF Al _{0.2} O ₃ /AlGa _{0.3} N/GaN MIS-HEMT With Low Threshold Voltage Hysteresis Using PEALD AlN Interfacial Passivation Layer. IEEE Electron Device Letters, 2014, 35, 732-734.	3.9	91
33	Can the subthreshold swing in a classical FET be lowered below 60 mV/decade?. , 2008, , .		88
34	Local negative permittivity and topological phase transition in polar skyrmions. Nature Materials, 2021, 20, 194-201.	27.5	86
35	Analysis and Compact Modeling of Negative Capacitance Transistor with High ON-Current and Negative Output Differential Resistanceâ€™Part I: Model Description. IEEE Transactions on Electron Devices, 2016, 63, 4981-4985.	3.0	85
36	Heterojunction Vertical Band-to-Band Tunneling Transistors for Steep Subthreshold Swing and High on Current. IEEE Electron Device Letters, 2011, 32, 689-691.	3.9	79

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37	Engineering Negative Differential Resistance in NCFETs for Analog Applications. IEEE Transactions on Electron Devices, 2018, 65, 2033-2039.	3.0	79
38	Self-Aligned, Gate Last, FDSOI, Ferroelectric Gate Memory Device With 5.5-nm Hf _{0.8} Zr _{0.2} O ₂ , High Endurance and Breakdown Recovery. IEEE Electron Device Letters, 2017, 38, 1379-1382.	3.9	76
39	High Speed Epitaxial Perovskite Memory on Flexible Substrates. Advanced Materials, 2017, 29, 1605699.	21.0	74
40	Spin-orbit torque switching of ultralarge-thickness ferrimagnetic GdFeCo. Physical Review B, 2017, 96, .	3.2	74
41	Enabling Energy-Efficient Nonvolatile Computing With Negative Capacitance FET. IEEE Transactions on Electron Devices, 2017, 64, 3452-3458.	3.0	72
42	Ferroelectric negative capacitance domain dynamics. Journal of Applied Physics, 2018, 123, .	2.5	72
43	Impact of Parasitic Capacitance and Ferroelectric Parameters on Negative Capacitance FinFET Characteristics. IEEE Electron Device Letters, 2017, 38, 142-144.	3.9	71
44	Compact models of negative-capacitance FinFETs: Lumped and distributed charge models. , 2016, , .		69
45	Interface Engineering of Domain Structures in BiFeO ₃ Thin Films. Nano Letters, 2017, 17, 486-493.	9.1	69
46	Proposal for Capacitance Matching in Negative Capacitance Field-Effect Transistors. IEEE Electron Device Letters, 2019, 40, 463-466.	3.9	66
47	Emergent ferroelectricity in subnanometer binary oxide films on silicon. Science, 2022, 376, 648-652.	12.6	65
48	Deterministic Domain Wall Motion Orthogonal To Current Flow Due To Spin Orbit Torque. Scientific Reports, 2015, 5, 11823.	3.3	64
49	Work Function Engineering for Performance Improvement in Leaky Negative Capacitance FETs. IEEE Electron Device Letters, 2017, 38, 1335-1338.	3.9	64
50	High-frequency performance projections for ballistic carbon-nanotube transistors. IEEE Nanotechnology Magazine, 2006, 5, 14-22.	2.0	62
51	Intrinsic speed limit of negative capacitance transistors. IEEE Electron Device Letters, 2017, 38, 1328-1330.	3.9	61
52	Stabilization of ferroelectric phase in tungsten capped Hf _{0.8} Zr _{0.2} O ₂ . Applied Physics Letters, 2017, 111, .	3.3	58
53	Switching Energy of Ferromagnetic Logic Bits. IEEE Nanotechnology Magazine, 2009, 8, 505-514.	2.0	57
54	Spin-orbit torque and Nernst effect in Bi-Sb/Co heterostructures. Physical Review B, 2019, 99, .	3.2	53

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55	One Nanometer HfO ₂ -Based Ferroelectric Tunnel Junctions on Silicon. Advanced Electronic Materials, 2022, 8, 2100499.	5.1	52
56	Spin wave generation by surface acoustic waves. Journal of Applied Physics, 2017, 122, .	2.5	51
57	A Spin-Orbit Torque Memristive Device. Advanced Electronic Materials, 2019, 5, 1800782.	5.1	51
58	Nonvolatile MoS ₂ field effect transistors directly gated by single crystalline epitaxial ferroelectric. Applied Physics Letters, 2017, 111, .	3.3	45
59	Experimental Demonstration of a Ferroelectric HfO ₂ -Based Content Addressable Memory Cell. IEEE Electron Device Letters, 2020, 41, 240-243.	3.9	45
