

A Asenov

List of Publications by Year in descending order

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253
papers

4,938
citations

201674

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times ranked

2128
citing authors

#	ARTICLE	IF	CITATIONS
1	Random dopant induced threshold voltage lowering and fluctuations in sub-0.1 μm MOSFET's: A 3-D "atomistic" simulation study. IEEE Transactions on Electron Devices, 1998, 45, 2505-2513.	3.0	571
2	Intrinsic parameter fluctuations in decananometer mosfets introduced by gate line edge roughness. IEEE Transactions on Electron Devices, 2003, 50, 1254-1260.	3.0	525
3	Simulation of intrinsic parameter fluctuations in decananometer and nanometer-scale MOSFETs. IEEE Transactions on Electron Devices, 2003, 50, 1837-1852.	3.0	479
4	RTS amplitudes in decananometer MOSFETs: 3-D simulation study. IEEE Transactions on Electron Devices, 2003, 50, 839-845.	3.0	358
5	Increase in the random dopant induced threshold fluctuations and lowering in sub-100 nm MOSFETs due to quantum effects: a 3-D density-gradient simulation study. IEEE Transactions on Electron Devices, 2001, 48, 722-729.	3.0	198
6	Intrinsic threshold voltage fluctuations in decanano MOSFETs due to local oxide thickness variations. IEEE Transactions on Electron Devices, 2002, 49, 112-119.	3.0	162
7	Suppression of random dopant-induced threshold voltage fluctuations in sub-0.1- μm MOSFET's with epitaxial and δ -doped channels. IEEE Transactions on Electron Devices, 1999, 46, 1718-1724.	3.0	150
8	A Self-Consistent Full 3-D Real-Space NEGF Simulator for Studying Nonperturbative Effects in Nano-MOSFETs. IEEE Transactions on Electron Devices, 2007, 54, 2213-2222.	3.0	130
9	Intrinsic fluctuations in sub 10-nm double-gate MOSFETs introduced by discreteness of charge and matter. IEEE Nanotechnology Magazine, 2002, 1, 195-200.	2.0	88
10	Impact of intrinsic parameter fluctuations in decanano MOSFETs on yield and functionality of SRAM cells. Solid-State Electronics, 2005, 49, 740-746.	1.4	79
11	Quantitative Evaluation of Statistical Variability Sources in a 45-nm Technological Node LP N-MOSFET. IEEE Electron Device Letters, 2008, 29, 609-611.	3.9	75
12	Hierarchical approach to "atomistic" 3-D MOSFET simulation. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 1999, 18, 1558-1565.	2.7	65
13	The impact of random doping effects on CMOS SRAM cell. , 0, , .		64
14	Polysilicon gate enhancement of the random dopant induced threshold voltage fluctuations in sub-100 nm MOSFETs with ultrathin gate oxide. IEEE Transactions on Electron Devices, 2000, 47, 805-812.	3.0	53
15	Complete Monte Carlo RF analysis of "real" short-channel compound FET's. IEEE Transactions on Electron Devices, 1998, 45, 1644-1652.	3.0	52
16	Scaling of pseudomorphic high electron mobility transistors to decanano dimensions. Solid-State Electronics, 2002, 46, 631-638.	1.4	52
17	Origin of the Asymmetry in the Magnitude of the Statistical Variability of n- and p-Channel Poly-Si Gate Bulk MOSFETs. IEEE Electron Device Letters, 2008, 29, 913-915.	3.9	46
18	High Mobility III-V MOSFETs For RF and Digital Applications. , 2007, , .		44

