Yiming Li

List of Publications by Year in descending order

346 papers	3,360 citations	218677 26 h-index	289244 40 g-index
348 all docs	348 docs citations	348 times ranked	1592 citing authors

#	ARTICLE	IF	CITATIONS
1	5nm-gate nanowire FinFET. , 2004, , .		146
2	Process-Variation Effect, Metal-Gate Work-Function Fluctuation, and Random-Dopant Fluctuation in Emerging CMOS Technologies. IEEE Transactions on Electron Devices, 2010, 57, 437-447.	3.0	110
3	Discrete Dopant Fluctuations in 20-nm/15-nm-Gate Planar CMOS. IEEE Transactions on Electron Devices, 2008, 55, 1449-1455.	3.0	101
4	Investigation of Electrical Characteristics on Surrounding-Gate and Omega-Shaped-Gate Nanowire FinFETs. IEEE Nanotechnology Magazine, 2005, 4, 510-516.	2.0	90
5	Computer simulation of electron energy levels for different shape InAs/GaAs semiconductor quantum dots. Computer Physics Communications, 2001, 141, 66-72.	7.5	74
6	Energy states and magnetization in nanoscale quantum rings. Physical Review B, 2002, 66, .	3.2	66
7	Random-Dopant-Induced Variability in Nano-CMOS Devices and Digital Circuits. IEEE Transactions on Electron Devices, 2009, 56, 1588-1597.	3.0	55
8	Discretization Scheme for the Density-Gradient Equation and Effect of Boundary Conditions. Journal of Computational Electronics, 2002, 1, 389-393.	2.5	50
9	Comparison of Random-Dopant-Induced Threshold Voltage Fluctuation in Nanoscale Single-, Double-, and Surrounding-Gate Field-Effect Transistors. Japanese Journal of Applied Physics, 2006, 45, 6860-6865.	1.5	49
10	A parallel adaptive finite volume method for nanoscale double-gate MOSFETs simulation. Journal of Computational and Applied Mathematics, 2005, 175, 87-99.	2.0	48
11	Discrete-dopant-induced characteristic fluctuations in 16nm multiple-gate silicon-on-insulator devices. Journal of Applied Physics, 2007, 102, 084509.	2.5	48
12	A Coupled-Simulation-and-Optimization Approach to Nanodevice Fabrication With Minimization of Electrical Characteristics Fluctuation. IEEE Transactions on Semiconductor Manufacturing, 2007, 20, 432-438.	1.7	47
13	Effect of Fin Angle on Electrical Characteristics of Nanoscale Round-Top-Gate Bulk FinFETs. IEEE Transactions on Electron Devices, 2007, 54, 3426-3429.	3.0	47
14	Process variation effect, metal-gate work-function fluctuation and random dopant fluctuation of 10-nm gate-all-around silicon nanowire MOSFET devices. , 2015, , .		47
15	Strained CMOS Devices With Shallow-Trench-Isolation Stress Buffer Layers. IEEE Transactions on Electron Devices, 2008, 55, 1085-1089.	3.0	45
16	High-Frequency Characteristic Fluctuations of Nano-MOSFET Circuit Induced by Random Dopants. IEEE Transactions on Microwave Theory and Techniques, 2008, 56, 2726-2733.	4.6	43
17	Intelligent BSIM4 Model Parameter Extraction for Sub-100 nm MOSFET Era. Japanese Journal of Applied Physics, 2004, 43, 1717-1722.	1.5	39
18	An automatic parameter extraction technique for advanced CMOS device modeling using genetic algorithm. Microelectronic Engineering, 2007, 84, 260-272.	2.4	39

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19	A parallel monotone iterative method for the numerical solution ofÂmulti-dimensional semiconductor Poisson equation. Computer Physics Communications, 2003, 153, 359-372.	7.5	38
20	Cluster evolution of IC industry from Taiwan to China. Technological Forecasting and Social Change, 2009, 76, 1092-1104.	11.6	38
21	Simulation study on electrical characteristic of AlGaN/GaN high electron mobility transistors with AlN spacer layer. Japanese Journal of Applied Physics, 2014, 53, 04EF08.	1.5	34
