

Yoshio Nishi

List of Publications by Year in descending order

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187
papers

5,660
citations

76196

40
h-index

98622

67
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all docs

188
docs citations

188
times ranked

7304
citing authors

#	ARTICLE	IF	CITATIONS
1	Three-Dimensional Analysis of Particle Distribution on Filter Layers inside N95 Respirators by Deep Learning. Nano Letters, 2021, 21, 651-657.	4.5	41
2	Carbon nanotube thermoelectric devices by direct printing: Toward wearable energy converters. Applied Physics Letters, 2021, 118, .	1.5	7
3	Contact Engineering High-Performance n-Type MoTe ₂ Transistors. Nano Letters, 2019, 19, 6352-6362.	4.5	87
4	Effect of IrO ₂ Spatial Distribution on the Stability and Charge Distribution of Ti _{1-x} Ir _x O ₂ Alloys. Chemistry of Materials, 2019, 31, 8742-8751.	3.2	2
5	Intrinsic limits of leakage current in self-heating-triggered threshold switches. Applied Physics Letters, 2019, 114, .	1.5	9
6	Measurement of the vacuum-ultraviolet absorption spectrum of low-k dielectrics using X-ray reflectivity. Applied Physics Letters, 2018, 112, .	1.5	6
7	Effect of thermal insulation on the electrical characteristics of NbOx threshold switches. Applied Physics Letters, 2018, 112, .	1.5	26
8	HfO ₂ /Ti Interface Mediated Conductive Filament Formation in RRAM: An <i>Ab Initio</i> Study. IEEE Transactions on Electron Devices, 2018, 65, 507-513.	1.6	24
9	A Bi-stable 1- /2-Transistor SRAM in 14 nm FinFET Technology for High Density / High Performance Embedded Applications. , 2018, , .		2
10	Transient dynamics of NbOx threshold switches explained by Poole-Frenkel based thermal feedback mechanism. Applied Physics Letters, 2018, 112, .	1.5	27
11	Research Update: Ab initio study on resistive memory device optimization trends: Dopant segregation effects and data retention in HfO _{2-x} . APL Materials, 2018, 6, 058102.	2.2	6
12	Copper interstitial recombination centers in $N_{1-x}Cu_xO_2$. Physical Review B, 2018, 97, .		
13	Oxygen migration during resistance switching and failure of hafnium oxide memristors. Applied Physics Letters, 2017, 110, .	1.5	64
14	Chemical Vapor-Deposited Hexagonal Boron Nitride as a Scalable Template for High-Performance Organic Field-Effect Transistors. Chemistry of Materials, 2017, 29, 2341-2347.	3.2	52
15	Hydrogen-Induced Oxygen Vacancy Bistability and Its Impact on RRAM Device Operation. IEEE Electron Device Letters, 2017, 38, 728-731.	2.2	10
16	Ultra-thin and high-response transparent and flexible heater based on carbon nanotube film. Applied Physics Letters, 2017, 110, .	1.5	49
17	Identifying Ferroelectric Switching Pathways in HfO ₂ : First Principles Calculations under Electric Fields. , 2017, , .		10
18	Modeling resistive switching materials and devices across scales. Journal of Electroceramics, 2017, 39, 39-60.	0.8	19

