Genquan Han

List of Publications by Year
in descending order

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152	2,873	28	44
papers	citations	h-index	g-index

186209

243529

153	153	153	2378
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	HfO₂-ZrO₂ Superlattice Ferroelectric Capacitor With Improved Endurance Performance and Higher Fatigue Recovery Capability. IEEE Electron Device Letters, 2022, 43, 216-219.	2.2	33
2	Synaptic Behaviors in Ferroelectric-Like Field-Effect Transistors with Ultrathin Amorphous HfO2 Film. Nanoscale Research Letters, 2022, 17, 17.	3.1	6
3	Analog Synapses Based on Nonvolatile FETs With Amorphous ZrO₂ Dielectric for Spiking Neural Network Applications. IEEE Transactions on Electron Devices, 2022, 69, 1028-1033.	1.6	12
4	Impact of post metallization annealing (PMA) on the electrical properties of Ge nMOSFETs with ZrO2 dielectric. Solid-State Electronics, 2022, 190, 108240.	0.8	0
5	The role of surface pretreatment by low temperature O2 gas annealing for <i>Î²</i> -Ga2O3 Schottky barrier diodes. Applied Physics Letters, 2022, 120, .	1.5	3
6	Demonstration of Î²-Gaâ‚‚Oâ‚ƒ Superjunction-Equivalent MOSFETs. IEEE Transactions on Electron Devices, 2022, 69, 2203-2209.	1.6	15
7	Energy-efficient non-volatile ferroelectric based electrostatic doping multilevel optical readout memory. Optics Express, 2022, 30, 13572.	1.7	5
8	Recessed-Gate Gaâ‚‚Oâ‚ƒ-on-SiC MOSFETs Demonstrating a Stable Power Figure of Merit of 100 mW/cmÂ² Up to 200 Â°C. IEEE Transactions on Electron Devices, 2022, 69, 1945-1949.	1.6	15
9	Unraveling the Mechanism of Remote Scavenging Effect at the InP/Al ₂ O ₃ Interface Induced by Titanium Layer. Advanced Materials Interfaces, 2022, 9, 2101238.	1.9	0
10	Thermodynamics of Ion-Cutting of Î²-Ga₂O₃ and Wafer-Scale Heterogeneous Integration of a Î²-Ga₂O₃ Thin Film onto a Highly Thermal Conductive SiC Substrate. ACS Applied Electronic Materials, 2022, 4, 494-502.	2.0	12
11	Reconfigurable Ferroelectric Electrostatic Doped Negative Capacitance Nanosheet Field-Effect Transistors with Enhanced I_{ON}/I_{OFF} and Scaled V_{DD} < 0.45 V. , 2022, , .		0
12	Effect of thickness scaling on the switching dynamics of ferroelectric HfO2â€“ZrO2 capacitors. Ceramics International, 2022, 48, 28489-28495.	2.3	2
13	High mobility germanium-on-insulator p-channel FinFETs. Science China Information Sciences, 2021, 64, 1.	2.7	2
14	ZrOx Negative Capacitance Field-Effect Transistor with Sub-60 Subthreshold Swing Behavior. Nanoscale Research Letters, 2021, 16, 21.	3.1	5
15	Analytical Model for the Channel Maximum Temperature in Ga2O3 MOSFETs. Nanoscale Research Letters, 2021, 16, 29.	3.1	9
16	Channel Properties of Gaâ‚‚Oâ‚ƒ-on-SiC MOSFETs. IEEE Transactions on Electron Devices, 2021, 68, 1185-1189.	1.6	17
17	Non-Volatile FETs with Amorphous (Al2O3, HfO2, ZrO2, etc.) Gate Insulators. , 2021, , .		1
18	Channel Mobility Properties of Î²-Ga2O3 MOSFETs on Si Substrate Fabricated by Ion-cutting Process. , 2021, , .		1

