

Douglas J Paul

List of Publications by Year in descending order

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291
papers

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101543

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294
all docs

294
docs citations

294
times ranked

5151
citing authors

#	ARTICLE	IF	CITATIONS
1	Ge-on-Si single-photon avalanche diode detectors for short-wave infrared wavelengths. JPhys Photonics, 2022, 4, 012001.	4.6	10
2	Silicon nitride waveguide polarization rotator and polarization beam splitter for chip-scale atomic systems. APL Photonics, 2022, 7, .	5.7	18
3	On-chip infrared photonics with Si-Ge-heterostructures: What is next?. APL Photonics, 2022, 7, .	5.7	18
4	A MEMS gravimeter with multi-axis gravitational sensitivity. , 2022, , .		2
5	A Simulation Study of the Temperature Sensitivity and Impact of Fabrication Tolerances on the Performance of a Geometric Anti-Spring Based MEMS Gravimeter. , 2022, , .		1
6	THz intersubband electroluminescence from n-type Ge/SiGe quantum cascade structures. Applied Physics Letters, 2021, 118, .	3.3	15
7	Terahertz intersubband electroluminescence from n-type germanium quantum wells. , 2021, , .		0
8	Field-resolved detection of the temporal response of a single plasmonic antenna in the mid-infrared. Optica, 2021, 8, 898.	9.3	14
9	Ge-on-Si Single-Photon Avalanche Diode Detectors with Low Noise Equivalent Power in the Short-Wave Infrared. , 2021, , .		0
10	Ge on Si Photonics Platform for Mid-Infrared Sensors. , 2021, , .		0
11	Faceting of Si and Ge crystals grown on deeply patterned Si substrates in the kinetic regime: phase-field modelling and experiments. Scientific Reports, 2021, 11, 18825.	3.3	4
12	Pseudo-planar Ge-on-Si single photon avalanche diode detector with record low noise-equivalent power. , 2021, , .		1
13	Current leakage mechanisms related to threading dislocations in Ge-rich SiGe heterostructures grown on Si(001). Applied Physics Letters, 2021, 119, .	3.3	3
14	THz Intersubband Emitter based on Silicon. , 2021, , .		0
15	Photonic Band Gap and Light Routing in Self-Assembled Lattices of Epitaxial $\text{Ge}_{1-x}\text{Si}_x$ Nanocrystals. $\text{Ge}_{1-x}\text{Si}_x$ Nanocrystals. Physical Review Applied, 2021, 16, .	3.8	1
16	Electron Population Dynamics in Optically Pumped Asymmetric Coupled Ge/SiGe Quantum Wells: Experiment and Models. Photonics, 2020, 7, 2.	2.0	5
17	Distributed Feedback Lasers for Quantum Cooling Applications. , 2020, , .		1
18	Self-Assembly of Nanovoids in Si Microcrystals Epitaxially Grown on Deeply Patterned Substrates. Crystal Growth and Design, 2020, 20, 2914-2920.	3.0	2

