

Yee-Chia Yeo

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302
papers

6,060
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64
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370
ext. papers

6,767
ext. citations

3.1
avg, IF

5.55
L-index

#	Paper	IF	Citations
302	Metal-dielectric band alignment and its implications for metal gate complementary metal-oxide-semiconductor technology. <i>Journal of Applied Physics</i> , 2002 , 92, 7266-7271	2.5	362
301	Tunneling Field-Effect Transistor: Capacitance Components and Modeling. <i>IEEE Electron Device Letters</i> , 2010 , 31, 752-754	4.4	165
300	Direct tunneling leakage current and scalability of alternative gate dielectrics. <i>Applied Physics Letters</i> , 2002 , 81, 2091-2093	3.4	162
299	Electronic band structure and effective mass parameters of Ge _{1-x} Sn _x alloys. <i>Journal of Applied Physics</i> , 2012 , 112, 103715	2.5	159
298	MOSFET gate leakage modeling and selection guide for alternative gate dielectrics based on leakage considerations. <i>IEEE Transactions on Electron Devices</i> , 2003 , 50, 1027-1035	2.9	141
297	Effects of high- κ gate dielectric materials on metal and silicon gate workfunctions. <i>IEEE Electron Device Letters</i> , 2002 , 23, 342-344	4.4	140
296	Device physics and design of germanium tunneling field-effect transistor with source and drain engineering for low power and high performance applications. <i>Journal of Applied Physics</i> , 2008 , 103, 104504	2.5	134
295	Device physics and design of double-gate tunneling field-effect transistor by silicon film thickness optimization. <i>Applied Physics Letters</i> , 2007 , 90, 263507	3.4	107
294	Fermi pinning-induced thermal instability of metal-gate work functions. <i>IEEE Electron Device Letters</i> , 2004 , 25, 337-339	4.4	102
293	Nonvolatile flash memory device using Ge nanocrystals embedded in HfAlO high- κ /tunneling and control oxides: Device fabrication and electrical performance. <i>IEEE Transactions on Electron Devices</i> , 2004 , 51, 1840-1848	2.9	90
292	Lattice strain analysis of transistor structures with silicon-germanium and silicon-carbon source-drain stressors. <i>Applied Physics Letters</i> , 2005 , 86, 093102	3.4	89
291	Germanium in (GeSn) p-Channel MOSFETs Fabricated on (100) and (111) Surface Orientations With Sub-400 Å Si ₂ H ₆ Passivation. <i>IEEE Electron Device Letters</i> , 2013 , 34, 339-341	4.4	87
290	Sulfur-Induced PtSi:C/Si:C Schottky Barrier Height Lowering for Realizing N-Channel FinFETs With Reduced External Resistance. <i>IEEE Electron Device Letters</i> , 2009 , 30, 472-474	4.4	85
289	Dual-metal gate CMOS technology with ultrathin silicon nitride gate dielectric. <i>IEEE Electron Device Letters</i> , 2001 , 22, 227-229	4.4	83
288	A Variational Approach to the Two-Dimensional Nonlinear Poisson Equation for the Modeling of Tunneling Transistors. <i>IEEE Electron Device Letters</i> , 2008 , 29, 1252-1255	4.4	81
287	Device physics and guiding principles for the design of double-gate tunneling field effect transistor with silicon-germanium source heterojunction. <i>Applied Physics Letters</i> , 2007 , 91, 243505	3.4	78
286	Device Design and Scalability of a Double-Gate Tunneling Field-Effect Transistor with Silicon-Germanium Source. <i>Japanese Journal of Applied Physics</i> , 2008 , 47, 2593-2597	1.4	75

