

Chee Wee Liu

List of Publications by Year in descending order

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326
papers

4,732
citations

136950
32
h-index

175258
52
g-index

328
all docs

328
docs citations

328
times ranked

4066
citing authors

#	ARTICLE	IF	CITATIONS
1	Above-11%-Efficiency Organicâ€“Inorganic Hybrid Solar Cells with Omnidirectional Harvesting Characteristics by Employing Hierarchical Photon-Trapping Structures. <i>Nano Letters</i> , 2013, 13, 3658-3663.	9.1	171
2	Metal-Insulator-Semiconductor Photodetectors. <i>Sensors</i> , 2010, 10, 8797-8826.	3.8	154
3	Defectâ€“free bandâ€“edge photoluminescence and band gap measurement of pseudomorphic Si _{1-x} Ge _x Cy alloy layers on Si (100). <i>Applied Physics Letters</i> , 1995, 67, 3915-3917.	3.3	109
4	Physical thickness 1.x nm ferroelectric HfZrO _x negative capacitance FETs. , 2016, , .		105
5	Low temperature chemical vapor deposition growth of β -SiC on (100) Si using methylsilane and device characteristics. <i>Journal of Applied Physics</i> , 1997, 82, 4558-4565.	2.5	101
6	Toward an ideal animal model to trace donor cell fates after stem cell therapy: Production of stably labeled multipotent mesenchymal stem cells from bone marrow of transgenic pigs harboring enhanced green fluorescence protein gene1. <i>Journal of Animal Science</i> , 2011, 89, 3460-3472.	0.5	98
7	Electron mobility enhancement in strained-germanium n-channel metal-oxide-semiconductor field-effect transistors. <i>Applied Physics Letters</i> , 2007, 91, .	3.3	95
8	Realizing High-Efficiency Omnidirectional n-Type Si Solar Cells <i>via</i> the Hierarchical Architecture Concept with Radial Junctions. <i>ACS Nano</i> , 2013, 7, 9325-9335.	14.6	94
9	Mobility-enhancement technologies. <i>IEEE Circuits and Devices: the Magazine of Electronic and Photonic Systems</i> , 2005, 21, 21-36.	0.4	85
10	Surface passivation of Cu(In,Ga)Se ₂ using atomic layer deposited Al ₂ O ₃ . <i>Applied Physics Letters</i> , 2012, 100, .	3.3	85
11	Room-temperature electroluminescence from electron-hole plasmas in the metalâ€“oxideâ€“silicon tunneling diodes. <i>Applied Physics Letters</i> , 2000, 76, 1516-1518.	3.3	82
12	Strain-enhanced photoluminescence from Ge direct transition. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	78
13	Comprehensive study of the Raman shifts of strained silicon and germanium. <i>Journal of Applied Physics</i> , 2009, 105, .	2.5	69
14	Quantum confinement effects in strained siliconâ€“germanium alloy quantum wells. <i>Applied Physics Letters</i> , 1992, 60, 2135-2137.	3.3	67
15	A novel photodetector using MOS tunneling structures. <i>IEEE Electron Device Letters</i> , 2000, 21, 307-309.	3.9	67
16	Stress-Induced Hump Effects of p-Channel Polycrystalline Silicon Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , 2008, 29, 1332-1335.	3.9	66
17	Photoluminescence from electronâ€“hole plasmas confined in Si/Si _{1-x} Ge _x /Si quantum wells. <i>Applied Physics Letters</i> , 1992, 60, 1720-1722.	3.3	63
18	Ge Outdiffusion Effect on Flicker Noise in Strained-Si nMOSFETs. <i>IEEE Electron Device Letters</i> , 2004, 25, 693-695.	3.9	56