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19	Ultra-broadband mid-infrared Ge-on-Si waveguide polarization rotator. APL Photonics, 2020, 5, 026102.	5.7	21
20	High efficiency planar geometry germanium-on-silicon single-photon avalanche diode detectors. , 2020, , .		5
21	1.4 million Q factor Si ₃ N ₄ micro-ring resonator at 780nm wavelength for chip-scale atomic systems. Optics Express, 2020, 28, 4010.	3.4	18
22	Terahertz absorption-saturation and emission from electron-doped germanium quantum wells. Optics Express, 2020, 28, 7245.	3.4	12
23	Ge-on-Si waveguides for sensing in the molecular fingerprint regime. Optics Express, 2020, 28, 5749.	3.4	8
24	3D LIDAR imaging using Ge-on-Si single-photon avalanche diode detectors. Optics Express, 2020, 28, 1330.	3.4	45
25	Design and simulation of losses in Ge/SiGe terahertz quantum cascade laser waveguides. Optics Express, 2020, 28, 4786.	3.4	11
26	Characterization of integrated waveguides by atomic-force-microscopy-assisted mid-infrared imaging and spectroscopy. Optics Express, 2020, 28, 22186.	3.4	9
27	Sub-megahertz linewidth 780.24nm distributed feedback laser for ⁸⁷ Rb applications. Optics Letters, 2020, 45, 3529.	3.3	18
28	High sensitivity Ge-on-Si single-photon avalanche diode detectors. Optics Letters, 2020, 45, 6406.	3.3	19
29	1.4 Million Q-Factor 780 nm Wavelength Si ₃ N ₄ Micro-rings for Chip-Scale Atomic Systems. , 2020, , .		1
30	Ge-on-Si Waveguide Polarization Rotator Operating in the 8-14 μm Atmospheric Transmission Window. , 2020, , .		0
31	Ge-on-Si Single Photon Avalanche Diode Detectors for LIDAR in the Short Wave Infrared. , 2020, , .		1
32	Field-resolved response of mid-infrared plasmonic antennas. , 2020, , .		0
33	Narrow Linewidth Distributed Feedback Diode Lasers for Cooling in Cold Atom Systems. , 2020, , .		1
34	Mid-infrared Sensing with Ge on Si Waveguides. , 2019, , .		0
35	Thermal emissivity of silicon heterojunction solar cells. Solar Energy Materials and Solar Cells, 2019, 201, 110051.	6.2	9
36	Geiger Mode Ge-on-Si Single-Photon Avalanche Diode Detectors. , 2019, , .		1

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37	Towards a Mid-Infrared Lab-on-Chip Sensor using Ge-on-Si Waveguides. , 2019, , .		0
38	High-Q Si ₃ N ₄ Ring Resonators for Locking 780nm GaAs-Based Distributed Feedback Laser. , 2019, , .		0
39	Field-Resolved Response of Plasmonic Antennas. , 2019, , .		0
40	Room temperature operation of <i>n</i> -type Ge/SiGe terahertz quantum cascade lasers predicted by non-equilibrium Green's functions. Applied Physics Letters, 2019, 114, .	3.3	45
41	High performance planar germanium-on-silicon single-photon avalanche diode detectors. Nature Communications, 2019, 10, 1086.	12.8	104
42	Ge-On-Si High Efficiency Spads at 1310 Nm. , 2019, , .		1
43	Understanding the Sidewall Dependence of Loss for Ge-on-Si Waveguides in the Mid-Infrared. , 2019, , .		0
44	Geiger Mode Ge-on-Si Single-Photon Avalanche Diode Detectors. , 2019, , .		2
45	n-type Ge/SiGe Multi Quantum-Wells for a THz Quantum Cascade Laser. ECS Transactions, 2019, 93, 63-66.	0.5	0
46	Electron-doped SiGe Quantum Well Terahertz Emitters pumped by FEL pulses. , 2019, , .		0
47	N-Type Ge/SiGe Quantum Cascade Heterostructures for THz Emission. , 2019, , .		1
48	Si-based n-type THz Quantum Cascade Emitter. , 2019, , .		0
49	Strain analysis of a Ge micro disk using precession electron diffraction. Journal of Applied Physics, 2019, 126, .	2.5	10
50	Ultra Broadband Mid-Infrared Ge-on-Si Polarization Rotator. , 2019, , .		0
51	Understanding the Sidewall Dependence of Loss for Ge-on-Si Waveguides in the Mid-Infrared. , 2019, , .		0
52	Molecular Fingerprint Sensing using Ge-on-Si Waveguides. , 2019, , .		0
53	Geiger Mode Ge-on-Si Single-Photon Avalanche Diode Detectors. , 2019, , .		3
54	High-Quality n-Type Ge/SiGe Multilayers for THz Quantum Cascade Lasers. , 2019, , .		0