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19	Quantum corrections in the simulation of decanano MOSFETs. Solid-State Electronics, 2003, 47, 1141-1145.	1.4	43
20	Effective mobilities in pseudomorphic Si/SiGe/Si p-channel metal-oxide-semiconductor field-effect transistors with thin silicon capping layers. Applied Physics Letters, 2001, 78, 1424-1426.	3.3	42
21	The Use of Quantum Potentials for Confinement and Tunnelling in Semiconductor Devices. Journal of Computational Electronics, 2002, 1, 503-513.	2.5	39
22	Benchmarking of Scaled InGaAs Implant-Free NanoMOSFETs. IEEE Transactions on Electron Devices, 2008, 55, 2297-2306.	3.0	39
23	Simple approach to include external resistances in the Monte Carlo simulation of MESFETs and HEMTs. IEEE Transactions on Electron Devices, 1996, 43, 2032-2034.	3.0	36
24	Impact of Random Dopant Fluctuation on Bulk CMOS 6-T SRAM Scaling. Solid-State Device Research Conference, 2008 ESSDERC 2008 38th European, 2006, , .	0.0	35
25	Non-equilibrium Green's function analysis of cross section and channel length dependence of phonon scattering and its impact on the performance of Si nanowire field effect transistors. Journal of Applied Physics, 2011, 110, .	2.5	35
26	Modelling RTN and BTI in nanoscale MOSFETs from device to circuit: A review. Microelectronics Reliability, 2014, 54, 682-697.	1.7	35
27	CMOS 6-T SRAM cell design subject to atomistic fluctuations. Solid-State Electronics, 2007, 51, 565-571.	1.4	34
28	The impact of interface roughness scattering and degeneracy in relaxed and strained Si n-channel MOSFETs. Solid-State Electronics, 2004, 48, 1337-1346.	1.4	31
29	Impact of Single Charge Trapping in Nano-MOSFETs Electrostatics Versus Transport Effects. IEEE Nanotechnology Magazine, 2005, 4, 339-344.	2.0	28
30	Advanced simulation of statistical variability and reliability in nano CMOS transistors. , 2008, , .		28
31	3-D Nonequilibrium Green's Function Simulation of Nonperturbative Scattering From Discrete Dopants in the Source and Drain of a Silicon Nanowire Transistor. IEEE Nanotechnology Magazine, 2009, 8, 603-610.	2.0	27
32	Impact of interface state trap density on the performance characteristics of different III-V MOSFET architectures. Microelectronics Reliability, 2010, 50, 360-364.	1.7	27
33	Ballistic transport in Si, Ge, and GaAs nanowire MOSFETs. , 0, , .		26
34	1-µm gate length, In _{0.75} Ga _{0.25} As channel, thin body n-MOSFET on InP substrate with transconductance of 737 S/µm. Electronics Letters, 2008, 44, 498.	1.0	25
35	NEGF simulations of a junctionless Si gate-all-around nanowire transistor with discrete dopants. Solid-State Electronics, 2012, 71, 101-105.	1.4	25
36	Hot-carrier-induced deep-level defects from gated-diode measurements on MOSFETs. IEEE Electron Device Letters, 1990, 11, 95-97.	3.9	24

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37	Finite element Monte Carlo simulation of recess gate compound FETs. Solid-State Electronics, 1996, 39, 629-635.	1.4	23
38	Random telegraph signal amplitudes in sub 100 nm (decanano) MOSFETs: a 3D 'Atomistic' simulation study. , 0, , .		23
39	Nanowire transistor solutions for 5nm and beyond. , 2016, , .		22
40	Oxide thickness variation induced threshold voltage fluctuations in decanano MOSFETs: a 3D density gradient simulation study. Superlattices and Microstructures, 2000, 28, 507-515.	3.1	21
41	Analysis of Statistical Fluctuations due to Line Edge Roughness in sub-0.1 μ m MOSFETs. , 2001, , 78-81.		21
42	RC Variability of Short-Range Interconnects. , 2009, , .		20
43	Evaluation of statistical variability in 32 and 22nm technology generation LSTP MOSFETs. Solid-State Electronics, 2009, 53, 767-772.	1.4	20
44	Integrated atomistic process and device simulation of decananometre MOSFETs. , 0, , .		19
45	Quantum mechanical enhancement of the random dopant induced threshold voltage fluctuations and lowering in sub 0.1 micron MOSFETs. , 0, , .		18
46	Monte Carlo simulations of III-V MOSFETs. Semiconductor Science and Technology, 2004, 19, S202-S205.	2.0	18
47	A comparison of advanced transport models for the computation of the drain current in nanoscale nMOSFETs. Solid-State Electronics, 2009, 53, 1293-1302.	1.4	18
48	Simulation based transistor-SRAM co-design in the presence of statistical variability and reliability. , 2013, , .		18
49	Impact of device geometry and doping strategy on linearity and RF performance in Si/SiGe MODFETs. Microelectronics Reliability, 2004, 44, 1101-1107.	1.7	17
50	Role of multiple delta doping in PHEMTs scaled to sub-100 nm dimensions. Solid-State Electronics, 2004, 48, 1223-1232.	1.4	16
51	Combined sources of intrinsic parameter fluctuations in sub-25nm generation UTB-SOI MOSFETs: A statistical simulation study. Solid-State Electronics, 2007, 51, 611-616.	1.4	16
52	Interplay between statistical reliability and variability: A comprehensive transistor-to-circuit simulation technology. , 2013, , .		16
53	Hot carrier aging and its variation under use-bias: Kinetics, prediction, impact on V _{dd} and SRAM. , 2015, , .		16
54	Potential fluctuations in metal-oxide-semiconductor field-effect transistors generated by random impurities in the depletion layer. Journal of Applied Physics, 2002, 91, 4326-4334.	2.5	15