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19	A high efficient 820 nm MOS Ge quantum dot photodetector. <i>IEEE Electron Device Letters</i> , 2003, 24, 318-320.	3.9	52
20	Self-assembled nanorings in Si-capped Ge quantum dots on (001)Si. <i>Applied Physics Letters</i> , 2003, 83, 5283-5285.	3.3	52
21	Competitiveness between direct and indirect radiative transitions of Ge. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	52
22	Toward Efficient and Omnidirectional n-Type Si Solar Cells: Concurrent Improvement in Optical and Electrical Characteristics by Employing Microscale Hierarchical Structures. <i>ACS Nano</i> , 2014, 8, 2959-2969.	14.6	52
23	Electroluminescence from metal/oxidestrained-Si tunneling diodes. <i>Applied Physics Letters</i> , 2005, 86, 223502.	3.3	49
24	Observation of two-dimensional electron gas in a Si quantum well with mobility of $1.6\text{--}106 \text{ cm}^2/\text{Vs}$. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	48
25	A comprehensive study of inversion current in MOS tunneling diodes. <i>IEEE Transactions on Electron Devices</i> , 2001, 48, 2125-2130.	3.0	42
26	The $\text{LaTeX}^{\sim} 3, \times 10^{20} \text{ cm}^{-3}$ electron concentration and low specific contact resistivity of phosphorus-doped Ge on Si by <i>In-Situ</i> Chemical Vapor Deposition Doping and Laser Annealing. <i>IEEE Electron Device Letters</i> , 2015, 36, 1114-1117.	3.9	37
27	Alloy scattering limited transport of two-dimensional carriers in strained $\text{Si}_{1-x}\text{Ge}_x$ quantum wells. <i>Applied Physics Letters</i> , 1993, 63, 2795-2797.	3.3	35
28	Electroluminescence at Si band gap energy based on metal-oxide-silicon structures. <i>Journal of Applied Physics</i> , 2000, 87, 8793-8795.	2.5	35
29	A high-performance SiGe-Si multiple-quantum-well heterojunction phototransistor. <i>IEEE Electron Device Letters</i> , 2003, 24, 643-645.	3.9	34
30	Bandwidth Enhancement in an Integratable SiGe Phototransistor by Removal of Excess Carriers. <i>IEEE Electron Device Letters</i> , 2004, 25, 286-288.	3.9	33
31	Threading dislocation induced low frequency noise in strained-Si nMOSFETs. <i>IEEE Electron Device Letters</i> , 2005, 26, 667-669.	3.9	33
32	Enhanced Current Drive of Double-Gate α -IGZO Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , 2013, 34, 417-419.	3.9	33
33	Extremely Steep Switch of Negative-Capacitance Nanosheet GAA-FETs and FinFETs. , 2018, .		33
34	Growth and band gap of strained 110% $\text{Si}_{1-x}\text{Ge}_x$ layers on silicon substrates by chemical vapor deposition. <i>Applied Physics Letters</i> , 1994, 65, 76-78.	3.3	32
35	Growth and photoluminescence of high quality SiGeC random alloys on silicon substrates. <i>Journal of Applied Physics</i> , 1996, 80, 3043-3047.	2.5	32
36	Characterization of the Ultrathin HfO_2 and Hf-Silicate Films Grown by Atomic Layer Deposition. <i>IEEE Transactions on Electron Devices</i> , 2007, 54, 759-766.	3.0	32

