

J-L Autran

List of Publications by Year in descending order

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257
papers

4,435
citations

147801

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54
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260
all docs

260
docs citations

260
times ranked

2779
citing authors

#	ARTICLE	IF	CITATIONS
1	Tantalum pentoxide (Ta ₂ O ₅) thin films for advanced dielectric applications. Materials Science and Engineering Reports, 1998, 22, 269-322.	31.8	603
2	Modeling and Simulation of Single-Event Effects in Digital Devices and ICs. IEEE Transactions on Nuclear Science, 2008, 55, 1854-1878.	2.0	143
3	Properties of amorphous and crystalline Ta ₂ O ₅ thin films deposited on Si from a Ta(OC ₂ H ₅) ₅ precursor. Journal of Applied Physics, 1998, 83, 4823-4829.	2.5	119
4	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
5	Application of the TIARA Radiation Transport Tool to Single Event Effects Simulation. IEEE Transactions on Nuclear Science, 2014, 61, 1498-1500.	2.0	87
6	Technology downscaling worsening radiation effects in bulk: SOI to the rescue. , 2013, , .		85
7	On the tunneling component of charge pumping current in ultrathin gate oxide MOSFETs. IEEE Electron Device Letters, 1999, 20, 92-94.	3.9	77
8	Two-dimensional modeling of quantum ballistic transport in ultimate double-gate SOI devices. Solid-State Electronics, 2003, 47, 1219-1225.	1.4	73
9	Interfacial hardness enhancement in deuterium annealed 0.25 μ m channel metal oxide semiconductor transistors. Applied Physics Letters, 1997, 70, 2999-3001.	3.3	71
10	Quantum Short-channel Compact Modelling of Drain-Current in Double-Gate MOSFET. Solid-State Electronics, 2006, 50, 680-686.	1.4	71
11	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
12	Fabrication and characterization of Si-MOSFET's with PECVD amorphous Ta ₂ O ₅ gate insulator. IEEE Electron Device Letters, 1997, 18, 447-449.	3.9	67
13	Electrical properties of Ta ₂ O ₅ films obtained by plasma enhanced chemical vapor deposition using a TaF ₅ source. Applied Physics Letters, 1996, 68, 1775-1777.	3.3	64
14	Frequency characterization and modeling of interface traps in Hf ₆ Si ₂ O ₇ /HfO ₂ gate dielectric stack from a capacitance point-of-view. Applied Physics Letters, 2002, 81, 3392-3394.	3.3	62
15	Conduction mechanisms in Ta ₂ O ₅ /SiO ₂ and Ta ₂ O ₅ /Si ₃ N ₄ stacked structures on Si. Journal of Applied Physics, 1999, 86, 480-486.	2.5	59
16	Model for interface defect and positive charge generation in ultrathin SiO ₂ /ZrO ₂ gate dielectric stacks. Applied Physics Letters, 2002, 81, 709-711.	3.3	57
17	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
18	Altitude and Underground Real-Time SER Characterization of CMOS 65 nm SRAM. IEEE Transactions on Nuclear Science, 2009, 56, 2258-2266.	2.0	52