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55	Control of Electron-State Coupling in Asymmetric Ge/Si Quantum Wells. <i>Physical Review Applied</i> , 2019, 11, .	3.8	25
56	Low loss germanium-on-silicon waveguides for integrated mid-infrared photonics. , 2019, , .		3
57	Fingerprint mid-infrared sensing with germanium on silicon waveguides. , 2019, , .		1
58	Integrated DFB Lasers on Si_3N_4 Photonic Platform for Chip-Scale Atomic Systems. , 2019, , .		5
59	Field-Resolved Detection of the Temporal Response of a Mid-Infrared Plasmonic Antenna. , 2019, , .		0
60	High-efficiency Ge-on-Si SPADs for short-wave infrared. , 2019, , .		4
61	Ultra Broadband Mid-Infrared Ge-on-Si Polarization Rotator. , 2019, , .		0
62	Molecular Fingerprint Sensing using Ge-on-Si Waveguides. , 2019, , .		0
63	Microelectromechanical system gravimeters as a new tool for gravity imaging. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2018, 376, 20170291.	3.4	11
64	Impact of Randomly Distributed Dopants on Ω -Gate Junctionless Silicon Nanowire Transistors. <i>IEEE Transactions on Electron Devices</i> , 2018, 65, 1692-1698.	3.0	7
65	Topotactic anion-exchange in thermoelectric nanostructured layered tin chalcogenides with reduced selenium content. <i>Chemical Science</i> , 2018, 9, 3828-3836.	7.4	28
66	Interfacial sharpness and intermixing in a Ge-SiGe multiple quantum well structure. <i>Journal of Applied Physics</i> , 2018, 123, .	2.5	16
67	A High Stability Optical Shadow Sensor With Applications for Precision Accelerometers. <i>IEEE Sensors Journal</i> , 2018, 18, 4108-4116.	4.7	14
68	Mid-infrared emissivity of crystalline silicon solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2018, 174, 607-615.	6.2	68
69	A Portable MEMS Gravimeter for the Detection of the Earth Tides. , 2018, , .		8
70	Components for Integrated Ge on Si for Mid-Infrared Photonic Sensors. , 2018, , .		0
71	Distributed Feedback Lasers Operating at 780 nm Wavelength Integrated on Si Substrates for Chip-scale Atomic Systems. , 2018, , .		1
72	Ge-on-Si Mid-Infrared Waveguides Operating up to 11 μm Wavelength. , 2018, , .		0

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73	Quantum interference in silicon one-dimensional junctionless nanowire field-effect transistors. <i>Physical Review B</i> , 2018, 98, .	3.2	5
74	Plasmonic mid-infrared third harmonic generation in germanium nanoantennas. <i>Light: Science and Applications</i> , 2018, 7, 106.	16.6	42
75	Roadmap for the next-generation of hybrid photovoltaic-thermal solar energy collectors. <i>Solar Energy</i> , 2018, 174, 386-398.	6.1	77
76	Benchmarking the Use of Heavily Doped Ge for Plasmonics and Sensing in the Mid-Infrared. <i>ACS Photonics</i> , 2018, 5, 3601-3607.	6.6	31
77	Low loss Ge-on-Si waveguides operating in the 8-14 μm atmospheric transmission window. <i>Optics Express</i> , 2018, 26, 25667.	3.4	56
78	Analysis of terahertz-emitting SiGe quantum cascade structures by transmission electron microscopy. , 2018, , 155-158.		0
79	Advanced TEM analysis of strain-balanced Si/SiGe resonant tunnelling diode structures. , 2018, , 163-166.		0
80	Chlorine-Enabled Electron Doping in Solution-Synthesized SnSe Thermoelectric Nanomaterials. <i>Advanced Energy Materials</i> , 2017, 7, 1602328.	19.5	64
81	Experimental and Simulation Study of Silicon Nanowire Transistors Using Heavily Doped Channels. <i>IEEE Nanotechnology Magazine</i> , 2017, 16, 727-735.	2.0	17
82	One dimensional transport in silicon nanowire junction-less field effect transistors. <i>Scientific Reports</i> , 2017, 7, 3004.	3.3	31
83	Optical properties of highly n-doped germanium obtained by <i>in situ</i> doping and laser annealing. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 465103.	2.8	28
84	Germanium-on-silicon waveguides for mid-infrared photonic sensing chips. , 2017, , .		0
85	Comparative Study of Annealed and High Temperature Grown ITO and AZO Films for Solar Energy Applications. <i>MRS Advances</i> , 2017, 2, 3117-3122.	0.9	1
86	ITO and AZO films for low emissivity coatings in hybrid photovoltaic-thermal applications. <i>Solar Energy</i> , 2017, 155, 82-92.	6.1	51
87	Integrated germanium-on-silicon waveguides for mid-infrared photonic sensing chips. , 2017, , .		1
88	Mid-infrared n-Ge on Si plasmonic based microbolometer sensors. , 2017, , .		3
89	Heavily-doped germanium on silicon with activated doping exceeding 10^{20} cm^{-3} as an alternative to gold for mid-infrared plasmonics. , 2017, , .		0
90	Tensile strained GeSn mid-infrared light emitters. , 2017, , .		0