285	Tunneling Field-Effect Transistor: Effect of Strain and Temperature on Tunneling Current. <i>IEEE Electron Device Letters</i> , 2009 , 30, 981-983	4.4	74
284	Finite-element study of strain distribution in transistor with silicon-germanium source and drain regions. <i>Applied Physics Letters</i> , 2005 , 86, 023103	3.4	61
283	Two-micron-wavelength germanium-tin photodiodes with low dark current and gigahertz bandwidth. <i>Optics Express</i> , 2017 , 25, 15818-15827	3.3	60
282	Metal gate technology for nanoscale transistors: material selection and process integration issues. <i>Thin Solid Films</i> , 2004 , 462-463, 34-41	2.2	60
281	III-V Multiple-Gate Field-Effect Transistors With High-Mobility $\text{In}_{0.7}\text{Ga}_{0.3}\text{As}$ Channel and Epi-Controlled Retrograde-Doped Fin. <i>IEEE Electron Device Letters</i> , 2011 , 32, 146-148	4.4	55
280	Direct-tunneling gate leakage current in double-gate and ultrathin body MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2002 , 49, 2288-2295	2.9	55
279	Critical thickness for strain relaxation of $\text{Ge}_{1-x}\text{Sn}_x$ ($x \leq 0.17$) grown by molecular beam epitaxy on Ge(001). <i>Applied Physics Letters</i> , 2015 , 106, 232106	3.4	54
278	A fast measurement technique of MOSFET I_d - V_g characteristics. <i>IEEE Electron Device Letters</i> , 2006 , 27, 55-57	4.4	53
277	Silane and Ammonia Surface Passivation Technology for High-Mobility $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2010 , 57, 973-979	2.9	52
276	Wide V_{fb} and V_{th} Tunability for Metal-Gated MOS Devices With HfLaO Gate Dielectrics. <i>IEEE Electron Device Letters</i> , 2007 , 28, 258-260	4.4	52
275	Relaxed and Strained Patterned Germanium-Tin Structures: A Raman Scattering Study. <i>ECS Journal of Solid State Science and Technology</i> , 2013 , 2, P138-P145	2	51
274	A Simulation Study of Graphene-Nanoribbon Tunneling FET With Heterojunction Channel. <i>IEEE Electron Device Letters</i> , 2010 , 31, 555-557	4.4	49
273	High-speed photo detection at two-micron-wavelength: technology enablement by GeSn/Ge multiple-quantum-well photodiode on 300 mm Si substrate. <i>Optics Express</i> , 2019 , 27, 5798-5813	3.3	48
272	Silicon-based tunneling field-effect transistor with elevated germanium source formed on (110) silicon substrate. <i>Applied Physics Letters</i> , 2011 , 98, 153502	3.4	48
271	A dual-metal gate integration process for CMOS with sub-1-nm EOT HfO ₂ by using HfN replacement gate. <i>IEEE Electron Device Letters</i> , 2004 , 25, 580-582	4.4	48
270	Germanium in P-Channel Tunneling Field-Effect Transistor: Device Design and Technology Demonstration. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 4048-4056	2.9	47
269	Formation of Ge nanocrystals in HfAlO high-k dielectric and application in memory device. <i>Applied Physics Letters</i> , 2004 , 84, 5407-5409	3.4	47
268	Suppression of dark current in germanium-tin on silicon p-i-n photodiode by a silicon surface passivation technique. <i>Optics Express</i> , 2015 , 23, 18611-9	3.3	46

