

Yee-Chia Yeo

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7667733/publications.pdf>

Version: 2024-02-01

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	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	393
2	Tunneling Field-Effect Transistor: Capacitance Components and Modeling. <i>IEEE Electron Device Letters</i> , 2010, 31, 752-754.	3.9	213
3	Electronic band structure and effective mass parameters of Ge _{1-x} Sn _x alloys. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	194
4	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.	3.0	192
5	Direct tunneling leakage current and scalability of alternative gate dielectrics. <i>Applied Physics Letters</i> , 2002, 81, 2091-2093.	3.3	184
6	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, .	2.5	167
7	Effects of high- κ gate dielectric materials on metal and silicon gate workfunctions. <i>IEEE Electron Device Letters</i> , 2002, 23, 342-344.	3.9	159
8	Device physics and design of double-gate tunneling field-effect transistor by silicon film thickness optimization. <i>Applied Physics Letters</i> , 2007, 90, 263507.	3.3	130
9	Fermi Pinning-Induced Thermal Instability of Metal-Gate Work Functions. <i>IEEE Electron Device Letters</i> , 2004, 25, 337-339.	3.9	118
10	Lattice strain analysis of transistor structures with silicon-germanium and silicon-carbon source-drain stressors. <i>Applied Physics Letters</i> , 2005, 86, 093102.	3.3	103
11	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.	3.0	97
12	Tunneling Field-Effect Transistor: Effect of Strain and Temperature on Tunneling Current. <i>IEEE Electron Device Letters</i> , 2009, 30, 981-983.	3.9	96
13	Dual-metal gate CMOS technology with ultrathin silicon nitride gate dielectric. <i>IEEE Electron Device Letters</i> , 2001, 22, 227-229.	3.9	94
14	A Variational Approach to the Two-Dimensional Nonlinear Poisson's Equation for the Modeling of Tunneling Transistors. <i>IEEE Electron Device Letters</i> , 2008, 29, 1252-1255.	3.9	94
15	Germanium–Tin (GeSn) p-Channel MOSFETs Fabricated on (100) and (111) Surface Orientations With Sub-400 κ Tunneling and Control Oxides: Device Fabrication and Electrical Performance. <i>IEEE Electron Device Letters</i> , 2013, 34, 339-341.	3.9	94
16	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.	3.9	92
17	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.	1.5	89
18	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, .	3.3	88

#	ARTICLE	IF	CITATIONS
19	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
20	Two-micron-wavelength germanium-tin photodiodes with low dark current and gigahertz bandwidth. Optics Express, 2017, 25, 15818.	3.4	78
21	Direct-tunneling gate leakage current in double-gate and ultrathin body MOSFETs. IEEE Transactions on Electron Devices, 2002, 49, 2288-2295.	3.0	74
22	Critical thickness for strain relaxation of Ge _{1-x} Sn _x (x=0.17) grown by molecular beam epitaxy on Ge(001). Applied Physics Letters, 2015, 106, .	3.3	70
23	Metal gate technology for nanoscale transistors—material selection and process integration issues. Thin Solid Films, 2004, 462-463, 34-41.	1.8	68
24	Finite-element study of strain distribution in transistor with silicon-germanium source and drain regions. Applied Physics Letters, 2005, 86, 023103.	3.3	68
25	A fast measurement technique of MOSFET I _d /V _g characteristics. IEEE Electron Device Letters, 2006, 27, 55-57.	3.9	64
26	III-V Multiple-Gate Field-Effect Transistors With High-Mobility In _{0.7} Ga _{0.3} As Channel and Epi-Controlled Retrograde-Doped Fin. IEEE Electron Device Letters, 2011, 32, 146-148.	3.9	63
27	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
28	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
29	Silicon-based tunneling field-effect transistor with elevated germanium source formed on (110) silicon substrate. Applied Physics Letters, 2011, 98, 153502.	3.3	58
30	Wide V _{m fb} and V _{m th} Tunability for Metal-Gated MOS Devices With HfLaO Gate Dielectrics. IEEE Electron Device Letters, 2007, 28, 258-260.	3.9	57
31	Silane and Ammonia Surface Passivation Technology for High-Mobility In _{0.53} Ga _{0.47} As MOSFETs. IEEE Transactions on Electron Devices, 2010, 57, 973-979.	3.0	57
32	A Simulation Study of Graphene-Nanoribbon Tunneling FET With Heterojunction Channel. IEEE Electron Device Letters, 2010, 31, 555-557.	3.9	57
33	Lattice-Mismatched In _{0.4} Ga _{0.6} As Source/Drain Stressors With In Situ Doping for Strained In _{0.53} Ga _{0.47} As Channel n-MOSFETs. IEEE Electron Device Letters, 2009, 30, 805-807.	3.9	53
34	Germanium-Tin P-Channel Tunneling Field-Effect Transistor: Device Design and Technology Demonstration. IEEE Transactions on Electron Devices, 2013, 60, 4048-4056.	3.0	52
35	A Dual-Metal Gate Integration Process for CMOS With Sub-1-nm EOT and HfO ₂ by Using HfN Replacement Gate. IEEE Electron Device Letters, 2004, 25, 580-582.	3.9	51
36	Ballistic Transport Performance of Silicane and Germanane Transistors. IEEE Transactions on Electron Devices, 2014, 61, 1590-1598.	3.0	51

#	ARTICLE	IF	CITATIONS
37	Formation of Ge nanocrystals in HfAlO high-k dielectric and application in memory device. Applied Physics Letters, 2004, 84, 5407-5409.	3.3	50
38	New materials for post-Si computing: Ge and GeSn devices. MRS Bulletin, 2014, 39, 678-686.	3.5	50
39	Aluminum oxynitride interfacial passivation layer for high-permittivity gate dielectric stack on gallium arsenide. Applied Physics Letters, 2006, 89, 202903.	3.3	48
40	n-MOSFET With Silicon ¹⁶ Carbon Source/Drain for Enhancement of Carrier Transport. IEEE Transactions on Electron Devices, 2007, 54, 249-256.	3.0	48
41	Germanium-Tin on Si Avalanche Photodiode: Device Design and Technology Demonstration. IEEE Transactions on Electron Devices, 2015, 62, 128-135.	3.0	48
42	Tin surface segregation, desorption, and island formation during post-growth annealing of strained epitaxial Ge _{1-x} Sn _x layer on Ge(001) substrate. Applied Surface Science, 2014, 321, 240-244.	6.1	47
43	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. IEEE Transactions on Electron Devices, 2007, 54, 2699-2705.	3.0	46
44	Floating-base germanium-tin heterojunction phototransistor for high-efficiency photodetection in short-wave infrared range. Optics Express, 2017, 25, 18502.	3.4	44
45	Sub-0.1-eV Effective Schottky-Barrier Height for NiSi on n-Type Si (100) Using Antimony Segregation. IEEE Electron Device Letters, 2007, 28, 703-705.	3.9	43
46	Ge _{0.97} Sn _{0.03} 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
47	Towards direct band-to-band tunneling in P-channel tunneling field effect transistor (TFET): Technology enablement by Germanium-tin (GeSn). , 2012, , .		42
48	Germanium-tin n-channel tunneling field-effect transistor: Device physics and simulation study. Journal of Applied Physics, 2013, 113, .	2.5	42
49	Nickel-Silicide:Carbon Contact Technology for N-Channel MOSFETs With Silicon ¹⁶ Carbon Source/Drain. IEEE Electron Device Letters, 2008, 29, 89-92.	3.9	41
50	In _{0.7} Ga _{0.3} As Channel n-MOSFET with Self-Aligned Ni ¹⁶ InGaAs Source and Drain. Electrochemical and Solid-State Letters, 2011, 14, H60.	2.2	40
51	N-channel FinFETs With 25-nm Gate Length and Schottky-Barrier Source and Drain Featuring Ytterbium Silicide. IEEE Electron Device Letters, 2007, 28, 164-167.	3.9	39
52	High-mobility germanium-tin (GeSn) P-channel MOSFETs featuring metallic source/drain and sub-370 nm ² process modules. , 2011, , .		39
53	Strained n-Channel FinFETs Featuring In Situ Doped Silicon ¹⁶ Carbon $\text{Si}_{1-y}\text{C}_y$ Source and Drain Stressors With High Carbon Content. IEEE Transactions on Electron Devices, 2008, 55, 2475-2483.	3.0	37
54	A new robust non-local algorithm for band-to-band tunneling simulation and its application to Tunnel-FET. Solid-State Electronics, 2011, 57, 23-30.	1.4	37

