Yee-Chia Yeo

List of Publications by Year
in descending order

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370 papers	7,280 citations	61984 43 h-index	88630 70 g-index
370 all docs	370 docs citations	370 times ranked	4406 citing authors

#	Article	IF	Citations
1	All-GaN Power Integration: Devices to Functional Subcircuits and Converter ICs. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 31-41.	5.4	28
2	A Ladder Transmission Line Model for the Extraction of Ultralow Specific Contact Resistivityâ€"Part I: Theoretical Design and Simulation Study. IEEE Transactions on Electron Devices, 2020, 67, 2682-2689.	3.0	6
3	A Ladder Transmission Line Model for the Extraction of Ultralow Specific Contact Resistivityâ€"Part II: Experimental Verification. IEEE Transactions on Electron Devices, 2020, 67, 2690-2696.	3.0	4
4	Design and Experimental Demonstration of Integrated Over-Current Protection Circuit for GaN DCâ€"DC Converters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 4270-4278.	5.4	7
5	Development of GaN Power IC Platform and All GaN DC-DC Buck Converter IC. , 2019, , .		13
6	High-speed photo detection at two-micron-wavelength: technology enablement by GeSn/Ge multiple-quantum-well photodiode on 300 mm Si substrate. Optics Express, 2019, 27, 5798.	3.4	82
7	High Performance GeSn Photodiode on a 200 mm Ge-on-insulator Photonics Platform for Advanced Optoelectronic Integration with Ge CMOS Operating at 2 Î¼m Band. , 2019, , .		0
8	Elimination of the Parasitic Metal Resistance in Transmission Line Model for Extraction of Ultralow Specific Contact Resistivity. IEEE Transactions on Electron Devices, 2019, 66, 3086-3092.	3.0	8
9	Toward Monolithic Optoelectronic Integration of GeSn Photodiode and FinFET on GeSnOI Platform. , 2019, , .		0
10	Integrating GeSn photodiode on a 200 mm Ge-on-insulator photonics platform with Ge CMOS devices for advanced OEIC operating at 2 Î¼m band. Optics Express, 2019, 27, 26924.	3.4	28
11	Enhanced Photo Response at Two-micron-wavelength Using GeSn/Ge Multiple-Quantum-Well Waveguide. , 2019, , .		1
12	Pseudomorphic GeSn/Ge Multiple-quantum-well on Silicon for Photo Detection and Modulation at 2 Âµm Wavelength Range. , 2019, , .		0
13	Strain relaxation of germanium-tin (GeSn) fins. AIP Advances, 2018, 8, 025111.	1.3	6
14	Nanoscale metal-InGaAs contacts with ultra-low specific contact resistivity: Improved interfacial quality and extraction methodology. Journal of Applied Physics, 2018, 123, 024508.	2.5	10
15	High Speed (<tex>$oldsymbol{f}_{3-oldsymbol{d}oldsymbol{B}}$</tex> above 10 GHz) Photo Detection at Two-micron-wavelength Realized by GeSn/Ge Multiple-quantum-well Photodiode on a 300 mm Si Substrate. , 2018, , .		1
16	Design of Full GaN Power Integrated DC-DC Converter with Over-current Protection. , 2018, , .		1
17	Ge<inf>0.9</inf>Sn<inf>0.1</inf> p-i-n Photodiode with Record-High Responsivity at Two-Micron-Wavelength. , 2018, , .		0
18	Sub-<inline-formula> <tex-math notation="LaTeX">$10^{-extsf{9}},,Omegacdot{ext{cm}}^{extsf{2}}$ </tex-math> </inline-formula> Specific Contact Resistivity (Down to <inline-formula> <tex-math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6 Transactions on Electron Devices, 2018, 65, 5275-5281.	3.0	14

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19	Metal/P-type GeSn Contacts with Specific Contact Resistivity down to 4.4Ã—10^{â˜’10} Î©-cm². , 2018, , .		2
20	An Improved Methodology for Accurate Extraction of Ultra-Low Specific Contact Resistivity of Alloyed Contacts Using Nanoscale Transmission Line Method. IEEE Electron Device Letters, 2018, 39, 803-806.	3.9	6