#	Article	IF	Citations
19	Proposal of Ferroelectric Based Electrostatic Doping for Nanoscale Devices. IEEE Electron Device Letters, 2021, 42, 605-608.	2.2	19
20	Amorphous ZrO₂ Tunnel Junction Memristor With a Tunneling Electroresistance Ratio Above 400. IEEE Electron Device Letters, 2021, 42, 696-699.	2.2	6
21	Theoretical Study of Negative Capacitance FinFET With Quasi-Antiferroelectric Material. IEEE Transactions on Electron Devices, 2021, 68, 3074-3079.	1.6	1
22	Exploration of switching characteristics of 4H-SiC floating junction Schottky barrier diodes with stronger blocking voltage capability. Journal of Power Electronics, 2021, 21, 1567-1573.	0.9	1
23	Ferroelectricâ€Like Behavior in TaN/Highâ€k/Si System Based on Amorphous Oxide. Advanced Electronic Materials, 2021, 7, 2100414.	2.6	12
24	All-Optical Synapse With Directional Coupler Structure Based on Phase Change Material. IEEE Photonics Journal, 2021, 13, 1-6.	1.0	3
25	Dynamical manipulation of a dual-polarization plasmon-induced transparency employing an anisotropic graphene-black phosphorus heterostructure. Optics Express, 2021, 29, 29690.	1.7	23
26	Ge N-Channel MOSFETs with ZrO2 Dielectric Achieving Improved Mobility. Nanoscale Research Letters, 2021, 16, 125.	3.1	5
27	Study of the role of air exposure time to interface oxide on HCl treated InAs (100) before atomic layer deposition of Al2O3. Vacuum, 2021, 193, 110555.	1.6	0
28	Temperature-dependent characteristics of Schottky barrier diode on heterogeneous Î²-Ga₂O₃(\$ar 201\$)-Al₂O₃-Si Substrate. Journal Physics D: Applied Physics, 2021, 54, 034004.	1.3	9
29	Ferroelectric-Like Non-Volatile FET With Amorphous Gate Insulator for Supervised Learning Applications. IEEE Journal of the Electron Devices Society, 2021, 9, 1145-1150.	1.2	4
30	Efficient thermal dissipation in wafer-scale heterogeneous integration of single-crystalline Î²-Ga2O3 thin film on SiC. Fundamental Research, 2021, 1, 691-696.	1.6	20
31	Memory Behavior of an Al₂O₃ Gate Dielectric Non-Volatile Field-Effect Transistor. IEEE Electron Device Letters, 2020, 41, 1340-1343.	2.2	21
32	Non-Volatile Field-Effect Transistors Enabled by Oxygen Vacancy-Related Dipoles for Memory and Synapse Applications. IEEE Transactions on Electron Devices, 2020, 67, 3632-3636.	1.6	16
33	Effects of Temperature on the Performance of Hfâ‚€.â‚…Zrâ‚€.â‚…Oâ‚‚-Based Negative Capacitance FETs. IEEE Electron Device Letters, 2020, 41, 1625-1628.	2.2	13
34	A van der Waals Synaptic Transistor Based on Ferroelectric Hf_{0.5}Zr_{0.5}O₂ and 2D Tungsten Disulfide. Advanced Electronic Materials, 2020, 6, 2000057.	2.6	68
35	Photonic Associative Learning Neural Network Based on VCSELs and STDP. Journal of Lightwave Technology, 2020, 38, 4691-4698.	2.7	8
36	Ferroelectric-like BehaviorÂOriginating from Oxygen Vacancy Dipoles in Amorphous Film for Non-volatile Memory. Nanoscale Research Letters, 2020, 15, 134.	3.1	22