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37	First-principles study of carbon impurity effects in the pseudo-hexagonal Ta ₂ O ₅ . <i>Current Applied Physics</i> , 2016, 16, 638-643.	1.1	11
38	Filament-Induced Anisotropic Oxygen Vacancy Diffusion and Charge Trapping Effects in Hafnium Oxide RRAM. <i>IEEE Electron Device Letters</i> , 2016, 37, 400-403.	2.2	42
39	HfO ₂ -Based RRAM: Electrode Effects, Ti/HfO ₂ Interface, Charge Injection, and Oxygen (O) Defects Diffusion Through Experiment and <i>Ab Initio</i> Calculations. <i>IEEE Transactions on Electron Devices</i> , 2016, 63, 360-368.	1.6	81
40	Effects of ultraviolet (UV) irradiation in air and under vacuum on low-k dielectrics. <i>AIP Advances</i> , 2016, 6, .	0.6	5
41	Deep recombination centers in Cu_2ZnSnS_4 revealed by screened-exchange hybrid density functional theory. <i>Physical Review B</i> , 2015, 92, .	1.1	34
42	Significance of the double-layer capacitor effect in polar rubbery dielectrics and exceptionally stable low-voltage high transconductance organic transistors. <i>Scientific Reports</i> , 2015, 5, 17849.	1.6	66
43	Defect-induced bandgap narrowing in low-k dielectrics. <i>Applied Physics Letters</i> , 2015, 107, 082903.	1.5	27
44	In-operando synchronous time-multiplexed O K-edge x-ray absorption spectromicroscopy of functioning tantalum oxide memristors. <i>Journal of Applied Physics</i> , 2015, 118, .	1.1	25
45	Fluorophore-based sensor for oxygen radicals in processing plasmas. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2015, 33, .	0.9	5
46	H-treatment impact on conductive-filament formation and stability in Ta ₂ O ₅ -based resistive-switching memory cells. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	20
47	A novel Bi-stable 1-transistor SRAM for high density embedded applications. , 2015, , .		4
48	Performance Prediction of Large-Scale 1S1R Resistive Memory Array Using Machine Learning. , 2015, , .		9
49	Effects of vacuum-ultraviolet irradiation on copper penetration into low-k dielectrics under bias-temperature stress. <i>Applied Physics Letters</i> , 2015, 106, 012904.	1.5	8
50	<i>Ab initio</i> modeling of oxygen-vacancy formation in doped-HfO _x RRAM: Effects of oxide phases, stoichiometry, and dopant concentrations. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	53
51	Pulse-train measurement techniques: An RRAM test vehicle for in-depth physical understanding. , 2014, , .		0
52	Ultrathin (~ 2 nm) HfO ₂ as the fundamental resistive switching element: Thickness scaling limit, stack engineering and 3D integration. , 2014, , .		12
53	Measuring the volume charge in dielectric films using single frequency electro-acoustic waves. <i>Journal of Materials Research</i> , 2014, 29, 501-508.	1.2	1
54	(Invited) The Interplay between Electronic and Ionic Transport in the Resistive Switching Process of Random Access Memory Devices. <i>ECS Transactions</i> , 2014, 64, 153-158.	0.3	7

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55	Ab initio modeling of resistive switching mechanism in binary metal oxides. , 2014, , .		2
56	Time-dependent dielectric breakdown measurements of porous organosilicate glass using mercury and solid metal probes. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, .	0.9	5
57	Effects of plasma and vacuum-ultraviolet exposure on the mechanical properties of low-k porous organosilicate glass. Journal of Applied Physics, 2014, 116, .	1.1	23
58	Electronic structure and stability of low symmetry Ta ₂ O ₅ polymorphs. Physica Status Solidi - Rapid Research Letters, 2014, 8, 560-565.	1.2	26
59	Improved multi-level control of RRAM using pulse-train programming. , 2014, , .		6
60	Microscopic understanding of the low resistance state retention in HfO ₂ and HfAlO based RRAM. , 2014, , .		20
61	Monolithic 3D integration of logic and memory: Carbon nanotube FETs, resistive RAM, and silicon FETs. , 2014, , .		105
62	Effect of water uptake on the fracture behavior of low-k organosilicate glass. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, 031512.	0.9	7
63	A Combined <i>Ab Initio</i> and Experimental Study on the Nature of Conductive Filaments in $\text{HfO}_2/\text{m Pt}/\text{m HfO}_2/\text{m Pt}$ Resistive Random Access Memory. IEEE Transactions on Electron Devices. 2014. 61. 1394-1402.	1.6	55
64	Impact of pulse rise time on programming of cross-point RRAM arrays. , 2014, , .		0
65	Measurement of bandgap energies in low-k organosilicates. Journal of Applied Physics, 2014, 115, .	1.1	95
66	Cross plane thermal conductance of graphene-metal interfaces. , 2014, , .		7
67	Sequential Electronic and Structural Transitions in VO ₂ Observed Using X-ray Absorption Spectromicroscopy. Advanced Materials, 2014, 26, 7505-7509.	11.1	77
68	First-principles study of A-site substitution in ferroelectric bismuth titanate. Journal of Materials Science, 2014, 49, 6363-6372.	1.7	4
69	Review on simulation of filamentary switching in binary metal oxide based RRAM devices. , 2014, , .		2
70	Nanoscale (∼10nm) 3D vertical ReRAM and NbO ₂ threshold selector with TiN electrode. , 2013, , .		35
71	On the forming-free operation of HfOx based RRAM devices: Experiments and ab initio calculations. , 2013, , .		5
72	First principles modeling of charged oxygen vacancy filaments in reduced TiO ₂ – implications to the operation of non-volatile memory devices. Mathematical and Computer Modelling, 2013, 58, 275-281.	2.0	24

