Douglas J Paul

List of Publications by Year in Descending Order

208 papers	3,903 citations	31 h-index	55 g-index
294 ext. papers	4,672 ext. citations	3.8 avg, IF	5.53 L-index

#	Paper	IF	Citations
208	Ge-on-Si single-photon avalanche diode detectors for short-wave infrared wavelengths. *JPhys Photonics*, **2022**, 4, 012001	2.5	3
207	Silicon nitride waveguide polarization rotator and polarization beam splitter for chip-scale atomic systems. *APL Photonics*, **2022**, 7, 046101	5.2	3
206	Current leakage mechanisms related to threading dislocations in Ge-rich SiGe heterostructures grown on Si(001). *Applied Physics Letters*, **2021**, 119, 153504	3.4	0
205	THz intersubband electroluminescence from n-type Ge/SiGe quantum cascade structures. *Applied Physics Letters*, **2021**, 118, 101101	3.4	4
204	Field-resolved detection of the temporal response of a single plasmonic antenna in the mid-infrared. *Optica*, **2021**, 8, 898	8.6	1
203	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	4.9	1
202	Self-Assembly of Nanovoids in Si Microcrystals Epitaxially Grown on Deeply Patterned Substrates. *Crystal Growth and Design*, **2020**, 20, 2914-2920	3.5	2
201	Ultra-broadband mid-infrared Ge-on-Si waveguide polarization rotator. *APL Photonics*, **2020**, 5, 026102	5.2	10
200	High efficiency planar geometry germanium-on-silicon single-photon avalanche diode detectors **2020**,		2
199	1.4 million Q factor SiN micro-ring resonator at 780 nm wavelength for chip-scale atomic systems. *Optics Express*, **2020**, 28, 4010-4020	3.3	7
198	Terahertz absorption-saturation and emission from electron-doped germanium quantum wells. *Optics Express*, **2020**, 28, 7245-7258	3.3	9
197	Ge-on-Si waveguides for sensing in the molecular fingerprint regime. *Optics Express*, **2020**, 28, 5749-5757	3.3	5
196	3D LIDAR imaging using Ge-on-Si single-photon avalanche diode detectors. *Optics Express*, **2020**, 28, 1330-1344	3.3	20
195	Design and simulation of losses in Ge/SiGe terahertz quantum cascade laser waveguides. *Optics Express*, **2020**, 28, 4786-4800	3.3	8
194	Characterization of integrated waveguides by atomic-force-microscopy-assisted mid-infrared imaging and spectroscopy. *Optics Express*, **2020**, 28, 22186-22199	3.3	4
193	Sub-megahertz linewidth 780.24 nm distributed feedback laser for Rb applications. *Optics Letters*, **2020**, 45, 3529-3532	3	8
192	High sensitivity Ge-on-Si single-photon avalanche diode detectors. *Optics Letters*, **2020**, 45, 6406-6409	3	9