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91	n-Ge on Si for mid-infrared plasmonic sensors. , 2017, , .		5
92	Mid-infrared light emission > 3 Åµm wavelength from tensile strained GeSn microdisks. Optics Express, 2017, 25, 25374.	3.4	34
93	Field Tests of a Portable MEMS Gravimeter. Sensors, 2017, 17, 2571.	3.8	28
94	GaAs-based distributed feedback laser at 780 nm for 87Rb cold atom quantum technology. , 2017, , .		4
95	Germanium nanoantennas for plasmon-enhanced third harmonic generation in the mid infrared. , 2017, , .		0
96	Variability study of high current junctionless silicon nanowire transistors. , 2017, , .		2
97	Improved Light Incoupling in Planar Solar Cells via Improved Texture Morphology of PDMS Scattering Layer. , 2017, , .		2
98	Mid-Infrared Third-Harmonic Emission from Heavily-Doped Germanium Plasmonic Nanoantennas. , 2017, , .		0
99	Facile Surfactant-Free Synthesis of p-Type SnSe Nanoplates with Exceptional Thermoelectric Power Factors. Angewandte Chemie, 2016, 128, 6543-6547.	2.0	9
100	Facile Surfactant-Free Synthesis of p-Type SnSe Nanoplates with Exceptional Thermoelectric Power Factors. Angewandte Chemie - International Edition, 2016, 55, 6433-6437.	13.8	81
101	Scalable solar thermoelectrics and photovoltaics (SUNTRAP). AIP Conference Proceedings, 2016, , .	0.4	5
102	8-band k-p modelling of mid-infrared intersubband absorption in Ge quantum wells. Journal of Applied Physics, 2016, 120, .	2.5	15
103	(Invited) The Use of Silicon-Germanium Superlattices in Thermoelectric Devices and Microfabricated Generators. ECS Transactions, 2016, 75, 469-478.	0.5	1
104	Ge-on-Si Photonics for Mid-infrared Sensing Applications. MRS Advances, 2016, 1, 3269-3279.	0.9	0
105	Disentangling nonradiative recombination processes in Ge micro-crystals on Si substrates. Applied Physics Letters, 2016, 108, .	3.3	14
106	Experimental and simulation study of a high current 1D silicon nanowire transistor using heavily doped channels. , 2016, , .		1
107	Specially designed solar cells for hybrid photovoltaic-thermal generators. , 2016, , .		3
108	Mid-infrared intersubband absorption from p-Ge quantum wells on Si. , 2016, , .		0