60	Ultrafast magnetic switching of GdFeCo with electronic heat currents. Physical Review B, 2017, 95, .	3.2	43
61	Negative Capacitance, n-Channel, Si FinFETs: Bi-directional Sub-60 mV/dec, Negative DIBL, Negative Differential Resistance and Improved Short Channel Effect. , 2018, , .		43
62	Voltage-driven, local, and efficient excitation of nitrogen-vacancy centers in diamond. Science Advances, 2018, 4, eaat6574.	10.3	42
63	Electrical Characteristics of n, p-In _{0.53} Ga _{0.47} As MOSCAPs With In Situ PEALD-AIN Interfacial Passivation Layer. IEEE Transactions on Electron Devices, 2014, 61, 2774-2778.	3.0	39
64	Ultrafast magnetization switching in nanoscale magnetic dots. Applied Physics Letters, 2019, 114, .	3.3	39
65	Highly Scaled, High Endurance, 1T1R-Gate, Nanowire Ferroelectric FET Memory Transistors. IEEE Electron Device Letters, 2020, 41, 1637-1640.	3.9	39
66	BSIM Compact Model of Quantum Confinement in Advanced Nanosheet FETs. IEEE Transactions on Electron Devices, 2020, 67, 730-737.	3.0	38
67	Compact Modeling of Temperature Effects in FDSOI and FinFET Devices Down to Cryogenic Temperatures. IEEE Transactions on Electron Devices, 2021, 68, 4223-4230.	3.0	38
68	Analysis and Modeling of Inner Fringing Field Effect on Negative Capacitance FinFETs. IEEE Transactions on Electron Devices, 2019, 66, 2023-2027.	3.0	37
69	Differential voltage amplification from ferroelectric negative capacitance. Applied Physics Letters, 2017, 111, .	3.3	36
70	Spacer Engineering in Negative Capacitance FinFETs. IEEE Electron Device Letters, 2019, 40, 1009-1012.	3.9	36
71	Role of phonon scattering in graphene nanoribbon transistors: Nonequilibrium Green's function method with real space approach. Applied Physics Letters, 2011, 98, 203503.	3.3	34
72	Circuit performance analysis of negative capacitance FinFETs. , 2016, , .		33

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73	NCFET Design Considering Maximum Interface Electric Field. IEEE Electron Device Letters, 2018, 39, 1254-1257.	3.9	33
74	Novel Spinâ€œOrbit Torque Generation at Room Temperature in an Allâ€œOxide Epitaxial La _{0.7} Sr _{0.3} MnO ₃ /SrIrO ₃ System. Advanced Materials, 2021, 33, e2008269.	21.0	32
75	Designing 0.5 V 5-nm HP and 0.23 V 5-nm LP NC-FinFETs With Improved $\{I\}_{OFF}$ Sensitivity in Presence of Parasitic Capacitance. IEEE Transactions on Electron Devices, 2018, 65, 1211-1216.	3.0	31
76	Near Threshold Capacitance Matching in a Negative Capacitance FET With 1 nm Effective Oxide Thickness Gate Stack. IEEE Electron Device Letters, 2020, 41, 179-182.	3.9	30
77	Ferroelectric Domain Wall Motion in Freestanding Singleâ€œCrystal Complex Oxide Thin Film. Advanced Materials, 2020, 32, e1907036.	21.0	30
78	Response Speed of Negative Capacitance FinFETs. , 2018, , .		29
79	Variation Caused by Spatial Distribution of Dielectric and Ferroelectric Grains in a Negative Capacitance Field-Effect Transistor. IEEE Transactions on Electron Devices, 2018, 65, 4652-4658.	3.0	29
80	Characterization and Modeling of Flicker Noise in FinFETs at Advanced Technology Node. IEEE Electron Device Letters, 2019, 40, 985-988.	3.9	28
81	Challenges to Partial Switching of Hf _{0.8} Zr _{0.2} O ₂ Gated Ferroelectric FET for Multilevel/Analog or Low-Voltage Memory Operation. IEEE Electron Device Letters, 2019, 40, 1423-1426.	3.9	27
82	Design Optimization Techniques in Nanosheet Transistor for RF Applications. IEEE Transactions on Electron Devices, 2020, 67, 4515-4520.	3.0	26
83	Epitaxial Ferroelectric Hf _{0.5} Zr _{0.5} O ₂ with Metallic Pyrochlore Oxide Electrodes. Advanced Materials, 2021, 33, e2006089.	21.0	26
84	Hidden Magnetic States Emergent Under Electric Field, In A Room Temperature Composite Magnetolectric Multiferroic. Scientific Reports, 2017, 7, 15460.	3.3	25