191	Electron Population Dynamics in Optically Pumped Asymmetric Coupled Ge/SiGe Quantum Wells: Experiment and Models. *Photonics*, **2020**, 7, 2	2.2	3
190	Room temperature operation of n-type Ge/SiGe terahertz quantum cascade lasers predicted by non-equilibrium Green's functions. *Applied Physics Letters*, **2019**, 114, 111102	3.4	24
189	High performance planar germanium-on-silicon single-photon avalanche diode detectors. *Nature Communications*, **2019**, 10, 1086	17.4	61
188	Thermal emissivity of silicon heterojunction solar cells. *Solar Energy Materials and Solar Cells*, **2019**, 201, 110051	6.4	6
187	Low loss germanium-on-silicon waveguides for integrated mid-infrared photonics **2019**,		3
186	Fingerprint mid-infrared sensing with germanium on silicon waveguides **2019**,		1
185	Integrated DFB Lasers on Si3N4 Photonic Platform for Chip-Scale Atomic Systems **2019**,		3
184	High-efficiency Ge-on-Si SPADs for short-wave infrared **2019**,		3
183	Geiger Mode Ge-on-Si Single-Photon Avalanche Diode Detectors **2019**,		1
182	N-Type Ge/SiGe Quantum Cascade Heterostructures for THz Emission **2019**,		1
181	Strain analysis of a Ge micro disk using precession electron diffraction. *Journal of Applied Physics*, **2019**, 126, 235701	2.5	7
180	Geiger Mode Ge-on-Si Single-Photon Avalanche Diode Detectors **2019**,		2
179	Control of Electron-State Coupling in Asymmetric Ge/SiGe Quantum Wells. *Physical Review Applied* , **2019**, 11,	4.3	15
178	Microelectromechanical system gravimeters as a new tool for gravity imaging. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2018**, 376,	3	5
177	Impact of Randomly Distributed Dopants on $Omega$ -Gate Junctionless Silicon Nanowire Transistors. *IEEE Transactions on Electron Devices*, **2018**, 65, 1692-1698	2.9	7
176	Topotactic anion-exchange in thermoelectric nanostructured layered tin chalcogenides with reduced selenium content. *Chemical Science*, **2018**, 9, 3828-3836	9.4	24
175	Interfacial sharpness and intermixing in a Ge-SiGe multiple quantum well structure. *Journal of Applied Physics*, **2018**, 123, 035703	2.5	12
174	A High Stability Optical Shadow Sensor With Applications for Precision Accelerometers. *IEEE Sensors Journal*, **2018**, 18, 4108-4116	4	7

173	Mid-infrared emissivity of crystalline silicon solar cells. *Solar Energy Materials and Solar Cells*, **2018**, 174, 607-615	6.4	50
172	Benchmarking the Use of Heavily Doped Ge for Plasmonics and Sensing in the Mid-Infrared. *ACS Photonics*, **2018**, 5, 3601-3607	6.3	21
171	Low loss Ge-on-Si waveguides operating in the 8-14 μm atmospheric transmission window. *Optics Express*, **2018**, 26, 25667-25675	3.3	24
170	Analysis of terahertz-emitting SiGe quantum cascade structures by transmission electron microscopy **2018**, 155-158		
169	Advanced TEM analysis of strain-balanced Si/SiGe resonant tunnelling diode structures **2018**, 163-166		
168	A Portable MEMS Gravimeter for the Detection of the Earth Tides **2018**,		5
167	Quantum interference in silicon one-dimensional junctionless nanowire field-effect transistors. *Physical Review B*, **2018**, 98,	3.3	2
166	Plasmonic mid-infrared third harmonic generation in germanium nanoantennas. *Light: Science and Applications*, **2018**, 7, 106	16.7	23
165	Roadmap for the next-generation of hybrid photovoltaic-thermal solar energy collectors. *Solar Energy*, **2018**, 174, 386-398	6.8	45
164	Chlorine-Enabled Electron Doping in Solution-Synthesized SnSe Thermoelectric Nanomaterials. *Advanced Energy Materials*, **2017**, 7, 1602328	21.8	48
163	Experimental and Simulation Study of Silicon Nanowire Transistors Using Heavily Doped Channels. *IEEE Nanotechnology Magazine*, **2017**, 16, 727-735	2.6	12
162	One dimensional transport in silicon nanowire junction-less field effect transistors. *Scientific Reports*, **2017**, 7, 3004	4.9	24
161	Optical properties of highly n-doped germanium obtained byin situdoping and laser annealing. *Journal Physics D: Applied Physics*, **2017**, 50, 465103	3	22
160	Variability study of high current junctionless silicon nanowire transistors **2017**,		1
159	Improved Light Incoupling in Planar Solar Cells via Improved Texture Morphology of PDMS Scattering Layer **2017**,		1
158	Comparative Study of Annealed and High Temperature Grown ITO and AZO Films for Solar Energy Applications. *MRS Advances*, **2017**, 2, 3117-3122	0.7	0
157	ITO and AZO films for low emissivity coatings in hybrid photovoltaic-thermal applications. *Solar Energy*, **2017**, 155, 82-92	6.8	36
156	Integrated germanium-on-silicon waveguides for mid-infrared photonic sensing chips **2017**,		1

