

J-L Autran

List of Publications by Year in descending order

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257
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2779
citing authors

#	ARTICLE	IF	CITATIONS
1	Radiation Characterization of a Backside-Illuminated P-Type Photo-MOS Pixel With Gamma Rays and Fusion-Induced Neutrons. IEEE Transactions on Nuclear Science, 2022, 69, 534-541.	2.0	1
2	Real-Time Characterization of Neutron-Induced SEUs in Fusion Experiments at WEST Tokamak During D-D Plasma Operation. IEEE Transactions on Nuclear Science, 2022, 69, 501-511.	2.0	4
3	Single-Event Transient Space Characterizations in 28-nm UTBB SOI Technologies and Below. IEEE Transactions on Nuclear Science, 2021, 68, 21-26.	2.0	7
4	Influence of Supply Voltage and Body Biasing on Single-Event Upsets and Single-Event Transients in UTBB FD-SOI. IEEE Transactions on Nuclear Science, 2021, 68, 850-856.	2.0	5
5	Radiation-Hardened Cortex-R4F System-on-Chip Prototype With Total Ionizing Dose Dynamic Compensation in 28-nm FD-SOI. IEEE Transactions on Nuclear Science, 2021, 68, 1040-1044.	2.0	7
6	TIARA: Industrial Platform for Monte Carlo Single-Event Simulations in Planar Bulk, FD-SOI, and FinFET. IEEE Transactions on Nuclear Science, 2021, 68, 603-610.	2.0	9
7	Electronics reliability assessment of future power fusion machines: Neutron interaction analysis in bulk silicon. Microelectronics Reliability, 2021, 126, 114223.	1.7	2
8	Basic single-event mechanisms in Ge-based nanoelectronics subjected to terrestrial atmospheric neutrons. Microelectronics Reliability, 2021, , 114256.	1.7	0
9	Comparing analytical and Monte-Carlo-based simulation methods for logic gates SET sensitivity evaluation. Microelectronics Reliability, 2020, 114, 113871.	1.7	3
10	Reliability-driven pin assignment optimization to improve in-orbit soft-error rate. Microelectronics Reliability, 2020, 114, 113885.	1.7	0
11	On-Chip Total Ionizing Dose Digital Monitor in Fully Depleted SOI Technologies. IEEE Transactions on Nuclear Science, 2020, 67, 1326-1331.	2.0	8
12	Design exploration of majority voter architectures based on the signal probability for TMR strategy optimization in space applications. Microelectronics Reliability, 2020, 114, 113877.	1.7	5
13	Atmospheric Neutron Radiation Response of III-V Binary Compound Semiconductors. IEEE Transactions on Nuclear Science, 2020, 67, 1428-1435.	2.0	13
14	Exploiting Transistor Folding Layout as RHBD Technique Against Single-Event Transients. IEEE Transactions on Nuclear Science, 2020, 67, 1581-1589.	2.0	4
15	Mitigation and Predictive Assessment of SET Immunity of Digital Logic Circuits for Space Missions. Aerospace, 2020, 7, 12.	2.2	5
16	Body-Bias Calibration Based Temperature Sensor. Integrated Circuits and Systems, 2020, , 243-261.	0.2	0
17	Impact of Complex Logic Cell Layout on the Single-Event Transient Sensitivity. IEEE Transactions on Nuclear Science, 2019, 66, 1465-1472.	2.0	7
18	Radiation hardening efficiency of gate sizing and transistor stacking based on standard cells. Microelectronics Reliability, 2019, 100-101, 113457.	1.7	8