85	Unifying femtosecond and picosecond single-pulse magnetic switching in Gd-Fe-Co. Physical Review B, 2021, 103, .	3.2	25
86	Device design considerations for ultra-thin body non-hysteretic negative capacitance FETs. , 2013, , .		24
87	A Nitrided Interfacial Oxide for Interface State Improvement in Hafnium Zirconium Oxide-Based Ferroelectric Transistor Technology. IEEE Electron Device Letters, 2018, 39, 95-98.	3.9	24
88	BSIM-HV: High-Voltage MOSFET Model Including Quasi-Saturation and Self-Heating Effect. IEEE Transactions on Electron Devices, 2019, 66, 4258-4263.	3.0	23
89	Fully transparent field-effect transistor with high drain current and on-off ratio. APL Materials, 2020, 8, .	5.1	23
90	Fast Read-After-Write and Depolarization Fields in High Endurance n-Type Ferroelectric FETs. IEEE Electron Device Letters, 2022, 43, 717-720.	3.9	23

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91	Nature of magnetic domains in an exchange coupled BiFeO ₃ /CoFe heterostructure. Applied Physics Letters, 2013, 102, .	3.3	22
92	Electric-field control of spin dynamics during magnetic phase transitions. Science Advances, 2020, 6, .	10.3	22
93	Quantitative model for TMR and spin-transfer torque in MTJ devices. , 2010, , .		21
94	Phenomenological Compact Model for QM Charge Centroid in Multigate FETs. IEEE Transactions on Electron Devices, 2013, 60, 1480-1484.	3.0	21
95	Dependence of intrinsic performance of transition metal dichalcogenide transistors on materials and number of layers at the 5 nm channel-length limit. , 2013, , .		20
96	Screening in Ultrashort (5 nm) Channel MoS ₂ Transistors: A Full-Band Quantum Transport Study. IEEE Transactions on Electron Devices, 2015, 62, 2457-2463.	3.0	20
97	A Predictive Tunnel FET Compact Model With Atomistic Simulation Validation. IEEE Transactions on Electron Devices, 2017, 64, 599-605.	3.0	20
98	Low power negative capacitance FETs for future quantum-well body technology. , 2013, , .		19
99	Ballistic " " Characteristics of Short-Channel Graphene Field-Effect Transistors: Analysis and Optimization for Analog and RF Applications. IEEE Transactions on Electron Devices, 2013, 60, 958-964.	3.0	19
100	Negative-Capacitance FinFET Inverter, Ring Oscillator, SRAM Cell, and Ft. , 2018, , .		19
101	Electrically induced, non-volatile, metal insulator transition in a ferroelectric-controlled MoS ₂ transistor. Applied Physics Letters, 2018, 112, .	3.3	18
102	Modeling of Advanced RF Bulk FinFETs. IEEE Electron Device Letters, 2018, 39, 791-794.	3.9	17
103	Multidomain Phase-Field Modeling of Negative Capacitance Switching Transients. IEEE Transactions on Electron Devices, 2018, 65, 295-298.	3.0	17
104	RKKY Exchange Bias Mediated Ultrafast All-Optical Switching of a Ferromagnet. Advanced Functional Materials, 2022, 32, 2107490.	14.9	17
105	Magnetic domain-wall motion twisted by nanoscale probe-induced spin transfer. Physical Review B, 2014, 90, .	3.2	16
106	Anomalous Beneficial Gate-Length Scaling Trend of Negative Capacitance Transistors. IEEE Electron Device Letters, 2019, 40, 1860-1863.	3.9	16
107	Optimization of NCFET by Matching Dielectric and Ferroelectric Nonuniformly Along the Channel. IEEE Electron Device Letters, 2019, 40, 822-825.	3.9	16
108	A Compact Model of Polycrystalline Ferroelectric Capacitor. IEEE Transactions on Electron Devices, 2021, 68, 5311-5314.	3.0	15

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109	Logically synthesized and hardware-accelerated restricted Boltzmann machines for combinatorial optimization and integer factorization. <i>Nature Electronics</i> , 2022, 5, 92-101.	26.0	15
110	Generation and stability of structurally imprinted target skyrmions in magnetic multilayers. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	14