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73	Dopant selection rules for desired electronic structure and vacancy formation characteristics of TiO ₂ resistive memory. Applied Physics Letters, 2013, 102, .	1.5	46
74	Generalized mechanism of the resistance switching in binary-oxide-based resistive random-access memories. Physical Review B, 2013, 87, .	1.1	52
75	Charge-dependent oxygen vacancy diffusion in Al ₂ O ₃ -based resistive-random-access-memories. Applied Physics Letters, 2013, 103, 093504.	1.5	39
76	Grain boundary composition and conduction in HfO ₂ : An <i>ab initio</i> study. Applied Physics Letters, 2013, 102, .	1.5	54
77	Design and optimization methodology for 3D RRAM arrays. , 2013, , .		36
78	Surface photoconductivity of organosilicate glass dielectrics induced by vacuum-ultraviolet radiation. Journal of Applied Physics, 2013, 114, 064104.	1.1	1
79	Investigation of the role of electrodes on the retention performance of HfO ₂ -based RRAM cells by experiments, atomistic simulations and device physical modeling. , 2013, , .		7
80	Amorphous thin film TaWSiC as a diffusion barrier for copper interconnects. Applied Physics Letters, 2013, 103, .	1.5	11
81	Achieving direct band gap in germanium through integration of Sn alloying and external strain. Journal of Applied Physics, 2013, 113, .	1.1	351
82	Local Temperature Redistribution and Structural Transition During Joule-Heating-Driven Conductance Switching in VO ₂ . Advanced Materials, 2013, 25, 6128-6132.	11.1	173
83	Interface trap evaluation of Pd/Al ₂ O ₃ /GaN metal oxide semiconductor capacitors and the influence of near-interface hydrogen. Applied Physics Letters, 2013, 103, 201607.	1.5	54
84	First-principles investigation of the conductive filament configuration in rutile TiO _{2-x} ReRAM. Materials Research Society Symposia Proceedings, 2012, 1430, 155.	0.1	3
85	Engineering the metal gate electrode for controlling the threshold voltage of organic transistors. Applied Physics Letters, 2012, 101, 063304.	1.5	22
86	First principles guiding principles for the switching process in oxide ReRAM. , 2012, , .		3
87	Time-dependent dielectric breakdown of plasma-exposed porous organosilicate glass. Applied Physics Letters, 2012, 100, .	1.5	31
88	Plasma and vacuum ultraviolet induced charging of SiO ₂ and HfO ₂ patterned structures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	0.9	5
89	Ti-electrode effects of NiO based resistive switching memory with Ni insertion layer. Applied Physics Letters, 2012, 100, .	1.5	26
90	Demonstration of Electroluminescence from Strained Ge Membrane LED. , 2012, , .		1

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91	First principles calculations of oxygen vacancy-ordering effects in resistance change memory materials incorporating binary transition metal oxides. Journal of Materials Science, 2012, 47, 7498-7514.	1.7	83
92	Low-Contact-Resistivity Nickel Germanide Contacts on n+Ge with Phosphorus/Antimony Co-Doping and Schottky Barrier Height Lowering. , 2012, , .		16
93	Towards high mobility GeSn channel nMOSFETs: Improved surface passivation using novel ozone oxidation method. , 2012, , .		28
94	Computational study toward micro electronics engineering. , 2012, , .		0
95	Theory and Experiments of the Impact of Work-Function Variability on Threshold Voltage Variability in MOS Devices. IEEE Transactions on Electron Devices, 2012, 59, 3124-3126.	1.6	3
96	Ab-Initio Modeling of the Resistance Switching Mechanism in RRAM Devices: Case Study of Hafnium Oxide (HfO ₂). Materials Research Society Symposia Proceedings, 2012, 1430, 72.	0.1	11
97	The effects of vacuum ultraviolet radiation on low- <i>k</i> dielectric films. Journal of Applied Physics, 2012, 112, .	1.1	35
98	Physics in designing desirable ReRAM stack structure — Atomistic recipes based on oxygen chemical potential control and charge injection/removal. , 2012, , .		16
99	Electroluminescence from strained germanium membranes and implications for an efficient Si-compatible laser. Applied Physics Letters, 2012, 100, .	1.5	79
100	ON-OFF switching mechanism of resistiveâ€“randomâ€“accessâ€“memories based on the formation and disruption of oxygen vacancy conducting channels. Applied Physics Letters, 2012, 100, .	1.5	90
101	Hard HfB ₂ tip-coatings for ultrahigh density probe-based storage. Applied Physics Letters, 2012, 101, 091909.	1.5	6
102	High n-Type Antimony Dopant Activation in Germanium Using Laser Annealing for p^+n Junction Diode. IEEE Electron Device Letters, 2011, 32, 838-840.	2.2	40
103	Novel Germanium n-MOSFETs With Raised Source/Drain on Selectively Grown Ge on Si for Monolithic Integration. IEEE Electron Device Letters, 2011, 32, 446-448.	2.2	12
104	GeSn technology: Extending the Ge electronics roadmap. , 2011, , .		84
105	Effect of vacuum ultraviolet and ultraviolet irradiation on mobile charges in the bandgap of low- <i>k</i> -porous organosilicate dielectrics. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2011, 29, .	0.9	11
106	Resistive switching mechanisms in random access memory devices incorporating transition metal oxides: TiO ₂ , NiO and Pr _{0.7} Ca _{0.3} MnO ₃ . Nanotechnology, 2011, 22, 254029.	1.3	65
107	Impact of Oxygen Vacancy Ordering on the Formation of a Conductive Filament in TiO_2 for Resistive Switching Memory. IEEE Electron Device Letters, 2011, 32, 197-199.	2.2	119
108	In _x Ga _{1-x} Sb channel p-metal-oxide-semiconductor field effect transistors: Effect of strain and heterostructure design. Journal of Applied Physics, 2011, 110, 014503.	1.1	37