#	ARTICLE	IF	CITATIONS
55	Selenium Segregation for Effective Schottky Barrier Height Reduction in NiGe/n ⁺ Ge Contacts. IEEE Electron Device Letters, 2012, 33, 773-775.	3.9	37
56	Enhanced performance in 50 nm N-MOSFETs with silicon-carbon source/drain regions. , 0, , .		36
57	<i>In Situ</i> Surface Passivation and CMOS-Compatible Palladium ⁺ Germanium Contacts for Surface-Channel Gallium Arsenide MOSFETs. IEEE Electron Device Letters, 2008, 29, 553-556.	3.9	36
58	Modeling Study of the Impact of Surface Roughness on Silicon and Germanium UTB MOSFETs. IEEE Transactions on Electron Devices, 2005, 52, 2430-2439.	3.0	35
59	Dopant Segregation and Nickel Stanogermanide Contact Formation on $\text{p}^+\text{Ge}_{0.947}\text{Sn}_{0.053}$ Source/Drain. IEEE Electron Device Letters, 2012, 33, 634-636.	3.9	35
60	Ge _{0.83} Sn _{0.17} 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
61	Above-bandgap optical properties of biaxially strained GeSn alloys grown by molecular beam epitaxy. Applied Physics Letters, 2014, 104, .	3.3	33
62	GeSn lateral p-i-n photodetector on insulating substrate. Optics Express, 2018, 26, 17312.	3.4	33
63	A Self-Aligned Ni-InGaAs Contact Technology for InGaAs Channel n-MOSFETs. Journal of the Electrochemical Society, 2012, 159, H511-H515.	2.9	32
64	GeSn-on-insulator substrate formed by direct wafer bonding. Applied Physics Letters, 2016, 109, .	3.3	31
65	Strained n-Channel Transistors With Silicon Source and Drain Regions and Embedded Silicon/Germanium as Strain-Transfer Structure. IEEE Electron Device Letters, 2007, 28, 609-612.	3.9	30
66	Strained germanium ⁺ 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
67	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
68	Design and fabrication of 50-nm thin-body p-MOSFETs with a SiGe heterostructure channel. IEEE Transactions on Electron Devices, 2002, 49, 279-286.	3.0	29
69	Strained p-Channel FinFETs With Extended p^+ -Shaped Silicon ⁺ Germanium Source and Drain Stressors. IEEE Electron Device Letters, 2007, 28, 905-908.	3.9	29
70	Band alignment between amorphous Ge ₂ Sb ₂ Te ₅ and prevalent complementary-metal-oxide-semiconductor materials. Applied Physics Letters, 2008, 92, .	3.3	29
71	<i>In-situ</i> 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
72	Enhancement of memory window in short channel non-volatile memory devices using double layer tungsten nanocrystals. , 0, , .		28

#	ARTICLE	IF	CITATIONS
73	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
74	Integrating GeSn photodiode on a 200 nm Ge-on-insulator photonics platform with Ge CMOS devices for advanced OEIC operating at 2 μ m band. Optics Express, 2019, 27, 26924.	3.4	28
75	I-MOS Transistor With an Elevated Silicon-Germanium Impact-Ionization Region for Bandgap Engineering. IEEE Electron Device Letters, 2006, 27, 975-977.	3.9	27
76	Strained In_mSn_n -MOSFET With Embedded Source/Drain Stressors and Strain-Transfer Structure (STS) for Enhanced Transistor Performance. IEEE Transactions on Electron Devices, 2008, 55, 850-857.	3.0	27
77	Dependence of the properties of phase change random access memory on nitrogen doping concentration in $\text{Ge}_2\text{Sb}_2\text{Te}_5$. Journal of Applied Physics, 2010, 107, .	2.5	27
78	Performance Enhancement in Uniaxial Strained Silicon-on-Insulator N-MOSFETs Featuring Silicon-Carbon Source/Drain Regions. IEEE Transactions on Electron Devices, 2007, 54, 2910-2917.	3.0	26
79	$\text{Ni}(\text{Ge}_{1-x}\text{Sn}_x)$ Ohmic Contact Formation on N-Type $\text{Ge}_{1-x}\text{Sn}_x$ Using Selenium or Sulfur Implant and Segregation. IEEE Transactions on Electron Devices, 2013, 60, 746-752.	3.0	26
80	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
81	Compositional dependence of optical critical point parameters in pseudomorphic GeSn alloys. Journal of Applied Physics, 2014, 116, 053520.	2.5	25
82	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
83	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
84	High-Permittivity Dielectric Stack on Gallium Nitride Formed by Silane Surface Passivation and Metal-Organic Chemical Vapor Deposition. IEEE Electron Device Letters, 2010, 31, 8-10.	3.9	23
85	Strained germanium-tin (GeSn) N-channel MOSFETs featuring low temperature N+/P junction formation and GeSnO_2 interfacial layer. , 2012, , .		23
86	Sub-400 $\text{Å}^\circ\text{C}$ $\text{Si}_{2.6}\text{H}_6$ Passivation, HfO_2 Gate Dielectric, and Single TaN Metal Gate: A Common Gate Stack Technology for $\text{In}_{0.7}\text{Ga}_{0.3}\text{As}$ and $\text{Ge}_{1-x}\text{Sn}_x$ CMOS. IEEE Transactions on Electron Devices, 2013, 60, 1640-1648.	3.0	23
87	Tunneling field-effect transistor with $\text{Ge}/\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ heterostructure as tunneling junction. Journal of Applied Physics, 2013, 113, .	2.5	23
88	Ultra-low specific contact resistivity ($1.4 \times 10^{-9} \text{ } \Omega \cdot \text{cm}^2$) for metal contacts on <i>in-situ</i> Ga-doped $\text{Ge}_{0.95}\text{Sn}_{0.05}$ film. Journal of Applied Physics, 2017, 122, .	2.5	23
89	n-Channel GaAs MOSFET with TaN/HfAlO Gate Stack Formed Using In Situ Vacuum Anneal and Silane Passivation. Journal of the Electrochemical Society, 2008, 155, H464.	2.9	22
90	Crystal structure and epitaxial relationship of $\text{Ni}_4\text{InGaAs}_2$ films formed on InGaAs by annealing. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2013, 31, 012202.	1.2	22