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19	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
20	Experimental Investigation on the Quasi-Ballistic Transport: Part II – Determination of a New Backscattering Coefficient Extraction Methodology. IEEE Transactions on Electron Devices, 2009, 56, 408-419.	3.0	43
21	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
22	Full-band study of current across silicon nanowire transistors. Applied Physics Letters, 2007, 90, 132112.	3.3	42
23	Microscopic model for dielectric constant in metal-insulator-metal capacitors with high-permittivity metallic oxides. Applied Physics Letters, 2006, 88, 052902.	3.3	40
24	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
25	Radiation-induced interface traps in hardened MOS transistors: an improved charge-pumping study. IEEE Transactions on Nuclear Science, 1996, 43, 2547-2557.	2.0	37
26	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
27	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
28	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
29	Trapping-detrapping properties of irradiated ultra-thin SIMOX buried oxides. IEEE Transactions on Nuclear Science, 1995, 42, 2108-2113.	2.0	35
30	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
31	Role of hydrogen on negative bias temperature instability in HfO ₂ -based hole channel field-effect transistors. Applied Physics Letters, 2004, 85, 2101-2103.	3.3	34
32	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
33	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
34	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
35	Comparison between the properties of amorphous and crystalline Ta ₂ O ₅ thin films deposited on Si. Microelectronics Reliability, 1999, 39, 261-268.	1.7	31
36	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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37	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
38	Highly performant double gate MOSFET realized with SON process. , 0, , .		30
39	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
40	A 225 μm^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
41	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
42	3D quantum modeling and simulation of multiple-gate nanowire MOSFETs. , 0, , .		29
43	A 2.7 pJ/cycle 16 MHz, 0.7 μm^2 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
44	Characterization of Si O_2 interface states: Comparison between different charge pumping and capacitance techniques. Journal of Applied Physics, 1993, 74, 3932-3935.	2.5	27
45	Conduction properties of amorphous Ta 2O_5 films prepared by plasma enhanced chemical vapour deposition. Sensors and Actuators A: Physical, 1995, 51, 5-8.	4.1	27
46	Strained FDSOI CMOS technology scalability down to 2.5nm film thickness and 18nm gate length with a TiN/HfO 2 gate stack. , 2007, , .		27
47	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
48	Real-time soft-error rate measurements: A review. Microelectronics Reliability, 2014, 54, 1455-1476.	1.7	27
49	Ballistic transport in Si, Ge, and GaAs nanowire MOSFETs. , 0, , .		26
50	Use of carbon-free Ta 2O_5 thin-films as a gate insulator. Microelectronic Engineering, 1997, 36, 61-64.	2.4	25
51	Real-time Soft-Error testing of 40nm SRAMs. , 2012, , .		25
52	Behavioral modeling of SRIM tables for numerical simulation. Nuclear Instruments & Methods in Physics Research B, 2014, 322, 2-6.	1.4	25
53	Charge pumping analysis of radiation effects in LOCOS parasitic transistors. IEEE Transactions on Nuclear Science, 1997, 44, 1930-1938.	2.0	24
54	Compact model of the quantum short-channel threshold voltage in symmetric Double-Gate MOSFET. Molecular Simulation, 2005, 31, 831-837.	2.0	24

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55	Electrical characteristics of Ge/GeOx(N)/HfO2 gate stacks. Journal of Non-Crystalline Solids, 2005, 351, 1902-1905.	3.1	24
56	An Efficient Model for Accurate Capacitance-Voltage Characterization of High-k Gate Dielectrics Using a Mercury Probe. Electrochemical and Solid-State Letters, 2002, 5, F4.	2.2	23
57	Properties of SiO2 films deposited on silicon at low temperatures by plasma enhanced decomposition of hexamethyldisilazane. Journal of Non-Crystalline Solids, 1999, 245, 20-26.	3.1	21
58	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
59	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
60	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
61	Use of the charge pumping technique with a sinusoidal gate waveform. Solid-State Electronics, 1996, 39, 1394-1395.	1.4	20
62	Capacitance non-linearity study in Al2O3 MIM capacitors using an ionic polarization model. Microelectronic Engineering, 2006, 83, 2422-2426.	2.4	20
63	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
64	Radiation Effects in Thin-Film Ferroelectric PZT for Non-Volatile Memory Applications in Microelectronics. Journal De Physique III, 1997, 7, 1227-1243.	0.3	19
65	Enhanced total dose damage in junction field effect transistors and related linear integrated circuits. IEEE Transactions on Nuclear Science, 1996, 43, 3060-3067.	2.0	18
66	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
67	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
68	Will strain be useful for 10nm quasi-ballistic FDSOI devices? An experimental study. , 2007, , .		17
69	Soft-Error Rate of Advanced SRAM Memories: Modeling and Monte Carlo Simulation. , 0, , .		17
70	Radiation sensitivity of junctionless double-gate 6T SRAM cells investigated by 3-D numerical simulation. Microelectronics Reliability, 2014, 54, 2284-2288.	1.7	17
71	X-radiation response of SIMOX buried oxides: influence of the fabrication process. IEEE Transactions on Nuclear Science, 1996, 43, 821-825.	2.0	16
72	Isothermal and isochronal annealing methodology to study post-irradiation temperature activated phenomena. IEEE Transactions on Nuclear Science, 1997, 44, 2007-2012.	2.0	16