22	Impacts of plasma-induced damage due to UV light irradiation during etching on Ge fin fabrication and device performance of Ge fin field-effect transistors. Applied Physics Express, 2017, 10, 026501.	2.4	33
23	Characteristics of Stacked Gate-All-Around Si Nanosheet MOSFETs With Metal Sidewall Source/Drain and Their Impacts on CMOS Circuit Properties. IEEE Transactions on Electron Devices, 2021, 68, 3124-3128.	3.0	33
24	Electrical Characteristic of AlGaN/GaN High-Electron-Mobility Transistors With Recess Gate Structure. IEEE Transactions on Electron Devices, 2019, 66, 1694-1698.	3.0	31
25	The effect of the geometry aspect ratio on the silicon ellipse-shaped surrounding- gate field-effect transistor and circuit. Semiconductor Science and Technology, 2009, 24, 095018.	2.0	30
26	Shape Effect of Silicon Nitride Subwavelength Structure on Reflectance for Silicon Solar Cells. IEEE Transactions on Electron Devices, 2010, 57, 2427-2433.	3.0	30
27	A novel parallel adaptive Monte Carlo method for nonlinear Poisson equation in semiconductor devices. Mathematics and Computers in Simulation, 2003, 62, 413-420.	4.4	29
28	A Genetic Algorithm Approach to InGaP/GaAs HBT Parameter Extraction and RF Characterization. Japanese Journal of Applied Physics, 2003, 42, 2371-2374.	1.5	28
29	A new parallel adaptive finite volume method for the numerical simulation of semiconductor devices. Computer Physics Communications, 2001, 142, 285-289.	7.5	27
30	Forecasting global adoption of crystal display televisions with modified product diffusion model. Computers and Industrial Engineering, 2010, 58, 553-562.	6.3	24
31	Modeling of quantum effects for ultrathin oxide MOS structures with an effective potential. IEEE Nanotechnology Magazine, 2002, 1, 238-242.	2.0	23
32	Process-variation- and random-dopants-induced threshold voltage fluctuations in nanoscale planar MOSFET and bulk FinFET devices. Microelectronic Engineering, 2009, 86, 277-282.	2.4	23
33	Simulation study of type-II Ge/Si quantum dot for solar cell applications. Journal of Applied Physics, 2013, 114, 124509.	2.5	23
34	DC/AC/RF Characteristic Fluctuations Induced by Various Random Discrete Dopants of Gate-All-Around Silicon Nanowire n-MOSFETs. IEEE Transactions on Electron Devices, 2018, 65, 2638-2646.	3.0	23
35	Numerical simulation of quantum effects in high-k gate dielectric MOS structures using quantum mechanical models. Computer Physics Communications, 2002, 147, 214-217.	7.5	22
36	Electronic design automation using a unified optimization framework. Mathematics and Computers in Simulation, 2008, 79, 1137-1152.	4.4	22

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37	Silicon Nitride Nanopillars and Nanocones Formed by Nickel Nanoclusters and Inductively Coupled Plasma Etching for Solar Cell Application. Japanese Journal of Applied Physics, 2009, 48, 126508.	1.5	22
38	Simulation of characteristic variation in 16 nm gate FinFET devices due to intrinsic parameter fluctuations. Nanotechnology, 2010, 21, 095203.	2.6	22
39	Largeâ€scale â€œatomisticâ€•approach to discreteâ€dopantâ€induced characteristic fluctuations in silicon nanowire transistors. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 1505-1510.	1.8	21
40	Machine Learning Aided Device Simulation of Work Function Fluctuation for Multichannel Gate-All-Around Silicon Nanosheet MOSFETs. IEEE Transactions on Electron Devices, 2021, 68, 5490-5497.	3.0	21
41	Discrete-Dopant-Fluctuated Threshold Voltage Roll-Off in Sub-16 nm Bulk Fin-Type Field Effect Transistors. Japanese Journal of Applied Physics, 2008, 47, 2580-2584.	1.5	20