#	ARTICLE	IF	CITATIONS
91	Germanium-based transistors for future high performance and low power logic applications. , 2015, , .		22
92	Performance enhancement of n-channel impact-ionization metal-oxide-semiconductor transistor by strain engineering. Applied Physics Letters, 2007, 90, 023505.	3.3	21
93	Enhanced Strain Effects in 25-nm Gate-Length Thin-Body nMOSFETs With Silicon-Carbon Source/Drain and Tensile-Stress Liner. IEEE Electron Device Letters, 2007, 28, 301-304.	3.9	21
94	Silane-Ammonia Surface Passivation for Gallium Arsenide Surface-Channel n-MOSFETs. IEEE Electron Device Letters, 2009, 30, 110-112.	3.9	21
95	Superlatticelike dielectric as a thermal insulator for phase-change random access memory. Applied Physics Letters, 2010, 97, .	3.3	21
96	Au-Free AlGaIn/GaN MIS-HEMTs With Embedded Current Sensing Structure for Power Switching Applications. IEEE Transactions on Electron Devices, 2017, 64, 3515-3518.	3.0	21
97	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, , .		20
98	Spacer Removal Technique for Boosting Strain in n-Channel FinFETs With Silicon-Carbon Source and Drain Stressors. IEEE Electron Device Letters, 2008, 29, 80-82.	3.9	20
99	SPICE Behavioral Model of the Tunneling Field-Effect Transistor for Circuit Simulation. IEEE Transactions on Circuits and Systems II: Express Briefs, 2009, 56, 946-950.	3.0	20
100	Formation of epitaxial metastable NiGe ₂ thin film on Ge(100) by pulsed excimer laser anneal. Applied Physics Letters, 2010, 97, .	3.3	20
101	High-Performance Germanium Ω -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
102	N-Channel (110)-Sidewall Strained FinFETs With Silicon-Carbon Source and Drain Stressors and Tensile Capping Layer. IEEE Electron Device Letters, 2007, 28, 1014-1017.	3.9	19
103	Multiple-Gate In _{0.53} Ga _{0.47} As Channel n-MOSFETs with Self-Aligned Ni-InGaAs Contacts. ECS Journal of Solid State Science and Technology, 2012, 1, P82-P85.	1.8	19
104	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
105	A Double-Spacer I-MOS Transistor With Shallow Source Junction and Lightly Doped Drain for Reduced Operating Voltage and Enhanced Device Performance. IEEE Electron Device Letters, 2008, 29, 189-191.	3.9	18
106	Effective Modulation of Quadratic Voltage Coefficient of Capacitance in MIM Capacitors Using $\text{Sm}_2\text{O}_3/\text{SiO}_2$ Dielectric Stack. IEEE Electron Device Letters, 2009, 30, 460-462.	3.9	18
107	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
108	Self-assembly of tin wires via phase transformation of heteroepitaxial germanium-tin on germanium substrate. Journal of Applied Physics, 2015, 117, .	2.5	18

#	ARTICLE	IF	CITATIONS
109	The first GeSn FinFET on a novel GeSnOI substrate achieving lowest S of 79 mV/decade and record high Gm, int of 807 $\hat{1}/4S/\hat{1}/4m$ for GeSn P-FETs. , 2017, , .		18
110	A High-Stress Liner Comprising Diamond-Like Carbon (DLC) for Strained p-Channel MOSFET. IEEE Electron Device Letters, 2008, 29, 192-194.	3.9	17
111	P-Channel Tri-Gate FinFETs Featuring $\$hbox{\$Ni}_{1-y}\$hbox{\$Pt}_{y}\$ hbox{\$SiGe}\$ Source/Drain Contacts for Enhanced Drive Current Performance. IEEE Electron Device Letters, 2008, 29, 438-441.$	3.9	17
112	Contact-Resistance Reduction for Strained n-FinFETs With Siliconâ€Carbon Source/Drain and Platinum-Based Silicide Contacts Featuring Tellurium Implantation and Segregation. IEEE Transactions on Electron Devices, 2011, 58, 3852-3862.	3.0	17
113	Photoelectron spectroscopy study of band alignment at interface between Ni-InGaAs and In _{0.53} Ga _{0.47} As. Applied Physics Letters, 2011, 99, .	3.3	17
114	Self-Aligned Gate-First In _[sub 0.7] Ga _[sub 0.3] As n-MOSFETs with an InP Capping Layer for Performance Enhancement. Electrochemical and Solid-State Letters, 2011, 14, H117.	2.2	17
115	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
116	Germanium n-Channel Planar FET and FinFET: Gate-Stack and Contact Optimization. IEEE Transactions on Electron Devices, 2015, 62, 3567-3574.	3.0	17
117	Carrier Transport Characteristics of Sub-30 nm Strained N-Channel FinFETs Featuring Silicon-Carbon Source/Drain Regions and Methods for Further Performance Enhancement. , 2006, , .		16
118	Full Silicidation of Silicon Gate Electrodes Using Nickel-Terbium Alloy for MOSFET Applications. Journal of the Electrochemical Society, 2006, 153, G337.	2.9	16
119	Pulsed Laser Annealing of Silicon-Carbon Source/Drain in MuGFETs for Enhanced Dopant Activation and High Substitutional Carbon Concentration. IEEE Electron Device Letters, 2008, 29, 464-467.	3.9	16
120	Digital Etch Technique for Forming Ultra-Scaled Germanium-Tin (Ge $1\hat{a}^x$ Sn x) Fin Structure. Scientific Reports, 2017, 7, 1835.	3.3	16
121	Source Engineering for Tunnel Field-Effect Transistor: Elevated Source with Vertical Siliconâ€Germanium/Germanium Heterostructure. Japanese Journal of Applied Physics, 2011, 50, 04DJ07.	1.5	15
122	Simulation of tunneling field-effect transistors with extended source structures. Journal of Applied Physics, 2012, 111, 114514.	2.5	15
123	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
124	Design of power integrated circuits in full AlGaIn/GaN MISâ€HEMT configuration for power conversion. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600562.	1.8	15
125	Siliconâ€Carbon Stressors With High Substitutional Carbon Concentration and In Situ Doping Formed in Source/Drain Extensions of n-Channel Transistors. IEEE Electron Device Letters, 2008, 29, 460-463.	3.9	14
126	Novel Nickel Silicide Contact Technology Using Selenium Segregation for SOI N-FETs With Siliconâ€Carbon Source/Drain Stressors. IEEE Electron Device Letters, 2008, 29, 841-844.	3.9	14

#	ARTICLE	IF	CITATIONS
127	Achieving Conduction Band-Edge Schottky Barrier Height for Arsenic-Segregated Nickel Aluminide Disilicide and Implementation in FinFETs With Ultra-Narrow Fin Widths. IEEE Electron Device Letters, 2008, 29, 382-385.	3.9	14
128	Fermi-level depinning at the metal-germanium interface by the formation of epitaxial nickel digermanide NiGe ₂ using pulsed laser anneal. Applied Physics Letters, 2012, 101, .	3.3	14
129	Post-growth annealing of germanium-tin alloys using pulsed excimer laser. Journal of Applied Physics, 2015, 118, .	2.5	14
130	Heteroepitaxial growth of In _{0.30} Ga _{0.70} As high-electron mobility transistor on 200 mm silicon substrate using metamorphic graded buffer. AIP Advances, 2016, 6, 085106.	1.3	14
131	Substrate Specific Contact Resistivity (Down to $1.0784314 \times 10^{-9} \Omega \text{cm}^2$) of Overlapped Contact Technology for Strained nFinFETs With Silicon-Carbon Source/Drain Stressors Featuring Sulfur Implant and Segregation. IEEE Transactions on Electron Devices, 2018, 65, 5275-5281.	3.0	14
132	Novel Nickel-Alloy Silicides for Source/Drain Contact Resistance Reduction in N-Channel Multiple-Gate Transistors with Sub-35nm Gate Length. , 2006, , .		13
133	Strained Thin-Body p-MOSFET With Condensed Silicon-Germanium Source/Drain for Enhanced Drive Current Performance. IEEE Electron Device Letters, 2007, 28, 509-512.	3.9	13
134	Work Function Tunability of Refractory Metal Nitrides by Lanthanum or Aluminum Doping for Advanced CMOS Devices. IEEE Transactions on Electron Devices, 2007, 54, 2871-2877.	3.0	13
135	Fabrication of p-MOSFETs on Germanium Epitaxially Grown on Gallium Arsenide Substrate by Chemical Vapor Deposition. Journal of the Electrochemical Society, 2008, 155, H76.	2.9	13
136	Modeling the Negative Quadratic VCC of SiO_2 in MIM Capacitor. IEEE Electron Device Letters, 2011, 32, 1671-1673.	3.9	13
137	Contact Technology for Strained nFinFETs With Silicon-Carbon Source/Drain Stressors Featuring Sulfur Implant and Segregation. IEEE Transactions on Electron Devices, 2012, 59, 1046-1055.	3.0	13
138	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
139	Development of GaN Power IC Platform and All GaN DC-DC Buck Converter IC. , 2019, , .		13
140	ColnGaAs as a novel self-aligned metallic source/drain material for implant-less In _{0.53} Ga _{0.47} As n-MOSFETs. Solid-State Electronics, 2012, 78, 62-67.	1.4	12
141	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
142	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
143	Band alignment of HfO ₂ /Al _{0.25} Ga _{0.75} N determined by x-ray photoelectron spectroscopy: Effect of SiH ₄ surface treatment. Applied Physics Letters, 2014, 104, 091605.	3.3	12
144	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