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109	Effects of vacuum ultraviolet radiation on deposited and ultraviolet-cured low-k porous organosilicate glass. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2011, 29, .	0.9	16
110	Cavity-enhanced direct band electroluminescence near 1550 nm from germanium microdisk resonator diode on silicon. Applied Physics Letters, 2011, 98, 211101.	1.5	26
111	Role of Hydrogen Ions in TiO ₂ -Based Memory Devices. Integrated Ferroelectrics, 2011, 124, 112-118.	0.3	16
112	Fully inverted single-digit nanometer domains in ferroelectric films. Applied Physics Letters, 2010, 96, .	1.5	17
113	The effects of wet surface clean and in situ interlayer on In _{0.52} Al _{0.48} As metal-oxide-semiconductor characteristics. Applied Physics Letters, 2010, 96, 142906.	1.5	8
114	Electronic correlation effects in reduced rutile TiO_2 . Physical Review B, 2010, 82, .	1.1	193
115	Photonic Crystal and Plasmonic Silicon-Based Light Sources. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 132-140.	1.9	15
116	Optimization of Light Emission from Silicon Nanocrystals Grown by PECVD. Materials Research Society Symposia Proceedings, 2010, 1257, 1.	0.1	0
117	Reduction in reset current of unipolar NiO-based resistive switching through nickel interfacial layer. Applied Physics Letters, 2010, 97, .	1.5	21
118	Contact engineering for organic semiconductor devices via Fermi level depinning at the metal-organic interface. Physical Review B, 2010, 82, .	1.1	69
119	Direct band Ge photoluminescence near 1.6 μm coupled to Ge-on-Si microdisk resonators. Applied Physics Letters, 2010, 97, .	1.5	37
120	Understanding of switching phenomena in unipolar NiO-based RRAM. , 2010, , .		0
121	Reflectance and substrate currents of dielectric layers under vacuum ultraviolet irradiation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2010, 28, 1316-1318.	0.9	9
122	Development and characterization of high temperature stable Ta ₂ SiC amorphous metal gates. Applied Physics Letters, 2010, 97, 223505.	1.5	20
123	Bilayer metal gate electrodes with tunable work function: Mechanism and proposed model. Journal of Applied Physics, 2010, 107, .	1.1	19
124	High quality single-crystal germanium-on-insulator on bulk Si substrates based on multistep lateral over-growth with hydrogen annealing. Applied Physics Letters, 2010, 97, .	1.5	25
125	Bilayer metal gate electrodes with tunable work function: Adhesion and interface characterization. Journal of Applied Physics, 2010, 108, .	1.1	9
126	Photoluminescence from silicon dioxide photonic crystal cavities with embedded silicon nanocrystals. Physical Review B, 2010, 81, .	1.1	20