155	Mid-infrared n-Ge on Si plasmonic based microbolometer sensors **2017**,		2
154	n-Ge on Si for mid-infrared plasmonic sensors **2017**,		2
153	Mid-infrared light emission > 3 μm wavelength from tensile strained GeSn microdisks. *Optics Express*, **2017**, 25, 25374-25385	3.3	25
152	Field Tests of a Portable MEMS Gravimeter. *Sensors*, **2017**, 17,	3.8	17
151	Thermoelectric cross-plane properties on p- and n-Ge/SixGe1-x superlattices. *Thin Solid Films*, **2016**, 602, 90-94	2.2	4
150	Analysis of Ge micro-cavities with in-plane tensile strains above 2. *Optics Express*, **2016**, 24, 4365-4374	3.3	27
149	Tunability of the dielectric function of heavily doped germanium thin films for mid-infrared plasmonics. *Physical Review B*, **2016**, 94,	3.3	57
148	Optical Activation of Germanium Plasmonic Antennas in the Mid-Infrared. *Physical Review Letters*, **2016**, 117, 047401	7.4	40
147	Expanding the Ge emission wavelength to 2.25 μm with SixNy strain engineering. *Thin Solid Films*, **2016**, 602, 60-63	2.2	3
146	Ba6−x Nd8+2x Ti18O54 Tungsten Bronze: A New High-Temperature n-Type Oxide Thermoelectric. *Journal of Electronic Materials*, **2016**, 45, 1894-1899	1.9	14
145	The UK National Quantum Technologies Hub in sensors and metrology (Keynote Paper) **2016**,		6
144	A novel absorptive/reflective solar concentrator for heat and electricity generation: An optical and thermal analysis. *Energy Conversion and Management*, **2016**, 114, 142-153	10.6	16
143	Fabrication of mid-infrared plasmonic antennas based on heavily doped germanium thin films. *Thin Solid Films*, **2016**, 602, 52-55	2.2	6
142	Facile Surfactant-Free Synthesis of p-Type SnSe Nanoplates with Exceptional Thermoelectric Power Factors. *Angewandte Chemie*, **2016**, 128, 6543-6547	3.6	8
141	Facile Surfactant-Free Synthesis of p-Type SnSe Nanoplates with Exceptional Thermoelectric Power Factors. *Angewandte Chemie - International Edition*, **2016**, 55, 6433-7	16.4	71
140	Scalable solar thermoelectrics and photovoltaics (SUNTRAP) **2016**,		5
139	8-band k·p modelling of mid-infrared intersubband absorption in Ge quantum wells. *Journal of Applied Physics*, **2016**, 120, 043103	2.5	11
138	Ge-on-Si Photonics for Mid-infrared Sensing Applications. *MRS Advances*, **2016**, 1, 3269-3279	0.7	

137	Disentangling nonradiative recombination processes in Ge micro-crystals on Si substrates. *Applied Physics Letters*, **2016**, 108, 262103	3.4	8
136	Specially designed solar cells for hybrid photovoltaic-thermal generators **2016**,		3
135	Germanium plasmonic nanoantennas for third-harmonic generation in the mid infrared **2016**,		2
134	Mid-infrared plasmonic platform based on n-doped Ge-on-Si: Molecular sensing with germanium nano-antennas on Si **2016**,		1
133	Mid-infrared intersubband absorption from p-Ge quantum wells grown on Si substrates. *Applied Physics Letters*, **2016**, 108, 091114	3.4	13
132	Measurement of the Earth tides with a MEMS gravimeter. *Nature*, **2016**, 531, 614-7	50.4	153
131	Engineering Large In-Plane Tensile Strains in Ge Microdisks, Microrings and Racetrack Optical Cavities. *ECS Transactions*, **2016**, 75, 633-640	1	
130	Finite Element Modelling To Evaluate the Cross-plane Thermal conductivity and Seebeck Coefficient of Ge/SiGe Heterostructure. *Materials Today: Proceedings*, **2015**, 2, 510-518	1.4	1
129	Extending the emission wavelength of Ge nanopillars to 2.25 μm using silicon nitride stressors. *Optics Express*, **2015**, 23, 18193-202	3.3	21
128	Midinfrared Plasmon-Enhanced Spectroscopy with Germanium Antennas on Silicon Substrates. *Nano Letters*, **2015**, 15, 7225-31	11.5	129
127	Coupled Simulation of Performance of a Crossed Compound Parabolic Concentrator with Solar Cell. *Energy Procedia*, **2015**, 75, 325-330	2.3	7
126	Group-IV midinfrared plasmonics. *Journal of Nanophotonics*, **2015**, 9, 093789	1.1	19
125	Modelling and experimental verification of a Ge/SiGe thermoelectric generator **2015**,		1
124	Multiphysics Simulations of a Thermoelectric Generator. *Energy Procedia*, **2015**, 75, 633-638	2.3	14
123	Physics and Applications of Terahertz Radiation. *Springer Series in Optical Sciences*, **2014**,	0.5	36
122	Quantum Well Photodetectors. *Springer Series in Optical Sciences*, **2014**, 3-34	0.5	1
121	Beyond Moore's law. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2014**, 372, 20130376	3	6
120	Design and fabrication of memory devices based on nanoscale polyoxometalate clusters. *Nature*, **2014**, 515, 545-9	50.4	243