#	ARTICLE	IF	CITATIONS
145	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
146	Thin body silicon-on-insulator N-MOSFET with silicon-carbon source/drain regions for performance enhancement. , 0, , .		11
147	Thermally robust TaTb _x N metal gate electrode for n-MOSFETs applications. IEEE Electron Device Letters, 2005, 26, 75-77.	3.9	11
148	Route to Low Parasitic Resistance in MuGFETs with Silicon-Carbon Source/Drain: Integration of Novel Low Barrier Ni(M)Si:C Metal Silicides and Pulsed Laser Annealing. , 2007, , .		11
149	Strained Silicon- ⁶⁶ Germanium-On-Insulator n-MOSFET With Embedded Silicon Source-and-Drain Stressors. IEEE Electron Device Letters, 2008, 29, 77-79.	3.9	11
150	Study of surface passivation of strained indium gallium arsenide by vacuum annealing and silane treatment. Journal of Applied Physics, 2008, 104, 093527.	2.5	11
151	Cointegration of <i>In Situ</i> Doped Silicon- ⁶⁶ Carbon Source and Silicon- ⁶⁶ Carbon I-Region in P-Channel Silicon Nanowire Impact-Ionization Transistor. IEEE Electron Device Letters, 2008, 29, 731-733.	3.9	11
152	Performance Improvement of $\text{Sm}_{2}\text{O}_{3}$ MIM Capacitors by Using Plasma Treatment After Dielectric Formation. IEEE Electron Device Letters, 2009, 30, 1033-1035.	3.9	11
153	Self-aligned contact metallization technology for III-V metal-oxide-semiconductor field effect transistors. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2011, 29, .	1.2	11
154	Electrostatics of Ultimately Thin-Body Tunneling FET Using Graphene Nanoribbon. IEEE Electron Device Letters, 2011, 32, 431-433.	3.9	11
155	Device Physics and Design of a L-Shaped Germanium Source Tunneling Transistor. Japanese Journal of Applied Physics, 2012, 51, 02BC04.	1.5	11
156	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
157	High performance Ge CMOS with novel InAlP-passivated channels for future sub-10 nm technology node applications. , 2013, , .		11
158	Realistic Trap Configuration Scheme With Fabrication Processes in Consideration for the Simulations of AlGaIn/GaN MIS-HEMT Devices. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 720-729.	5.4	11
159	Effects of high- $\hat{\rho}$ dielectrics on the workfunctions of metal and silicon gates. , 0, , .		10
160	NMOS Compatible Work Function of TaN Metal Gate With Erbium-Oxide-Doped Hafnium Oxide Gate Dielectric. IEEE Electron Device Letters, 2007, 28, 862-864.	3.9	10
161	A New Liner Stressor with Very High Intrinsic Stress (≈ 226 GPa) and Low Permittivity Comprising Diamond-Like Carbon (DLC) for Strained P-Channel Transistors. , 2007, , .		10
162	Modification of Molybdenum Gate Electrode Work Function via (La-, Al-Induced) Dipole Effect at High- SiO_{2} Interface. IEEE Electron Device Letters, 2008, 29, 848-851.	3.9	10

#	ARTICLE	IF	CITATIONS
163	Diamond-Like Carbon (DLC) Liner: A New Stressor for P-Channel Multiple-Gate Field-Effect Transistors. IEEE Electron Device Letters, 2008, 29, 750-752.	3.9	10
164	Germanium Source and Drain Stressors for Ultrathin-Body and Nanowire Field-Effect Transistors. IEEE Electron Device Letters, 2008, 29, 808-810.	3.9	10
165	Fluorine Incorporation in HfAlO Gate Dielectric for Defect Passivation and Effect on Electrical Characteristics of In _{0.53} Ga _{0.47} As n-MOSFETs. Electrochemical and Solid-State Letters, 2010, 13, H440.	2.2	10
166	Fermi-level pinning and charge neutrality level in nitrogen-doped Ge ₂ Sb ₂ Te ₅ : Characterization and application in phase change memory devices. Journal of Applied Physics, 2010, 108, .	2.5	10
167	Enhancement of TFET performance using dopant profile-steepening implant and source dopant concentration engineering at tunneling junction. , 2010, , .		10
168	Local stress induced by diamond-like carbon liner in AlGaIn/GaN metal-oxide-semiconductor high-electron mobility transistors and impact on electrical characteristics. Applied Physics Letters, 2011, 98, .	3.3	10
169	Schottky barrier height tuning of silicides on p-type Si (100) by aluminum implantation and pulsed excimer laser anneal. Journal of Applied Physics, 2011, 110, .	2.5	10
170	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
171	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
172	Source Engineering for Tunnel Field-Effect Transistor: Elevated Source with Vertical Silicon- ¹³ C Germanium/Germanium Heterostructure. Japanese Journal of Applied Physics, 2011, 50, 04DJ07.	1.5	10
173	Device Physics and Design of a L-Shaped Germanium Source Tunneling Transistor. Japanese Journal of Applied Physics, 2012, 51, 02BC04.	1.5	10
174	Beneath-The-Channel Strain-Transfer-Structure (STS) and Embedded Source/Drain Stressors for Strain and Performance Enhancement of Nanoscale MOSFETs. , 2007, , .		9
175	Novel and cost-efficient single metallic silicide integration solution with dual Schottky-barrier achieved by aluminum inter-diffusion for FinFET CMOS technology with enhanced performance. , 2008, , .		9
176	N-Channel MOSFETs With Embedded Silicon- ¹³ C Carbon Source/Drain Stressors Formed Using Cluster-Carbon Implant and Excimer-Laser-Induced Solid Phase Epitaxy. IEEE Electron Device Letters, 2008, 29, 1315-1318.	3.9	9
177	The Role of Carbon and Dysprosium in Ni[Dy]Si:C Contacts for Schottky-Barrier Height Reduction and Application in N-Channel MOSFETs With Si:C Source/Drain Stressors. IEEE Transactions on Electron Devices, 2009, 56, 2770-2777.	3.0	9
178	Investigation of Pd- ¹³ C InGaAs for the formation of self-aligned source/drain contacts in InGaAs metal- ¹³ C oxide- ¹³ C semiconductor field-effect transistors. Solid-State Electronics, 2013, 85, 36-42.	1.4	9
179	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
180	Intrinsic reliability projections for a thin JVD silicon nitride gate dielectric in P-MOSFET. IEEE Transactions on Device and Materials Reliability, 2001, 1, 4-8.	2.0	8