21	High-performance GeSn photodetector and fin field-effect transistor (FinFET) on an advanced GeSn-on-insulator platform. Optics Express, 2018, 26, 10305.	3.4	25
22	GeSn lateral p-i-n photodetector on insulating substrate. Optics Express, 2018, 26, 17312.	3.4	33
23	Germanium-Tin (GeSn) P-Channel Fin Field-Effect Transistor Fabricated on a Novel GeSn-on-Insulator Substrate. IEEE Transactions on Electron Devices, 2018, 65, 3754-3761.	3.0	26
24	Monolithic Integration of InAs Quantum-Well n-MOSFETs and Ultrathin Body Ge p-MOSFETs on a Si Substrate. IEEE Transactions on Electron Devices, 2017, 64, 353-360.	3.0	8
25	Nanoscale FETs Simulation Based on Full-Complex-Band Structure and Self-Consistently Solved Atomic Potential. IEEE Transactions on Electron Devices, 2017, 64, 58-65.	3.0	9
26	Record low specific contact resistivity (1.2Ã—10^{â˜’9} Î©-cm²) for P-type semiconductors: Incorporation of Sn into Ge and in-Situ Ga doping. , 2017, , .		3
27	Digital Etch Technique for Forming Ultra-Scaled Germanium-Tin (Ge 1â˜’x Sn x) Fin Structure. Scientific Reports, 2017, 7, 1835.	3.3	16
28	The first GeSn FinFET on a novel GeSnOI substrate achieving lowest S of 79 mV/decade and record high Gm, int of 807 Î¼S/Î¼m for GeSn P-FETs. , 2017, , .		18
29	Ultra-low specific contact resistivity (1.4â€‰Ã—â€‰10â˜’9 Î©·cm2) for metal contacts on in-situ Ga-doped Ge0.95Sn0.05 film. Journal of Applied Physics, 2017, 122, .	2.5	23
30	Kinetics of plasma oxidation of germanium-tin (GeSn). Applied Surface Science, 2017, 425, 95-99.	6.1	2
31	Au-Free AlGaN/GaN MIS-HEMTs With Embedded Current Sensing Structure for Power Switching Applications. IEEE Transactions on Electron Devices, 2017, 64, 3515-3518.	3.0	21
32	Design of power integrated circuits in full AlGaN/GaN MISâ€HEMT configuration for power conversion. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600562.	1.8	15
33	Thermal stability of germanium-tin (GeSn) fins. Applied Physics Letters, 2017, 111, 252103.	3.3	7
34	Si-on-insulator grating coupler operating at 2 Î¼Î¹Î·: Device design, fabrication, and characterization. , 2017, , .		0
35	Two-micron-wavelength germanium-tin photodiodes with low dark current and gigahertz bandwidth. Optics Express, 2017, 25, 15818.	3.4	78
36	Floating-base germanium-tin heterojunction phototransistor for high-efficiency photodetection in short-wave infrared range. Optics Express, 2017, 25, 18502.	3.4	44

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37	Enabling low power and high speed OEICs: First monolithic integration of InGaAs n-FETs and lasers on Si substrate. , 2017, , .		2
38	Ge0.9Sn0.1 multiple-quantum-well p-i-n photodiodes for optical communications at 2 Î¼m. , 2017, , .		0
39	Growth and characterization of highly tensile strained Ge1â^'xSnx formed on relaxed InyGa1â^'yP buffer layers. Journal of Applied Physics, 2016, 119, .	2.5	4
40	Germaniumâ€“tin interdiffusion in strained Ge/GeSn multiple-quantum-well structure. Journal Physics D: Applied Physics, 2016, 49, 225102.	2.8	7
41	Near-bandgap optical properties of pseudomorphic GeSn alloys grown by molecular beam epitaxy. Journal of Applied Physics, 2016, 120, .	2.5	8
42	GeSn-on-insulator substrate formed by direct wafer bonding. Applied Physics Letters, 2016, 109, .	3.3	31
43	Ge0.83Sn0.17 p-channel metal-oxide-semiconductor field-effect transistors: Impact of sulfur passivation on gate stack quality. Journal of Applied Physics, 2016, 119, .	2.5	34
44	In-situ gallium-doping for forming p+ germanium-tin and application in germanium-tin p-i-n photodetector. Journal of Applied Physics, 2016, 119, .	2.5	29
45	Performance evaluation of nanoscale FETs based on full-band complex bandstructure and real space poisson solver. , 2016, , .		0