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55	Impact of scattering in atomistic™ device simulations. Solid-State Electronics, 2005, 49, 733-739.	1.4	15
56	Modeling and simulation of transistor and circuit variability and reliability. , 2010, , .		15
57	Simulation of direct source-to-drain tunnelling using the density gradient formalism: Non-Equilibrium Greens Function calibration. , 0, , .		14
58	Monte carlo simulations of sub-100 nm InGaAs MOSFETs for digital applications. , 0, , .		14
59	Impact of High- <math>\epsilon</math> Gate Stacks on Transport and Variability in Nano-CMOS Devices. Journal of Computational and Theoretical Nanoscience, 2008, 5, 1072-1088.	0.4	14
60	Hot-carrier degradation monitoring in LDD n-MOSFETs using drain gated-diode measurements. Microelectronic Engineering, 1991, 15, 445-448.	2.4	13
61	PBTI/NBTI-Related Variability in TB-SOI and DG MOSFETs. IEEE Electron Device Letters, 2010, 31, 408-410.	3.9	13
62	Time-dependent variation: A new defect-based prediction methodology. , 2014, , .		13
63	Interaction between hot carrier aging and PBTI degradation in nMOSFETs: Characterization, modelling and lifetime prediction. , 2017, , .		13
64	Process Variability for Devices at and beyond the 7Ånm Node. ECS Journal of Solid State Science and Technology, 2018, 7, P595-P601.	1.8	12
65	Title is missing!. Journal of Computational Electronics, 2002, 1, 289-293.	2.5	11
66	Efficient three-dimensional parallel simulations of PHEMTs. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2005, 18, 327-340.	1.9	11
67	A study of the effect of the interface roughness on a DG-MOSFET using a full 2D NEGF technique. , 2005, , .		11
68	Key issues and techniques for characterizing time-dependent device-to-device variation of SRAM. , 2013, , .		11
69	Electron dynamics in nanoscale transistors by means of Wigner and Boltzmann approaches. Physica A: Statistical Mechanics and Its Applications, 2014, 398, 194-198.	2.6	11
70	Thorough Understanding of Retention Time of Z2FET Memory Operation. IEEE Transactions on Electron Devices, 2019, 66, 383-388.	3.0	11
71	Strain engineered pHEMTs on virtual substrates: a Monte Carlo simulation study. Solid-State Electronics, 1999, 43, 1281-1288.	1.4	10
72	Effect of oxide interface roughness on the threshold voltage fluctuations in decanano MOSFETs with ultrathin gate oxides. , 0, , .		10