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37	High quality Ge thin film grown by ultrahigh vacuum chemical vapor deposition on GaAs substrate. <i>Applied Physics Letters</i> , 2011, 98, .	3.3	32
38	Investigation of Reliability Characteristics in NMOS and PMOS FinFETs. <i>IEEE Electron Device Letters</i> , 2008, 29, 788-790.	3.9	31
39	Roughness-enhanced electroluminescence from metal oxide silicon tunneling diodes. <i>IEEE Electron Device Letters</i> , 2000, 21, 601-603.	3.9	30
40	A PMOS tunneling photodetector. <i>IEEE Transactions on Electron Devices</i> , 2001, 48, 1747-1749.	3.0	30
41	Electroluminescence from the Ge quantum dot MOS tunneling diodes. <i>IEEE Electron Device Letters</i> , 2006, 27, 252-254.	3.9	30
42	Ultra-high mobility two-dimensional electron gas in a SiGe/Si/SiGe quantum well. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	30
43	Temperature dependence of the electronâ€“hole-plasma electroluminescence from metalâ€“oxideâ€“silicon tunneling diodes. <i>Applied Physics Letters</i> , 2000, 77, 1111-1113.	3.3	29
44	Scattering mechanisms in shallow undoped Si/SiGe quantum wells. <i>AIP Advances</i> , 2015, 5, .	1.3	29
45	Strained Pt Schottky diodes on n-type Si and Ge. <i>Applied Physics Letters</i> , 2006, 88, 143509.	3.3	28
46	Characteristics of strained-germanium p- and n-channel field effect transistors on a Si (1â‰%1â‰%) substrate. <i>Semiconductor Science and Technology</i> , 2007, 22, 342-347.	2.0	28
47	Mobility enhancement of strained Si by optimized SiGe/Si/SiGe structures. <i>Applied Physics Letters</i> , 2012, 101, 042111.	3.3	28
48	Thermal resistance modeling of back-end interconnect and intrinsic FinFETs, and transient simulation of inverters with capacitive loading effects. , 2016, , .		28
49	Strain effect on the stability in ferroelectric HfO ₂ simulated by first-principles calculations. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 23LT01.	2.8	28
50	Infrared emission from Ge metal-insulator-semiconductor tunneling diodes. <i>Applied Physics Letters</i> , 2006, 89, 261913.	3.3	27
51	Low-temperature fabrication and characterization of Ge-on-insulator structures. <i>Applied Physics Letters</i> , 2006, 89, 101913.	3.3	27
52	The intermixing and strain effects on electroluminescence of SiGe dots. <i>Journal of Applied Physics</i> , 2007, 102, 053520.	2.5	27
53	Junctionless Gate-All-Around pFETs Using <italic>In-situ</italic> Boron-Doped Ge Channel on Si. <i>IEEE Nanotechnology Magazine</i> , 2015, 14, 878-882.	2.0	26
54	PMOS Hole Mobility Enhancement Through SiGe Conductive Channel and Highly Compressive ILD-\$hbox{SiN}_x\$ Stressing Layer. <i>IEEE Electron Device Letters</i> , 2008, 29, 86-88.	3.9	25

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55	Temperature dependence of Raman scattering in bulk 4H-SiC with different carrier concentration. Optics Express, 2013, 21, 26475.	3.4	25
56	High-Mobility CVD-Grown Ge/Strained Ge _{0.9} Sn _{0.1} /Ge Quantum-Well pMOSFETs on Si by Optimizing Ge Cap Thickness. IEEE Transactions on Electron Devices, 2017, 64, 2498-2504.	3.0	25
57	Indication of band flattening at the Fermi level in a strongly correlated electron system. Scientific Reports, 2017, 7, 14539.	3.3	25
58	Semiconductor, topological semimetal, indirect semimetal, and topological Dirac semimetal phases of $\text{Ge}_{x/\text{Si}}\text{Sn}_{1-x}$. Physical Review B, 2017, 95, .	3.2	25
59	Vertically Stacked Strained 3-GeSn-Nanosheet pGAAFETs on Si Using GeSn/Ge CVD Epitaxial Growth and the Optimum Selective Channel Release Process. IEEE Electron Device Letters, 2018, 39, 1274-1277.	3.9	25
60	Upper limit of two-dimensional electron density in enhancement-mode Si/SiGe heterostructure field-effect transistors. Applied Physics Letters, 2011, 99, .	3.3	24
61	Mobility Enhancement of Back-Channel-Etch Amorphous InGaZnO TFT by Double Layers With Quantum Well Structures. IEEE Transactions on Electron Devices, 2019, 66, 4188-4192.	3.0	24
62	Mechanical strain effect of n-channel polycrystalline silicon thin-film transistors. Applied Physics Letters, 2006, 89, 103502.	3.3	23
63	Broadband SiGe Si quantum dot infrared photodetectors. Journal of Applied Physics, 2007, 101, 033117.	2.5	23
64	Hole mobility enhancement of Si _{0.2} Ge _{0.8} quantum well channel on Si. Applied Physics Letters, 2007, 90, 012114.	3.3	22
65	2.0 μm electroluminescence from Si/Si _{0.2} Ge _{0.8} type II heterojunctions. Journal of Applied Physics, 2008, 103, .	2.5	22
66	Flexible Ge-on-polyimide detectors. Applied Physics Letters, 2009, 94, 261107.	3.3	21
67	Biaxial tensile strain effects on photoluminescence of different orientated Ge wafers. Applied Physics Letters, 2011, 98, .	3.3	21
68	Fractional quantum Hall effect of two-dimensional electrons in high-mobility Si/SiGe field-effect transistors. Physical Review B, 2012, 85, .	3.2	21
69	Fabrication and Low Temperature Characterization of Ge (110) and (100) p-MOSFETs. IEEE Transactions on Electron Devices, 2014, 61, 2215-2219.	3.0	21
70	Magneto-transport analysis of an ultra-low-density two-dimensional hole gas in an undoped strained Ge/SiGe heterostructure. Applied Physics Letters, 2016, 108, .	3.3	21
71	Hot carrier recombination model of visible electroluminescence from metal-oxide-silicon tunneling diodes. Applied Physics Letters, 2000, 77, 4347-4349.	3.3	20
72	Novel MIS Ge-Si Quantum-Dot Infrared Photodetectors. IEEE Electron Device Letters, 2004, 25, 544-546.	3.9	19