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109	Germanium plasmonic nanoantennas for third-harmonic generation in the mid infrared. , 2016, , .		2
110	Benchmarking the use of heavily-doped Ge against noble metals for plasmonics and sensing in the mid-infrared. , 2016, , .		0
111	Mid-infrared plasmonic platform based on n-doped Ge-on-Si: Molecular sensing with germanium nano-antennas on Si. , 2016, , .		1
112	Mid-infrared intersubband absorption from p-Ge quantum wells grown on Si substrates. Applied Physics Letters, 2016, 108, .	3.3	22
113	Measurement of the Earth tides with a MEMS gravimeter. Nature, 2016, 531, 614-617.	27.8	237
114	Engineering Large In-Plane Tensile Strains in Ge Microdisks, Microrings and Racetrack Optical Cavities. ECS Transactions, 2016, 75, 633-640.	0.5	0
115	Analysis of Ge micro-cavities with in-plane tensile strains above 2 %. Optics Express, 2016, 24, 4365.	3.4	38
116	Tunability of the dielectric function of heavily doped germanium thin films for mid-infrared plasmonics. Physical Review B, 2016, 94, .	3.2	86
117	Optical Activation of Germanium Plasmonic Antennas in the Mid-Infrared. Physical Review Letters, 2016, 117, 047401.	7.8	55
118	Mid-Infrared Sensing Using Heavily Doped Germanium Plasmonics on Silicon Substrates. ECS Transactions, 2016, 75, 247-251.	0.5	0
119	Mid-Infrared Intersubband Absorption from p-Ge Quantum Wells Grown on Si Substrates. ECS Transactions, 2016, 75, 253-256.	0.5	0
120	Intersubband absorption in p-Ge QWs on Si. , 2016, , .		0
121	Expanding the Ge emission wavelength to 2.25 μ m with SixNy strain engineering. Thin Solid Films, 2016, 602, 60-63.	1.8	3
122	Ba ₆ ~ ³ x Nd _{8+2x} Ti ₁₈ O ₅₄ Tungsten Bronze: A New High-Temperature n-Type Oxide Thermoelectric. Journal of Electronic Materials, 2016, 45, 1894-1899.	2.2	17
123	The UK National Quantum Technologies Hub in sensors and metrology (Keynote Paper). Proceedings of SPIE, 2016, , .	0.8	10
124	A novel absorptive/reflective solar concentrator for heat and electricity generation: An optical and thermal analysis. Energy Conversion and Management, 2016, 114, 142-153.	9.2	23
125	Fabrication of mid-infrared plasmonic antennas based on heavily doped germanium thin films. Thin Solid Films, 2016, 602, 52-55.	1.8	8
126	Thermoelectric cross-plane properties on p- and n-Ge/SixGe1-x superlattices. Thin Solid Films, 2016, 602, 90-94.	1.8	4

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127	Chapter 4. Nano- and Micro-fabrication Techniques for Improving Thermoelectric Materials and Generators. RSC Energy and Environment Series, 2016, , 83-108.	0.5	1
128	Engineering Large In-Plane Tensile Strains in Ge Microdisks, Microrings and Racetrack Optical Cavities. ECS Meeting Abstracts, 2016, , .	0.0	0
129	Mid-Infrared Intersubband Absorption from p-Ge Quantum Wells Grown on Si Substrates. ECS Meeting Abstracts, 2016, , .	0.0	0
130	(Invited) The Use of Silicon-Germanium Superlattices in Thermoelectric Devices and Microfabricated Generators. ECS Meeting Abstracts, 2016, , .	0.0	0
131	Mid-Infrared Sensing Using Heavily Doped Germanium Plasmonics on Silicon Substrates. ECS Meeting Abstracts, 2016, , .	0.0	0
132	Heavily phosphorous-doped Germanium thin films for mid-infrared plasmonics. , 2015, , .		0
133	Highly strained Ge on Si microdisks with silicon nitride stressors. , 2015, , .		0
134	Group-IV midinfrared plasmonics. Journal of Nanophotonics, 2015, 9, 093789.	1.0	27
135	Modelling and experimental verification of a Ge/SiGe thermoelectric generator. , 2015, , .		3
136	Time- and frequency-resolved electrodynamics of germanium nanoantennas for mid-infrared plasmonics. , 2015, , .		0
137	Optical Switching of Mid-Infrared Plasmonic Nanoantennas Based on Germanium. , 2015, , .		0
138	Multiphysics Simulations of a Thermoelectric Generator. Energy Procedia, 2015, 75, 633-638.	1.8	21
139	Mid-infrared intersubband absorption in p-Ge/SiGe quantum wells grown on Si. , 2015, , .		0
140	Finite Element Modelling To Evaluate the Cross-plane Thermal conductivity and Seebeck Coefficient of Ge/SiGe Heterostructure. Materials Today: Proceedings, 2015, 2, 510-518.	1.8	2
141	Mid-infrared plasmonic resonances exploiting heavily-doped Ge on Si. Proceedings of SPIE, 2015, , .	0.8	1
142	Extending the emission wavelength of Ge nanopillars to 225 $\hat{1}$ / ₄ m using silicon nitride stressors. Optics Express, 2015, 23, 18193.	3.4	25
143	Midinfrared Plasmon-Enhanced Spectroscopy with Germanium Antennas on Silicon Substrates. Nano Letters, 2015, 15, 7225-7231.	9.1	173
144	Coupled Simulation of Performance of a Crossed Compound Parabolic Concentrator with Solar Cell. Energy Procedia, 2015, 75, 325-330.	1.8	10