#	ARTICLE	IF	CITATIONS
181	Strained Channel Transistor Using Strain Field Induced By Source and Drain Stressors. Materials Research Society Symposia Proceedings, 2004, 809, B10.4.1.	0.1	8
182	Carrier Backscattering Characteristics of Strained N-MOSFET Featuring Silicon-Carbon Source/Drain Regions. Solid-State Device Research Conference, 2008 ESSDERC 2008 38th European, 2006, , .	0.0	8
183	Impact of interfacial dipole on effective work function of nickel fully silicided gate electrodes formed on rare-earth-based dielectric interlayers. Applied Physics Letters, 2007, 91, 172115.	3.3	8
184	5 nm gate length Nanowire-FETs and planar UTB-FETs with pure germanium source/drain stressors and laser-free Melt-Enhanced Dopant (MeltED) diffusion and activation technique. , 2008, , .		8
185	Fermi-level pinning at the interface between metals and nitrogen-doped Ge ₂ Sb ₂ Te ₅ examined by x-ray photoelectron spectroscopy. Applied Physics Letters, 2009, 95, .	3.3	8
186	Carrier transport in strained N-channel field effect transistors with channel proximate silicon-carbon source/drain stressors. Applied Physics Letters, 2010, 97, .	3.3	8
187	Nickel-Silicide Contact Technology With Dual Near-Band-Edge Barrier Heights and Integration in CMOS FinFETs With Single Mask. IEEE Electron Device Letters, 2010, 31, 918-920.	3.9	8
188	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
189	Band alignment study of lattice-matched InAlP and Ge using x-ray photoelectron spectroscopy. Applied Physics Letters, 2013, 103, .	3.3	8
190	Near-bandgap optical properties of pseudomorphic GeSn alloys grown by molecular beam epitaxy. Journal of Applied Physics, 2016, 120, .	2.5	8
191	Single Crystalline Germanium-Lead Formed by Laser-Induced Epitaxy. ECS Journal of Solid State Science and Technology, 2016, 5, P353-P360.	1.8	8
192	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
193	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
194	Reduction of direct-tunneling gate leakage current in double-gate and ultra-thin body MOSFETs. , 0, , .		7
195	In Situ Silane Passivation of Gallium Arsenide and Deposition of High-Permittivity Gate Dielectric for MOS Applications. Journal of the Electrochemical Society, 2007, 154, H879.	2.9	7
196	Carrier backscattering characteristics of strained silicon-on-insulator n-MOSFETs featuring silicon-carbon source/drain regions. Solid-State Electronics, 2007, 51, 1444-1449.	1.4	7
197	Novel Rare-Earth Dielectric Interlayers for Wide NMOS Work-Function Tunability in Ni-FUSI Gates. IEEE Transactions on Electron Devices, 2008, 55, 2370-2377.	3.0	7
198	Bias temperature instability (BTI) characteristics of graphene Field-Effect Transistors. , 2011, , .		7

#	ARTICLE	IF	CITATIONS
199	Lattice strain analysis of silicon fin field-effect transistor structures wrapped by Ge ₂ Sb ₂ Te ₅ liner stressor. Journal of Applied Physics, 2013, 113, .	2.5	7
200	In _{0.53} Ga _{0.47} As FinFETs with self-aligned molybdenum contacts and HfO ₂ /Al ₂ O ₃ gate dielectric. Solid-State Electronics, 2013, 84, 83-89.	1.4	7
201	Germanium-tin interdiffusion in strained Ge/GeSn multiple-quantum-well structure. Journal Physics D: Applied Physics, 2016, 49, 225102.	2.8	7
202	Thermal stability of germanium-tin (GeSn) fins. Applied Physics Letters, 2017, 111, 252103.	3.3	7
203	Design and Experimental Demonstration of Integrated Over-Current Protection Circuit for GaN DC-DC Converters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 4270-4278.	5.4	7
204	A novel CMOS compatible L-shaped impact-ionization MOS (LI-MOS) transistor. , 0, , .		6
205	Yttrium- and Terbium-Based Interlayer on SiO_2 and HfO_2 Gate Dielectrics for Work Function Modulation of Nickel Fully Silicided Gate in nMOSFET. IEEE Electron Device Letters, 2007, 28, 482-485.	3.9	6
206	Impact Ionization Nanowire Transistor with Multiple-Gates, Silicon-Germanium Impact Ionization Region, and Sub-5 mV/decade Subthreshold Swing. , 2007, , .		6
207	Metal-Gate Work Function Modulation Using Hafnium Alloys Obtained by the Interdiffusion of Thin Metallic Layers. Journal of the Electrochemical Society, 2007, 154, H309.	2.9	6
208	Work Function Engineering Within a Single Metal Gate Stack: Manipulating Terbium- and Aluminum-Induced Interface Dipoles of Opposing Polarity. IEEE Transactions on Electron Devices, 2009, 56, 466-473.	3.0	6
209	Contact Resistance Reduction Technology Using Selenium Segregation for N-MOSFETs With Silicon-Carbon Source/Drain. IEEE Transactions on Electron Devices, 2009, 56, 1128-1134.	3.0	6
210	Schottky Barrier Height Modulation of Nickel-Dysprosium-Alloy Germanosilicide Contacts for Strained P-FinFETs. IEEE Electron Device Letters, 2009, 30, 1278-1280.	3.9	6
211	Strained Silicon Nanowire p-Channel FETs With Diamond-Like Carbon Liner Stressor. IEEE Electron Device Letters, 2010, 31, 1371-1373.	3.9	6
212	III-V MOSFETs with a new self-aligned contact. , 2010, , .		6
213	Advanced source/drain technologies for parasitic resistance reduction. , 2010, , .		6
214	Source/Drain Engineering for In _{0.7} Ga _{0.3} As N-Channel Metal-Oxide-Semiconductor Field-Effect Transistors: Raised Source/Drain with In situ Doping for Series Resistance Reduction. Japanese Journal of Applied Physics, 2011, 50, 04DF01.	1.5	6
215	Near ballistic sub-7 nm Junctionless FET featuring 1 nm extremely-thin channel and raised S/D structure. , 2013, , .		6
216	Strain relaxation of germanium-tin (GeSn) fins. AIP Advances, 2018, 8, 025111.	1.3	6