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73	A Compact Analytic Model of the Strain Field Induced by Through Silicon Vias. IEEE Transactions on Electron Devices, 2012, 59, 777-782.	3.0	19
74	Bilayer-Based Antiferroelectric HfZrO ₂ Tunneling Junction With High Tunneling Electroresistance and Multilevel Nonvolatile Memory. IEEE Electron Device Letters, 2021, 42, 1464-1467.	3.9	19
75	Engineering Hf _{0.5} Zr _{0.5} O ₂ Ferroelectric/Anti- Ferroelectric Phases With Oxygen Vacancy and Interface Energy Achieving High Remanent Polarization and Dielectric Constants. IEEE Electron Device Letters, 2022, 43, 553-556.	3.9	19
76	The evolution of electroluminescence in Ge quantum-dot diodes with the fold number. Applied Physics Letters, 2004, 85, 6107-6109.	3.3	18
77	Effective g factor of low-density two-dimensional holes in a Ge quantum well. Applied Physics Letters, 2017, 111, .	3.3	18
78	Thermal SPICE Modeling of FinFET and BEOL Considering Frequency-Dependent Transient Response, 3-D Heat Flow, Boundary/Alloy Scattering, and Interfacial Thermal Resistance. IEEE Transactions on Electron Devices, 2019, 66, 2710-2714.	3.0	18
79	On-Current Enhancement in TreeFET by Combining Vertically Stacked Nanosheets and Interbridges. IEEE Electron Device Letters, 2020, 41, 1292-1295.	3.9	18
80	Symmetric Si/Si _{1-x} Ge electron resonant tunneling diodes with an anomalous temperature behavior. Applied Physics Letters, 1993, 62, 603-605.	3.3	17
81	Abnormal hole mobility of biaxial strained Si. Journal of Applied Physics, 2005, 98, 066104.	2.5	17
82	Influence of defects and interface on radiative transition of Ge. Applied Physics Letters, 2011, 98, 141105.	3.3	17
83	Mechanically Strained Si _x Ge HBTs. IEEE Electron Device Letters, 2004, 25, 483-485.	3.9	16
84	High-linearity and temperature-insensitive 2.4 GHz SiGe power amplifier with dynamic-bias control. , 0, ,		16
85	Nanograin crystalline transformation enhanced UV transparency of annealing refined indium tin oxide film. Applied Physics Letters, 2009, 94, .	3.3	16
86	Interfacial layer reduction and high permittivity tetragonal ZrO ₂ on germanium reaching ultrathin 0.39nm equivalent oxide thickness. Applied Physics Letters, 2013, 102, .	3.3	16
87	Band alignments at strained Ge _{1-x} y _x Sn _y heterointerfaces. Journal Physics D: Applied Physics, 2017, 50, 13LT02.	2.8	16
88	Energy band structure of strained Si _{1-x} C _x alloys on Si (001) substrate. Journal of Applied Physics, 2002, 92, 3717-3723.	2.5	15
89	Oxide roughness effect on tunneling current of MOS diodes. IEEE Transactions on Electron Devices, 2002, 49, 2204-2208.	3.0	15
90	Î-Doped MOS Ge/Si quantum dot/well infrared photodetector. Thin Solid Films, 2006, 508, 389-392.	1.8	15