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73	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
74	Comparison of trapping and detrapping properties of mobile charge in alkali contaminated metal-oxide-silicon carbide structures. Applied Physics Letters, 1995, 66, 2340-2342.	3.3	15
75	Chapter 6 Charge pumping techniques. Instabilities in Silicon Devices, 1999, , 405-493.	0.0	15
76	Investigation of capacitance-voltage characteristics in Ge /high- κ MOS devices. Journal of Non-Crystalline Solids, 2009, 355, 1171-1175.	3.1	15
77	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
78	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
79	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
80	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
81	Radiation induced trap levels in SIMOX oxides: low temperature thermally stimulated luminescence. IEEE Transactions on Nuclear Science, 1998, 45, 1396-1401.	2.0	14
82	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
83	Influence of band-structure on electron ballistic transport in silicon nanowire MOSFET's: an atomistic study. , 0, , .		14
84	Heavy ion testing and 3D simulations of Multiple Cell Upset in 65nm standard SRAMs. , 2007, , .		14
85	Real-time neutron and alpha soft-error rate testing of CMOS 130nm SRAM: Altitude versus underground measurements. , 2008, , .		14
86	Simulation Analysis of Quantum Confinement and Short-Channel Effects in Independent Double-Gate Metal-Oxide-Semiconductor Field-Effect Transistors. Japanese Journal of Applied Physics, 2008, 47, 7013-7018.	1.5	14
87	Three-level charge pumping study of radiation-induced defects at Si-SiO ₂ interface in submicrometer MOS transistors. Journal of Non-Crystalline Solids, 1995, 187, 211-215.	3.1	13
88	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
89	An analytical subthreshold current model for ballistic quantum-wire double-gate MOS transistors. Molecular Simulation, 2005, 31, 179-183.	2.0	13
90	Monte-Carlo Based Charge Sharing Investigations on a Bulk 65 nm RHBD Flip-Flop. IEEE Transactions on Nuclear Science, 2010, , .	2.0	13

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91	The Plateau de Bure Neutron Monitor: Design, Operation and Monte Carlo Simulation. IEEE Transactions on Nuclear Science, 2012, 59, 303-313.	2.0	13
92	Atmospheric Neutron Radiation Response of III-V Binary Compound Semiconductors. IEEE Transactions on Nuclear Science, 2020, 67, 1428-1435.	2.0	13
93	Charge trapping in SIMOX and UNIBOND [®] oxides. Microelectronic Engineering, 1997, 36, 387-390.	2.4	12
94	Analysis of MOS Device Capacitance-Voltage Characteristics Based on the Self-Consistent Solution of the Schrödinger and Poisson Equations. Materials Research Society Symposia Proceedings, 1999, 592, 173.	0.1	12
95	An improved time domain analysis of the charge pumping current. Journal of Non-Crystalline Solids, 2001, 280, 255-260.	3.1	12
96	Alpha-Particle Induced Soft-Error Rate in CMOS 130 nm SRAM. IEEE Transactions on Nuclear Science, 2011, 58, 1086-1092.	2.0	12
97	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
98	Soft errors induced by natural radiation at ground level in floating gate flash memories. , 2013, , .		12
99	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
100	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
101	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
102	Defect Generation in Ultrathin SiON/ZrO ₂ Gate Dielectric Stacks. Journal of the Electrochemical Society, 2002, 149, F181.	2.9	11
103	A new memory concept: the nano-multiple-tunnel-junction memory with embedded Si nano-crystals. Microelectronic Engineering, 2004, 72, 399-404.	2.4	11
104	Improved effective mass theory for silicon nanostructures. Applied Physics Letters, 2008, 93, 092103.	3.3	11
105	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
106	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
107	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
108	Alpha soft error rate of FDSOI 28 nm SRAMs: Experimental testing and simulation analysis. , 2015, , .		11