#	ARTICLE	IF	CITATIONS
217	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
218	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
219	Strained Silicon-Germanium-on-Insulator N-MOSFETs Featuring Lattice Mismatched Source/Drain Stressor and High-Stress Silicon Nitride Liner. , 2006, , .		5
220	Enhancing CMOS Transistor Performance Using Lattice-Mismatched Materials in Source/Drain Regions. , 2006, , .		5
221	Silicon-Germanium-Tin (SiGeSn) Source and Drain Stressors formed by Sn Implant and Laser Annealing for Strained Silicon-Germanium Channel P-MOSFETs. , 2007, , .		5
222	Effect of substitutional carbon concentration on Schottky-barrier height of nickel silicide formed on epitaxial silicon-carbon films. Journal of Applied Physics, 2009, 106, .	2.5	5
223	Dependence of energy band offsets at Ge ₂ Sb ₂ Te ₅ /SiO ₂ interface on nitrogen concentration. Applied Physics Letters, 2009, 94, .	3.3	5
224	Silicon-Carbon Formed Using Cluster-Carbon Implant and Laser-Induced Epitaxy for Application as Source/Drain Stressors in Strained n-Channel MOSFETs. Journal of the Electrochemical Society, 2009, 156, H361.	2.9	5
225	Impact of a Germanium and Carbon Preamorphization Implant on the Electrical Characteristics of NiSi/Si Contacts With a Presilicide Sulfur Implant. IEEE Electron Device Letters, 2011, 32, 1734-1736.	3.9	5
226	A new liner stressor (GeTe) featuring stress enhancement due to very large phase-change induced volume contraction for p-channel FinFETs. , 2012, , .		5
227	PBTI characteristics of N-channel tunneling field effect transistor with HfO ₂ gate dielectric: New insights and physical model. , 2012, , .		5
228	Study of interfaces between phase-change material Ge ₂ Sb ₂ Te ₅ and prevalent complementary metal-oxide semiconductor materials by XPS. Surface and Interface Analysis, 2012, 44, 1013-1017.	1.8	5
229	Hot-carrier reliability comparison for pMOSFETs with ultrathin silicon-nitride and silicon-oxide gate dielectrics. IEEE Transactions on Device and Materials Reliability, 2001, 1, 158-162.	2.0	4
230	SDODEL MOSFET for performance enhancement. IEEE Electron Device Letters, 2005, 26, 205-207.	3.9	4
231	Source/drain germanium condensation for p-channel strained ultra-thin body transistors. , 0, , .		4
232	Chemical reversability of the electrical dedoping of conducting polymers: An organic chemically erasable programmable read-only memory. Applied Physics Letters, 2008, 93, 033314.	3.3	4
233	Platinum Germanosilicide as Source/Drain Contacts in P-Channel Fin Field-Effect Transistors (FinFETs). IEEE Transactions on Electron Devices, 2009, 56, 1458-1465.	3.0	4
234	Novel technique to engineer aluminum profile at nickel-silicide/Silicon:Carbon interface for contact resistance reduction, and integration in strained N-MOSFETs with silicon-carbon stressors. , 2011, , .		4

#	ARTICLE	IF	CITATIONS
235	Novel technique comprising silane treatment and laser anneal for abrupt ultra-shallow junction formation for InGaAs n-MOSFETs. , 2013, , .		4
236	Asymmetrically strained high performance Germanium gate-all-around nanowire p-FETs featuring 3.5 nm wire width and contractible phase change liner stressor (Ge ₂ Sb ₂ Te ₅). , 2013, , .		4
237	Infrared spectroscopic ellipsometry study of sulfur-doped In _{0.53} Ga _{0.47} As ultra-shallow junctions. Applied Physics Letters, 2014, 104, .	3.3	4
238	P ₂ S ₅ /(NH ₄) ₂ S _x -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
239	Etching of germanium-tin using ammonia peroxide mixture. Journal of Applied Physics, 2015, 118, .	2.5	4
240	Mid-infrared to ultraviolet optical properties of InSb grown on GaAs by molecular beam epitaxy. Journal of Applied Physics, 2015, 117, .	2.5	4
241	Growth and characterization of highly tensile strained Ge _{1-x} Sn _x formed on relaxed In _y Ga _{1-y} P buffer layers. Journal of Applied Physics, 2016, 119, .	2.5	4
242	A Ladder Transmission Line Model for the Extraction of Ultralow Specific Contact Resistivity Part II: Experimental Verification. IEEE Transactions on Electron Devices, 2020, 67, 2690-2696.	3.0	4
243	Process-Induced Strained P-MOSFET Featuring Nickel-Platinum Silicided Source/Drain. Materials Research Society Symposia Proceedings, 2006, 913, 1.	0.1	3
244	Hot-Carrier Effects in Strained n-Channel Transistor With Silicon Carbon $(\text{Si}_{1-x}\text{C}_x)$ ETQq0 0 0 rgBT /Overlock 10 Tf 50 387 T 2007, 28, 996-999.	3.9	3
245	Hot Carrier Reliability of Strained N-Mosfet with Lattice Mismatched Source/Drain Stressors. , 2007, , .		3
246	Effectiveness of Aluminum Incorporation in Nickel Silicide and Nickel Germanide Metal Gates for Work Function Reduction. Japanese Journal of Applied Physics, 2008, 47, 2383-2387.	1.5	3
247	Source and Drain Series Resistance Reduction for N-Channel Transistors Using Solid Antimony (Sb) Segregation (SSbS) During Silicidation. IEEE Electron Device Letters, 2008, 29, 756-758.	3.9	3
248	Strain optimization in ultrathin body transistors with silicon-germanium source and drain stressors. Journal of Applied Physics, 2008, 104, 084505.	2.5	3
249	Selenium Segregation for Lowering the Contact Resistance in Ultrathin-Body MOSFETs With Fully Metallized Source/Drain. IEEE Electron Device Letters, 2009, 30, 1087-1089.	3.9	3
250	Performance Benefits of Diamond-like Carbon Liner Stressor in Strained P-Channel Field-Effect Transistors With Silicon Germanium Source and Drain. IEEE Electron Device Letters, 2009, 30, 250-253.	3.9	3
251	Diamond-like carbon (DLC) liner with highly compressive stress formed on AlGaIn/GaN MOS-HEMTs with in situ silane surface passivation for performance enhancement. , 2010, , .		3
252	Strained n-Channel Field-Effect Transistors with Channel Proximate Silicon Carbon Source/Drain Stressors for Performance Enhancement. Journal of the Electrochemical Society, 2010, 157, H1088.	2.9	3

#	ARTICLE	IF	CITATIONS
253	Band offsets between SiO ₂ and phase change materials in the (GeTe) _x (Sb ₂ Te ₃) _{1-x} pseudobinary system. Applied Physics Letters, 2011, 98, .	3.3	3
254	Technology options for reducing contact resistances in nanoscale metal-oxide-semiconductor field-effect transistors. , 2013, , .		3
255	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
256	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
257	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
258	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
259	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
260	Avalanche photodiode featuring Germanium-tin multiple quantum wells on silicon: Extending photodetection to wavelengths of 2 and beyond. , 2015, , .		3
261	Germanium-Tin heterojunction phototransistor: Towards high-efficiency low-power photodetection in short-wave infrared range. , 2016, , .		3
262	Record low specific contact resistivity ($1.2 \times 10^{-9} \text{ } \Omega \cdot \text{cm}^2$) for P-type semiconductors: Incorporation of Sn into Ge and in-Situ Ga doping. , 2017, , .		3
263	Source/Drain Engineering for In _{0.7} Ga _{0.3} As N-Channel Metalâ€“Oxideâ€“Semiconductor Field-Effect Transistors: Raised Source/Drain with <i>In situ</i> Doping for Series Resistance Reduction. Japanese Journal of Applied Physics, 2011, 50, 04DF01.	1.5	3
264	Strain-Transfer Structure Beneath the Transistor Channel for Increasing the Strain Effects of Lattice-Mismatched Source and Drain Stressors. Materials Research Society Symposia Proceedings, 2007, 995, 1.	0.1	2
265	A complementary-I-MOS technology featuring SiGe channel and i-region for enhancement of impact-ionization, breakdown voltage, and performance. , 2007, , .		2
266	Manipulating interface dipoles of opposing polarity for work function engineering within a single metal gate stack. , 2008, , .		2
267	Selenium Co-implantation and segregation as a new contact technology for nanoscale SOI N-FETs featuring NiSi:C formed on silicon-carbon (Si:C) source/drain stressors. , 2008, , .		2
268	Sulfur implant for reducing nickel silicide contact resistance in FinFETs with silicon-carbon source/drain. , 2009, , .		2
269	NBTI Reliability of P-Channel Transistors With Diamond-Like Carbon Liner Having Ultrahigh Compressive Stress. IEEE Electron Device Letters, 2009, 30, 867-869.	3.9	2
270	Performance boost for In _{0.53} Ga _{0.47} As channel N-MOSFET using silicon nitride liner stressor with high tensile stress. , 2009, , .		2