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91	Superior n-MOSFET Performance by Optimal Stress Design. <i>IEEE Electron Device Letters</i> , 2008, 29, 402-404.	3.9	15
92	SiGe nanorings by ultrahigh vacuum chemical vapor deposition. <i>Applied Physics Letters</i> , 2009, 94, 141909.	3.3	15
93	Dynamic Bias Instability of p-Channel Polycrystalline-Silicon Thin-Film Transistors Induced by Impact Ionization. <i>IEEE Electron Device Letters</i> , 2009, 30, 368-370.	3.9	15
94	LDMOS Transistor High-Frequency Performance Enhancements by Strain. <i>IEEE Electron Device Letters</i> , 2012, 33, 471-473.	3.9	15
95	New materials for post-Si computing. <i>MRS Bulletin</i> , 2014, 39, 658-662.	3.5	15
96	Energy preference of uniform polarization switching for HfO ₂ by first-principle study. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 085304.	2.8	15
97	Electroluminescence and photoluminescence studies on carrier radiative and nonradiative recombinations in metal-oxide-silicon tunneling diodes. <i>Journal of Applied Physics</i> , 2003, 93, 4253-4259.	2.5	14
98	Base transit time of graded-base Si/SiGe HBTs considering recombination lifetime and velocity saturation. <i>Solid-State Electronics</i> , 2004, 48, 207-215.	1.4	14
99	Performance enhancement of ring oscillators and transimpedance amplifiers by package strain. <i>IEEE Transactions on Electron Devices</i> , 2006, 53, 724-729.	3.0	14
100	\$hbox{GeO}_2\$ Passivation for Low Surface Recombination Velocity on Ge Surface. <i>IEEE Electron Device Letters</i> , 2013, 34, 444-446.	3.9	14
101	RF Performance of Stacked Si Nanosheet nFETs. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 5277-5283.	3.0	14
102	MEXTRAM Modeling of Si-SiGe HPTs. <i>IEEE Transactions on Electron Devices</i> , 2004, 51, 870-876.	3.0	13
103	Design and Analysis of Separate-Absorption-Transport-Charge-Multiplication Traveling-Wave Avalanche Photodetectors. <i>Journal of Lightwave Technology</i> , 2004, 22, 1583-1590.	4.6	13
104	Buckled SiGe layers by the oxidation of SiGe on viscous SiO ₂ layers. <i>Applied Physics Letters</i> , 2005, 86, 011909.	3.3	13
105	Enhanced CMOS performances using substrate strained-SiGe and mechanical strained-Si technology. <i>IEEE Electron Device Letters</i> , 2006, 27, 46-48.	3.9	13
106	Ge-on-glass detectors. <i>Applied Physics Letters</i> , 2007, 91, .	3.3	13
107	Effects of Applied Mechanical Uniaxial and Biaxial Tensile Strain on the Flatband Voltage of (001), (110), and (111) Metal-Oxide-Silicon Capacitors. <i>IEEE Transactions on Electron Devices</i> , 2009, 56, 1736-1745.	3.0	13
108	Electron scattering in Ge metal-oxide-semiconductor field-effect transistors. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	13