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37	Î²-Ga2O3 MOSFETs on the Si substrate fabricated by the ion-cutting process. Science China: Physics, Mechanics and Astronomy, 2020, 63, 1.	2.0	34
38	Effects of Post Annealing on Electrical Performance of Polycrystalline Ga2O3 Photodetector on Sapphire. Nanoscale Research Letters, 2020, 15, 100.	3.1	21
39	ZrO2 Ferroelectric Field-Effect Transistors Enabled by the Switchable Oxygen Vacancy Dipoles. Nanoscale Research Letters, 2020, 15, 120.	3.1	20
40	Low Voltage Operating 2D MoS2 Ferroelectric Memory Transistor with Hf1-xZrxO2 Gate Structure. Nanoscale Research Letters, 2020, 15, 157.	3.1	31
41	Active tuning of the hybridization effects of mid-infrared surface plasmon resonance in a black phosphorus sheet array and a metal grating slit. Optical Materials Express, 2020, 10, 14.	1.6	14
42	Rabi splitting obtained in a monolayer BP-plasmonic heterostructure at room temperature. Optical Materials Express, 2020, 10, 2159.	1.6	2
43	Experimental Validation of Depolarization Field Produced Voltage Gains in Negative Capacitance Field-Effect Transistors. IEEE Transactions on Electron Devices, 2019, 66, 4419-4424.	1.6	26
44	ZrO₂ Ferroelectric FET for Non-volatile Memory Application. IEEE Electron Device Letters, 2019, 40, 1419-1422.	2.2	38
45	Ge pMOSFETs with GeOx Passivation Formed by Ozone and Plasma Post Oxidation. Nanoscale Research Letters, 2019, 14, 126.	3.1	12
46	High mobility Ge pMOSFETs with amorphous Si passivation: impact of surface orientation. Nanoscale Research Letters, 2019, 14, 15.	3.1	6
47	Nanoelectromechanical Switches by Controlled Switchable Cracking. IEEE Electron Device Letters, 2019, 40, 1209-1212.	2.2	6
48	Nanocrystal-Embedded-Insulator (NEI) Ferroelectric Field-Effect Transistor Featuring Low Operating Voltages and Improved Synaptic Behavior. IEEE Electron Device Letters, 2019, 40, 1933-1936.	2.2	20
49	Germanium Negative Capacitance Field Effect Transistors: Impacts of Zr Composition in Hf1âˆ’xZrxO2. Nanoscale Research Letters, 2019, 14, 125.	3.1	10
50	High Mobility Ge pMOSFETs with ZrO2 Dielectric: Impacts of Post Annealing. Nanoscale Research Letters, 2019, 14, 202.	3.1	6
51	High-Mobility Ge pMOSFETs With Crystalline ZrO₂ Dielectric. IEEE Electron Device Letters, 2019, 40, 371-374.	2.2	18
52	Comparative Study of Negative Capacitance Field-Effect Transistors with Different MOS Capacitances. Nanoscale Research Letters, 2019, 14, 171.	3.1	9
53	The band structure change of Hf0.5Zr0.5O2/Ge system upon post deposition annealing. Applied Surface Science, 2019, 488, 778-782.	3.1	7
54	Band alignments at Hf1-Zr O2/Si and Hf0.52Zr0.48O2/Si0.55Ge0.45 interfaces. Superlattices and Microstructures, 2019, 130, 519-527.	1.4	6