119	Thin SiGe virtual substrates for Ge heterostructures integration on silicon. *Journal of Applied Physics*, **2014**, 115, 093502	2.5	18
118	Determining the electronic performance limitations in top-down-fabricated Si nanowires with mean widths down to 4 nm. *Nano Letters*, **2014**, 14, 6056-60	11.5	21
117	Multilayered Ge/SiGe Material in Microfabricated Thermoelectric Modules. *Journal of Electronic Materials*, **2014**, 43, 3838-3843	1.9	5
116	Prospects for SiGe thermoelectric generators. *Solid-State Electronics*, **2014**, 98, 70-74	1.7	17
115	Principles and Applications of THz Time Domain Spectroscopy. *Springer Series in Optical Sciences*, **2014**, 203-231	0.5	6
114	Terahertz Frequency Security Systems and Terahertz Safety Considerations. *Springer Series in Optical Sciences*, **2014**, 233-255	0.5	1
113	Mid-infrared plasmonic germanium antennas on silicon **2014**,		1
112	Mid-infrared plasmonic platform based on heavily doped epitaxial Ge-on-Si: Retrieving the optical constants of thin Ge epilayers **2014**,		1
111	Ge/SiGe quantum confined Stark effect electro-absorption modulation with low voltage swing at = 1550 nm. *Optics Express*, **2014**, 22, 19284-92	3.3	19
110	Silver antimony Ohmic contacts to moderately doped n-type germanium. *Applied Physics Letters*, **2014**, 104, 162101	3.4	7
109	(Invited) The Thermoelectric Properties of Ge/SiGe Based Superlattices: from Materials to Energy Harvesting Modules. *ECS Transactions*, **2014**, 64, 929-937	1	1
108	THz Bolometer Detectors. *Springer Series in Optical Sciences*, **2014**, 35-75	0.5	8
107	Quantum Cascade Lasers. *Springer Series in Optical Sciences*, **2014**, 103-121	0.5	1
106	Relativistic Electrons-Based THz Sources: Principles of Operation and the ENEA Experience. *Springer Series in Optical Sciences*, **2014**, 123-148	0.5	1
105	Physics and Applications of T-Rays. *Springer Series in Optical Sciences*, **2014**, 149-175	0.5	1
104	Terahertz Control. *Springer Series in Optical Sciences*, **2014**, 179-202	0.5	
103	Terahertz Plasma Field Effect Transistors. *Springer Series in Optical Sciences*, **2014**, 77-100	0.5	2
102	Thermal Conductivity Measurement Methods for SiGe Thermoelectric Materials. *Journal of Electronic Materials*, **2013**, 42, 2376-2380	1.9	8