#	ARTICLE	IF	CITATIONS
271	Nanoheteroepitaxy of gallium arsenide on strain-compliant silicon-germanium nanowires. Journal of Applied Physics, 2010, 108, 024312.	2.5	2
272	Schottky barrier tuning at NiSi/Si interface using pre-silicide aluminum and sulfur co-implant. , 2010, , .		2
273	A new self-aligned contact technology for III-V MOSFETs. , 2010, , .		2
274	A new Ge ₂ Sb ₂ Te ₅ (GST) liner stressor featuring stress enhancement due to amorphous-crystalline phase change for sub-20 nm p-channel FinFETs. , 2011, , .		2
275	Silicon-Carbon Source and Drain Stressors: Carbon Profile Design by Ion Implantation. Journal of the Electrochemical Society, 2012, 159, H425-H432.	2.9	2
276	In _{0.53} Ga _{0.47} As N-Channel Metal-Oxide-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
277	Ge/Ni-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
278	High performance α -gate Ge FinFET featuring low temperature Si ₂ H ₆ passivation and implantless Schottky-barrier NiGe metallic Source/Drain. , 2012, , .		2
279	Metal stanogermanide contacts with enhanced thermal stability for high mobility germanium-tin field-effect transistor. , 2012, , .		2
280	Phase Change Liner Stressor for Strain Engineering of P-Channel FinFETs. IEEE Transactions on Electron Devices, 2013, 60, 2703-2711.	3.0	2
281	Ultimate performance projection of ballistic III-V ultra-thin-body MOSFET. , 2013, , .		2
282	(110)-oriented germanium-tin (Ge _{0.97} Sn _{0.03}) P-channel MOSFETs. , 2013, , .		2
283	Formation of vertically stacked germanium-tin (Ge _{1-x} Sn _x) nanowires using a selective dry etch technique. , 2014, , .		2
284	Kinetics of plasma oxidation of germanium-tin (GeSn). Applied Surface Science, 2017, 425, 95-99.	6.1	2
285	Enabling low power and high speed OEICs: First monolithic integration of InGaAs n-FETs and lasers on Si substrate. , 2017, , .		2
286	Metal/P-type GeSn Contacts with Specific Contact Resistivity down to $4.4 \times 10^{-10} \Omega\text{-cm}^2$. , 2018, , .		2
287	Ge/Ni-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
288	Chemical Vapor Deposition of Germanium Nanocrystals on Hafnium Oxide for Non-Volatile Memory Applications. Materials Research Society Symposia Proceedings, 2004, 830, 299.	0.1	1

#	ARTICLE	IF	CITATIONS
289	Strain engineering for hole mobility enhancement in p-channel field-effect transistors. , 0, , .		1
290	Strain enhancement in spacerless N-channel FinFETs with silicon-carbon source and drain stressors. , 2007, , .		1
291	Enhanced Carrier Transport in Strained Bulk N-MOSFETs with Silicon-Carbon Source/Drain Stressors. , 2007, , .		1
292	A new source/drain germanium-enrichment process comprising Ge deposition and laser-induced local melting and recrystallization for P-FET performance enhancement. , 2008, , .		1
293	Realization of Silicon-Germanium-Tin (SiGeSn) Source/Drain Stressors by Sn implant and Solid Phase Epitaxy for strain engineering in SiGe channel P-MOSFETs. , 2008, , .		1
294	Schottky barrier height modulation with Aluminum segregation and pulsed laser anneal: A route for contact resistance reduction. , 2010, , .		1
295	In<inf>0.7</inf>Ga<inf>0.3</inf>As channel n-MOSFETs with a novel self-aligned Ni-InGaAs contact formed using a salicide-like metallization process. , 2011, , .		1
296	Novel bipolar TaO<inf>x</inf>-based Resistive Random Access Memory. , 2011, , .		1
297	Pd-InGaAs as a new self-aligned contact material on InGaAs. , 2011, , .		1
298	New Tellurium implant and segregation for contact resistance reduction and single metallic silicide technology for independent contact resistance optimization in n- and p-FinFETs. , 2011, , .		1
299	Modeling of a new liner stressor comprising Ge<inf>2</inf>Sb<inf>2</inf>Te<inf>5</inf> (GST): Amorphous-crystalline phase change and stress induced in FinFET channel. , 2011, , .		1
300	(NH4)2S Passivation for High Mobility Germanium-Tin (GeSn) p-MOSFETs. , 2012, , .		1
301	A gate-last In<inf>0.53</inf>Ga<inf>0.47</inf>As channel FinFET with Molybdenum source/drain contacts. , 2012, , .		1
302	Performance comparison of III-V MOSFETs with source filter for electron energy. , 2012, , .		1
303	Chlorine- and Fluorine-based dry etching of Germanium-Tin. , 2014, , .		1
304	An Expandable $\text{ZnSn}_x\text{SiO}_2$ Liner Stressor for N-Channel FinFETs. IEEE Transactions on Electron Devices, 2014, 61, 1963-1971.	3.0	1
305	Migration enhanced epitaxy of InGaP on offcut Ge (001) using solid-source molecular beam epitaxy. , 2014, , .		1
306	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

#	ARTICLE	IF	CITATIONS
307	Parametrized dielectric functions of amorphous GeSn alloys. Journal of Applied Physics, 2015, 118, 123102.	2.5	1
308	High Speed ($\alpha_{3-d}B$) 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
309	Design of Full GaN Power Integrated DC-DC Converter with Over-current Protection. , 2018, , .		1
310	Enhanced Photo Response at Two-micron-wavelength Using GeSn/Ge Multiple-Quantum-Well Waveguide. , 2019, , .		1
311	Hot-carrier reliability of p-MOSFET with ultra-thin silicon nitride gate dielectric. , 0, , .		0
312	Ultra-Thin-Body P-MOSFET Featuring Silicon-Germanium Source/Drain Stressors With High Germanium Content Formed by Local Condensation. Solid-State Device Research Conference, 2008 ESSDERC 2008 38th European, 2006, , .	0.0	0
313	Enhancing CMOS Transistor Performance Using Lattice-Mismatched Materials in Source/Drain Regions. , 0, , .		0
314	Uniaxial strained silicon n-FETs on silicon-germanium-on-insulator substrates with an e-Si$_{0.7}$Ge$_{0.3}$ stress transfer layer and source/drain stressors for performance enhancement. , 2007, , .		0
315	Band edge NMOS work function for nickel fully-silicided (FUSI) gate obtained by the insertion of novel Y-, Tb-, and Yb-based interlayers. , 2007, , .		0
316	Enhanced performance in strained n-FET with double-recessed Si:C source/drain and lattice-mismatched SiGe strain-transfer structure (STS). , 2007, , .		0
317	Silicon nano-wire impact ionization transistors with multiple-gates for enhanced gate control and performance. , 2007, , .		0
318	Source/drain-extension-last process for incorporating in situ doped lattice-mismatched extension stressor for enhanced performance in SOI N-FET. , 2007, , .		0
319	Sub 50nm Strained n-FETs Formed on Silicon-Germanium-on-Insulator Substrates and the Integration of Silicon Source/Drain Stressors. Materials Research Society Symposia Proceedings, 2007, 995, 1.	0.1	0
320	Material and Electrical Characterization of Nickel Silicide-Carbon as Contact Metal to Silicon-Carbon Source and Drain Stressors. Materials Research Society Symposia Proceedings, 2007, 995, 1.	0.1	0
321	Sub-30 nm FinFETs with Schottky-Barrier Source/Drain Featuring Complementary Metal Silicides and Fully-Silicided Gate for P-FinFETs. Materials Research Society Symposia Proceedings, 2007, 995, 1.	0.1	0
322	Interface dipole mechanism and NMOS Ni-FUSI gate work function engineering using rare-earth metal (RE)-based dielectric interlayers. , 2007, , .		0
323	Strained FinFETs with In-situ Doped Si$_{1-y}$C$_y$ Source and Drain Stressors: Performance Boost with Lateral Stressor Encroachment and High Substitutional Carbon Content. International Power Modulator Symposium and High-Voltage Workshop, 2008, , .	0.0	0
324	P-Channel I-MOS Transistor featuring Silicon Nano-Wire with Multiple-Gates, Strained Si$_{1-y}$C$_y$ I-region, in situ doped Si$_{1-y}$C$_y$ Source, and Sub-5 mV/decade Subthreshold Swing. International Power Modulator Symposium and High-Voltage Workshop, 2008, , .	0.0	0