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55	A Novel Negative Capacitance Tunnel FET With Improved Subthreshold Swing and Nearly Non-Hysteresis Through Hybrid Modulation. IEEE Electron Device Letters, 2019, 40, 989-992.	2.2	25
56	Improved Performance in GeSn/SiGeSn TFET by Hetero-Line Architecture With Staggered Tunneling Junction. IEEE Transactions on Electron Devices, 2019, 66, 1985-1989.	1.6	16
57	Nanocrystal-Embedded-Insulator (NEI) Ferroelectric FETs for Negative Capacitance Device and Non-Volatile Memory Applications. Nanoscale Research Letters, 2019, 14, 115.	3.1	9
58	First Demonstration of Waferscale Heterogeneous Integration of Ga₂O₃ MOSFETs on SiC and Si Substrates by Ion-Cutting Process. , 2019, , .		42
59	Lightâ€"Matter Interaction in Black Phosphorus Coupled to a Si Photonic Crystal at Near Infrared Band. IEEE Photonics Journal, 2019, 11, 1-10.	1.0	0
60	Incomplete Dipoles Flipping Produced Near Hysteresis-Free Negative Capacitance Transistors. IEEE Electron Device Letters, 2019, 40, 329-332.	2.2	30
61	Nanostructured multiple-layer black phosphorus photodetector based on localized surface plasmon resonance. Optical Materials Express, 2019, 9, 739.	1.6	15
62	Negative capacitance transistors with sub-kT/q swing. , 2019, , .		0
63	Analytical Calculation of Influence of Ferroelectric Properties on Electrical Characteristics Negative Capacitance Germanium FETs. IEEE Journal of the Electron Devices Society, 2018, 6, 233-239.	1.2	9
64	Hysteresis Reduction in Negative Capacitance Ge PFETs Enabled by Modulating Ferroelectric Properties in HfZrO_{<i>x</i>}. IEEE Journal of the Electron Devices Society, 2018, 6, 41-48.	1.2	51
65	Nonideality of Negative Capacitance Ge Field-Effect Transistors Without Internal Metal Gate. IEEE Electron Device Letters, 2018, 39, 614-617.	2.2	25
66	Negative Capacitance Ge PFETs for Performance Improvement: Impact of Thickness of HfZrO_{<italic>x</italic>}. IEEE Transactions on Electron Devices, 2018, 65, 1217-1222.	1.6	40
67	Design and theoretical calculation of novel GeSn fully-depleted n-tunneling FET with quantum confinement model for suppression on GIDL effect. Superlattices and Microstructures, 2018, 118, 266-274.	1.4	3
68	Theoretical Investigation of Tensile-Strained GeSn/SiGeSn Multiple Quantum Well Laser Wrapped in Si 3N4 Liner Stressor. IEEE Photonics Journal, 2018, 10, 1-9.	1.0	3
69	Absorption Enhancement for Black Phosphorus Active Layer Based on Plasmonic Nanocavity. IEEE Photonics Journal, 2018, 10, 1-10.	1.0	7
70	Revised Analysis of Design Options and Minimum Subthreshold Swing in Piezoelectric FinFETs. IEEE Electron Device Letters, 2018, 39, 444-447.	2.2	14
71	Rainbow Trapping in Highly Doped Silicon Graded Grating Strip at the Terahertz Range. IEEE Photonics Journal, 2018, 10, 1-9.	1.0	0
72	Negative Differential Resistance in Negative Capacitance FETs. IEEE Electron Device Letters, 2018, 39, 622-625.	2.2	98

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73	Experimental investigation of the contact resistance of Graphene/MoS2 interface treated with O2 plasma. Superlattices and Microstructures, 2018, 114, 421-427.	1.4	4
74	Reduced Contact Resistance Between Metal and n-Ge by Insertion of ZnO with Argon Plasma Treatment. Nanoscale Research Letters, 2018, 13, 237.	3.1	9
75	Nanocrystal-Embedded-Insulator Ferroelectric Negative Capacitance FETs with Sub-kT/q Swing. IEEE Electron Device Letters, 2018, , 1-1.	2.2	14
76	Buffer-Free GeSn with High Relaxation Degree Grown on Si(001) Substrate for Photodetection. IEEE Photonics Journal, 2018, 10, 1-9.	1.0	4
77	Rainbow trapping and releasing in InSb graded subwavelength grooves by thermal tuning at the terahertz range. Optical Materials Express, 2018, 8, 2954.	1.6	7
78	Improving metal/ n â€Ge ohmic contact by inserting TiO 2 deposited by PEALD. Micro and Nano Letters, 2018, 13, 801-803.	0.6	3
79	Theoretical study of strained black phosphorus photodetector integrated with silicon waveguide. Superlattices and Microstructures, 2018, 122, 501-509.	1.4	6
80	Effects of the Variation of ${V}_{ext {GS}}$ Sweep Range on the Performance of Negative Capacitance FETs. IEEE Electron Device Letters, 2018, 39, 618-621.	2.2	20
81	Localized plasmon resonances for black phosphorus bowtie nanoantennas at terahertz frequencies. Optics Express, 2018, 26, 27683.	1.7	33
82	Strained Germanium Quantum Well PMOSFETs on SOI with Mobility Enhancement by External Uniaxial Stress. Nanoscale Research Letters, 2017, 12, 120.	3.1	3
83	Investigation of GaAsBi/GaAsN Type-II Staggered Heterojunction TFETs with the Analytical Model. IEEE Transactions on Electron Devices, 2017, 64, 1541-1547.	1.6	10
84	Performance enhancement in uniaxially tensile stressed GeSn n-channel fin tunneling field-effect transistor: Impact of stress direction. Japanese Journal of Applied Physics, 2017, 56, 04CD07.	0.8	3
85	Performance Enhancement in Uniaxially Strained Germaniumâ€"Tin FinTFET: Fin Direction Dependence. IEEE Transactions on Electron Devices, 2017, 64, 2804-2811.	1.6	8
86	Ferroelectric Negative Capacitance GeSn PFETs With Sub-20 mV/decade Subthreshold Swing. IEEE Electron Device Letters, 2017, 38, 1157-1160.	2.2	71
87	Theoretical investigation of GaAsBi/GaAsN tunneling field-effect transistors with type-II staggered tunneling junction. Superlattices and Microstructures, 2017, 106, 139-146.	1.4	8
88	Study of novel junctionless Ge n-Tunneling Field-Effect Transistors with lightly doped drain (LDD) region. Superlattices and Microstructures, 2017, 102, 7-16.	1.4	10
89	Study of novel fully-depleted Ge-on-Insulator n-channel MOSFET with field plate structure for improvement in GIDL and on/off characteristics. Superlattices and Microstructures, 2017, 112, 644-653.	1.4	1
90	Comparison Study of Î²-Ga2O3 Photodetectors Grown on Sapphire at Different Oxygen Pressures. IEEE Photonics Journal, 2017, 9, 1-8.	1.0	52