111	Quantum Transport Simulation of Tunneling Based Spin Torque Transfer (STT) Devices: Design Trade offs and Torque Efficiency. , 2007, , .		13
112	Compact Modeling Source-to-Drain Tunneling in Sub-10-nm GAA FinFET With Industry Standard Model. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 3576-3581.	3.0	13
113	Analysis and Modeling of Polarization Gradient Effect on Negative Capacitance FET. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 4521-4525.	3.0	13
114	Tunable Magnetoelastic Effects in Voltage-Controlled Exchange-Coupled Composite Multiferroic Microstructures. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 6752-6760.	8.0	12
115	Ferroelectric gate oxides for negative capacitance transistors. <i>MRS Bulletin</i> , 2021, 46, 930-937.	3.5	12
116	Self-Consistent Simulation of Hybrid Spintronic Devices. , 2006, , .		11
117	Review of negative capacitance transistors. , 2016, , .		10
118	Electric Field-Induced Permittivity Enhancement in Negative-Capacitance FET. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 1346-1351.	3.0	10
119	Electrically controlled switching of the magnetization state in multiferroic $\text{BaTiO}_3/\text{CoFe}_2\text{O}_4$ submicrometer structures. <i>Physical Review Materials</i> . 2018, 2, .	2.4	10
120	Surface states in a monolayer MoS_2 transistor. <i>Journal of Materials Research</i> , 2016, 31, 911-916.	2.6	9
121	Modeling of Back-Gate Effects on Gate-Induced Drain Leakage and Gate Currents in UTB SOI MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 3986-3990.	3.0	9
122	Negative-Capacitance FinFETs: Numerical Simulation, Compact Modeling and Circuit Evaluation. , 2018, , .		9
123	Statistically meaningful measure of domain-wall roughness in magnetic thin films. <i>Physical Review B</i> , 2020, 101, .	3.2	9
124	Phase field model of domain dynamics in micron scale, ultrathin ferroelectric films: Application for multiferroic bismuth ferrite. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	8
125	Intrinsic Limits to Contact Resistivity in Transition Metal Dichalcogenides. <i>IEEE Electron Device Letters</i> , 2017, 38, 1755-1758.	3.9	8
126	Novel Cascadable Magnetic Majority Gates for Implementing Comprehensive Logic Functions. <i>IEEE Transactions on Electron Devices</i> , 2018, 65, 4687-4693.	3.0	8

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127	Tunneling electroresistance effects in epitaxial complex oxides on silicon. Applied Physics Letters, 2020, 116, .	3.3	8
128	Unified Framework for Charge-Spin Interconversion in Spin-Orbit Materials. Physical Review Applied, 2021, 15, .	3.8	8
129	Modeling SiGe FinFETs With Thin Fin and Current-Dependent Source/Drain Resistance. IEEE Electron Device Letters, 2015, 36, 636-638.	3.9	7
130	Partial switching of ferroelectrics for synaptic weight storage. , 2017, , .		7
131	Possible route to low current, high speed, dynamic switching in a perpendicular anisotropy CoFeB-MgO junction using Spin Hall Effect of Ta. , 2012, , .		6
132	Reliability of Ferroelectric HfO ₂ -based Memories: From MOS Capacitor to FeFET. , 2020, , .		6
133	Large Injection Velocities in Highly Scaled, Fully Depleted Silicon on Insulator Transistors. IEEE Electron Device Letters, 2022, 43, 184-187.	3.9	6
134	A Compact Model of Metalâ€“Ferroelectric-Insulatorâ€“Semiconductor Tunnel Junction. IEEE Transactions on Electron Devices, 2022, 69, 414-418.	3.0	6
135	Negative capacitance in ferroelectric materials and implications for steep transistors. , 2015, , .		5
136	One-Dimensional Spin Channel in Two-Dimensional Transition Metal Dichalcogenide Heterostructures. IEEE Nanotechnology Magazine, 2018, 17, 1053-1057.	2.0	5
137	In situ ferromagnetic resonance capability on a polarized neutron reflectometry beamline. Journal of Applied Crystallography, 2018, 51, 9-16.	4.5	5
138	A Compact Model of Ferroelectric Field-Effect Transistor. IEEE Electron Device Letters, 2022, 43, 1363-1366.	3.9	5