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73	Intrinsic parameter fluctuations in MOSFETs due to structural non-uniformity of high- κ gate stack materials. , 2005, , .		10
74	Simulation of combined sources of intrinsic parameter fluctuations in a 'real' 35 nm MOSFET. , 0, , .		10
75	Integrating intrinsic parameter fluctuation description into BSIMSOI to forecast sub-15nm UTB SOI based 6T SRAM operation. Solid-State Electronics, 2006, 50, 86-93.	1.4	10
76	Impact of Intrinsic Parameter Fluctuations on SRAM Cell Design. , 2006, , .		10
77	Beyond SiO ₂ technology: Simulation of the impact of high- $\hat{\epsilon}$ dielectrics on mobility. Journal of Non-Crystalline Solids, 2007, 353, 630-634.	3.1	10
78	Statistical Compact Model Parameter Extraction Strategy for Intrinsic Parameter Fluctuation. , 2007, , 301-304.		10
79	Impact of intrinsic parameter fluctuations on the performance of HEMTs studied with a 3D parallel drift-diffusion simulator. Solid-State Electronics, 2007, 51, 481-488.	1.4	10
80	Parameter set and data sampling strategy for accurate yet efficient statistical MOSFET compact model extraction. Solid-State Electronics, 2010, 54, 307-315.	1.4	10
81	Speed-up of scalable iterative linear solvers implemented on an array of transputers. Parallel Computing, 1994, 20, 375-387.	2.1	9
82	Impact of high- κ dielectric HfO ₂ on the mobility and device performance of sub-100-nm nMOSFETs. IEEE Transactions on Device and Materials Reliability, 2005, 5, 103-108.	2.0	9
83	Intrinsic parameter fluctuations in conventional MOSFETs until the end of the ITRS: A statistical simulation study. Journal of Physics: Conference Series, 2006, 38, 188-191.	0.4	9
84	Monte Carlo simulations of InGaAs nano-MOSFETs. Microelectronic Engineering, 2007, 84, 2150-2153.	2.4	9
85	A Comparison between a Fully-3D Real-Space Versus Coupled Mode-Space NEGF in the Study of Variability in Gate-All-Around Si Nanowire MOSFET. , 2009, , .		9
86	Impact of random dopant fluctuations on trap-assisted tunnelling in nanoscale MOSFETs. Microelectronics Reliability, 2012, 52, 1918-1923.	1.7	9
87	MS-EMC vs. NEGF: A comparative study accounting for transport quantum corrections. , 2018, , .		9
88	Scalable parallel 3D finite element nonlinear poisson solver. Simulation Modelling Practice and Theory, 1996, 4, 155-168.	0.3	8
89	Effect of single-electron interface trapping in decanano MOSFETs: A 3D atomistic simulation study. Superlattices and Microstructures, 2000, 27, 411-416.	3.1	8
90	Nonequilibrium transport in scaled high electron mobility transistors. Semiconductor Science and Technology, 2002, 17, 579-584.	2.0	8

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91	Intrinsic fluctuations induced by a high- ϵ^{p} gate dielectric in sub-100 nm Si MOSFETs. AIP Conference Proceedings, 2005, , .	0.4	8
92	Modelling of InP HEMTs with high indium content channels. , 0, , .		8
93	Simulation of implant free III-V MOSFETs for high performance low power Nano-CMOS applications. Microelectronic Engineering, 2007, 84, 2398-2403.	2.4	8
94	Effect of interface state trap density on the characteristics of n-type, enhancement-mode, implant-free In _{0.3} Ga _{0.7} As MOSFETs. Microelectronic Engineering, 2009, 86, 1564-1567.	2.4	8
95	A novel approach to the statistical generation of non-normal distributed PSP compact model parameters using a nonlinear power method. , 2010, , .		8
96	Combining process and statistical variability in the evaluation of the effectiveness of corners in digital circuit parametric yield analysis. , 2010, , .		8
97	New evidence for velocity overshoot in a 200 nm pseudomorphic HEMT. Microelectronics Journal, 1996, 27, 785-793.	2.0	7
98	Ab-initio Coulomb Scattering in Atomistic Device Simulation. VLSI Design, 1998, 8, 331-335.	0.5	7
99	Degeneracy and High Doping Effects in Deep Sub-Micron Relaxed and Strained Si n-MOSFETs. Journal of Computational Electronics, 2003, 2, 475-479.	2.5	7
100	Interface roughness scattering and its impact on electron transport in relaxed and strained Si n-MOSFETs. Semiconductor Science and Technology, 2004, 19, S155-S157.	2.0	7
101	Sub-25nm UTB SOI SRAM cell under the influence of discrete random dopants. Solid-State Electronics, 2006, 50, 660-667.	1.4	7
102	On the impact of high- ϵ^{p} gate stacks on mobility: A Monte Carlo study including coupled SO phonon-plasmon scattering. Journal of Computational Electronics, 2007, 6, 1-5.	2.5	7
103	Modelling circuit performance variations due to statistical variability: Monte Carlo static timing analysis. , 2011, , .		7
104	RTN distribution comparison for bulk, FDSOI and FinFETs devices. Microelectronics Reliability, 2014, 54, 1749-1752.	1.7	7
105	Unified approach for simulation of statistical reliability in nanoscale CMOS transistors from devices to circuits. , 2015, , .		7
106	On the nature and energy distribution of defect states caused by hot electrons in Si. Applied Surface Science, 1987, 30, 319-324.	6.1	6
107	UTB SOI SRAM cell stability under the influence of intrinsic parameter fluctuation. , 0, , .		6
108	A study of the interface roughness effect in Si nanowires using a full 3D NEGF approach. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 37, 168-172.	2.7	6