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19	Modelling and simulation of SEU in bulk Si and Ge SRAM. Microelectronics Reliability, 2019, 100-101, 113390.	1.7	1
20	Terrestrial neutron-induced single events in GaN. Microelectronics Reliability, 2019, 100-101, 113357.	1.7	3
21	A water tank muon spectrometer for the characterization of low energy atmospheric muons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 933, 12-17.	1.6	1
22	A 225 μm Si^{2+} Probe Single-Point Calibration Digital Temperature Sensor Using Body-Bias Adjustment in 28 nm FD-SOI CMOS. IEEE Solid-State Circuits Letters, 2018, 1, 14-17.	2.0	30
23	Accurate Resolution of Time-Dependent and Circuit-Coupled Charge Transport Equations: 1-D Case Applied to 28-nm FD-SOI Devices. IEEE Transactions on Nuclear Science, 2018, 65, 331-338.	2.0	6
24	A 1.1-pJ/cycle, 20-MHz, 0.42-V Temperature Compensated ARM Cortex-M0+ SoC With Adaptive Self Body-Biasing in FD-SOI. IEEE Solid-State Circuits Letters, 2018, 1, 174-177.	2.0	9
25	Analysis of the charge sharing effect in the SET sensitivity of bulk 45-nm standard cell layouts under heavy ions. Microelectronics Reliability, 2018, 88-90, 920-924.	1.7	12
26	A 2.7 pJ/cycle 16 MHz, 0.7 μW Deep Sleep Power ARM Cortex-M0+ Core SoC in 28 nm FD-SOI. IEEE Journal of Solid-State Circuits, 2018, 53, 2088-2100.	5.4	28
27	Characterization of atmospheric muons at sea level using a cosmic ray telescope. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 903, 77-84.	1.6	12
28	On-Orbit Upset Rate Prediction at Advanced Technology Nodes: a 28 nm FD-SOI Case Study. IEEE Transactions on Nuclear Science, 2017, 64, 449-456.	2.0	15
29	Single-event-transient effects in Junctionless Double-Gate MOSFETs with Dual-Material Gate investigated by 3D simulation. Microelectronics Reliability, 2017, 76-77, 719-724.	1.7	8
30	Multi-Poisson process analysis of real-time soft-error rate measurements in bulk 65 nm and 40 nm SRAMs. Microelectronics Reliability, 2017, 76-77, 53-57.	1.7	3
31	On-chip supply power measurement and waveform reconstruction in a 28nm FD-SOI processor SoC. , 2016, , .		1
32	Natural radiation events in CCD imagers at ground level. Microelectronics Reliability, 2016, 64, 68-72.	1.7	4
33	Modeling boron dose loss in sidewall spacer stacks of complementary metal oxide semiconductor transistors. Solid-State Electronics, 2016, 126, 163-169.	1.4	6
34	Real-time soft error rate measurements on bulk 40 nm SRAM memories: a five-year dual-site experiment. Semiconductor Science and Technology, 2016, 31, 114003.	2.0	3
35	Investigating the single-event-transient sensitivity of 65 nm clock trees with heavy ion irradiation and Monte-Carlo simulation. , 2016, , .		3
36	A 28nm FD-SOI standard cell 0.6-1.2V open-loop frequency multiplier for low power SoC clocking. , 2016, , .		3

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37	Radiation and COTS at ground level. Microelectronics Reliability, 2015, 55, 2147-2153.	1.7	3
38	3D simulation of single-event-transient effects in symmetrical dual-material double-gate MOSFETs. Microelectronics Reliability, 2015, 55, 1522-1526.	1.7	7
39	Alpha soft error rate of FDSOI 28 nm SRAMs: Experimental testing and simulation analysis. , 2015, , .		11
40	SEU sensitivity of Junctionless Single-Gate SOI MOSFETs-based 6T SRAM cells investigated by 3D TCAD simulation. Microelectronics Reliability, 2015, 55, 1501-1505.	1.7	1
41	Muons and thermal neutrons SEU characterization of 28nm UTBB FD-SOI and Bulk eSRAMs. , 2015, , .		6
42	ASTEP (2005â€“2015): Ten years of soft error and atmospheric radiation characterization on the Plateau de Bure. Microelectronics Reliability, 2015, 55, 1506-1511.	1.7	7
43	Experimental model of adaptive body biasing for energy efficiency in 28nm UTBB FD-SOI. , 2014, , .		4
44	Random-Walk Drift-Diffusion Charge-Collection Model For Reverse-Biased Junctions Embedded in Circuits. IEEE Transactions on Nuclear Science, 2014, 61, 3527-3534.	2.0	15
45	Altitude and Underground Real-Time SER Testing of SRAMs Manufactured in CMOS Bulk 130, 65 and 40 nm. , 2014, , .		6
46	90Ånm SRAM Static and Dynamic Mode Real-Time Testing at Concordia Station in Antarctica. IEEE Transactions on Nuclear Science, 2014, 61, 3389-3394.	2.0	0
47	Use of CCD to Detect Terrestrial Cosmic Rays at Ground Level: Altitude vs. Underground Experiments, Modeling and Numerical Monte Carlo Simulation. IEEE Transactions on Nuclear Science, 2014, 61, 3380-3388.	2.0	8
48	Sources of variability in alpha emissivity measurements at LA and ULA levels, a multicenter study. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 750, 96-102.	1.6	12
49	Behavioral modeling of SRIM tables for numerical simulation. Nuclear Instruments & Methods in Physics Research B, 2014, 322, 2-6.	1.4	25
50	Real-time soft-error rate measurements: A review. Microelectronics Reliability, 2014, 54, 1455-1476.	1.7	27
51	Particle Monte Carlo modeling of single-event transient current and charge collection in integrated circuits. Microelectronics Reliability, 2014, 54, 2278-2283.	1.7	8
52	Radiation sensitivity of junctionless double-gate 6T SRAM cells investigated by 3-D numerical simulation. Microelectronics Reliability, 2014, 54, 2284-2288.	1.7	17
53	An Analytical Model to Quantify Decay Chain Disequilibriumâ€“Application to the Thorium Decay Chain. IEEE Transactions on Nuclear Science, 2014, 61, 1414-1419.	2.0	2
54	Application of the TIARA Radiation Transport Tool to Single Event Effects Simulation. IEEE Transactions on Nuclear Science, 2014, 61, 1498-1500.	2.0	87