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91	Comparative Study of Negative Capacitance Ge pFETs With HfZrO_{<italic>x</italic>}Partially and Fully Covering Gate Region. IEEE Transactions on Electron Devices, 2017, 64, 4838-4843.	1.6	36
92	Frequency dependence of performance in Ge negative capacitance PFETs achieving sub-30 mV/decade swing and 110 mV hysteresis at MHz. , 2017, , .		38
93	(AlGa)_2O_3 solar-blind photodetectors on sapphire with wider bandgap and improved responsivity. Optical Materials Express, 2017, 7, 1240.	1.6	80
94	Engineering rainbow trapping and releasing in ultrathin THz plasmonic graded metallic grating strip with thermo-optic material. Optics Express, 2017, 25, 1278.	1.7	7
95	Simulation investigation of strained black phosphorus photodetector for middle infrared range. Optics Express, 2017, 25, 24705.	1.7	6
96	Low Temperature Aqueous Solution-Processed ZnO and Polyethylenimine Ethoxylated Cathode Buffer Bilayer for High Performance Flexible Inverted Organic Solar Cells. Energies, 2017, 10, 494.	1.6	9
97	Correlation of Gate Capacitance with Drive Current and Transconductance in Negative Capacitance Ge PFETs. IEEE Electron Device Letters, 2017, 38, 1500-1503.	2.2	30
98	Study of drain induced barrier lowering (DIBL) effect and subthreshold characteristics of fully-depleted Ge NMOS with P-substrate. Superlattices and Microstructures, 2016, 100, 1230-1237.	1.4	2
99	Ferroelectric HfZrO<inf>x</inf> Ge and GeSn PMOSFETs with Sub-60 mV/decade subthreshold swing, negligible hysteresis, and improved I<inf>ds</inf>. , 2016, , .		57
100	Theoretical calculation of performance enhancement in lattice-matched SiGeSn/GeSn p-channel tunneling field-effect transistor with type-II staggered tunneling junction. Japanese Journal of Applied Physics, 2016, 55, 04ED13.	0.8	7
101	GeSn Quantum Well P-Channel Tunneling FETs Fabricated on Si(001) and (111) with Improved Subthreshold Swing. IEEE Electron Device Letters, 2016, , 1-1.	2.2	29
102	Effect of polyelectrolyte interlayer on efficiency and stability of p-i-n perovskite solar cells. Solar Energy, 2016, 139, 190-198.	2.9	25
103	Comparison Study of <inline-formula> <tex-math notation="LaTeX">$eta $ </tex-math> </inline-formula>-Ga₂O₃Photodetectors on Bulk Substrate and Sapphire. IEEE Transactions on Electron Devices, 2016, 63, 3578-3583.	1.6	63
104	InN/InGaN complementary heterojunction-enhanced tunneling field-effect transistor with enhanced subthreshold swing and tunneling current. Superlattices and Microstructures, 2016, 93, 144-152.	1.4	15
105	Theoretical Investigation of Performance Enhancement in GeSn/SiGeSn Type-II Staggered Heterojunction Tunneling FET. IEEE Transactions on Electron Devices, 2016, 63, 303-310.	1.6	54
106	Gain-assisted propagation of surface plasmons in nanodisk resonator. , 2015, , .		0
107	Tensile-Strained Mid-Infrared GeSn Detectors Wrapped in Si ₃N ₄ Liner Stressor: Theoretical Investigation of Impact of Device Architectures. IEEE Photonics Journal, 2015, 7, 1-8.	1.0	2
108	Performance improvement in novel germaniumâ€“tin/germanium heterojunction-enhanced p-channel tunneling field-effect transistor. Superlattices and Microstructures, 2015, 83, 401-410.	1.4	21