42	Hybrid intelligent approach for modeling and optimization of semiconductor devices and nanostructures. Computational Materials Science, 2009, 45, 41-51.	3.0	20
43	Intelligent optical proximity correction using genetic algorithm with model- and rule-based approaches. Computational Materials Science, 2009, 45, 65-76.	3.0	20
44	A novel AlGaN/GaN multiple aperture vertical high electron mobility transistor with silicon oxide current blocking layer. Vacuum, 2015, 118, 59-63.	3.5	20
45	Impact of silicon quantum dot super lattice and quantum well structure as intermediate layer on pâ€iâ€n silicon solar cells. Progress in Photovoltaics: Research and Applications, 2016, 24, 774-780.	8.1	20
46	Title is missing!. Journal of Computational Electronics, 2003, 2, 49-57.	2.5	19
47	A unified quantum correction model for nanoscale single- and double-gate MOSFETs under inversion conditions. Nanotechnology, 2004, 15, 1009-1016.	2.6	19
48	Discrete-Dopant-Induced Timing Fluctuation and Suppression in Nanoscale CMOS Circuit. IEEE Transactions on Circuits and Systems II: Express Briefs, 2009, 56, 379-383.	3.0	19
49	Statistical Simulation of Static Noise Margin Variability in Static Random Access Memory. IEEE Transactions on Semiconductor Manufacturing, 2010, 23, 509-516.	1.7	19
50	A unified 3D device simulation of random dopant, interface trap and work function fluctuations on high-к/metal gate device. , 2011, , .		19
51	Electrical characteristic fluctuation of 16-nm-gate trapezoidal bulk FinFET devices with fixed top-fin width induced by random discrete dopants. Nanoscale Research Letters, 2015, 10, 116.	5.7	19
52	A study of threshold voltage fluctuations of nanoscale double gate metal-oxide-semiconductor field effect transistors using quantum correction simulation. Journal of Computational Electronics, 2006, 5, 125-129.	2.5	18
53	Nanosized metal grains induced electrical characteristic fluctuation in 16-nm-gate high-Î¤/metal gate bulk FinFET devices. Microelectronic Engineering, 2011, 88, 1240-1242.	2.4	18
54	Deep Learning Approach to Inverse Grain Pattern of Nanosized Metal Gate for Multichannel Gate-All-Around Silicon Nanosheet MOSFETs. IEEE Transactions on Semiconductor Manufacturing, 2021, 34, 513-520.	1.7	18

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55	Deep Learning Algorithms for the Work Function Fluctuation of Random Nanosized Metal Grains on Gate-All-Around Silicon Nanowire MOSFETs. IEEE Access, 2021, 9, 73467-73481.	4.2	18
56	A SPICE-compatible model for nanoscale MOSFET capacitor simulation under the inversion condition. IEEE Nanotechnology Magazine, 2002, 1, 243-246.	2.0	17
57	A time-domain approach to simulation and characterization of rf hbt two-tone intermodulation distortion. IEEE Transactions on Microwave Theory and Techniques, 2003, 51, 2055-2062.	4.6	17
58	Field-emission properties of novel palladium nanogaps for surface conduction electron-emitters. Nanotechnology, 2007, 18, 475708.	2.6	17
59	Diamond-shaped Ge and Ge0.9Si0.1 gate-all-around nanowire FETs with four {111} facets by dry etch technology. , 2015, , .		17
60	Miniband Calculation of 3-D Nanostructure Array for Solar Cell Applications. IEEE Transactions on Electron Devices, 2015, 62, 3709-3714.	3.0	17
61	Impact of Doping Concentration on Electronic Properties of Transition Metal-Doped Monolayer Molybdenum Disulfide. IEEE Transactions on Electron Devices, 2018, 65, 733-738.	3.0	17
62	Electrical Characteristic Fluctuations in Sub-45nm CMOS Devices. , 2006, , .		16
63	Electrical characteristic fluctuations in 16 nm bulk-FinFET devices. Microelectronic Engineering, 2007, 84, 2093-2096.	2.4	16