267	Lattice-Mismatched $\text{In}_{0.4}\text{Ga}_{0.6}\text{As}$ Source/Drain Stressors With In Situ Doping for Strained $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ Channel n-MOSFETs. <i>IEEE Electron Device Letters</i> , 2009 , 30, 805-807	4.4	46
266	Aluminum oxynitride interfacial passivation layer for high-permittivity gate dielectric stack on gallium arsenide. <i>Applied Physics Letters</i> , 2006 , 89, 202903	3.4	46
265	Ballistic Transport Performance of Silicene and Germanene Transistors. <i>IEEE Transactions on Electron Devices</i> , 2014 , 61, 1590-1598	2.9	44
264	n-MOSFET With Silicon-Carbon Source/Drain for Enhancement of Carrier Transport. <i>IEEE Transactions on Electron Devices</i> , 2007 , 54, 249-256	2.9	43
263	Germanium-Tin on Si Avalanche Photodiode: Device Design and Technology Demonstration. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 128-135	2.9	42
262	New materials for post-Si computing: Ge and GeSn devices. <i>MRS Bulletin</i> , 2014 , 39, 678-686	3.2	42
261	Nickel-Silicide:Carbon Contact Technology for N-Channel MOSFETs With Silicon-Carbon Source/Drain. <i>IEEE Electron Device Letters</i> , 2008 , 29, 89-92	4.4	41
260	Sub-0.1-eV Effective Schottky-Barrier Height for NiSi on n-Type Si (100) Using Antimony Segregation. <i>IEEE Electron Device Letters</i> , 2007 , 28, 703-705	4.4	40
259	Tin surface segregation, desorption, and island formation during post-growth annealing of strained epitaxial $\text{Ge}_{1-x}\text{Sn}_x$ layer on Ge(001) substrate. <i>Applied Surface Science</i> , 2014 , 321, 240-244	6.7	39
258	Germanium-tin n-channel tunneling field-effect transistor: Device physics and simulation study. <i>Journal of Applied Physics</i> , 2013 , 113, 194507	2.5	39
257	Floating-base germanium-tin heterojunction phototransistor for high-efficiency photodetection in short-wave infrared range. <i>Optics Express</i> , 2017 , 25, 18502-18507	3.3	38
256	$\text{Ge}_{0.97}\text{Sn}_{0.03}$ p-channel metal-oxide-semiconductor field-effect transistors: Impact of Si surface passivation layer thickness and post metal annealing. <i>Journal of Applied Physics</i> , 2013 , 114, 044510	2.5	38
255	Electrical Characteristics of Memory Devices With a High- HfO_2 Trapping Layer and Dual $\text{SiO}_2/\text{Si}_3\text{N}_4$ Tunneling Layer. <i>IEEE Transactions on Electron Devices</i> , 2007 , 54, 2699-2705	2.9	38
254	N-channel FinFETs With 25-nm Gate Length and Schottky-Barrier Source and Drain Featuring Ytterbium Silicide. <i>IEEE Electron Device Letters</i> , 2007 , 28, 164-167	4.4	38
253	$\text{In}_{0.7}\text{Ga}_{0.3}\text{As}$ Channel n-MOSFET with Self-Aligned NiInGaAs Source and Drain. <i>Electrochemical and Solid-State Letters</i> , 2011 , 14, H60		34
252	Selenium Segregation for Effective Schottky Barrier Height Reduction in NiGe/nGe Contacts. <i>IEEE Electron Device Letters</i> , 2012 , 33, 773-775	4.4	33
251	Towards direct band-to-band tunneling in P-channel tunneling field effect transistor (TFET): Technology enablement by Germanium-tin (GeSn) 2012 ,		33
250	Above-bandgap optical properties of biaxially strained GeSn alloys grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , 2014 , 104, 022111	3.4	31