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109	Design of GeSn-Based Heterojunction-Enhanced N-Channel Tunneling FET With Improved Subthreshold Swing and ON-State Current. IEEE Transactions on Electron Devices, 2015, 62, 1262-1268.	1.6	47
110	Simulation investigation of tensile strained GeSn fin photodetector with Si_3N_4 liner stressor for extension of absorption wavelength. Optics Express, 2015, 23, 739.	1.7	9
111	Theoretical investigation of tensile strained GeSn waveguide with Si_3N_4 liner stressor for mid-infrared detector and modulator applications. Optics Express, 2015, 23, 7924.	1.7	18
112	Investigation of performance enhancement in InAs/InGaAs heterojunction-enhanced N-channel tunneling field-effect transistor. Superlattices and Microstructures, 2015, 88, 90-98.	1.4	10
113	Relaxed Ge<inf>0.97</inf>Sn<inf>0.03</inf> P-channel tunneling FETs with high drive current fabricated on Si and further improvement enabled by uniaxial tensile strain. , 2015, , .		0
114	Strained Germaniumâ€“Tin (GeSn) P-Channel Metal-Oxide-Semiconductor Field-Effect Transistors Featuring High Effective Hole Mobility. International Journal of Thermophysics, 2015, 36, 980-986.	1.0	7
115	Strained GeSn p-Channel Metalâ€“Oxideâ€“Semiconductor Field-Effect Transistors With <i>In Situ</i> Si₂H₆ Surface Passivation: Impact of Sn Composition. IEEE Transactions on Electron Devices, 2014, 61, 3639-3645.	1.6	32
116	Undoped Ge<inf>0.92</inf>Sn<inf>0.08</inf> quantum well PMOSFETs on (001), (011) and (111) substrates with in situ Si<inf>2</inf>H<inf>6</inf> passivation: High hole mobility and dependence of performance on orientation. , 2014, , .		11
117	Mobility enhancement in undoped Ge0.92Sn0.08quantum well p-channel metal-oxide-semiconductor field-effect transistor fabricated on (111)-oriented substrate. Semiconductor Science and Technology, 2014, 29, 115027.	1.0	3
118	Strained Ge<inf>0.96</inf>Sn<inf>0.04</inf> P-channel MOSFETs with in situ low temperature Si<inf>2</inf>H<inf>6</inf> surface passivation. , 2014, , .		1
119	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.	0.8	30
120	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.	2.2	94
121	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.	1.6	23
122	$hbox{Ni}(hbox{Ge}_{1 - x}hbox{Sn}_{x})$ 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.	1.6	26
123	Germanium Multiple-Gate Field-Effect Transistors Formed on Germanium-on-Insulator Substrate. IEEE Transactions on Electron Devices, 2013, 60, 1852-1860.	1.6	17
124	Relaxed and Strained Patterned Germanium-Tin Structures: A Raman Scattering Study. ECS Journal of Solid State Science and Technology, 2013, 2, P138-P145.	0.9	62
125	Germanium-tin n-channel tunneling field-effect transistor: Device physics and simulation study. Journal of Applied Physics, 2013, 113, .	1.1	42
126	Tunneling field-effect transistor with Ge/In0.53Ga0.47As heterostructure as tunneling junction. Journal of Applied Physics, 2013, 113, .	1.1	23