64	Effect of the single grain boundary position on surrounding-gate polysilicon thin film transistors. Semiconductor Science and Technology, 2008, 23, 015019.	2.0	16
65	Numerical calculation of the reflectance of sub-wavelength structures on silicon nitride for solar cell application. Computer Physics Communications, 2009, 180, 1721-1729.	7.5	16
66	Influence of Fringing-Field on DC/AC Characteristics of Siâ‚‹â‚“Geâ‚“ Based Multi-Channel Tunnel FETs. IEEE Access, 2020, 8, 208658-208668.	4.2	16
67	Optimal Inter-Gate Separation and Overlapped Source of Multi-Channel Line Tunnel FETs. IEEE Open Journal of Nanotechnology, 2020, 1, 38-46.	2.0	16
68	Atomic layer germanium etching for 3D Fin-FET using chlorine neutral beam. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	2.1	15
69	A two-dimensional thin-film transistor simulation using adaptive computing technique. Applied Mathematics and Computation, 2007, 184, 73-85.	2.2	14
70	Process-variation- and random-dopants-induced threshold voltage fluctuations in nanoscale CMOS and SOI devices. Microelectronic Engineering, 2007, 84, 2117-2120.	2.4	14
71	Surface conduction electron emission in palladium hydrogenation nanogaps. Journal Physics D: Applied Physics, 2008, 41, 085301.	2.8	14
72	Large-scale atomistic approach to random-dopant-induced characteristic variability in nanoscale CMOS digital and high-frequency integrated circuits. , 2008, , .		14

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73	Simulation-based evolutionary method in antenna design optimization. Mathematical and Computer Modelling, 2010, 51, 944-955.	2.0	14
74	Realistic quantum design of silicon quantum dot intermediate band solar cells. Nanotechnology, 2013, 24, 265401.	2.6	14
75	Random telegraph noise in gate-all-around silicon nanowire MOSFETs induced by a single charge trap or random interface traps. Journal of Computational Electronics, 2020, 19, 253-262.	2.5	14
76	Increase in the Efficiency of III-Nitride Micro-LEDs: Atomic-Layer Deposition and Etching. IEEE Nanotechnology Magazine, 2021, 15, 18-34.	1.3	14
77	Work-Function Fluctuation of Gate-All-Around Silicon Nanowire n-MOSFETs: A Unified Comparison Between Cuboid and Voronoi Methods. IEEE Journal of the Electron Devices Society, 2021, 9, 151-159.	2.1	14
78	Gateway towards recent developments in quantum dot-based light-emitting diodes. Nanoscale, 2022, 14, 4042-4064.	5.6	14
79	Significance of Work Function Fluctuations in SiGe/Si Hetero-Nanosheet Tunnel-FET at Sub-3 nm Nodes. IEEE Transactions on Electron Devices, 2022, 69, 434-438.	3.0	14
80	Novel Metamorphic HEMTs With Highly Doped InGaAs Source/Drain Regions for High Frequency Applications. IEEE Transactions on Electron Devices, 2010, 57, 2594-2598.	3.0	13
81	Dynamic Characteristic Optimization of 14 a-Si:H TFTs Gate Driver Circuit Using Evolutionary Methodology for Display Panel Manufacturing. Journal of Display Technology, 2011, 7, 274-280.	1.2	13
82	Calculation of induced electron states in three-dimensional semiconductor artificial molecules. Computer Physics Communications, 2002, 147, 209-213.	7.5	12
83	Statistical variability in FinFET devices with intrinsic parameter fluctuations. Microelectronics Reliability, 2010, 50, 635-638.	1.7	12
84	Random work function variation induced threshold voltage fluctuation in 16-nm bulk FinFET devices with high-k-metal-gate material. , 2010, , .		12
85	Optimal design of the multiple-apertures-GaN-based vertical HEMTs with $$hbox {SiO}_{2}$$ SiO 2 current blocking layer. Journal of Computational Electronics, 2016, 15, 154-162.	2.5	12
86	A domain partition approach to parallel adaptive simulation of dynamic threshold voltage MOSFET. Computer Physics Communications, 2002, 147, 697-701.	7.5	11