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127	Solution-processed flexible organic transistors showing very-low subthreshold slope with a bilayer polymeric dielectric on plastic. Applied Physics Letters, 2009, 94, 203301.	1.5	37
128	Physical model of the impact of metal grain work function variability on emerging dual metal gate MOSFETs and its implication for SRAM reliability. , 2009, , .		10
129	<i>Ab initio</i> study of Al–Ni bilayers on SiO ₂ : Implications to effective work function modulation in gate stacks. Journal of Applied Physics, 2009, 105, .	1.1	16
130	High performance n-MOSFETs with novel source/drain on selectively grown Ge on Si for monolithic integration. , 2009, , .		3
131	Effect of uniaxial-strain on Ge p-i-n photodiodes integrated on Si. Applied Physics Letters, 2009, 95, .	1.5	13
132	Lattice and electronic effects in rutile TiO ₂ containing charged oxygen defects from ab initio calculations. Materials Research Society Symposia Proceedings, 2009, 1160, 1.	0.1	2
133	Radical oxidation of germanium for interface gate dielectric GeO ₂ formation in metal-insulator-semiconductor gate stack. Journal of Applied Physics, 2009, 106, .	1.1	80
134	Fermi level depinning in metal/Ge Schottky junction for metal source/drain Ge metal-oxide-semiconductor field-effect-transistor application. Journal of Applied Physics, 2009, 105, .	1.1	165
135	Carbon Nanotube Quantum Capacitance for Nonlinear Terahertz Circuits. IEEE Nanotechnology Magazine, 2009, 8, 31-36.	1.1	13
136	Plasmonic enhancement of emission from Si-nanocrystals. Applied Physics Letters, 2009, 94, 013106.	1.5	26
137	Electric field dependent switching and degradation of Resistance Random Access Memory. , 2009, , .		1
138	Germanium In Situ Doped Epitaxial Growth on Si for High-Performance In^+/p^- Junction Diode. IEEE Electron Device Letters, 2009, 30, 1002-1004.	2.2	41
139	New universal physical model for the recoverable part of NBTI degradation. , 2009, , .		0
140	An internally amplified signal SOI nano-bridge biosensor for electrical detection of DNA hybridization. , 2009, , .		0
141	Fermi level depinning at metal-organic semiconductor interface for low-resistance Ohmic contacts. , 2009, , .		6
142	An Analytical Derivation of the Density of States, Effective Mass, and Carrier Density for Achiral Carbon Nanotubes. IEEE Transactions on Electron Devices, 2008, 55, 289-297.	1.6	38
143	Integrating Phase-Change Memory Cell With Ge Nanowire Diode for Crosspoint Memory—Experimental Demonstration and Analysis. IEEE Transactions on Electron Devices, 2008, 55, 2307-2313.	1.6	20
144	<i>Ab Initio</i> Modeling of Schottky-Barrier Height Tuning by Yttrium at Nickel Silicide/Silicon Interface. IEEE Electron Device Letters, 2008, 29, 746-749.	2.2	8

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145	Analytical ballistic theory of carbon nanotube transistors: Experimental validation, device physics, parameter extraction, and performance projection. Journal of Applied Physics, 2008, 104, 124514.	1.1	54
146	Recent Progress in Resistance Change Memory. , 2008, , .		14
147	First-principles study of resistance switching in rutile TiO ₂ with oxygen vacancy. , 2008, , .		6
148	A semiconductor nanobridge biosensor for electrical detection of DNA hybridization. , 2008, , .		0
149	Plasmonic gratings for interaction with quantum emitters. , 2008, , .		0
150	Low D _{it} ; optimized Interfacial Layer using High-Density Plasma Oxidation and Nitridation in Germanium High- κ Gate stack. , 2008, , .		2
151	HfO ₂ gate dielectric on (NH ₄) ₂ S passivated (100) GaAs grown by atomic layer deposition. Journal of Applied Physics, 2008, 103, .	1.1	52
152	Fermi-level depinning in metal/Ge Schottky junction and its application to metal source/drain Ge NMOSFET. , 2008, , .		29
153	High-Performance Air-Stable Solution Processed Organic Transistors. , 2008, , .		1
154	High-Performance Gate-All-Around GeOI p-MOSFETs Fabricated by Rapid Melt Growth Using Plasma Nitridation and ALD Al_2O_3 Gate Dielectric and Self-Aligned NiGe Contacts. IEEE Electron Device Letters, 2008, 29, 805-807.	2.2	56
155	Synchrotron radiation photoemission spectroscopic study of band offsets and interface self-cleaning by atomic layer deposited HfO ₂ on In _{0.53} Ga _{0.47} As and In _{0.52} Al _{0.48} As. Applied Physics Letters, 2008, 93, .	1.5	48
156	Analysis of electrically biased paramagnetic defect centers in HfO ₂ and Hf _x Si _{1-x} O ₂ /(100)Si interfaces. Journal of Applied Physics, 2008, 104, 014106.	1.1	8
157	Electronic structures of Nb ^W bulk and surface from first principles calculation. Journal of Applied Physics, 2008, 103, .	1.1	2
158	Photoluminescence decay dynamics of silicon-rich silicon nitride film in photonic crystal nanocavity. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	0
159	Bipolar resistive switching in polycrystalline TiO ₂ films. Applied Physics Letters, 2007, 90, 113501.	1.5	200
160	Copper sulfide-based resistance change memory. , 2007, , .		4
161	Electro-Thermally Coupled Power Optimization for Future Transistors. Device Research Conference, IEEE Annual, 2007, , .	0.0	0
162	Source/Drain Technology for Nanoscale MIS Field Effect Devices. , 2007, , .		0