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145	Principles and Applications of THz Time Domain Spectroscopy. Springer Series in Optical Sciences, 2014, , 203-231.	0.7	9
146	Terahertz Frequency Security Systems and Terahertz Safety Considerations. Springer Series in Optical Sciences, 2014, , 233-255.	0.7	3
147	Mid-infrared plasmonic germanium antennas on silicon. , 2014, , .		1
148	Process induced tensile strain of Ge on Si nanopillars by ICP-PECVD SiN stressor layers. , 2014, , .		0
149	Mid-infrared plasmonic platform based on heavily doped epitaxial Ge-on-Si: Retrieving the optical constants of thin Ge epilayers. , 2014, , .		5
150	Ge/SiGe quantum confined Stark effect electro-absorption modulation with low voltage swing at $\lambda = 1550$ nm. Optics Express, 2014, 22, 19284.	3.4	25
151	Ge/SiGe quantum confined Stark effect modulators with low voltage swing at $\lambda = 1550$ nm. , 2014, , .		0
152	Silver antimony Ohmic contacts to moderately doped n-type germanium. Applied Physics Letters, 2014, 104, .	3.3	9
153	(Invited) The Thermoelectric Properties of Ge/SiGe Based Superlattices: from Materials to Energy Harvesting Modules. ECS Transactions, 2014, 64, 929-937.	0.5	1
154	Physics and Applications of Terahertz Radiation. Springer Series in Optical Sciences, 2014, , .	0.7	66
155	Quantum Well Photodetectors. Springer Series in Optical Sciences, 2014, , 3-34.	0.7	1
156	Beyond Moore's law. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130376.	3.4	9
157	Design and fabrication of memory devices based on nanoscale polyoxometalate clusters. Nature, 2014, 515, 545-549.	27.8	301
158	Thin SiGe virtual substrates for Ge heterostructures integration on silicon. Journal of Applied Physics, 2014, 115, .	2.5	28
159	Determining the Electronic Performance Limitations in Top-Down-Fabricated Si Nanowires with Mean Widths Down to 4 nm. Nano Letters, 2014, 14, 6056-6060.	9.1	25
160	Multilayered Ge/SiGe Material in Microfabricated Thermoelectric Modules. Journal of Electronic Materials, 2014, 43, 3838-3843.	2.2	5
161	Prospects for SiGe thermoelectric generators. Solid-State Electronics, 2014, 98, 70-74.	1.4	21
162	THz Bolometer Detectors. Springer Series in Optical Sciences, 2014, , 35-75.	0.7	11

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163	Relativistic Electrons-Based THz Sources: Principles of Operation and the ENEA Experience. Springer Series in Optical Sciences, 2014, , 123-148.	0.7	1
164	Physics and Applications of T-Rays. Springer Series in Optical Sciences, 2014, , 149-175.	0.7	2
165	Terahertz Control. Springer Series in Optical Sciences, 2014, , 179-202.	0.7	0
166	Terahertz Plasma Field Effect Transistors. Springer Series in Optical Sciences, 2014, , 77-100.	0.7	4
167	Thermal Conductivity Measurement Methods for SiGe Thermoelectric Materials. Journal of Electronic Materials, 2013, 42, 2376-2380.	2.2	9
168	Ge/SiGe Superlattices for Thermoelectric Devices Grown by Low-Energy Plasma-Enhanced Chemical Vapor Deposition. Journal of Electronic Materials, 2013, 42, 2030-2034.	2.2	10
169	Power Factor Characterization of Ge/SiGe Thermoelectric Superlattices at 300ÅK. Journal of Electronic Materials, 2013, 42, 1449-1453.	2.2	7
170	Ge/SiGe superlattices for nanostructured thermoelectric modules. Thin Solid Films, 2013, 543, 153-156.	1.8	16
171	Prospects for SiGe thermoelectric generators. , 2013, , .		1
172	Strained germanium nanostructures on silicon emitting at $\lambda = 2.2 \mu\text{m}$ wavelength. , 2013, , .		5
173	The cross-plane thermoelectric properties of p-Ge/Si _{0.5} Ge _{0.5} superlattices. Applied Physics Letters, 2013, 103, .	3.3	47
174	Design and performance of a prototype mesa-geometry Ge-on-Si single-photon avalanche diode detector at 1310 nm and 1550 nm wavelengths. , 2013, , .		0
175	Ge/SiGe superlattices for thermoelectric energy conversion devices. Journal of Materials Science, 2013, 48, 2829-2835.	3.7	23
176	The thermoelectric properties of Ge/SiGe modulation doped superlattices. Journal of Applied Physics, 2013, 113, .	2.5	65
177	Ge-on-Si Single-Photon Avalanche Diode Detectors: Design, Modeling, Fabrication, and Characterization at Wavelengths 1310 and 1550 nm. IEEE Transactions on Electron Devices, 2013, 60, 3807-3813.	3.0	116
178	Low Specific Ohmic Contacts to n-type Germanium Using a Low Temperature NiGe Process. ECS Transactions, 2013, 50, 1081-1084.	0.5	5
179	Si/SiGe Thermoelectric Generators. ECS Transactions, 2013, 50, 959-963.	0.5	1
180	Long Wavelength {greater than or equal to}1.9 Åm Germanium for Optoelectronics Using Process Induced Strain. ECS Transactions, 2013, 50, 779-782.	0.5	2