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127	Germanium-Tin (GeSn) N-channel MOSFETs with low temperature silicon surface passivation. , 2013, , .		0
128	(110)-oriented germanium-tin (Ge<inf>0.97</inf>Sn<inf>0.03</inf>) P-channel MOSFETs. , 2013, , .		2
129	Germaniumâ€"Tin P-Channel Tunneling Field-Effect Transistor: Device Design and Technology Demonstration. IEEE Transactions on Electron Devices, 2013, 60, 4048-4056.	1.6	52
130	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.	1.1	43
131	Germanium Tin Tunneling Field Effect Transistor for Sub-0.4 V Operation. ECS Transactions, 2013, 50, 979-986.	0.3	1
132	Simulation of tunneling field-effect transistors with extended source structures. Journal of Applied Physics, 2012, 111, 114514.	1.1	15
133	Thermally Stable Multi-Phase Nickel-Platinum Stanogermanide Contacts for Germanium-Tin Channel MOSFETs. Electrochemical and Solid-State Letters, 2012, 15, H179.	2.2	21
134	Electronic band structure and effective mass parameters of Ge1-xSnx alloys. Journal of Applied Physics, 2012, 112, .	1.1	194
135	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.	2.2	20
136	Strained germanium-tin (GeSn) N-channel MOSFETs featuring low temperature N+/P junction formation and GeSnO2 interfacial layer. , 2012, , .		23
137	(NH4)2S Passivation for High Mobility Germanium-Tin (GeSn) p-MOSFETs. , 2012, , .		1
138	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
139	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.	2.2	17
140	Towards high performance Ge<inf>1−x</inf>Sn<inf>x</inf> and In<inf>0.7</inf>Ga<inf>0.3</inf>As CMOS: A novel common gate stack featuring sub-400 °C Si<inf>2</inf>H<inf>6</inf> passivation, single TaN metal gate, and sub-1.3 nm EOT. , 2012, , .		5
141	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
142	Towards direct band-to-band tunneling in P-channel tunneling field effect transistor (TFET): Technology enablement by Germanium-tin (GeSn). , 2012, , .		42
143	Metal stanogermanide contacts with enhanced thermal stability for high mobility germanium-tin field-effect transistor. , 2012, , .		2
144	PBTI characteristics of N-channel tunneling field effect transistor with HfO<inf>2</inf> gate dielectric: New insights and physical model. , 2012, , .		5

#	ARTICLE	IF	CITATIONS
145	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.	2.2	35
146	High-mobility germanium-tin (GeSn) P-channel MOSFETs featuring metallic source/drain and sub-370 °C process modules. , 2011, , .		39
147	Silicon-based tunneling field-effect transistor with elevated germanium source formed on (110) silicon substrate. Applied Physics Letters, 2011, 98, 153502.	1.5	58
148	A new Ge<inf>2</inf>Sb<inf>2</inf>Te<inf>5</inf> (GST) liner stressor featuring stress enhancement due to amorphous-crystalline phase change for sub-20 nm p-channel FinFETs. , 2011, , .		2
149	Enhancement of TFET performance using dopant profile-steepening implant and source dopant concentration engineering at tunneling junction. , 2010, , .		10
150	Small SiGe quantum dots obtained by excimer laser annealing. Journal of Crystal Growth, 2008, 310, 3746-3751.	0.7	9
151	n-Type Geâ€“SiGe Quantum Cascade Structure Utilizing Quantum Wells for Electrons in the L and $Gamma$ Valleys. IEEE Photonics Technology Letters, 2008, 20, 419-421.	1.3	3
152	An n-type SiGe/Ge QC structure utilizing the deep Ge quantum well for electron at the Î“ point. Semiconductor Science and Technology, 2007, 22, 769-773.	1.0	8