139	Micromagnetic analysis and optimization of spin-orbit torque switching processes in synthetic antiferromagnets. Journal of Applied Physics, 2019, 126, 163905.	2.5	4
140	Memristors: A Spinâ€“Orbitâ€“Torque Memristive Device (Adv. Electron. Mater. 4/2019). Advanced Electronic Materials, 2019, 5, 1970022.	5.1	4
141	Dual-Source-Line-Bias Scheme to Improve the Read Margin and Sensing Accuracy of STTRAM in Sub-90-nm Nodes. IEEE Transactions on Circuits and Systems II: Express Briefs, 2010, 57, 208-212.	3.0	3
142	Effect of anti-ferromagnet surface moment density on the hysteresis properties of exchange coupled antiferromagnet-ferromagnet systems: The case of bismuth-ferrite. Journal of Applied Physics, 2012, 111, 103904.	2.5	3
143	Double-peaked resonance in harmonic-free acoustically driven ferromagnetic resonance. Applied Physics Letters, 2021, 119, .	3.3	3
144	A Compact Model of Antiferroelectric Capacitor. IEEE Electron Device Letters, 2022, 43, 316-318.	3.9	3

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145	Can piezoelectricity lead to negative capacitance?. , 2014, , .		2
146	Mapping Polarity, Toroidal Order, and the Local Energy Landscape by 4D-STEM. Microscopy and Microanalysis, 2018, 24, 176-177.	0.4	2
147	Resonant Enhancement of Exchange Coupling for Voltage-Controlled Magnetic Switching. Physical Review Applied, 2020, 14, .	3.8	2
148	Ultrathin Ferroelectricity and Its Application in Advanced Logic and Memory Devices. , 2021, , .		2
149	Energy Storage and Reuse in Negative Capacitance. IEEE Transactions on Electron Devices, 2021, 68, 1861-1865.	3.0	2
150	Accelerated Ultrafast Magnetization Dynamics at Graphene/CoGd Interfaces. ACS Nano, 2022, 16, 9620-9630.	14.6	2
151	Integrating Spintronics with Conventional Semiconductor Devices through Exchange Interaction. , 2006, , .		1
152	An All Electrical Spin Detector. , 2006, , .		1
153	Ferroelectric Si-doped HfO ₂ Capacitors for Next-Generation Memories. , 2019, , .		1
154	Dynamic Memory and Sequential Logic Design using Negative Capacitance FinFETs. , 2020, , .		1
155	Towards the Integration of Hf _{0.8} Zr _{0.2} O ₂ -based Negative Capacitance Dielectrics on η -Ga ₂ O ₃ Substrates. , 2021, , .		1
156	A Compact Model of Nanoscale Ferroelectric Capacitor. IEEE Transactions on Electron Devices, 2022, 69, 4761-4764.	3.0	1
157	An All Electrical Spin Detector. , 0, , .		0
158	Simulation of Spin Torque Devices with Inelastic Spin flip Scattering. Device Research Conference, IEEE Annual, 2007, , .	0.0	0
159	Key Role of Non Equilibrium Spin Density in Determining Spin Torque. , 2008, , .		0
160	Structure and doping effects in carbon heterojunction FETs towards barrier-free inter-band tunneling. , 2010, , .		0
161	Comparative analysis of the performance of InAs lateral and vertical band-to-band tunneling transistors. , 2010, , .		0
162	Proposal for piezoelectric-ferromagnet bilayer based microwave oscillators without any external magnetic field or spin transfer torque. , 2011, , .		0

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163	Scaling study of graphene transistors. , 2011, , .		0
164	Monolayer MoS ₂ transistors - ballistic performance limit analysis. , 2011, , .		0
165	Negative capacitance in ferroelectric materials and its potential use for transistors with <60 mV/decade subthreshold swing. , 2014, , .		0
166	Atomic scale understanding of the electronic structure of 5d-3d perovskite oxide heterostructures using STEM-EELS.. Microscopy and Microanalysis, 2021, 27, 356-358.	0.4	0
167	A Voltage-Controlled Gain Cell Magnetic Memory. IEEE Electron Device Letters, 2021, 42, 1452-1455.	3.9	0
168	Demonstration of Low EOT Gate Stack and Record Transconductance on $L_{\text{g}}=90$ nm nFETs Using 1.8 nm Ferroic HfO ₂ -ZrO ₂ Superlattice. , 2021, , .		0