101	Ge/SiGe Superlattices for Thermoelectric Devices Grown by Low-Energy Plasma-Enhanced Chemical Vapor Deposition. *Journal of Electronic Materials*, **2013**, 42, 2030-2034	1.9	10
100	Power Factor Characterization of Ge/SiGe Thermoelectric Superlattices at 300 K. *Journal of Electronic Materials*, **2013**, 42, 1449-1453	1.9	6
99	Ge/SiGe superlattices for nanostructured thermoelectric modules. *Thin Solid Films*, **2013**, 543, 153-156	2.2	15
98	Prospects for SiGe thermoelectric generators **2013**,		1
97	Strained germanium nanostructures on silicon emitting at >2.2 μm wavelength **2013**,		4
96	The cross-plane thermoelectric properties of p-Ge/Si0.5Ge0.5 superlattices. *Applied Physics Letters*, **2013**, 103, 143507	3.4	39
95	Ge/SiGe superlattices for thermoelectric energy conversion devices. *Journal of Materials Science*, **2013**, 48, 2829-2835	4.3	21
94	The thermoelectric properties of Ge/SiGe modulation doped superlattices. *Journal of Applied Physics*, **2013**, 113, 233704	2.5	52
93	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	2.9	71
92	Low Specific Ohmic Contacts to n-type Germanium Using a Low Temperature NiGe Process. *ECS Transactions*, **2013**, 50, 1081-1084	1	4
91	Si/SiGe Thermoelectric Generators. *ECS Transactions*, **2013**, 50, 959-963	1	
90	Long Wavelength {greater than or equal to}1.9 μm Germanium for Optoelectronics Using Process Induced Strain. *ECS Transactions*, **2013**, 50, 779-782	1	2
89	(Invited) Germanium/Silicon Heterostructures for Terahertz Emission. *ECS Transactions*, **2013**, 50, 763-771	1	3
88	1.55 μm direct bandgap electroluminescence from strained n-Ge quantum wells grown on Si substrates. *Applied Physics Letters*, **2012**, 101, 211101	3.4	17
87	SPICE Modeling of the Scaling of Resonant Tunneling Diodes and the Effects of Sidewall Leakage. *IEEE Transactions on Electron Devices*, **2012**, 59, 3555-3560	2.9	11
86	Ohmic contacts to n-type germanium with low specific contact resistivity. *Applied Physics Letters*, **2012**, 100, 022113	3.4	70
85	Nanofabrication of high aspect ratio (~50:1) sub-10 nm silicon nanowires using inductively coupled plasma etching. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2012**, 30, 06FF02	1.3	55
84	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, 114508	2.5	36

83	Si/SiGe quantum cascade superlattice designs for terahertz emission. *Journal of Applied Physics*, **2010**, 107, 053109	2.5	19
82	The progress towards terahertz quantum cascade lasers on silicon substrates. *Laser and Photonics Reviews*, **2010**, 4, 610-632	8.3	60
81	Si/SiGe Bound-to-Continuum Quantum Cascade Emitters. *ECS Transactions*, **2009**, 16, 865-874	1	4
80	Silicon photonics: a bright future?. *Electronics Letters*, **2009**, 45, 582	1.1	25
79	SiGe/Si quantum cascade structures deposited by low-energy plasma-enhanced CVD **2008**,		1
78	Si/SiGe bound-to-continuum quantum cascade terahertz emitters **2008**,		1
77	Silicon as a model ion trap: Time domain measurements of donor Rydberg states. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 10649-10653	11.5	61
76	Variation of the hopping exponent in disordered silicon MOSFETs. *Journal of Physics Condensed Matter*, **2008**, 20, 415226	1.8	1
75	Determination of complex refractive index of thin metal films from terahertz time-domain spectroscopy. *Journal of Applied Physics*, **2008**, 104, 053110	2.5	21
74	8-band k.p modeling of the quantum confined Stark effect in Ge quantum wells on Si substrates. *Physical Review B*, **2008**, 77,	3.3	65
73	Molecular beam epitaxy growth of Si/SiGe bound-to-continuum quantum cascade structures for THz emission. *Thin Solid Films*, **2008**, 517, 34-37	2.2	1
72	Structural and Compositional Properties of Strain-Symmetrized SiGe/Si Heterostructures. *Springer Proceedings in Physics*, **2008**, 269-272	0.2	1
71	Magnetoconductivity of Hubbard bands induced in silicon MOSFETs. *Physica B: Condensed Matter*, **2007**, 400, 218-223	2.8	2
70	Activation mechanisms in sodium-doped silicon MOSFETs. *Journal of Physics Condensed Matter*, **2007**, 19, 226216	1.8	5
69	Si□SiGe n-type resonant tunneling diodes fabricated using in situ hydrogen cleaning. *Applied Physics Letters*, **2007**, 90, 203501	3.4	7
68	A Review of Progress Towards Terahertz Si/SiGe Quantum Cascade Lasers. *IETE Journal of Research*, **2007**, 53, 285-292	0.9	6
67	Interwell relaxation times in p□Si□SiGe asymmetric quantum well structures: Role of interface roughness. *Physical Review B*, **2007**, 75,	3.3	29
66	Doubling speed using strained Si/SiGe CMOS technology. *Thin Solid Films*, **2006**, 508, 338-341	2.2	2