46	Germanium-tin multiple quantum well on silicon avalanche photodiode for photodetection at two micron wavelength. Semiconductor Science and Technology, 2016, 31, 095001.	2.0	25
47	Germanium-Tin heterojunction phototransistor: Towards high-efficiency low-power photodetection in short-wave infrared range. , 2016, , .		3
48	Heteroepitaxial growth of In0.30Ga0.70As high-electron mobility transistor on 200 mm silicon substrate using metamorphic graded buffer. AIP Advances, 2016, 6, 085106.	1.3	14
49	Realistic Trap Configuration Scheme With Fabrication Processes in Consideration for the Simulations of AlGaN/GaN MIS-HEMT Devices. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 720-729.	5.4	11
50	Single Crystalline Germanium-Lead Formed by Laser-Induced Epitaxy. ECS Journal of Solid State Science and Technology, 2016, 5, P353-P360.	1.8	8
51	Gate-All-Around In_{0.53}Ga_{0.47}As Junctionless Nanowire FET With Tapered Source/Drain Structure. IEEE Transactions on Electron Devices, 2016, 63, 1027-1033.	3.0	12
52	Ultimate Performance Projection of Ultrathin Body Transistor Based on Group IV, III-V, and 2-D-Materials. IEEE Transactions on Electron Devices, 2016, 63, 773-780.	3.0	15
53	Avalanche photodiode featuring Germanium-tin multiple quantum wells on silicon: Extending photodetection to wavelengths of 2 and beyond. , 2015, , .		3
54	Post-growth annealing of germanium-tin alloys using pulsed excimer laser. Journal of Applied Physics, 2015, 118, .	2.5	14

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55	Etching of germanium-tin using ammonia peroxide mixture. Journal of Applied Physics, 2015, 118, .	2.5	4
56	Parametrized dielectric functions of amorphous GeSn alloys. Journal of Applied Physics, 2015, 118, 123102.	2.5	1
57	Germanium-based transistors for future high performance and low power logic applications. , 2015, , .		22
58	Effect of Body Thickness on the Electrical Performance of Ballistic n-Channel GaSb Double-Gate Ultrathin-Body Transistor. IEEE Transactions on Electron Devices, 2015, 62, 788-794.	3.0	10
59	Suppression of dark current in germanium-tin on silicon p-i-n photodiode by a silicon surface passivation technique. Optics Express, 2015, 23, 18611.	3.4	59
60	Germanium n-Channel Planar FET and FinFET: Gate-Stack and Contact Optimization. IEEE Transactions on Electron Devices, 2015, 62, 3567-3574.	3.0	17
61	Probing the carrier concentration profiles in phosphorus-implanted germanium using infrared spectroscopic ellipsometry. Journal of Applied Physics, 2015, 117, 073103.	2.5	0
62	Influence of hydrogen surface passivation on Sn segregation, aggregation, and distribution in GeSn/Ge(001) materials. Journal of Applied Physics, 2015, 117, .	2.5	13
63	Self-assembly of tin wires via phase transformation of heteroepitaxial germanium-tin on germanium substrate. Journal of Applied Physics, 2015, 117, .	2.5	18
64	Critical thickness for strain relaxation of Ge1â^'xSnx (xâ€‰â‰¤â€‰0.17) grown by molecular beam epitaxy on Ge(001). Applied Physics Letters, 2015, 106, .	3.3	70
65	Mid-infrared to ultraviolet optical properties of InSb grown on GaAs by molecular beam epitaxy. Journal of Applied Physics, 2015, 117, .	2.5	4
66	Germanium-Tin on Si Avalanche Photodiode: Device Design and Technology Demonstration. IEEE Transactions on Electron Devices, 2015, 62, 128-135.	3.0	48
67	Chlorine- and Fluorine-based dry etching of Germanium-Tin. , 2014, , .		1
68	Novel short-channel In<inf>0.53</inf>Ga<inf>0.47</inf>As junctionless nanowire nFET with raised s/d structure: An ultimately scaled 1-D transistor architecture. , 2014, , .		0
69	Formation of vertically stacked germanium-tin (Ge<inf>1−x</inf>Sn<inf>x</inf>) nanowires using a selective dry etch technique. , 2014, , .		2