#	ARTICLE	IF	CITATIONS
325	Towards ultimate CMOS performance with new stressor materials. , 2008, , .		0
326	A New Salicidation Process with Solid Antimony (Sb) Segregation (SSBS) for Achieving Sub-0.1 eV Effective Schottky Barrier Height and Parasitic Series Resistance Reduction in N-Channel Transistors. International Power Modulator Symposium and High-Voltage Workshop, 2008, , .	0.0	0
327	Performance enhancement schemes featuring lattice mismatched S/D stressors concurrently realized on CMOS platform: e-SiGeSn S/D for pFETs by Sn<sup>+</sup> implant and SiC S/D for nFETs by C<sup>+</sup> implant. , 2008, , .		0
328	Epitaxial Growth of Single Crystalline Ge Films on GaAs Substrates for CMOS Device Integration. Materials Research Society Symposia Proceedings, 2008, 1068, 1.	0.1	0
329	Photoemission Study of Energy Band Alignment of Ge ₂ Sb ₂ Te ₅ and Common CMOS Materials. Materials Research Society Symposia Proceedings, 2008, 1072, 1.	0.1	0
330	In-Situ Surface Passivation and Metal-Gate/High- ϵ Dielectric Stack Formation for N-channel Gallium Arsenide Metal-Oxide-Semiconductor Field-Effect Transistors. , 2008, , .		0
331	Negative bias temperature instability of p-channel transistors with diamond-like carbon liner having ultra-high compressive stress. Reliability Physics Symposium, 2009 IEEE International, 2009, , .	0.0	0
332	Junction technologies for devices with steep subthreshold swing. , 2009, , .		0
333	Inversion-type surface channel In_{0.53}Ga_{0.47}As metal-oxide-semiconductor field-effect transistors with metal-gate/high-k dielectric stack and CMOS-compatible PdGe contacts. , 2009, , .		0
334	Realizing steep subthreshold swing with Impact Ionization Transistors. , 2009, , .		0
335	p-FinFETs with Al segregated NiSi/p<sup>+</sup>-Si source/drain contact junction for series resistance reduction. , 2009, , .		0
336	Carrier transport characteristics of strained N-MOSFET featuring channel proximate silicon-carbon source/drain stressors for performance boost. , 2010, , .		0
337	Silicides as new electrode/heater for compact integration of phase change memory with CMOS. , 2010, , .		0
338	III–V MOSFETs: Surface passivation for gate stack, source/drain and channel strain engineering, self-aligned contact metallization. , 2010, , .		0
339	A computational study on the device performance of graphene nanoribbon heterojunction tunneling FETs based on bandgap engineering. , 2010, , .		0
340	Effect of strain on Negative Bias Temperature Instability of Germanium p-channel Field-Effect Transistor with high- ϵ ; gate dielectric. , 2010, , .		0
341	Co-InGaAs as a novel self-aligned metallic source/drain material for implant-less In_{0.53}Ga_{0.47}As n-MOSFETs. , 2011, , .		0
342	Silicidation using nickel and Dysprosium stack on Si(100): NiSi² formation and impact on Schottky Barrier Height. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
343	Novel multi-level PCRAM cell with Ta ₂ O ₅ barrier layer in between a graded Ge ₂ Sb ₂ Te ₅ stack. , 2011, , .		0
344	Strain Engineering of Ultra-Thin Silicon-on-Insulator Structures Using Ion Implant. , 2012, , .		0
345	Advanced channel and contact technologies for future CMOS devices. , 2012, , .		0
346	Novel selenium implant and segregation for reduction of effective Schottky barrier height in NiGe/n-Ge contacts. , 2012, , .		0
347	Embedded Metal Source/Drain (eMSD) for series resistance reduction in In _{0.53} Ga _{0.47} As n-channel Ultra-Thin Body Field-Effect Transistor (UTB-FET). , 2012, , .		0
348	BF ₂ ion implantation and dopant activation in strained Germanium-tin (Ge _{1-x} Sn _x) epitaxial layer. , 2012, , .		0
349	Self-aligned contact metallization for III-V channel Field-Effect Transistors. , 2012, , .		0
350	AlGa _N /Ga _N -on-Silicon MOS-HEMTs with breakdown voltage of 800 V and on-state resistance of 3 mΩ·cm using a CMOS-compatible gold-free process. , 2012, , .		0
351	Influences of gate drive on pulsed current collapse recovery in AlGa _N /Ga _N power HEMTs. , 2013, , .		0
352	Modelling of temperature dependence on current collapse phenomenon in AlGa _N /Ga _N HEMT devices. , 2013, , .		0
353	Physical model for gallium arsenide growth on germanium fins with different orientations formed on 10Å° offcut germanium-on-insulator substrate. Journal of Applied Physics, 2013, 113, 044301.	2.5	0
354	Novel short-channel In _{0.53} Ga _{0.47} As junctionless nanowire nFET with raised s/d structure: An ultimately scaled 1-D transistor architecture. , 2014, , .		0
355	Germanium-lead alloy with 0.3% substitutional lead formed by pulsed laser induced epitaxy. , 2014, , .		0
356	High mobility germanium-tin (Ge _{0.93} Sn _{0.07}) P-MOSFETs with surface passivation by silicon atomic layer epitaxy. , 2014, , .		0
357	Thermal stability of highly compressive strained germanium-tin (GeSn) grown by molecular beam epitaxy. , 2014, , .		0
358	Self-crystallization and reduced contact resistivity by hot phosphorus ion implant in germanium-tin alloy. , 2014, , .		0
359	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
360	Growth of indium arsenide on silicon-based substrates using molecular beam epitaxy. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
361	Germanium-Tin on Silicon avalanche photodiode for short-wave infrared imaging. , 2014, , .		0
362	Probing the carrier concentration profiles in phosphorus-implanted germanium using infrared spectroscopic ellipsometry. Journal of Applied Physics, 2015, 117, 073103.	2.5	0
363	Performance evaluation of nanoscale FETs based on full-band complex bandstructure and real space poisson solver. , 2016, , .		0
364	Si-on-insulator grating coupler operating at 2 μm : Device design, fabrication, and characterization. , 2017, , .		0
365	Ge _{0.9} Sn _{0.1} p-i-n Photodiode with Record-High Responsivity at Two-Micron-Wavelength. , 2018, , .		0
366	High Performance GeSn Photodiode on a 200 nm Ge-on-insulator Photonics Platform for Advanced Optoelectronic Integration with Ge CMOS Operating at 2 μm Band. , 2019, , .		0
367	Toward Monolithic Optoelectronic Integration of GeSn Photodiode and FinFET on GeSnOI Platform. , 2019, , .		0
368	Ge _{0.9} Sn _{0.1} multiple-quantum-well p-i-n photodiodes for optical communications at 2 μm . , 2017, , .		0
369	Pseudomorphic GeSn/Ge Multiple-quantum-well on Silicon for Photo Detection and Modulation at 2 μm Wavelength Range. , 2019, , .		0
370	Enhancing CMOS Transistor Performance Using Lattice-Mismatched Materials in Source/Drain Regions. , 0, , .		0