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55	65 nm fault tolerant latch architecture based on transient propagation blocking. , 2014, , .		0
56	Photovoltaic response in a resonant tunneling wire-dot-wire junction. Applied Physics Letters, 2013, 103, .	3.3	8
57	A Silicon Diode-Based Detector for Investigations of Atmospheric Radiation. IEEE Transactions on Nuclear Science, 2013, 60, 3603-3608.	2.0	2
58	Proton Flux Anisotropy in the Atmosphere: Experiment and Modeling. IEEE Transactions on Nuclear Science, 2013, 60, 2386-2391.	2.0	0
59	New D-Flip-Flop Design in 65Ånm CMOS for Improved SEU and Low Power Overhead at System Level. IEEE Transactions on Nuclear Science, 2013, 60, 4381-4386.	2.0	20
60	Soft errors induced by natural radiation at ground level in floating gate flash memories. , 2013, , .		12
61	Technology downscaling worsening radiation effects in bulk: SOI to the rescue. , 2013, , .		85
62	Space radiation and reliability qualifications on 65nm CMOS 600MHz microprocessors. , 2013, , .		6
63	A silicon diode based detector for radiation measurement in high altitude natural environment. , 2012, , .		0
64	3-D Numerical Simulation of Bipolar Amplification in Junctionless Double-Gate MOSFETs Under Heavy-Ion Irradiation. IEEE Transactions on Nuclear Science, 2012, 59, 773-780.	2.0	35
65	Electronic transport in GAA silicon nanowire MOSFETs: From Kubo-Greenwood mobility including screening remote coulomb scattering to analytical backscattering coefficient. , 2012, , .		1
66	Geant4 Analysis of n-Si Nuclear Reactions From Different Sources of Neutrons and Its Implication on Soft-Error Rate. IEEE Transactions on Nuclear Science, 2012, 59, 714-722.	2.0	31
67	Embedded silicon detector to investigate the natural radiative environment. Journal of Instrumentation, 2012, 7, P05007-P05007.	1.2	2
68	A review of real-time soft-error rate measurements in electronic circuits. , 2012, , .		8
69	Real-time Soft-Error testing of 40nm SRAMs. , 2012, , .		25
70	Simulation Analysis of Bipolar Amplification in Independent-Gate FinFET and Multi-Channel NWFET Submitted to Heavy-Ion Irradiation. IEEE Transactions on Nuclear Science, 2012, 59, 3249-3257.	2.0	5
71	Soft-Error Rate Induced by Thermal and Low Energy Neutrons in 40 nm SRAMs. IEEE Transactions on Nuclear Science, 2012, 59, 2658-2665.	2.0	40
72	Underground Experiment and Modeling of Alpha Emitters Induced Soft-Error Rate in CMOS 65 nm SRAM. IEEE Transactions on Nuclear Science, 2012, 59, 1048-1053.	2.0	21