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109	First-principles study of Ge dangling bonds with different oxygen backbonds at Ge/GeO ₂ interface. Journal of Applied Physics, 2012, 111,	2.5	13
110	Improvement in electrical characteristics of HfO ₂ gate dielectrics treated by remote NH ₃ plasma. Applied Surface Science, 2013, 266, 89-93.	6.1	13
111	Effective electron mass in high-mobility SiGe/Si/SiGe quantum wells. JETP Letters, 2014, 100, 114-119.	1.4	13
112	Suppression of surface recombination in CuInSe ₂ (CIS) thin films via Trioctylphosphine Sulfide (TOP:S) surface passivation. Acta Materialia, 2016, 106, 171-181.	7.9	13
113	Self-Heating Induced Interchannel V _t Difference of Vertically Stacked Si Nanosheet Gate-All-Around MOSFETs. IEEE Electron Device Letters, 2019, 40, 1913-1916.	3.9	13
114	Experimental Demonstration of TreeFETs Combining Stacked Nanosheets and Low Doping Interbridges by Epitaxy and Wet Etching. IEEE Electron Device Letters, 2022, 43, 682-685.	3.9	13
115	Hole effective masses in relaxed Si _{1-x} C _x and Si _{1-y} Gey alloys. Applied Physics Letters, 1997, 70, 1441-1443.	3.3	12
116	Thermal stability of Si/Si _{1-x-y} GexCy/Si quantum wells grown by rapid thermal chemical vapor deposition. Journal of Applied Physics, 1999, 85, 2124-2128.	2.5	12
117	Hole confinement at Si/SiGe heterojunction of strained-Si N and PMOS devices. Solid-State Electronics, 2006, 50, 109-113.	1.4	12
118	Ballistic electron transport calculation of strained germanium-tin fin field-effect transistors. Applied Physics Letters, 2014, 104, .	3.3	12
119	Visible and band edge electroluminescence from indium tin oxide/SiO ₂ /Si metal-oxide-semiconductor structures. Journal of Applied Physics, 2001, 89, 323-326.	2.5	11
120	The characteristic of HfO ₂ on strained SiGe. Materials Science in Semiconductor Processing, 2005, 8, 209-213.	4.0	11
121	Coupling Effects of Dual SiGe Power Amplifiers for 802.11n MIMO Applications. , 0, .		11
122	Gate width dependence on backscattering characteristics in the nanoscale strained complementary metal-oxide-semiconductor field-effect transistor. Applied Physics Letters, 2008, 92, 063506.	3.3	11
123	Evolution of composition distribution of Si-capped Ge islands on Si(001). Thin Solid Films, 2009, 517, 5029-5032.	1.8	11
124	Physical mechanism of HfO ₂ -based bipolar resistive random access memory. , 2011, .		11
125	Nearly defect-free Ge gate-all-around FETs on Si substrates. , 2011, .		11
126	Unusual anisotropy of inplane field magnetoresistance in ultra-high mobility SiGe/Si/SiGe quantum wells. Journal of Applied Physics, 2017, 122, 224301.	2.5	11

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127	Oxygen-related Reliability of Amorphous InGaZnO Thin Film Transistors. IEEE Journal of the Electron Devices Society, 2020, , 1-1.	2.1	11
128	Band-edge exciton luminescence from Si/strained Si _{1-x} Gex/Si structures. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1992, 10, 1998.	1.6	10
129	Correlation between Si-H/D bond desorption and injected electron energy in metal-oxide-silicon tunneling diodes. Applied Physics Letters, 2001, 78, 637-639.	3.3	10
130	Recessed Oxynitride Dots on Self-Assembled Ge Quantum Dots Grown by LPD. Electrochemical and Solid-State Letters, 2004, 7, G201.	2.2	10
131	Electroluminescence from monocrystalline silicon solar cell. Journal of Applied Physics, 2009, 105, 106107.	2.5	10
132	The pn Junctions of Epitaxial Germanium on Silicon by Solid Phase Doping. IEEE Transactions on Electron Devices, 2014, 61, 2595-2598.	3.0	10
133	Photoluminescence and electroluminescence from Ge/strained GeSn/Ge quantum wells. Applied Physics Letters, 2016, 109, .	3.3	10
134	Evidence of phonon-absorption-assisted electron resonant tunneling in Si/Si _{1-x} Gex diodes. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1993, 11, 1145.	1.6	9
135	Novel methods to incorporate deuterium in the MOS structures. IEEE Electron Device Letters, 2001, 22, 519-521.	3.9	9
136	The Roughness-Enhanced Light Emission from Metal-Oxide-Silicon Light-Emitting Diodes Using Very High Vacuum Prebake. Japanese Journal of Applied Physics, 2002, 41, L326-L328.	1.5	9
137	Growth and Electrical Characteristics of Liquid-Phase Deposited SiO ₂ on Ge. Electrochemical and Solid-State Letters, 2003, 6, F9.	2.2	9
138	Hexagonal SiGe quantum dots and nanorings on Si(110). Journal of Applied Physics, 2010, 107, 056103.	2.5	9
139	High mobility high on/off ratio C-V dispersion-free Ge n-MOSFETs and their strain response. , 2010, , .		9
140	Strain response of high mobility germanium n-channel metal-oxide-semiconductor field-effect transistors on (001) substrates. Applied Physics Letters, 2011, 99, 022106.	3.3	9
141	Triangular-channel Ge NFETs on Si with (111) sidewall-enhanced I _{on} >I _{off} and nearly defect-free channels. , 2012, , .		9
142	Density-controlled quantum Hall ferromagnetic transition in a two-dimensional hole system. Scientific Reports, 2017, 7, 2468.	3.3	9
143	Highly Stacked GeSi Nanosheets and Nanowires by Low-Temperature Epitaxy and Wet Etching. IEEE Transactions on Electron Devices, 2021, 68, 6599-6604.	3.0	9
144	Uniform 4-Stacked Ge _{0.9} Sn _{0.1} Nanosheets Using Double Ge _{0.95} Sn _{0.05} Caps by Highly Selective Isotropic Dry Etch. IEEE Transactions on Electron Devices, 2021, 68, 2071-2076.	3.0	9