70	Cold Silicon Preamorphization Implant and Presilicide Sulfur Implant for Advanced Nickel Silicide Contacts. IEEE Transactions on Electron Devices, 2014, 61, 3499-3506.	3.0	3
71	Towards simultaneous achievement of carrier activation and crystallinity in Ge and GeSn with heated phosphorus ion implantation: An optical study. Applied Physics Letters, 2014, 105, 122108.	3.3	12
72	Infrared spectroscopic ellipsometry study of sulfur-doped In0.53Ga0.47As ultra-shallow junctions. Applied Physics Letters, 2014, 104, .	3.3	4

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73	Band alignment of HfO2/Al0.25Ga0.75N determined by x-ray photoelectron spectroscopy: Effect of SiH4 surface treatment. Applied Physics Letters, 2014, 104, 091605.	3.3	12
74	Self-Aligned and Non-Self-Aligned Contact Metallization in InGaAs Metalâ€“Oxide-Semiconductor Field-Effect Transistors: A Simulation Study. IEEE Transactions on Electron Devices, 2014, 61, 734-741.	3.0	3
75	Silicon Surface Passivation Technology for Germanium-Tin P-Channel MOSFETs: Suppression of Germanium and Tin Segregation for Mobility Enhancement. ECS Journal of Solid State Science and Technology, 2014, 3, Q162-Q168.	1.8	12
76	New materials for post-Si computing: Ge and GeSn devices. MRS Bulletin, 2014, 39, 678-686.	3.5	50
77	An Expandable <inline-formula> <tex-math notation="TeX">${m ZnS}hbox{-}{m SiO}_{2}$ </tex-math></inline-formula> Liner Stressor for N-Channel FinFETs. IEEE Transactions on Electron Devices, 2014, 61, 1963-1971.	3.0	1
78	Ballistic Transport Performance of Silicane and Germanane Transistors. IEEE Transactions on Electron Devices, 2014, 61, 1590-1598.	3.0	51
79	Germanium-lead alloy with 0.3% substitutional lead formed by pulsed laser induced epitaxy. , 2014, , .		0
80	Migration enhanced epitaxy of InGaP on offcut Ge (001) using solid-source molecular beam epitaxy. , 2014, , .		1
81	High mobility germanium-tin (Ge<inf>0.930</inf>Sn<inf>0.070</inf>) P-MOSFETs with surface passivation by silicon atomic layer epitaxy. , 2014, , .		0
82	Plasma Doping of InGaAs at Elevated Substrate Temperature for Reduced Sheet Resistance and Defect Formation. IEEE Transactions on Electron Devices, 2014, 61, 3159-3165.	3.0	1
83	Thermal stability of highly compressive strained germanium-tin (GeSn) grown by molecular beam epitaxy. , 2014, , .		0
84	Tin surface segregation, desorption, and island formation during post-growth annealing of strained epitaxial Ge1â^'xSnx layer on Ge(001) substrate. Applied Surface Science, 2014, 321, 240-244.	6.1	47
85	Self-crystallization and reduced contact resistivity by hot phosphorus ion implant in germanium-tin alloy. , 2014, , .		0
86	Toward Conformal Damage-Free Doping With Abrupt Ultrashallow Junction: Formation of Si Monolayers and Laser Anneal as a Novel Doping Technique for InGaAs nMOSFETs. IEEE Transactions on Electron Devices, 2014, 61, 1039-1046.	3.0	30
87	GeTe Liner Stressor Featuring Phase-Change- Induced Volume Contraction for Strain Engineering of Sub-50-nm p-Channel FinFETs: Simulation and Electrical Characterization. IEEE Transactions on Electron Devices, 2014, 61, 2647-2655.	3.0	3
88	P₂S₅/(NH₄)₂S_{<italic>x</italic>}-Based Sulfur Monolayer Doping for Source/Drain Extensions in n-Channel InGaAs FETs. IEEE Transactions on Electron Devices, 2014, 61, 2767-2773.	3.0	4
89	Compositional dependence of optical critical point parameters in pseudomorphic GeSn alloys. Journal of Applied Physics, 2014, 116, 053520.	2.5	25
90	Above-bandgap optical properties of biaxially strained GeSn alloys grown by molecular beam epitaxy. Applied Physics Letters, 2014, 104, .	3.3	33