65	Evidence for multiple impurity bands in sodium-doped silicon MOSFETs. *Physical Review B*, **2006**, 73,	3.3	8
64	Toward Silicon-Based Lasers for Terahertz Sources. *IEEE Journal of Selected Topics in Quantum Electronics*, **2006**, 12, 1570-1578	3.8	26
63	Low-Loss Surface-Mode Waveguides for Terahertz Si□SiGe Quantum Cascade Lasers. *IEEE Journal of Quantum Electronics*, **2006**, 42, 1233-1238	2	11
62	Strain-symmetrized Si/SiGe multi-quantum well structures grown by molecular beam epitaxy for intersubband engineering. *Journal of Luminescence*, **2006**, 121, 403-408	3.8	1
61	Low-temperature molecular beam epitaxy growth of Si/SiGe THz quantum cascade structures on virtual substrates. *Thin Solid Films*, **2006**, 508, 24-28	2.2	4
60	Intersubband lifetimes in p□Si□SiGe terahertz quantum cascade heterostructures. *Physical Review B*, **2005**, 71,	3.3	22
59	Pump□probe measurement of lifetime engineering in SiGe quantum wells below the optical phonon energy. *Semiconductor Science and Technology*, **2005**, 20, L50-L52	1.8	7
58	Investigation of the injection velocity of holes in strained Si pMOSFETs. *Semiconductor Science and Technology*, **2005**, 20, L20-L22	1.8	1
57	SiGe quantum cascade structures for light emitting devices. *Journal of Crystal Growth*, **2005**, 278, 488-494	1.6	7
56	Strained-Si n-MOS surface-channel and buried Si0.7Ge0.3 compressively-strained p-MOS fabricated in a 0.25□m heterostructure CMOS process. *Materials Science in Semiconductor Processing*, **2005**, 8, 343-346	1.3	2
55	Growth and structural characterisation of Si/SiGe heterostructures for optoelectronic applications. *Optical Materials*, **2005**, 27, 855-858	3.3	
54	Optical cavities for Si/SiGe tetrahertz quantum cascade emitters. *Optical Materials*, **2005**, 27, 851-854	3.3	4
53	Electron effective mass enhancement in ultrathin gate-oxide Si-MOSFETs. *AIP Conference Proceedings*, **2005**,	0	2
52	Electron effective mass in ultrathin oxide silicon MOSFET inversion layers. *Semiconductor Science and Technology*, **2005**, 20, 664-667	1.8	5
51	Transverse □esistance overshoot□ in a Si/SiGe two-dimensional electron gas in the quantum Hall effect regime. *Europhysics Letters*, **2005**, 69, 997-1002	1.6	9
50	Temperature dependence of terahertz optical transitions from boron and phosphorus dopant impurities in silicon. *Applied Physics Letters*, **2005**, 87, 101114	3.4	20
49	Masking by weak localization of metallic behavior in a two-dimensional electron system in strong parallel magnetic fields. *Physical Review B*, **2004**, 69,	3.3	6
48	Conductivity of weakly and strongly localized electrons in a n-type Si/SiGe heterostructure. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2004**, 1, 67-70		3