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109	Developing a full 3D NEGF simulator with random dopant and interface roughness. Journal of Computational Electronics, 2007, 6, 215-218.	2.5	6
110	Evaluation of intrinsic parameter fluctuations on 45, 32 and 22nm technology node LP N-MOSFETs. , 2008, , .		6
111	Dopants and roughness induced resonances in thin Si nanowire transistors: A self-consistent NEGF-poisson study. Journal of Physics: Conference Series, 2010, 220, 012009.	0.4	6
112	Enriched residual free bubbles for semiconductor device simulation. Computational Mechanics, 2012, 50, 119-133.	4.0	6
113	Study of the 1D Scattering Mechanisms' Impact on the Mobility in Si Nanowire Transistors. , 2018, , .		6
114	Statistical 3D atomistic™ simulation of decanano MOSFETs. Superlattices and Microstructures, 2000, 27, 215-227.	3.1	5
115	Scaling of pHEMTs to Decanano Dimensions. VLSI Design, 2001, 13, 435-439.	0.5	5
116	Quantum Corrections to the Atomistic™ MOSFET Simulations. VLSI Design, 2001, 13, 15-21.	0.5	5
117	Excessive Over-Relaxation Method for Multigrid Poisson Solvers. Journal of Computational Electronics, 2002, 1, 341-345.	2.5	5
118	Brownian Ionic Channel Simulation. Journal of Computational Electronics, 2003, 2, 257-262.	2.5	5
119	3D Parallel Simulations of Fluctuation Effects in pHEMTs. Journal of Computational Electronics, 2003, 2, 369-373.	2.5	5
120	A Methodology for Quantitatively Introducing Atomistic™ Fluctuations into Compact Device Models for Circuit Analysis. Journal of Computational Electronics, 2003, 2, 427-431.	2.5	5
121	Green function study of quantum transport in ultra-small devices with embedded atomistic clusters. Journal of Physics: Conference Series, 2006, 35, 233-246.	0.4	5
122	The scalability of 8T-SRAM cells under the influence of intrinsic parameter fluctuations. Solid-State Circuits Conference, 2008 ESSCIRC 2008 34th European, 2007, , .	0.0	5
123	Brownian simulation of charge transport in $\hat{\pm}$ -Haemolysin. Journal of Computational Electronics, 2008, 7, 28-33.	2.5	5
124	Secure, Performance-Oriented Data Management for nanoCMOS Electronics. , 2008, , .		5
125	NEGF simulations of a junctionless Si gate-all-around nanowire transistor with discrete dopants. , 2011, , .		5
126	Statistical aspects of NBTI/PBTI and impact on SRAM yield. , 2011, , .		5