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91	Voltage scalability of double-gate ultra-thin-body field-effect transistors with channel materials from group IV, III-V to 2D-materials based on ITRS metrics for year 2018 and beyond. , 2014, , .		0
92	Growth of indium arsenide on silicon-based substrates using molecular beam epitaxy. , 2014, , .		0
93	Germanium-Tin on Silicon avalanche photodiode for short-wave infrared imaging. , 2014, , .		0
94	InAlP-Capped (100) Ge nFETs with 1.06 nm EOT: Achieving record high peak mobility and first integration on 300 mm Si substrate. , 2014, , .		3
95	Investigation of Pdâ€“InGaAs for the formation of self-aligned source/drain contacts in InGaAs metalâ€“oxideâ€“semiconductor field-effect transistors. Solid-State Electronics, 2013, 85, 36-42.	1.4	9
96	Strained germaniumâ€“tin (GeSn) p-channel metal-oxide-semiconductor field-effect-transistors (p-MOSFETs) with ammonium sulfide passivation. Solid-State Electronics, 2013, 83, 66-70.	1.4	30
97	High performance Ge CMOS with novel InAlP-passivated channels for future sub-10 nm technology node applications. , 2013, , .		11
98	Phase Change Liner Stressor for Strain Engineering of P-Channel FinFETs. IEEE Transactions on Electron Devices, 2013, 60, 2703-2711.	3.0	2
99	Near ballistic sub-7 nm Junctionless FET featuring 1 nm extremely-thin channel and raised S/D structure. , 2013, , .		6
100	Novel technique comprising silane treatment and laser anneal for abrupt ultra-shallow junction formation for InGaAs n-MOSFETs. , 2013, , .		4
101	Lattice strain analysis of silicon fin field-effect transistor structures wrapped by Ge2Sb2Te5 liner stressor. Journal of Applied Physics, 2013, 113, .	2.5	7
102	Ultimate performance projection of ballistic III-V ultra-thin-body MOSFET. , 2013, , .		2
103	Influences of gate drive on pulsed current collapse recovery in AlGaN/GaN power HEMTs. , 2013, , .		0
104	Germanium–Tin (GeSn) p-Channel MOSFETs Fabricated on (100) and (111) Surface Orientations With Sub-400 <formula formulatype="inline"><tex Notation="TeX">$^{circ}hbox{C} hbox{Si}_{2}hbox{H}_{6}$</tex> </formula> Passivation. IEEE Electron Device Letters, 2013, 34, 339-341.	3.9	94
105	Technology options for reducing contact resistances in nanoscale metal-oxide-semiconductor field-effect transistors. , 2013, , .		3
106	In0.53Ga0.47As FinFETs with self-aligned molybdenum contacts and HfO2/Al2O3 gate dielectric. Solid-State Electronics, 2013, 84, 83-89.	1.4	7
107	Contact Resistance Reduction for Strained N-MOSFETs With Silicon-Carbon Source/Drain Utilizing Aluminum Ion Implant and Aluminum Profile Engineering. IEEE Transactions on Electron Devices, 2013, 60, 1310-1317.	3.0	19
108	Sub-400 Â°C Si₂H₆Passivation, HfO₂Gate Dielectric, and Single TaN Metal Gate: A Common Gate Stack Technology for In_{0.7}Ga_{0.3}As and Ge_{1-x}Sn_xCMOS. IEEE Transactions on Electron Devices, 2013, 60, 1640-1648.	3.0	23

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109	Germanium Multiple-Gate Field-Effect Transistor With In Situ Boron-Doped Raised Source/Drain. IEEE Transactions on Electron Devices, 2013, 60, 2135-2141.	3.0	12
110	Strain engineering of ultra-thin silicon-on-insulator structures using through-buried-oxide ion implantation and crystallization. Solid-State Electronics, 2013, 83, 37-41.	1.4	3
111	$hbox{Ni}(hbox{Ge}_{1 - x}hbox{Sn}_{x})$ Ohmic Contact Formation on N-Type $hbox{Ge}_{1 - x}hbox{Sn}_{x}$ Using Selenium or Sulfur Implant and Segregation. IEEE Transactions on Electron Devices, 2013, 60, 746-752.	3.0	26
112	Modelling of temperature dependence on current collapse phenomenon in AlGaN/GaN HEMT devices. , 2013, , .		0