249	Dopant Segregation and Nickel Stanogermanide Contact Formation on $\text{p}^+\text{Ge}_{0.947}\text{Sn}_{0.053}$ Source/Drain. <i>IEEE Electron Device Letters</i> , 2012 , 33, 634-636	4.4	31
248	A new robust non-local algorithm for band-to-band tunneling simulation and its application to Tunnel-FET. <i>Solid-State Electronics</i> , 2011 , 57, 23-30	1.7	31
247	Strained n-Channel FinFETs Featuring In Situ Doped Silicon-Carbon $\text{Si}_{1-y}\text{C}_y$ Source and Drain Stressors With High Carbon Content. <i>IEEE Transactions on Electron Devices</i> , 2008 , 55, 2475-2483	2.9	31
246	In Situ Surface Passivation and CMOS-Compatible Palladium-Germanium Contacts for Surface-Channel Gallium Arsenide MOSFETs. <i>IEEE Electron Device Letters</i> , 2008 , 29, 553-556	4.4	31
245	Modeling study of the impact of surface roughness on silicon and Germanium UTB MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2005 , 52, 2430-2439	2.9	30
244	Ge _{0.83} Sn _{0.17} p-channel metal-oxide-semiconductor field-effect transistors: Impact of sulfur passivation on gate stack quality. <i>Journal of Applied Physics</i> , 2016 , 119, 024502	2.5	29
243	A Self-Aligned Ni-InGaAs Contact Technology for InGaAs Channel n-MOSFETs. <i>Journal of the Electrochemical Society</i> , 2012 , 159, H511-H515	3.9	27
242	High-mobility germanium-tin (GeSn) P-channel MOSFETs featuring metallic source/drain and sub-370 °C process modules 2011 ,		27
241	Strained n-Channel Transistors With Silicon Source and Drain Regions and Embedded Silicon/Germanium as Strain-Transfer Structure. <i>IEEE Electron Device Letters</i> , 2007 , 28, 609-612	4.4	27
240	Toward Conformal Damage-Free Doping With Abrupt Ultrashallow Junction: Formation of Si Monolayers and Laser Anneal as a Novel Doping Technique for InGaAs nMOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2014 , 61, 1039-1046	2.9	26
239	Strained germanium-tin (GeSn) p-channel metal-oxide-semiconductor field-effect-transistors (p-MOSFETs) with ammonium sulfide passivation. <i>Solid-State Electronics</i> , 2013 , 83, 66-70	1.7	26
238	Band alignment between amorphous Ge ₂ Sb ₂ Te ₅ and prevalent complementary-metal-oxide-semiconductor materials. <i>Applied Physics Letters</i> , 2008 , 92, 032107	3.4	26
237	Strained p-Channel FinFETs With Extended π -Shaped Silicon-Germanium Source and Drain Stressors. <i>IEEE Electron Device Letters</i> , 2007 , 28, 905-908	4.4	26
236	GeSn lateral p-i-n photodetector on insulating substrate. <i>Optics Express</i> , 2018 , 26, 17312-17321	3.3	25
235	Performance Enhancement in Uniaxial Strained Silicon-on-Insulator N-MOSFETs Featuring Silicon-Carbon Source/Drain Regions. <i>IEEE Transactions on Electron Devices</i> , 2007 , 54, 2910-2917	2.9	25
234	Design and fabrication of 50-nm thin-body p-MOSFETs with a SiGe heterostructure channel. <i>IEEE Transactions on Electron Devices</i> , 2002 , 49, 279-286	2.9	25
233	GeSn-on-insulator substrate formed by direct wafer bonding. <i>Applied Physics Letters</i> , 2016 , 109, 022106	3.4	25
232	In-situ gallium-doping for forming p+ germanium-tin and application in germanium-tin p-i-n photodetector. <i>Journal of Applied Physics</i> , 2016 , 119, 155704	2.5	24