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145	RF Performance of Stacked Si Nanosheets/Nanowires. <i>IEEE Electron Device Letters</i> , 2022, 43, 1017-1020.	3.9	9
146	Carrier lifetime measurement on electroluminescent metal-oxide-silicon tunneling diodes. <i>Applied Physics Letters</i> , 2001, 79, 2264-2266.	3.3	8
147	The band-edge light emission from the metal-oxide-silicon tunneling diode on (110) substrates. <i>Solid-State Electronics</i> , 2002, 46, 1113-1116.	1.4	8
148	Light emission from Al/HfO ₂ /silicon diodes. <i>Journal of Applied Physics</i> , 2004, 95, 6486-6488.	2.5	8
149	Digital communication using Ge metal-insulator-semiconductor light-emitting diodes and photodetectors. <i>Journal of Applied Physics</i> , 2008, 103, .	2.5	8
150	Narrow-band metal-oxide-semiconductor photodetector. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	8
151	Composition redistribution of self-assembled Ge islands on Si (001) during annealing. <i>Thin Solid Films</i> , 2010, 518, S196-S199.	1.8	8
152	Influence of surface roughness and interfacial layer on the infrared spectra of V-CVD grown 3C-SiC/Si (100) epilayers. <i>Semiconductor Science and Technology</i> , 2012, 27, 115019.	2.0	8
153	Abnormal Threshold Voltage Shift of Amorphous InGaZnO Thin-Film Transistors Due to Mobile Sodium. <i>IEEE Journal of the Electron Devices Society</i> , 2016, 4, 353-357.	2.1	8
154	Electron Mobility in Junctionless Ge Nanowire NFETs. <i>IEEE Transactions on Electron Devices</i> , 2016, 63, 4191-4195.	3.0	8
155	The hysteresis-free negative capacitance field effect transistors using non-linear poly capacitance. <i>Solid-State Electronics</i> , 2016, 122, 13-17.	1.4	8
156	Self-Heating Mitigation of TreeFETs by Interbridges. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 4123-4128.	3.0	8
157	Characteristics of Si-doped GaAs epilayers grown by metalorganic chemical vapor deposition using a silane source. <i>Applied Physics Letters</i> , 1987, 51, 1634-1636.	3.3	7
158	Substitutional carbon reduction in SiGeC alloys grown by rapid thermal chemical vapor deposition. <i>Applied Physics Letters</i> , 1999, 75, 2271-2273.	3.3	7
159	Formation of SiCH ₆ -mediated Ge quantum dots with strong field emission properties by ultrahigh vacuum chemical vapor deposition. <i>Journal of Applied Physics</i> , 2005, 98, 073506.	2.5	7
160	Capacitorless 1T Memory Cells Using Channel Traps at Grain Boundaries. <i>IEEE Electron Device Letters</i> , 2010, 31, 1125-1127.	3.9	7
161	Differential Gene Expression Between the Porcine Morula and Blastocyst. <i>Reproduction in Domestic Animals</i> , 2012, 47, 69-81.	1.4	7
162	Roughness-enhanced reliability of MOS tunneling diodes. <i>IEEE Electron Device Letters</i> , 2002, 23, 431-433.	3.9	6

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163	Performance enhancement of high-speed SiGe-based heterojunction phototransistor with substrate terminal. <i>Applied Physics Letters</i> , 2004, 85, 2947-2949.	3.3	6
164	Hole effective mass in strained Si _{1-x} C _x alloys. <i>Journal of Applied Physics</i> , 2004, 96, 5037-5041.	2.5	6
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