113	Relaxed and Strained Patterned Germanium-Tin Structures: A Raman Scattering Study. ECS Journal of Solid State Science and Technology, 2013, 2, P138-P145.	1.8	62
114	Crystal structure and epitaxial relationship of Ni4InGaAs2 films formed on InGaAs by annealing. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, 012202.	1.2	22
115	Germanium-tin n-channel tunneling field-effect transistor: Device physics and simulation study. Journal of Applied Physics, 2013, 113, .	2.5	42
116	Tunneling field-effect transistor with Ge/In0.53Ga0.47As heterostructure as tunneling junction. Journal of Applied Physics, 2013, 113, .	2.5	23
117	(110)-oriented germanium-tin (Ge<inf>0.97</inf>Sn<inf>0.03</inf>) P-channel MOSFETs. , 2013, , .		2
118	Physical model for gallium arsenide growth on germanium fins with different orientations formed on 10Â° offcut germanium-on-insulator substrate. Journal of Applied Physics, 2013, 113, 044301.	2.5	0
119	Germaniumâ€“Tin P-Channel Tunneling Field-Effect Transistor: Device Design and Technology Demonstration. IEEE Transactions on Electron Devices, 2013, 60, 4048-4056.	3.0	52
120	Gate Stack Reliability of MOSFETs With High-Mobility Channel Materials: Bias Temperature Instability. IEEE Transactions on Device and Materials Reliability, 2013, 13, 524-533.	2.0	18
121	Band alignment study of lattice-matched InAlP and Ge using x-ray photoelectron spectroscopy. Applied Physics Letters, 2013, 103, .	3.3	8
122	Ge0.97Sn0.03 p-channel metal-oxide-semiconductor field-effect transistors: Impact of Si surface passivation layer thickness and post metal annealing. Journal of Applied Physics, 2013, 114, 044510.	2.5	43
123	Asymetrically strained high performance Germanium gate-all-around nanowire p-FETs featuring 3.5 nm wire width and contractible phase change liner stressor (Ge<inf>2</inf>Sb<inf>2</inf>Te<inf>5</inf>). , 2013, , .		4
124	Simulation of tunneling field-effect transistors with extended source structures. Journal of Applied Physics, 2012, 111, 114514.	2.5	15
125	Silicon-Carbon Source and Drain Stressors: Carbon Profile Design by Ion Implantation. Journal of the Electrochemical Society, 2012, 159, H425-H432.	2.9	2
126	In$_{0.53}$Ga$_{0.47}$As N-Channel Metalâ€“Oxideâ€“Semiconductor Field-Effect Transistors with Shallow Metallic Source and Drain Extensions and Offset N^{+} Doped Regions for Leakage Suppression. Japanese Journal of Applied Physics, 2012, 51, 02BF03.	1.5	2

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127	Device Physics and Design of a L-Shaped Germanium Source Tunneling Transistor. Japanese Journal of Applied Physics, 2012, 51, 02BC04.	1.5	11
128	Ge/Niâ€“InGaAs Solid-State Reaction for Contact Resistance Reduction on n^{+} In$_{0.53}$Ga$_{0.47}$As. Japanese Journal of Applied Physics, 2012, 51, 02BF06.	1.5	2
129	Electronic band structure and effective mass parameters of Ge1-xSnx alloys. Journal of Applied Physics, 2012, 112, .	2.5	194
130	Strain Engineering of Ultra-Thin Silicon-on-Insulator Structures Using Ion Implant. , 2012, , .		0
131	Modulation of effective Schottky barrier height of nickel silicide on silicon using pre-silicide ammonium sulfide treatment. Journal of Applied Physics, 2012, 111, 073705.	2.5	11
132	Fermi-level depinning at the metal-germanium interface by the formation of epitaxial nickel digermanide NiGe2 using pulsed laser anneal. Applied Physics Letters, 2012, 101, .	3.3	14
133	High-Performance Germanium $Omega$ -Gate MuGFET With Schottky-Barrier Nickel Germanide Source/Drain and Low-Temperature Disilane-Passivated Gate Stack. IEEE Electron Device Letters, 2012, 33, 1336-1338.	3.9	20
134	Strained germanium-tin (GeSn) N-channel MOSFETs featuring low temperature N+/P junction formation and GeSnO2 interfacial layer. , 2012, , .		23