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127	An advanced statistical compact model strategy for SRAM simulation at reduced V<inf>DD</inf>. , 2012, , .		5
128	A physics-based investigation of Pt-salt doped carbon nanotubes for local interconnects. , 2017, , .		5
129	Statistically reliable "Atomistic"™ Simulation of Sub 100 nm MOSFETs. , 1998, , 223-226.		5
130	Gender neutral engineering: an impossible dream? "the case of Eastern Europe. International Journal of Science Education, 1998, 20, 783-793.	1.9	4
131	Topologically Rectangular Grids in the Parallel Simulation of Semiconductor Devices. VLSI Design, 1998, 6, 91-95.	0.5	4
132	Transconductance, carrier mobility and 1/f noise in Si/Si0.64Ge0.36/Si pMOSFETs. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 89, 444-448.	3.5	4
133	Quantum mechanical and transport aspects of resolving discrete charges in nano-CMOS device simulation. , 0, , .		4
134	A NEGF study of the effect of surface roughness on CMOS nanotransistors. Journal of Physics: Conference Series, 2006, 35, 269-274.	0.4	4
135	Study of fluctuations in advanced MOSFETs using a 3D finite element parallel simulator. Journal of Computational Electronics, 2007, 5, 311-314.	2.5	4
136	Random dopant related variability in the 30Ånm gate length In0.75Ga0.25As implant free MOSFET. Journal of Computational Electronics, 2008, 7, 159-163.	2.5	4
137	Simulation of impurities with an attractive potential in fully 3-D real-space Non-Equilibrium Green’s Function quantum transport simulations. , 2008, , .		4
138	Benchmarking the Accuracy of PCA Generated Statistical Compact Model Parameters Against Physical Device Simulation and Directly Extracted Statistical Parameters. , 2009, , .		4
139	The effect of compact modelling strategy on SNM and Read Current variability in Modern SRAM. , 2011, , .		4
140	Assessment of gate leakage mechanism utilizing Multi-Subband Ensemble Monte Carlo. , 2017, , .		4
141	Efficient hole transport model in warped bands for use in the simulation of Si/SiGe MOSFETs. , 0, , .		3
142	Mesh-based particle simulation of sub-0.1 micron FETs. Semiconductor Science and Technology, 1998, 13, A173-A176.	2.0	3
143	Efficient 3D 'atomistic' simulation technique for studying of random dopant induced threshold voltage lowering and fluctuations in decanano MOSFETs. , 0, , .		3
144	RF analysis of aggressively scaled pHEMTs. , 2000, , .		3

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145	Scaling study of Si/SiGe MODFETs for RF applications. , 0, , .		3
146	Implications of Imperfect Interfaces and Edges in Ultra-small MOSFET Characteristics. Physica Status Solidi (B): Basic Research, 2002, 233, 101-112.	1.5	3
147	Generic Particle-Mesh Framework for the Simulation of Ionic Channels. Journal of Computational Electronics, 2002, 1, 405-409.	2.5	3
148	Scattering from Body Thickness Fluctuations in Double Gate MOSFETs: An ab initio Monte Carlo Simulation Study. Journal of Computational Electronics, 2004, 3, 341-345.	2.5	3
149	Monte carlo study of mobility in Si devices with γ -based oxides. Materials Science in Semiconductor Processing, 2006, 9, 995-999.	4.0	3
150	Atomistic effect of delta doping layer in a 50 nm InP HEMT. Journal of Computational Electronics, 2006, 5, 131-135.	2.5	3
151	Statistical study of the effect of interface charge fluctuations in HEMTs using a 3D simulator. Journal of Computational Electronics, 2007, 5, 385-388.	2.5	3
152	A full 3D non-equilibrium Green functions study of a stray charge in a nanowire MOS transistor. Journal of Computational Electronics, 2008, 7, 359-362.	2.5	3
153	Integrating Security Solutions to Support nanoCMOS Electronics Research. , 2008, , .		3
154	Atomistic mesh generation for the simulation of nanoscale metal-oxide-semiconductor field-effect transistors. Physical Review E, 2008, 77, 056702.	2.1	3
155	Monte Carlo analysis of In _{0.53} Ga _{0.47} As Implant-Free Quantum-Well device performance. , 2010, , .		3
156	Capturing intrinsic parameter fluctuations using the PSP compact model. , 2010, , .		3
157	Monte Carlo simulation study of hole mobility in germanium MOS inversion layers. , 2010, , .		3
158	Simulation study of the 20nm gate-length Ge implant-free quantum well p-MOSFET. Microelectronic Engineering, 2011, 88, 362-365.	2.4	3
159	Quantum insights in gate oxide charge-trapping dynamics in nanoscale MOSFETs. , 2013, , .		3
160	3D electro-thermal simulations of bulk FinFETs with statistical variations. , 2015, , .		3
161	Speed-up of scalable iterative linear solvers implemented on an array of transputers. Parallel Computing, 1995, 21, 669-682.	2.1	2
162	Parallel semiconductor device simulation: from power to 'atomistic' devices. , 0, , .		2