231	Compositional dependence of optical critical point parameters in pseudomorphic GeSn alloys. <i>Journal of Applied Physics</i> , 2014 , 116, 053520	2.5	23
230	Sub-400 °C Si ₂ H ₆ Passivation, HfO ₂ Gate Dielectric, and Single TaN Metal Gate: A Common Gate Stack Technology for In _{0.7} Ga _{0.3} As and Ge _{1-x} Sn _x CMOS. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 1640-1648	2.9	23
229	Strained ϵ -MOSFET With Embedded Source/Drain Stressors and Strain-Transfer Structure (STS) for Enhanced Transistor Performance. <i>IEEE Transactions on Electron Devices</i> , 2008 , 55, 850-857	2.9	23
228	Tunneling field-effect transistor with Ge/In _{0.53} Ga _{0.47} As heterostructure as tunneling junction. <i>Journal of Applied Physics</i> , 2013 , 113, 094502	2.5	22
227	Dependence of the properties of phase change random access memory on nitrogen doping concentration in Ge ₂ Sb ₂ Te ₅ . <i>Journal of Applied Physics</i> , 2010 , 107, 104506	2.5	22
226	Germanium-tin multiple quantum well on silicon avalanche photodiode for photodetection at two micron wavelength. <i>Semiconductor Science and Technology</i> , 2016 , 31, 095001	1.8	21
225	2012 ,		21
224	$\text{Ni}/(\text{Ge}_{1-x}\text{Sn}_x)$ Ohmic Contact Formation on N-Type $\text{Ge}_{1-x}\text{Sn}_x$ Using Selenium or Sulfur Implant and Segregation. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 746-752	2.9	20
223	High-Permittivity Dielectric Stack on Gallium Nitride Formed by Silane Surface Passivation and Metal-Organic Chemical Vapor Deposition. <i>IEEE Electron Device Letters</i> , 2010 , 31, 8-10	4.4	20
222	Enhancement of memory window in short channel non-volatile memory devices using double layer tungsten nanocrystals		20
221	Germanium-Tin (GeSn) P-Channel Fin Field-Effect Transistor Fabricated on a Novel GeSn-on-Insulator Substrate. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 3754-3761	2.9	19
220	Ultra-low specific contact resistivity ($1.4 \times 10^{-9} \Omega\text{cm}^2$) for metal contacts on in-situ Ga-doped Ge _{0.95} Sn _{0.05} film. <i>Journal of Applied Physics</i> , 2017 , 122, 224503	2.5	19
219	High-Performance Germanium Ω -Gate MuGFET With Schottky-Barrier Nickel Germanide Source/Drain and Low-Temperature Disilane-Passivated Gate Stack. <i>IEEE Electron Device Letters</i> , 2012 , 33, 1336-1338	4.4	19
218	n-Channel GaAs MOSFET with TaN/HfAlO Gate Stack Formed Using In Situ Vacuum Anneal and Silane Passivation. <i>Journal of the Electrochemical Society</i> , 2008 , 155, H464	3.9	19
217	Performance enhancement of n-channel impact-ionization metal-oxide-semiconductor transistor by strain engineering. <i>Applied Physics Letters</i> , 2007 , 90, 023505	3.4	19
216	I-MOS Transistor With an Elevated Silicon-Germanium Impact-Ionization Region for Bandgap Engineering. <i>IEEE Electron Device Letters</i> , 2006 , 27, 975-977	4.4	19
215	Crystal structure and epitaxial relationship of Ni ₄ InGaAs ₂ films formed on InGaAs by annealing. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2013 , 31, 012202	1.3	18
214	Superlattice-like dielectric as a thermal insulator for phase-change random access memory. <i>Applied Physics Letters</i> , 2010 , 97, 243508	3.4	18

213	Silane-Ammonia Surface Passivation for Gallium Arsenide Surface-Channel n-MOSFETs. <i>IEEE Electron Device Letters</i> , 2009 , 30, 110-112	4.4	18
212	Effective Modulation of Quadratic Voltage Coefficient of Capacitance in MIM Capacitors Using $\text{Sm}_2\text{O}_3/\text{SiO}_2$ Dielectric Stack. <i>IEEE Electron Device Letters</i> , 2009 , 30, 460-462	4.4	18
211	Integrating GeSn photodiode on a 200 nm Ge-on-insulator photonics platform with Ge CMOS devices for advanced OEIC operating at 2 μm band. <i>Optics Express</i> , 2019 , 27, 26924-26939	3.3	18
210	Germanium-based transistors for future high performance and low power logic applications 2015 ,		17
209	SPICE Behavioral Model of the Tunneling Field-Effect Transistor for Circuit Simulation. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2009 , 56, 946-950	3.5	17
208	Formation of epitaxial metastable NiGe ₂ thin film on Ge(100) by pulsed excimer laser anneal. <i>Applied Physics Letters</i> , 2010 , 97, 182104	3.4	17
207	Spacer Removal Technique for Boosting Strain in n-Channel FinFETs With Silicon-Carbon Source and Drain Stressors. <i>IEEE Electron Device Letters</i> , 2008 , 29, 80-82	4.4	17
206	Enhanced Strain Effects in 25-nm Gate-Length Thin-Body nMOSFETs With Silicon-Carbon Source/Drain and Tensile-Stress Liner. <i>IEEE Electron Device Letters</i> , 2007 , 28, 301-304	4.4	17
205	N-Channel (110)-Sidewall Strained FinFETs With Silicon-Carbon Source and Drain Stressors and Tensile Capping Layer. <i>IEEE Electron Device Letters</i> , 2007 , 28, 1014-1017	4.4	17
204	High-performance GeSn photodetector and fin field-effect transistor (FinFET) on an advanced GeSn-on-insulator platform. <i>Optics Express</i> , 2018 , 26, 10305-10314	3.3	16
203	Gate Stack Reliability of MOSFETs With High-Mobility Channel Materials: Bias Temperature Instability. <i>IEEE Transactions on Device and Materials Reliability</i> , 2013 , 13, 524-533	1.6	16
202	Multiple-Gate In _{0.53} Ga _{0.47} As Channel n-MOSFETs with Self-Aligned Ni-InGaAs Contacts. <i>ECS Journal of Solid State Science and Technology</i> , 2012 , 1, P82-P85	2	16
201	Contact Resistance Reduction for Strained N-MOSFETs With Silicon-Carbon Source/Drain Utilizing Aluminum Ion Implant and Aluminum Profile Engineering. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 1310-1317	2.9	15
200	The first GeSn FinFET on a novel GeSnOI substrate achieving lowest S of 79 mV/decade and record high G _m , int of 807 $\mu\text{S}/\mu\text{m}$ for GeSn P-FETs 2017 ,		15
199	Self-Aligned Gate-First In _{0.7} Ga _{0.3} As n-MOSFETs with an InP Capping Layer for Performance Enhancement. <i>Electrochemical and Solid-State Letters</i> , 2011 , 14, H117		15
198	A High-Stress Liner Comprising Diamond-Like Carbon (DLC) for Strained p-Channel MOSFET. <i>IEEE Electron Device Letters</i> , 2008 , 29, 192-194	4.4	15
197	A new silane-ammonia surface passivation technology for realizing inversion-type surface-channel GaAs N-MOSFET with 160 nm gate length and high-quality metal-gate/high-k dielectric stack 2008 ,		15
196	P-Channel Tri-Gate FinFETs Featuring $\text{Ni}_{1-y}\text{Pt}_y\text{SiGe}$ Source/Drain Contacts for Enhanced Drive Current Performance. <i>IEEE Electron Device Letters</i> , 2008 , 29, 438-441	4.4	15