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109	Influence of quadratic mobility degradation factor on low frequency noise in MOS transistors. Electronics Letters, 1998, 34, 1977.	1.0	10
110	Theoretical and experimental study of the conduction mechanism in Al/Ta ₂ O ₅ /SiO ₂ /Si and Al/Ta ₂ O ₅ /Si ₃ N ₄ /Si structures. Journal of Non-Crystalline Solids, 1999, 245, 73-78.	3.1	10
111	Energy and temperature dependence of electron effective masses in silicon. Journal of Applied Physics, 2002, 92, 1431-1433.	2.5	10
112	Quantum short-channel compact modeling of drain-current in double-gate MOSFET. , 0, , .		10
113	Analytical Modeling of Alpha-Particle Emission Rate at Wafer-Level. IEEE Transactions on Nuclear Science, 2011, 58, 2798-2803.	2.0	10
114	Irradiation effects in ultrathin Si/SiO ₂ /sub 2/ structures. IEEE Transactions on Nuclear Science, 1998, 45, 1407-1411.	2.0	9
115	Extraction and evolution of Fowler-Nordheim tunneling parameters of thin gate oxides under EEPROM-like dynamic degradation. Microelectronics Reliability, 1999, 39, 879-884.	1.7	9
116	SiO ₂ films deposited on silicon at low temperature by plasma-enhanced decomposition of hexamethyldisilazane: Defect characterization. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 2670-2675.	2.1	9
117	Atomic-scale modeling of source-to-drain tunneling in ultimate Schottky barrier double-gate MOSFETs. , 0, , .		9
118	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
119	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
120	Three-level charge pumping on submicronic MOS transistors. Solid State Communications, 1992, 84, 607-611.	1.9	8
121	Stretch-out of high-permittivity MOS capacitanceâ€“voltage curves resulting from a lateral non-uniform oxide charge distribution. Journal of Non-Crystalline Solids, 2003, 322, 219-224.	3.1	8
122	Compact modeling of the threshold voltage in silicon nanowire MOSFET including 2D-quantum confinement effects. Molecular Simulation, 2005, 31, 839-843.	2.0	8
123	Experimental Characterization of an Atmospheric Environment With a Stratospheric Balloon. IEEE Transactions on Nuclear Science, 2011, 58, 945-951.	2.0	8
124	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
125	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
126	A review of real-time soft-error rate measurements in electronic circuits. , 2012, , .		8

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127	Photovoltaic response in a resonant tunneling wire-dot-wire junction. Applied Physics Letters, 2013, 103, .	3.3	8
128	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
129	Particle Monte Carlo modeling of single-event transient current and charge collection in integrated circuits. Microelectronics Reliability, 2014, 54, 2278-2283.	1.7	8
130	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
131	Radiation hardening efficiency of gate sizing and transistor stacking based on standard cells. Microelectronics Reliability, 2019, 100-101, 113457.	1.7	8
132	On-Chip Total Ionizing Dose Digital Monitor in Fully Depleted SOI Technologies. IEEE Transactions on Nuclear Science, 2020, 67, 1326-1331.	2.0	8
133	Use of the charge pumping technique to understand non-uniform n-channel MOSFET degradation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1994, 23, 120-122.	3.5	7
134	Radiation induced thermally stimulated luminescence and conductivity in SIMOX oxides. IEEE Transactions on Nuclear Science, 1996, 43, 845-850.	2.0	7
135	Impact of Nitrogen on Negative Bias Temperature Instability in p-Channel MOSFETs. Electrochemical and Solid-State Letters, 2003, 6, G146.	2.2	7
136	Treatment of Point Defects in Nanowire MOSFETs Using the Nonequilibrium Greenâ€™s Function Formalism. Journal of Computational Electronics, 2004, 3, 393-396.	2.5	7
137	Poly-gate replacement through contact hole (PRETCH): a new method for high-K/metal gate and multi-oxide implementation on chip. , 0, , .		7
138	Performance Degradation Induced by Fringing Field-Induced Barrier Lowering and Parasitic Charge in Double-Gate Metalâ€™Oxideâ€™Semiconductor Field-Effect Transistors with High-Î» Dielectrics. Japanese Journal of Applied Physics, 2005, 44, 8362-8366.	1.5	7
139	A GPU/CUDA implementation of the collection-diffusion model to compute SER of large area and complex circuits. , 2010, , .		7
140	3D simulation of single-event-transient effects in symmetrical dual-material double-gate MOSFETs. Microelectronics Reliability, 2015, 55, 1522-1526.	1.7	7
141	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
142	Impact of Complex Logic Cell Layout on the Single-Event Transient Sensitivity. IEEE Transactions on Nuclear Science, 2019, 66, 1465-1472.	2.0	7
143	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
144	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