87	A numerical iterative method for solving SchrÃ¶dinger and Poisson equations in nanoscale single, double and surrounding gate metal-oxide-semiconductor structures. Computer Physics Communications, 2005, 169, 309-312.	7.5	11
88	UV Illumination Technique for Leakage Current Reduction in a-Si:H Thin-Film Transistors. IEEE Transactions on Electron Devices, 2008, 55, 3314-3318.	3.0	11
89	Temperature-aware floorplanning via geometric programming. Mathematical and Computer Modelling, 2010, 51, 927-934.	2.0	11
90	Mobility model extraction for surface roughness of SiGe along (110) and (100) Orientations in HKMG bulk FinFET devices. Microelectronic Engineering, 2013, 109, 357-359.	2.4	11

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91	Step buffer layer of Al_{0.25}Ga_{0.75}N/Al_{0.08}Ga_{0.92}N on P-InAlN gate normally-off high electron mobility transistors. Semiconductor Science and Technology, 2016, 31, 075006.	2.0	11
92	Effects of Spacer and Single-Charge Trap on Voltage Transfer Characteristics of Gate-All-Around Silicon Nanowire CMOS Devices and Circuits. , 2020, , .		11
93	Effect of Shape and Size on Electron Transition Energies of InAs Semiconductor Quantum Dots. Japanese Journal of Applied Physics, 2002, 41, 2698-2700.	1.5	10
94	Optimization of the Anti-Punch-Through Implant for Electrostatic Discharge Protection Circuit Design. Japanese Journal of Applied Physics, 2003, 42, 2152-2155.	1.5	10
95	A three-dimensional simulation of electrostatic characteristics for carbon nanotube array field effect transistors. Microelectronic Engineering, 2005, 81, 434-440.	2.4	10
96	Analytical solution of nonlinear Poisson equation for symmetric double-gate metal-oxide-semiconductor field effect transistors. Mathematical and Computer Modelling, 2007, 46, 180-188.	2.0	10
97	Numerical simulation of field emission efficiency of anodic aluminum oxide carbon nanotube field emitter in the triode structure. Computer Physics Communications, 2008, 179, 107-111.	7.5	10
98	Effect of Process Variation on Field Emission Characteristics in Surface-Conduction Electron Emitters. IEEE Nanotechnology Magazine, 2008, 7, 434-439.	2.0	10
99	Electrical characteristics dependence on the channel fin aspect ratio of multi-fin field effect transistors. Semiconductor Science and Technology, 2009, 24, 115021.	2.0	10
100	The impact of high-frequency characteristics induced by intrinsic parameter fluctuations in nano-MOSFET device and circuit. Microelectronics Reliability, 2010, 50, 657-661.	1.7	10
101	Asymmetric gate capacitance and dynamic characteristic fluctuations in 16 nm bulk MOSFETs due to random distribution of discrete dopants. Semiconductor Science and Technology, 2010, 25, 045006.	2.0	10
102	Hybrid Differential Evolution and Particle Swarm Optimization Approach to Surface-Potential-Based Model Parameter Extraction for Nanoscale MOSFETs. Materials and Manufacturing Processes, 2011, 26, 388-397.	4.7	10
103	Determination of Source-and-Drain Series Resistance in 16-nm-Gate FinFET Devices. IEEE Transactions on Electron Devices, 2015, 62, 1663-1667.	3.0	10
104	Design and Simulation of High Performance Lattice Matched Double Barrier Normally Off AlInGaN/GaN HEMTs. IEEE Journal of the Electron Devices Society, 2020, 8, 873-878.	2.1	10
105	Gateâ€allâ€around nanowire vertical tunneling FETs by ferroelectric internal voltage amplification. Nanotechnology, 2022, 33, 055201.	2.6	10
106	Electron Transition Energy for Vertically Coupled InAs/GaAs Semiconductor Quantum Dots and Rings. Japanese Journal of Applied Physics, 2004, 43, 2104-2109.	1.5	9