195	Full Silicidation of Silicon Gate Electrodes Using Nickel-Terbium Alloy for MOSFET Applications. <i>Journal of the Electrochemical Society</i> , 2006 , 153, G337	3.9	15
194	Au-Free AlGaIn/GaN MIS-HEMTs With Embedded Current Sensing Structure for Power Switching Applications. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 3515-3518	2.9	14
193	Germanium δ in n^+p Junction Formed Using Phosphorus Ion Implant and 400 $^{\circ}\text{C}$ Rapid Thermal Anneal. <i>IEEE Electron Device Letters</i> , 2012 , 33, 1529-1531	4.4	14
192	Contact-Resistance Reduction for Strained n-FinFETs With Silicon-Carbon Source/Drain and Platinum-Based Silicide Contacts Featuring Tellurium Implantation and Segregation. <i>IEEE Transactions on Electron Devices</i> , 2011 , 58, 3852-3862	2.9	14
191	Photoelectron spectroscopy study of band alignment at interface between Ni-InGaAs and In _{0.53} Ga _{0.47} As. <i>Applied Physics Letters</i> , 2011 , 99, 012105	3.4	14
190	A Double-Spacer I-MOS Transistor With Shallow Source Junction and Lightly Doped Drain for Reduced Operating Voltage and Enhanced Device Performance. <i>IEEE Electron Device Letters</i> , 2008 , 29, 189-191	4.4	14
189	Pulsed Laser Annealing of Silicon-Carbon Source/Drain in MuGFETs for Enhanced Dopant Activation and High Substitutional Carbon Concentration. <i>IEEE Electron Device Letters</i> , 2008 , 29, 464-467	4.4	14
188	Self-assembly of tin wires via phase transformation of heteroepitaxial germanium-tin on germanium substrate. <i>Journal of Applied Physics</i> , 2015 , 117, 225304	2.5	13
187	Ultimate Performance Projection of Ultrathin Body Transistor Based on Group IV, III-V, and 2-D-Materials. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 773-780	2.9	13
186	Simulation of tunneling field-effect transistors with extended source structures. <i>Journal of Applied Physics</i> , 2012 , 111, 114514	2.5	13
185	Fermi-level depinning at the metal-germanium interface by the formation of epitaxial nickel digermanide NiGe ₂ using pulsed laser anneal. <i>Applied Physics Letters</i> , 2012 , 101, 172103	3.4	13
184	Silicon-Carbon Stressors With High Substitutional Carbon Concentration and In Situ Doping Formed in Source/Drain Extensions of n-Channel Transistors. <i>IEEE Electron Device Letters</i> , 2008 , 29, 460-463	4.4	13
183	Achieving Conduction Band-Edge Schottky Barrier Height for Arsenic-Segregated Nickel Aluminide Disilicide and Implementation in FinFETs With Ultra-Narrow Fin Widths. <i>IEEE Electron Device Letters</i> , 2008 , 29, 382-385	4.4	13
182	Strained Thin-Body p-MOSFET With Condensed Silicon-Germanium Source/Drain for Enhanced Drive Current Performance. <i>IEEE Electron Device Letters</i> , 2007 , 28, 509-512	4.4	13
181	All-GaN Power Integration: Devices to Functional Subcircuits and Converter ICs. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2020 , 8, 31-41	5.6	13
180	Germanium n-Channel Planar FET and FinFET: Gate-Stack and Contact Optimization. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 3567-3574	2.9	12
179	Contact Technology for Strained nFinFETs With Silicon-Carbon Source/Drain Stressors Featuring Sulfur Implant and Segregation. <i>IEEE Transactions on Electron Devices</i> , 2012 , 59, 1046-1055	2.9	12
178	Band alignment of HfO ₂ /Al _{0.25} Ga _{0.75} N determined by x-ray photoelectron spectroscopy: Effect of SiH ₄ surface treatment. <i>Applied Physics Letters</i> , 2014 , 104, 091605	3.4	12