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163	Analytical Model of Carbon Nanotube Electrostatics: Density of States, Effective Mass, Carrier Density, and Quantum Capacitance. , 2007, , .		3
164	Resistive Switching Mechanism in $\text{Zn}_x\text{Cd}_{1-x}\text{S}$ Nonvolatile Memory Devices. IEEE Electron Device Letters, 2007, 28, 14-16.	2.2	86
165	Impact of Scaling and the Scaling Development Environment. IEEE Solid-State Circuits Society Newsletter, 2007, 12, 31-32.	0.1	0
166	Power Optimization for SRAM and Its Scaling. IEEE Transactions on Electron Devices, 2007, 54, 715-722.	1.6	27
167	Two-dimensional porous silicon photonic crystal light emitters. , 2006, , .		1
168	Band to Band Tunneling limited Off state Current in Ultra-thin Body Double Gate FETs with High Mobility Materials : III-V, Ge and strained Si/Ge. , 2006, , .		8
169	A semiclassical model of dielectric relaxation in glasses. Journal of Applied Physics, 2006, 100, 124104.	1.1	19
170	High-mobility low band-to-band-tunneling strained-Germanium double-gate heterostructure FETs: Simulations. IEEE Transactions on Electron Devices, 2006, 53, 1000-1009.	1.6	84
171	Nanoelectronic materials and devices as new opportunity. , 2006, , .		0
172	CMOS state of the arts and future potential. , 2006, , .		0
173	Silicon-based photonic crystal nanocavity light emitters. Applied Physics Letters, 2006, 89, 221101.	1.5	44
174	Theoretical Investigation Of Performance In Uniaxially- and Biaxially-Strained Si, SiGe and Ge Double-Gate p-MOSFETs. , 2006, , .		11
175	Silicon-based photonic crystal nanocavity light emitters. , 2006, , .		0
176	Characteristics and mechanism of tunable work function gate electrodes using a bilayer metal structure on SiO_2 and HfO_2 . IEEE Electron Device Letters, 2005, 26, 445-447.	2.2	62
177	Incorporation of supply voltage and process variations in the power optimization for future transistors. , 2005, , .		0
178	Technology roadmap and beyond. , 0, , .		0
179	The present and the future ofnanoelectronics. , 0, , .		0
180	Experimental study of biaxial and uniaxial strain effects on carrier mobility in bulk and ultrathin-body SOI MOSFETs. , 0, , .		44

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181	Investigation of the performance limits of III-V double-gate n-MOSFETs. , 0, , .		28
182	New constraint for V_{th} optimization for sub 32nm node CMOS gates scaling. , 0, , .		3
183	Fabrication and characterization of CMOSFETs on porous silicon for novel device layer transfer. , 0, , .		2
184	Edge-Defined 90nm TFTs with Adjustable V_{th} and I_{on} in a 3-D Compatible Process. , 0, , .		0
185	Low defect ultra-thin fully strained-Ge MOSFET on relaxed Si with high mobility and low band-to-band-tunneling (BTBT). , 0, , .		28
186	Strained-Si, Relaxed-Ge or Strained-(Si)Ge for Future Nanoscale p-MOSFETs?. , 0, , .		1
187	HfO ₂ gate dielectric on (NH ₄) ₂ S passivated (100) GaAs grown by atomic layer deposition. , 0, , .		1