107	Magnetization and Magnetic Susceptibility in Nanoscale Vertically Coupled Semiconductor Quantum Rings. Journal of Computational Electronics, 2005, 4, 135-138.	2.5	9
108	Parallel Genetic Algorithm for Intelligent Model Parameter Extraction of Metal-Oxide-Semiconductor Field Effect Transistors. Materials and Manufacturing Processes, 2009, 24, 243-249.	4.7	9

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109	16-nm multigate and multifin MOSFET device and SRAM circuits. , 2010, , .		9
110	Quantum hydrodynamic simulation of discrete-dopant fluctuated physical quantities in nanoscale FinFET. Computer Physics Communications, 2011, 182, 96-98.	7.5	9
111	Geometric programming approach to doping profile design optimization of metal-oxide-semiconductor devices. Mathematical and Computer Modelling, 2013, 58, 344-354.	2.0	9
112	Source/Drain Series Resistance Extraction in HKMG Multifin Bulk FinFET Devices. IEEE Transactions on Semiconductor Manufacturing, 2015, 28, 193-199.	1.7	9
113	First Demonstration of Heterogeneous IGZO/Si CFET Monolithic 3-D Integration With Dual Work Function Gate for Ultralow-Power SRAM and RF Applications. IEEE Transactions on Electron Devices, 2022, 69, 2101-2107.	3.0	9
114	A quantum correction Poisson equation for metalâ€“oxideâ€“semiconductor structure simulation. Semiconductor Science and Technology, 2004, 19, 917-922.	2.0	8
115	Temperature dependence on the contact size of GeSbTe films forÂphase change memories. Journal of Computational Electronics, 2008, 7, 138-141.	2.5	8
116	Modelling competition in global LCD TV industry. Applied Economics, 2011, 43, 2969-2981.	2.2	8
117	Modeling miniband for realistic silicon nanocrystal array. Mathematical and Computer Modelling, 2013, 58, 306-311.	2.0	8
118	Electrical characteristic fluctuation of 16-nm-gate high-Î²/metal gate bulk FinFET devices in the presence of random interface traps. Nanoscale Research Letters, 2014, 9, 633.	5.7	8
119	A Novel Driving Method for High-Performance Amorphous Silicon Gate Driver Circuits in Flat Panel Display Industry. Journal of Display Technology, 2016, 12, 1051-1056.	1.2	8
120	32-nm Multigate Si-nTFET With Microwave-Annealed Abrupt Junction. IEEE Transactions on Electron Devices, 2016, 63, 1808-1813.	3.0	8
121	High Electron Mobility Germanium FinFET Fabricated by Atomic Layer Defect-Free and Roughness-Free Etching. IEEE Open Journal of Nanotechnology, 2021, 2, 26-30.	2.0	8
122	Promised Design of Energy-Efficient Negative-Capacitance Vertical Tunneling FET. ECS Journal of Solid State Science and Technology, 2021, 10, 075002.	1.8	8
123	Design of GAA Nanosheet Ferroelectric Area Tunneling FET and Its Significance with DC/RF Characteristics Including Linearity Analyses. Nanoscale Research Letters, 2022, 17, 53.	5.7	8
124	A COMPUTATIONAL METHOD FOR ENERGY LEVEL SPIN SPLITTING SIMULATION IN InAs/GaAs SEMICONDUCTOR QUANTUM DOTS. International Journal of Modern Physics C, 2002, 13, 453-463.	1.7	7
125	An iterative method for single and vertically stacked semiconductor quantum dots simulation. Mathematical and Computer Modelling, 2005, 42, 711-718.	2.0	7
126	P-101: Nanogap Fabrication on Palladium Electrodes for Field Emission Display Applications. Digest of Technical Papers SID International Symposium, 2007, 38, 583-585.	0.3	7

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127	High field emission efficiency surface conduction electron emitters. Journal of Computational Electronics, 2008, 7, 440-444.	2.5	7
128	DC baseband and high-frequency characteristics of a silicon nanowire field effect transistor circuit. Semiconductor Science and Technology, 2009, 24, 045004.	2.0	7