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181	(Invited) Germanium/Silicon Heterostructures for Terahertz Emission. ECS Transactions, 2013, 50, 763-771.	0.5	4
182	Si/SiGe Tunneling Static Random Access Memories. ECS Transactions, 2013, 50, 987-990.	0.5	2
183	Mid-infrared plasmonic antennas made of electron-doped epitaxial germanium-on-silicon. , 2013, , .		1
184	Direct Band-gap Electroluminescence from Strained n-Ge Light Emitting Diodes. ECS Transactions, 2013, 50, 305-308.	0.5	1
185	Ohmic contacts to n-type germanium with low specific contact resistivity. Applied Physics Letters, 2012, 100, .	3.3	83
186	Scaling resonant tunnelling diodes and nanowires using SPICE modelling to optimise nanoscale performance. , 2012, , .		0
187	Nanofabrication of high aspect ratio ($\sim 1/450:1$) sub-10nm silicon nanowires using inductively coupled plasma etching. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2012, 30, .	1.2	73
188	Direct band-gap electroluminescence from strained n-doped germanium diodes. , 2012, , .		0
189	1.55 μm electroluminescence from strained n-Ge quantum wells on silicon substrates. , 2012, , .		0
190	Tuning the electroluminescence of n-Ge LEDs using process induced strain. , 2012, , .		0
191	1.55 μm direct bandgap electroluminescence from strained n-Ge quantum wells grown on Si substrates. Applied Physics Letters, 2012, 101, .	3.3	19
192	Si/SiGe nanoscale engineered thermoelectric materials for energy harvesting. , 2012, , .		0
193	Silicon nanowire devices with widths below 5 nm. , 2012, , .		0
194	SPICE Modeling of the Scaling of Resonant Tunneling Diodes and the Effects of Sidewall Leakage. IEEE Transactions on Electron Devices, 2012, 59, 3555-3560.	3.0	11
195	Process-Induced Strain Bandgap Reduction in Germanium Nanostructures. , 2012, , .		1
196	A study of the impact of dislocations on the thermoelectric properties of quantum wells in the Si/SiGe materials system. Journal of Applied Physics, 2011, 110, .	2.5	44
197	The progress towards terahertz quantum cascade lasers on silicon substrates. Laser and Photonics Reviews, 2010, 4, 610-632.	8.7	79
198	Si/SiGe quantum cascade superlattice designs for terahertz emission. Journal of Applied Physics, 2010, 107, 053109.	2.5	21

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199	Si/SiGe Bound-to-Continuum Quantum Cascade Emitters. ECS Transactions, 2009, 16, 865-874.	0.5	4
200	Silicon photonics: a bright future?. Electronics Letters, 2009, 45, 582.	1.0	31
201	Molecular beam epitaxy growth of Si/SiGe bound-to-continuum quantum cascade structures for THz emission. Thin Solid Films, 2008, 517, 34-37.	1.8	1
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203	Si/SiGe bound-to-continuum quantum cascade terahertz emitters. Proceedings of SPIE, 2008, , .	0.8	2
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