135	Advanced channel and contact technologies for future CMOS devices. , 2012, , .		0
136	A new liner stressor (GeTe) featuring stress enhancement due to very large phase-change induced volume contraction for p-channel FinFETs. , 2012, , .		5
137	Phase-Change Random Access Memory With Multilevel Resistances Implemented Using a Dual Phase-Change Material Stack. IEEE Transactions on Electron Devices, 2012, 59, 2910-2916.	3.0	8
138	Multiple-Gate In0.53Ga0.47As Channel n-MOSFETs with Self-Aligned Ni-InGaAs Contacts. ECS Journal of Solid State Science and Technology, 2012, 1, P82-P85.	1.8	19
139	A Self-Aligned Ni-InGaAs Contact Technology for InGaAs Channel n-MOSFETs. Journal of the Electrochemical Society, 2012, 159, H511-H515.	2.9	32
140	Selenium Segregation for Effective Schottky Barrier Height Reduction in NiGe/nâ€“Ge Contacts. IEEE Electron Device Letters, 2012, 33, 773-775.	3.9	37
141	(NH4)2S Passivation for High Mobility Germanium-Tin (GeSn) p-MOSFETs. , 2012, , .		1
142	Novel selenium implant and segregation for reduction of effective Schottky barrier height in NiGe/n-Ge contacts. , 2012, , .		0
143	A gate-last In<inf>0.53</inf>Ga<inf>0.47</inf>As channel FinFET with Molybdenum source/drain contacts. , 2012, , .		1
144	High performance Ω-gate Ge FinFET featuring low temperature Si<inf>2</inf>H<inf>6</inf> passivation and implantless Schottky-barrier NiGe metallic Source/Drain. , 2012, , .		2

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145	Embedded Metal Source/Drain (eMSD) for series resistance reduction in In<inf>0.53</inf>Ga<inf>0.47</inf>As n-channel Ultra-Thin Body Field-Effect Transistor (UTB-FET). , 2012, , .		0
146	Performance comparison of III-V MOSFETs with source filter for electron energy. , 2012, , .		1
147	Germaniumâ€“Tin $hbox{n}^{+}hbox{/p}$ Junction Formed Using Phosphorus Ion Implant and 400 $^{circ} hbox{C}$ Rapid Thermal Anneal. IEEE Electron Device Letters, 2012, 33, 1529-1531.	3.9	17
148	BF<inf>2</inf>⁺ ion implantation and dopant activation in strained Germanium-tin (Ge<inf>1−x</inf>Sn<inf>x</inf>) epitaxial layer. , 2012, , .		0
149	Self-aligned contact metallization for III–V channel Field-Effect Transistors. , 2012, , .		0
150	Towards direct band-to-band tunneling in P-channel tunneling field effect transistor (TFET): Technology enablement by Germanium-tin (GeSn). , 2012, , .		42
151	Metal stanogermanide contacts with enhanced thermal stability for high mobility germanium-tin field-effect transistor. , 2012, , .		2
152	PBTI characteristics of N-channel tunneling field effect transistor with HfO<inf>2</inf> gate dielectric: New insights and physical model. , 2012, , .		5
153	CoInGaAs as a novel self-aligned metallic source/drain material for implant-less In0.53Ga0.47As n-MOSFETs. Solid-State Electronics, 2012, 78, 62-67.	1.4	12
154	AlGaN/GaN-on-Silicon MOS-HEMTs with breakdown voltage of 800 V and on-state resistance of 3 mΩ.cm² using a CMOS-compatible gold-free process. , 2012, , .		0
155	Study of interfaces between phaseâ€change material Ge₂Sb₂Te₅ and prevalent complementary metalâ€oxide semiconductor materials by XPS. Surface and Interface Analysis, 2012, 44, 1013-1017.	1.8	5
156	Dopant Segregation and Nickel Stanogermanide Contact Formation on $hbox{p}^{+} hbox{Ge}_{0.947}hbox{Sn}_{0.053}$ Source/Drain. IEEE Electron Device Letters, 2012, 33, 634-636.	3.9	35
157	Contact Technology for Strained nFinFETs With Siliconâ€“Carbon Source/Drain Stressors Featuring Sulfur Implant and Segregation. IEEE Transactions on Electron Devices, 2012, 59, 1046-1055.	3.0	13
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