129	Interface traps and random dopants induced characteristic fluctuations in emerging MOSFETs. Microelectronic Engineering, 2011, 88, 1269-1271.	2.4	7
130	Statistical device simulation of physical and electrical characteristic fluctuations in 16-nm-gate high-Î°/metal gate MOSFETs in the presence of random discrete dopants and random interface traps. Solid-State Electronics, 2012, 77, 12-19.	1.4	7
131	The intrinsic parameter fluctuation on high-Î°/metal gate bulk FinFET devices. Microelectronic Engineering, 2013, 109, 302-305.	2.4	7
132	The impact of fin/sidewall/gate line edge roughness on trapezoidal bulk FinFET devices. , 2014, , .		7
133	A Systematic Approach to Correlation Analysis of In-Line Process Parameters for Process Variation Effect on Electrical Characteristic of 16-nm HKMG Bulk FinFET Devices. IEEE Transactions on Semiconductor Manufacturing, 2016, 29, 209-216.	1.7	7
134	Design and Simulation of Intermediate Band Solar Cell With Ultradense Type-II Multilayer Ge/Si Quantum Dot Superlattice. IEEE Transactions on Electron Devices, 2017, 64, 4547-4553.	3.0	7
135	Low resistive InGaN film grown by metalorganic chemical vapor deposition. Vacuum, 2020, 171, 108974.	3.5	7
136	Effects of a dual spacer on electrical characteristics and random telegraph noise of gate-all-around silicon nanowire p-type metalâ€“oxideâ€“semiconductor field-effect transistors. Japanese Journal of Applied Physics, 2020, 59, SGGA02.	1.5	7
137	p-SiGe nanosheet line tunnel field-effect transistors with ample exploitation of ferroelectric. Japanese Journal of Applied Physics, 2021, 60, 054001.	1.5	7
138	A Novel Statistical Methodology for Sub-100 nm MOSFET Fabrication Optimization and Sensitivity Analysis. , 2005, , .		7
139	Room-temperature and high-quality HfO2/SiO2 gate stacked film grown by neutral beam enhanced atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, .	2.1	7
140	A Machine Learning Approach to Modeling Intrinsic Parameter Fluctuation of Gate-All-Around Si Nanosheet MOSFETs. IEEE Access, 2022, 10, 71356-71369.	4.2	7
141	A Quantum Correction Model for Nanoscale Double-Gate MOS Devices Under Inversion Conditions. Journal of Computational Electronics, 2003, 2, 491-495.	2.5	6
142	Silicon-Germanium Structure in Surrounding-Gate Strained Silicon Nanowire Field Effect Transistors. Journal of Computational Electronics, 2004, 3, 251-255.	2.5	6
143	A Novel Approach to Compact Model Parameter Extraction for Excimer Laser Annealed Complementary Thin Film Transistors. Journal of Computational Electronics, 2004, 3, 257-261.	2.5	6
144	Quantum correction simulation of random dopant-induced threshold voltage fluctuations in nanoscale metal-oxide-semiconductor structures. , 0, , .		6

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145	P-102: Three-Dimensional Simulation of Novel Surface Conduction Electron-Emitters. Digest of Technical Papers SID International Symposium, 2007, 38, 586-589.	0.3	6
146	An Efficient Near-ML Algorithm with SQRD for Wireless MIMO Communications in Metro Transportation Systems. , 2007, , .		6
147	The geometric effect and programming current reduction in cylindrical-shaped phase change memory. Nanotechnology, 2009, 20, 285701.	2.6	6
148	Discrete-Dopant-Fluctuated Transient Behavior and Variability Suppression in 16-nm-Gate Complementary Metalâ€“Oxideâ€“Semiconductor Field-Effect Transistors. Japanese Journal of Applied Physics, 2009, 48, 04C051.	1.5	6
149	Propagation delay dependence on channel fins and geometry aspect ratio of 16-nm multi-gate MOSFET inverter. , 2009, , .		6