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163	Effect of impact ionization in scaled pHEMTs. , 0, , .		2
164	Multiple delta doping in aggressively scaled PHEMTs. , 2001, , .		2
165	High performance III-V MOSFETs: a dream close to reality?. , 0, , .		2
166	Breakdown of universal mobility curves in sub-100-nm MOSFETs. IEEE Nanotechnology Magazine, 2002, 1, 260-264.	2.0	2
167	Quantum Corrections in the Monte Carlo Simulations of Scaled PHEMTs with Multiple Delta Doping. Journal of Computational Electronics, 2002, 1, 257-261.	2.5	2
168	Simulation Study of High Performance III-V MOSFETs for Digital Applications. Journal of Computational Electronics, 2003, 2, 341-345.	2.5	2
169	Applicability of Quasi-3D and 3D MOSFET Simulations in the "Atomistic" Regime. Journal of Computational Electronics, 2003, 2, 423-426.	2.5	2
170	Artificial carrier heating due to the introduction of ab initio Coulomb scattering in Monte Carlo simulations. Superlattices and Microstructures, 2003, 34, 319-326.	3.1	2
171	Self-aligned 0.12 μ m T-gate In _{0.53} Ga _{0.47} As/In _{0.52} Al _{0.48} As HEMT technology utilising a non-annealed ohmic contact strategy. , 0, , .		2
172	Simulations of Sub-100 nm Strained Si MOSFETs with High- $\hat{\rho}$ Gate Stacks. Journal of Computational Electronics, 2004, 3, 171-175.	2.5	2
173	Simulating the bio-nano-CMOS interface. , 0, , .		2
174	Development of a Full 3D NEGF Nano-CMOS Simulator. , 2006, , .		2
175	Current variations in PHEMTs introduced by channel composition fluctuations. Journal of Physics: Conference Series, 2006, 38, 212-215.	0.4	2
176	Monte Carlo Simulation of Implant Free InGaAs MOSFET. Journal of Physics: Conference Series, 2006, 38, 200-203.	0.4	2
177	Introducing energy broadening in semiclassical Monte Carlo simulations. Journal of Computational Electronics, 2007, 5, 419-423.	2.5	2
178	Impact of intrinsic parameter fluctuations on the performance of In _{0.75} Ga _{0.25} As implant free MOSFETs. Semiconductor Science and Technology, 2009, 24, 055011.	2.0	2
179	Impact of the field induced polarization space-charge on the characteristics of AlGaIn/GaN HEMT: Self-consistent simulation study. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S1007-S1011.	0.8	2
180	Effect of interface state trap density on the performance of scaled surface channel In _{0.3} Ga _{0.7} As MOSFETs. Journal of Physics: Conference Series, 2009, 193, 012122.	0.4	2

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181	FET based nano-pore sensing: a 3D simulation study. Journal of Computational Electronics, 2012, 11, 266-271.	2.5	2
182	Silicon-on-insulator (SOI) fin-on-oxide field effect transistors (FinFETs). , 2014, , 195-211.		2
183	Challenges and Progress on Carbon Nanotube Integration for BEOL Interconnects. , 2018, , .		2
184	Simulation of Statistical NBTI Degradation in 10nm Doped Channel pFinFETs. , 2019, , .		2
185	MOSFETs Under Electrical Stress " Degradation, Subthreshold Conduction, and Noise in a Submicron Structure. Springer Series in Solid-state Sciences, 1988, , 253-262.	0.3	2
186	A Combined First Principles and Kinetic Monte Carlo study of Polyoxometalate based Molecular Memory Devices. , 2020, , .		2
187	Simulation of Nano-CMOS Devices: From Atoms to Architecture. Nanostructure Science and Technology, 2007, , 257-303.	0.1	2
188	Ultra-linear pseudomorphic HEMTs for wireless communications: A simulation study. , 1997, , .		1
189	Monte Carlo Analysis of Si/SiGe MODFET Performance Potential. Physica Status Solidi (B): Basic Research, 1997, 204, 525-527.	1.5	1
190	RF analysis methodology for Si and SiGe FETs based on transient Monte Carlo simulation. , 0, , .		1
191	Scaling of pHEMTs to decanano dimensions. , 0, , .		1
192	Quantum corrections to the 'atomistic' MOSFET simulation. , 0, , .		1
193	Gate tunnelling and impact ionisation in sub 100 nm PHEMTs. , 0, , .		1
194	Simulations of Scaled Sub-100 nm Strained Si/SiGe p-Channel MOSFETs. Journal of Computational Electronics, 2003, 2, 363-368.	2.5	1
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