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73	Kubo-Greenwood approach for the calculation of mobility in gate-all-around nanowire metal-oxide-semiconductor field-effect transistors including screened remote Coulomb scattering—Comparison with experiment. Journal of Applied Physics, 2012, 111, 103710.	2.5	11
74	The Plateau de Bure Neutron Monitor: Design, Operation and Monte Carlo Simulation. IEEE Transactions on Nuclear Science, 2012, 59, 303-313.	2.0	13
75	Alpha-Particle Induced Soft-Error Rate in CMOS 130 nm SRAM. IEEE Transactions on Nuclear Science, 2011, 58, 1086-1092.	2.0	12
76	Analytical model of ballistic current for GAA nanowire MOSFET including band structure effects: Application to ring oscillator. , 2011, , .		1
77	Combining GEANT4 and TIARA for Neutron Soft Error-Rate Prediction of 65 nm Flip-Flops. IEEE Transactions on Nuclear Science, 2011, 58, 2599-2606.	2.0	15
78	3-D numerical simulation of bipolar amplification in Junctionless Double-Gate MOSFETs under heavy-ion irradiation. , 2011, , .		3
79	Experimental Characterization of an Atmospheric Environment With a Stratospheric Balloon. IEEE Transactions on Nuclear Science, 2011, 58, 945-951.	2.0	8
80	Heavy Ion Characterization and Monte Carlo Simulation on 32 nm CMOS Bulk Technology. IEEE Transactions on Nuclear Science, 2011, 58, 2652-2657.	2.0	4
81	Modeling of energy bands in ultra-thin layer quantum nanostructures for solar cell applications. Journal of Non-Crystalline Solids, 2011, 357, 1884-1887.	3.1	8
82	Effects of localized gate stack parasitic charge on current-voltage characteristics of double-gate MOSFETs with high-permittivity dielectrics and Ge-channel. Journal of Non-Crystalline Solids, 2011, 357, 1879-1883.	3.1	1
83	Simulation study of Short-Channel Effects and quantum confinement in double-gate FinFET devices with high-mobility materials. Microelectronic Engineering, 2011, 88, 366-369.	2.4	12
84	Quantum Compact Model of Drain Current in Independent Double-Gate Metal—Oxide—Semiconductor Field-Effect Transistors. Japanese Journal of Applied Physics, 2011, 50, 024301.	1.5	0
85	Analytical Modeling of Alpha-Particle Emission Rate at Wafer-Level. IEEE Transactions on Nuclear Science, 2011, 58, 2798-2803.	2.0	10
86	Analytical model of drain current in nanowire MOSFETs including quantum confinement, band structure effects and quasi-ballistic transport: device to circuit performances analysis. , 2011, , .		8
87	Impact of (Quasi-)Ballistic Transport on Operation of Complementary Metal—Oxide—Semiconductor Inverters Based on Fully-Depleted Silicon-on-Insulator and Nanowire Devices. Japanese Journal of Applied Physics, 2011, 50, 014103.	1.5	0
88	Impact of (Quasi-)Ballistic Transport on Operation of Complementary Metal—Oxide—Semiconductor Inverters Based on Fully-Depleted Silicon-on-Insulator and Nanowire Devices. Japanese Journal of Applied Physics, 2011, 50, 014103.	1.5	0
89	Quantum Compact Model of Drain Current in Independent Double-Gate Metal—Oxide—Semiconductor Field-Effect Transistors. Japanese Journal of Applied Physics, 2011, 50, 024301.	1.5	1
90	Soft-errors induced by terrestrial neutrons and natural alpha-particle emitters in advanced memory circuits at ground level. Microelectronics Reliability, 2010, 50, 1822-1831.	1.7	34