150	Optimization on configuration of surface conduction electron-emitters. Microelectronics Reliability, 2010, 50, 699-703.	1.7	6
151	Nanosized-Metal-Grain-Induced Characteristic Fluctuation in 16 nm Complementary Metalâ€“Oxideâ€“Semiconductor Devices and Digital Circuits. Japanese Journal of Applied Physics, 2011, 50, 04DC22.	1.5	6
152	3D simulation of morphological effect on reflectance of Si3N4 sub-wavelength structures for silicon solar cells. Nanoscale Research Letters, 2012, 7, 196.	5.7	6
153	Device Simulationâ€“Based Multiobjective Evolutionary Algorithm for Process Optimization of Semiconductor Solar Cells. Materials and Manufacturing Processes, 2013, 28, 761-767.	4.7	6
154	Optimal power consumption design of the amorphous silicon thin-film transistor gate driver circuit for 10.1-in. display panel manufacturing. Journal of Information Display, 2013, 14, 13-19.	4.0	6
155	Capacitance Characteristic Optimization of Germanium MOSFETs with Aluminum Oxide by Using a Semiconductor-Device-Simulation-Based Multi-Objective Evolutionary Algorithm Method. Materials and Manufacturing Processes, 2015, 30, 520-528.	4.7	6
156	Simulation Study of Multilayer Si/SiC Quantum Dot Superlattice for Solar Cell Applications. IEEE Electron Device Letters, 2016, , 1-1.	3.9	6
157	Miniband formulation in Ge/Si quantum dot array. Japanese Journal of Applied Physics, 2016, 55, 04EJ14.	1.5	6
158	Characteristic Fluctuations of Dynamic Power Delay Induced by Random Nanosized Titanium Nitride Grains and the Aspect Ratio Effect of Gate-All-Around Nanowire CMOS Devices and Circuits. Materials, 2019, 12, 1492.	2.9	6
159	Effects of random number and location of the nanosized metal grains on the threshold voltage variability of silicon gate-all-around nanowire n-type metal-oxide-semiconductor field-effect transistors. Journal of Computational Electronics, 2020, 19, 1478-1484.	2.5	6
160	High-Performance Metal-Ferroeletric-Semiconductor Nanosheet Line Tunneling Field Effect Transistors with Strained SiGe. , 2020, , .		6
161	NUMERICAL CALCULATION OF ELECTRON ENERGY STATES FOR NANOSCOPIC InAs/GaAs QUANTUM RINGS. International Journal of Modern Physics C, 2003, 14, 995-1005.	1.7	5
162	A novel approach to compact model parameter extraction for excimer laser annealed complementary thin film transistors. , 2004, , .		5

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163	Characteristic Comparison of SRAM Cells with 20 nm Planar MOSFET, Omega FinFET and Nanowire FinFET. , 2006, , .		5
164	Effect of single grain boundary position on surrounding-gate polysilicon thin film transistors. , 2007, , .		5
165	Optimal Configuration of Hydrogen-Embrittlement-Fabricated Nanogaps for Surface-Conduction Electron-Emitter Display. IEEE Nanotechnology Magazine, 2009, 8, 671-677.	2.0	5
166	Statistical simulation of metal-gate work-function fluctuation in high-κ/metal-gate devices. , 2010, , .		5
167	Tuning of the electron<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>g</mml:mi></mml:math>factor in defect-free GaAs nanodisks. Physical Review B, 2015, 92, .	3.2	5
168	Electrical characteristic and power consumption fluctuations of trapezoidal bulk FinFET devices and circuits induced by random line edge roughness. , 2015, , .		5
169	Suspended Diamond-Shaped Nanowire With Four {111} Facets for High-Performance Ge Gate-All-Around FETs. IEEE Transactions on Electron Devices, 2016, 63, 3837-3843.	3.0	5
170	Analysis of In-Line Process Parameters of the Unity Gain Frequency of HKMG Bulk FinFET Devices. IEEE Electron Device Letters, 2018, 39, 335-338.	3.9	5
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