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145	Location of individual traps in DRAM cell transistors by charge pumping technique. <i>Microelectronic Engineering</i> , 1997, 36, 83-86.	2.4	6
146	Simulations of threshold voltage instabilities in Hf _y SiO _x and SiO ₂ /Hf _y SiO _x -based field-effect transistors. <i>Applied Physics Letters</i> , 2003, 83, 5065-5067.	3.3	6
147	Theory of spin-dependent tunneling current in ferromagnetic metal-oxide-silicon structures. <i>Journal of Applied Physics</i> , 2007, 102, 113707.	2.5	6
148	Electron transport through high- ϵ dielectric barriers: A non-equilibrium Green's function (NEGF) study. <i>Journal of Non-Crystalline Solids</i> , 2009, 355, 1180-1184.	3.1	6
149	Space radiation and reliability qualifications on 65nm CMOS 600MHz microprocessors. , 2013, , .		6
150	Altitude and Underground Real-Time SER Testing of SRAMs Manufactured in CMOS Bulk 130, 65 and 40 nm. , 2014, , .		6
151	Muons and thermal neutrons SEU characterization of 28nm UTBB FD-SOI and Bulk eSRAMs. , 2015, , .		6
152	Modeling boron dose loss in sidewall spacer stacks of complementary metal oxide semiconductor transistors. <i>Solid-State Electronics</i> , 2016, 126, 163-169.	1.4	6
153	Accurate Resolution of Time-Dependent and Circuit-Coupled Charge Transport Equations: 1-D Case Applied to 28-nm FD-SOI Devices. <i>IEEE Transactions on Nuclear Science</i> , 2018, 65, 331-338.	2.0	6
154	DYNAMOS: a numerical MOSFET model including quantum-mechanical and near-interface trap transient effects. <i>Solid-State Electronics</i> , 2002, 46, 1051-1059.	1.4	5
155	Simulation of hole phonon-velocity in strained Si/SiGe metal-oxide-semiconductor transistor. <i>Journal of Applied Physics</i> , 2004, 95, 713-717.	2.5	5
156	Impact of high-permittivity dielectrics on speed performances and power consumption in double-gate-based CMOS circuits. <i>Journal of Non-Crystalline Solids</i> , 2007, 353, 639-644.	3.1	5
157	Compact modeling of symmetrical double-gate MOSFETs including carrier confinement and short-channel effects. <i>Molecular Simulation</i> , 2007, 33, 605-611.	2.0	5
158	Impact of Geometrical and Electrical Parameters on Speed Performance Characteristics in Ultimate Double-Gate Metal-oxide-Semiconductor Field-Effect Transistors. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 3390-3395.	1.5	5
159	Compact Modeling of Quasi-Ballistic Transport and Quantum Mechanical Confinement in Nanowire MOSFETs: Circuit Performances Analysis. , 2009, , .		5
160	Simulation Analysis of Bipolar Amplification in Independent-Gate FinFET and Multi-Channel NWFET Submitted to Heavy-Ion Irradiation. <i>IEEE Transactions on Nuclear Science</i> , 2012, 59, 3249-3257.	2.0	5
161	Susceptibility of Group-IV and III-V Semiconductor-Based Electronics to Atmospheric Neutrons Explored by Geant4 Numerical Simulations. , 0, , .		5
162	Design exploration of majority voter architectures based on the signal probability for TMR strategy optimization in space applications. <i>Microelectronics Reliability</i> , 2020, 114, 113877.	1.7	5

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163	Mitigation and Predictive Assessment of SET Immunity of Digital Logic Circuits for Space Missions. <i>Aerospace</i> , 2020, 7, 12.	2.2	5
164	Influence of Supply Voltage and Body Biasing on Single-Event Upsets and Single-Event Transients in UTBB FD-SOI. <i>IEEE Transactions on Nuclear Science</i> , 2021, 68, 850-856.	2.0	5
165	A comparison of Si ⁻ -SiO ₂ interface trap properties in thin-film transistors with thermal and plasma nitrided oxides. <i>Journal of Non-Crystalline Solids</i> , 1995, 187, 374-379.	3.1	4
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