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91	Single Event Upset and Multiple Cell Upset Modeling in Commercial Bulk 65-nm CMOS SRAMs and Flip-Flops. IEEE Transactions on Nuclear Science, 2010, 57, 1876-1883.	2.0	69
92	Monte-Carlo Based Charge Sharing Investigations on a Bulk 65 nm RHBD Flip-Flop. IEEE Transactions on Nuclear Science, 2010, , .	2.0	13
93	Alpha-emitter induced soft-errors in CMOS 130nm SRAM: Real-time underground experiment and Monte-Carlo simulation. , 2010, , .		1
94	A GPU/CUDA implementation of the collection-diffusion model to compute SER of large area and complex circuits. , 2010, , .		7
95	A Simple Compact Model to Analyze the Impact of Ballistic and Quasi-Ballistic Transport on Ring Oscillator Performance. Lecture Notes in Electrical Engineering, 2010, , 37-51.	0.4	0
96	Evidences on the Physical Origin of the Unexpected Transport Degradation in Ultimate n-FDSOI Devices. IEEE Nanotechnology Magazine, 2009, 8, 167-173.	2.0	11
97	Combined altitude and underground real-time SER characterization of CMOS technologies on the ASTEP-LSM platform. , 2009, , .		4
98	Altitude and Underground Real-Time SER Characterization of CMOS 65 nm SRAM. IEEE Transactions on Nuclear Science, 2009, 56, 2258-2266.	2.0	52
99	Simulation of Gate Tunneling Current in Metal-Insulator-Metal Capacitor with Multi layer High- ϵ_r Dielectric Stack Using the Non-equilibrium Green's Function Formalism. Japanese Journal of Applied Physics, 2009, 48, 111409.	1.5	3
100	Analytical modelling and performance analysis of double-gate MOSFET-based circuit including ballistic/quasi-ballistic effects. Molecular Simulation, 2009, 35, 631-637.	2.0	1
101	Quantum Simulation of C-V and I-V Characteristics in Ge and III-V Materials/High- ϵ_r MOS Devices. Materials Research Society Symposia Proceedings, 2009, 1194, 15.	0.1	0
102	Experimental Investigation on the Quasi-Ballistic Transport: Part I- Determination of a New Backscattering Coefficient Extraction Methodology. IEEE Transactions on Electron Devices, 2009, 56, 408-419.	3.0	43
103	Experimental Investigation on the Quasi-Ballistic Transport: Part II- Backscattering Coefficient Extraction and Link With the Mobility. IEEE Transactions on Electron Devices, 2009, 56, 420-430.	3.0	43
104	Physics-Based Analytical Modeling of Quasi-Ballistic Transport in Double-Gate MOSFETs: From Device to Circuit Operation. IEEE Transactions on Electron Devices, 2009, 56, 2692-2702.	3.0	16
105	Investigation of capacitance-voltage characteristics in Ge /high- ϵ_r MOS devices. Journal of Non-Crystalline Solids, 2009, 355, 1171-1175.	3.1	15
106	Simulation study of circuit performances of independent double-gate (IDG) MOSFETs with high-permittivity gate dielectrics. Journal of Non-Crystalline Solids, 2009, 355, 1185-1188.	3.1	3
107	Electron transport through high- ϵ_r dielectric barriers: A non-equilibrium Green's function (NEGF) study. Journal of Non-Crystalline Solids, 2009, 355, 1180-1184.	3.1	6
108	3-D Simulation Analysis of Bipolar Amplification in Planar Double-Gate and FinFET With Independent Gates. IEEE Transactions on Nuclear Science, 2009, 56, 2083-2090.	2.0	31

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109	A compact model for the ballistic subthreshold current in ultra-thin independent double-gate MOSFETs. Molecular Simulation, 2009, 35, 491-497.	2.0	3
110	Transient Response of 3-D Multi-Channel Nanowire MOSFETs Submitted to Heavy Ion Irradiation: a 3-D Simulation Study. IEEE Transactions on Nuclear Science, 2009, 56, 2042-2049.	2.0	15
111	Compact Modeling of Quasi-Ballistic Transport and Quantum Mechanical Confinement in Nanowire MOSFETs: Circuit Performances Analysis. , 2009, , .		5
112	Compact Modeling of Independent Double-Gate MOSFET: A Physical Approach. , 2009, , 27-54.		3
113	Boron out-diffusion mechanism in oxide and nitride CMOS sidewall spacer: Impact of the materials properties. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 154-155, 252-255.	3.5	3
114	Modeling and Simulation of Single-Event Effects in Digital Devices and ICs. IEEE Transactions on Nuclear Science, 2008, 55, 1854-1878.	2.0	143
115	Impact of Ballistic and Quasi-Ballistic Transport on Performances of Double-Gate MOSFET-Based Circuits. IEEE Transactions on Electron Devices, 2008, 55, 2443-2453.	3.0	27
116	Improved effective mass theory for silicon nanostructures. Applied Physics Letters, 2008, 93, 092103.	3.3	11
117	Electron mean-free-path experimental extraction on ultra-thin and ultra-short strained and unstrained FDSOI n-MOSFETs. , 2008, , .		4
118	3-D simulation analysis of bipolar amplification in Planar Double-Gate and FinFET with independent gates. , 2008, , .		1
119	Heavy Ion Testing and 3-D Simulations of Multiple Cell Upset in 65 nm Standard SRAMs. IEEE Transactions on Nuclear Science, 2008, 55, 2048-2054.	2.0	55
120	Altitude and underground real-time SER characterization of CMOS 65nm SRAM. , 2008, , .		2
121	Transient response of 3-D Multi-Channel nanowire MOSFETs submitted to heavy ion irradiation: A 3-D simulation study. , 2008, , .		1
122	A simple compact model to analyze the impact of ballistic and quasi-ballistic transport on ring oscillator performance. , 2008, , .		2
123	Real-time neutron and alpha soft-error rate testing of CMOS 130nm SRAM: Altitude versus underground measurements. , 2008, , .		14
124	Simulation Analysis of Quantum Confinement and Short-Channel Effects in Independent Double-Gate Metalâ€“Oxideâ€“Semiconductor Field-Effect Transistors. Japanese Journal of Applied Physics, 2008, 47, 7013-7018.	1.5	14
125	Impact of Geometrical and Electrical Parameters on Speed Performance Characteristics in Ultimate Double-Gate Metalâ€“Oxideâ€“Semiconductor Field-Effect Transistors. Japanese Journal of Applied Physics, 2008, 47, 3390-3395.	1.5	5
126	New Unified Analytical Model of Backscattering Coefficient From Low- to High-Field Conditions in Quasi-Ballistic Transport. IEEE Electron Device Letters, 2008, 29, 1392-1394.	3.9	11