177	Source Engineering for Tunnel Field-Effect Transistor: Elevated Source with Vertical Silicon/Carbon/Carbon/Germanium/Germanium Heterostructure. <i>Japanese Journal of Applied Physics</i> , 2011 , 50, 04DJ07	1.4	12
176	Fabrication of p-MOSFETs on Germanium Epitaxially Grown on Gallium Arsenide Substrate by Chemical Vapor Deposition. <i>Journal of the Electrochemical Society</i> , 2008 , 155, H76	3.9	12
175	Novel Nickel Silicide Contact Technology Using Selenium Segregation for SOI N-FETs With Silicon/Carbon Source/Drain Stressors. <i>IEEE Electron Device Letters</i> , 2008 , 29, 841-844	4.4	12
174	Towards simultaneous achievement of carrier activation and crystallinity in Ge and GeSn with heated phosphorus ion implantation: An optical study. <i>Applied Physics Letters</i> , 2014 , 105, 122108	3.4	11
173	Silicon Surface Passivation Technology for Germanium-Tin P-Channel MOSFETs: Suppression of Germanium and Tin Segregation for Mobility Enhancement. <i>ECS Journal of Solid State Science and Technology</i> , 2014 , 3, Q162-Q168	2	11
172	Study of surface passivation of strained indium gallium arsenide by vacuum annealing and silane treatment. <i>Journal of Applied Physics</i> , 2008 , 104, 093527	2.5	11
171	Work Function Tunability of Refractory Metal Nitrides by Lanthanum or Aluminum Doping for Advanced CMOS Devices. <i>IEEE Transactions on Electron Devices</i> , 2007 , 54, 2871-2877	2.9	11
170	Thermally robust TaTb/sub x/N metal gate electrode for n-MOSFETs applications. <i>IEEE Electron Device Letters</i> , 2005 , 26, 75-77	4.4	11
169	Enhanced performance in 50 nm N-MOSFETs with silicon-carbon source/drain regions		11
168	Sub- 10^{-9} Ωcm^2 Specific Contact Resistivity (Down to $4.4 \times 10^{-10} \Omega\text{cm}^2$) for Metal Contact on Ga and Sn Surface-Segregated GeSn Film. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 5275-5281	2.9	11
167	Influence of hydrogen surface passivation on Sn segregation, aggregation, and distribution in GeSn/Ge(001) materials. <i>Journal of Applied Physics</i> , 2015 , 117, 205302	2.5	10
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