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127	A new unified compact model for quasi-ballistic transport: Application to the analysis of circuit performances of a Double-Gate architecture. , 2008, , .		3
128	Simulation of Electron Transport in Nanoscale Independent-Gate Double-Gate Devices Using a Full 2D Green's Function Approach. Journal of Computational and Theoretical Nanoscience, 2008, 5, 1120-1127.	0.4	30
129	Theory of spin-dependent tunneling current in ferromagnetic metal-oxide-silicon structures. Journal of Applied Physics, 2007, 102, 113707.	2.5	6
130	Impact of high-permittivity dielectrics on speed performances and power consumption in double-gate-based CMOS circuits. Journal of Non-Crystalline Solids, 2007, 353, 639-644.	3.1	5
131	Altitude SEE Test European Platform (ASTEP) and First Results in CMOS 130 nm SRAM. IEEE Transactions on Nuclear Science, 2007, 54, 1002-1009.	2.0	30
132	3D Quantum Numerical Simulation of Single-Event Transients in Multiple-Gate Nanowire MOSFETs. IEEE Transactions on Nuclear Science, 2007, 54, 994-1001.	2.0	36
133	Will strain be useful for 10nm quasi-ballistic FDSOI devices? An experimental study. , 2007, , .		17
134	Compact modeling of symmetrical double-gate MOSFETs including carrier confinement and short-channel effects. Molecular Simulation, 2007, 33, 605-611.	2.0	5
135	Full-band study of current across silicon nanowire transistors. Applied Physics Letters, 2007, 90, 132112.	3.3	42
136	Strained FDSOI CMOS technology scalability down to 2.5nm film thickness and 18nm gate length with a TiN/HfO ₂ gate stack. , 2007, , .		27
137	Heavy ion testing and 3D simulations of Multiple Cell Upset in 65nm standard SRAMs. , 2007, , .		14
138	Experimental determination of the channel backscattering coefficient on 10-70nm-metal-gate Double-Gate transistors. Solid-State Electronics, 2007, 51, 537-542.	1.4	33
139	Analysis of 45-nm Multi-Gate Transistors Behavior Under Heavy Ion Irradiation by 3-D Device Simulation. IEEE Transactions on Nuclear Science, 2006, 53, 3265-3270.	2.0	17
140	Investigation of Quantum Effects in Ultra-Thin Body Single- and Double-Gate Devices Submitted to Heavy Ion Irradiation. IEEE Transactions on Nuclear Science, 2006, 53, 3363-3371.	2.0	34
141	Quantum Short-channel Compact Modelling of Drain-Current in Double-Gate MOSFET. Solid-State Electronics, 2006, 50, 680-686.	1.4	71
142	Influence of band structure on electron ballistic transport in silicon nanowire MOSFETs: An atomistic study. Solid-State Electronics, 2006, 50, 716-721.	1.4	96
143	Capacitance non-linearity study in Al ₂ O ₃ MIM capacitors using an ionic polarization model. Microelectronic Engineering, 2006, 83, 2422-2426.	2.4	20
144	Microscopic model for dielectric constant in metal-insulator-metal capacitors with high-permittivity metallic oxides. Applied Physics Letters, 2006, 88, 052902.	3.3	40

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145	Investigation of 30 nm Gate-All-Around MOSFET Sensitivity to Heavy Ions: A 3-D Simulation Study. IEEE Transactions on Nuclear Science, 2006, 53, 1950-1958.	2.0	21
146	Performance Degradation Induced by Fringing Field-Induced Barrier Lowering and Parasitic Charge in Double-Gate Metal-oxide-semiconductor Field-Effect Transistors with High- ϵ_r Dielectrics. Japanese Journal of Applied Physics, 2005, 44, 8362-8366.	1.5	7
147	Improvement of current-control induced by oxide notch in very short field-effect transistor. Applied Physics Letters, 2005, 87, 073509.	3.3	3
148	An analytical subthreshold current model for ballistic quantum-wire double-gate MOS transistors. Molecular Simulation, 2005, 31, 179-183.	2.0	13
149	Simulation analysis of the bipolar amplification induced by heavy-ion irradiation in double-gate MOSFETs. IEEE Transactions on Nuclear Science, 2005, 52, 2137-2143.	2.0	21
150	Simulation analysis of the bipolar amplification in fully-depleted SOI technologies under heavy-ion irradiations. IEEE Transactions on Nuclear Science, 2005, 52, 1474-1479.	2.0	43
151	Compact model of the quantum short-channel threshold voltage in symmetric Double-Gate MOSFET. Molecular Simulation, 2005, 31, 831-837.	2.0	24
152	A simulation analysis of FIBL in decananometer Double-Gate MOSFETs with high- ϵ_r gate dielectrics. Journal of Non-Crystalline Solids, 2005, 351, 1897-1901.	3.1	17
153	Electrical characteristics of Ge/GeOx(N)/HfO2 gate stacks. Journal of Non-Crystalline Solids, 2005, 351, 1902-1905.	3.1	24
154	Quantum short-channel compact model for the threshold voltage in double-gate MOSFETs with high-permittivity gate dielectrics. Journal of Non-Crystalline Solids, 2005, 351, 1911-1918.	3.1	37
155	Compact modeling of the threshold voltage in silicon nanowire MOSFET including 2D-quantum confinement effects. Molecular Simulation, 2005, 31, 839-843.	2.0	8
156	Simulation of hole phonon-velocity in strained Si/SiGe metal-oxide-semiconductor transistor. Journal of Applied Physics, 2004, 95, 713-717.	2.5	5
157	Role of hydrogen on negative bias temperature instability in HfO2-based hole channel field-effect transistors. Applied Physics Letters, 2004, 85, 2101-2103.	3.3	34
158	Modeling negative bias temperature instabilities in hole channel metal-oxide-semiconductor field effect transistors with ultrathin gate oxide layers. Journal of Applied Physics, 2004, 95, 2786-2791.	2.5	13
159	Electrical modeling and simulation of nanoscale MOS devices with a high-permittivity dielectric gate stack. Materials Research Society Symposia Proceedings, 2004, 811, 295.	0.1	0
160	Treatment of Point Defects in Nanowire MOSFETs Using the Nonequilibrium Green's Function Formalism. Journal of Computational Electronics, 2004, 3, 393-396.	2.5	7
161	Atomic-scale modeling of double-gate MOSFETs using a tight-binding Green's function formalism. Solid-State Electronics, 2004, 48, 567-574.	1.4	37
162	A new memory concept: the nano-multiple-tunnel-junction memory with embedded Si nano-crystals. Microelectronic Engineering, 2004, 72, 399-404.	2.4	11

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163	Two-dimensional modeling of quantum ballistic transport in ultimate double-gate SOI devices. Solid-State Electronics, 2003, 47, 1219-1225.	1.4	73
164	Model for defect generation at the (1 0 0)Si/SiO ₂ interface during electron injection in MOS structures. Applied Surface Science, 2003, 212-213, 749-752.	6.1	14
165	Model for negative bias temperature instability in p-MOSFETs with ultrathin oxynitride layers. Journal of Non-Crystalline Solids, 2003, 322, 100-104.	3.1	2
166	Towards a full microscopic approach to the modeling of transistors with nanometer dimensions. Journal of Non-Crystalline Solids, 2003, 322, 160-167.	3.1	3
167	New oxide quality characterization for charge leakage applications using the floating-gate technique. Journal of Non-Crystalline Solids, 2003, 322, 179-182.	3.1	0
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