47	Si/SiGe heterostructures: from material and physics to devices and circuits. *Semiconductor Science and Technology*, **2004**, 19, R75-R108	1.8	424
46	Study of single- and dual-channel designs for high-performance strained-Si-SiGe n-MOSFETs. *IEEE Transactions on Electron Devices*, **2004**, 51, 1245-1253	2.9	26
45	High-performance nMOSFETs using a novel strained Si/SiGe CMOS architecture. *IEEE Transactions on Electron Devices*, **2003**, 50, 1961-1969	2.9	70
44	Si/SiGe quantum-cascade emitters for terahertz applications. *Physica E: Low-Dimensional Systems and Nanostructures*, **2003**, 16, 147-155	3	15
43	Electroluminescence from Si/SiGe quantum cascade emitters. *Physica E: Low-Dimensional Systems and Nanostructures*, **2003**, 16, 309-314	3	4
42	THz intersubband dynamics in p-Si/SiGe quantum well emitter structures. *Physica Status Solidi (B): Basic Research*, **2003**, 237, 381-385	1.3	
41	Terahertz Emission From Silicon-Germanium Quantum Cascades **2003**, 367-382		2
40	Longitudinal conductivity in Si/SiGe heterostructure at integer filling factors. *Physical Review B*, **2003**, 68,	3.3	5
39	Interwell intersubband electroluminescence from Si/SiGe quantum cascade emitters. *Applied Physics Letters*, **2003**, 83, 4092-4094	3.4	60
38	Si-based electroluminescence at THz frequencies. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2002**, 89, 10-12	3.1	20
37	n-type Si/SiGe resonant tunnelling diodes. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2002**, 89, 26-29	3.1	9
36	Low-dimensional inverted Si/SiGe modulation-doped electron gases using selective ex-situ ion implantation. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2002**, 89, 111-115	3.1	
35	Investigation of the zero-field 2D metallic state with rS and kFl controlled independently. *Physica E: Low-Dimensional Systems and Nanostructures*, **2002**, 12, 616-619	3	1
34	THz intersubband dynamics in p-Si/SiGe quantum well structures. *Physica E: Low-Dimensional Systems and Nanostructures*, **2002**, 13, 904-907	3	4
33	Relative importance of the electron interaction strength and disorder in the two-dimensional metallic state. *Physical Review B*, **2002**, 66,	3.3	18
32	Intersubband electroluminescence from Si/SiGe cascade emitters at terahertz frequencies. *Applied Physics Letters*, **2002**, 81, 1543-1545	3.4	102
31	Picosecond intersubband dynamics in p-Si/SiGe quantum-well emitter structures. *Applied Physics Letters*, **2002**, 80, 1456-1458	3.4	34
30	High performance Si/Si/sub 1-x/Gex resonant tunneling diodes. *IEEE Electron Device Letters*, **2001**, 22, 182-184	4.4	42

29	Si/SiGe electron resonant tunneling diodes with graded spacer wells. *Applied Physics Letters*, **2001**, 78, 4184-4186	3.4	9
28	The scaled performance of Si/Si/sub 1-x/Gex resonant tunneling diodes. *IEEE Electron Device Letters* , **2001**, 22, 582-584	4.4	31
27	Silicon germanium makes its mark. *Physics World*, **2000**, 13, 27-32	0.5	22
26	Investigation of Si/SiGe heterostructure material using non-destructive optical techniques. *Thin Solid Films*, **2000**, 364, 75-79	2.2	1
25	Schottky gating high mobility Si/Si 1 Ge x 2D electron systems. *Thin Solid Films*, **2000**, 369, 316-319	2.2	11
24	Si/SiGe n-type inverted modulation doping using ion implantation. *Thin Solid Films*, **2000**, 369, 324-327	2.2	3
23	Inverted modulation-doped n-type Si/Si0.77Ge0.23 heterostructures. *Microelectronic Engineering*, **2000**, 53, 205-208	2.5	
22	Si/Si1 Gex heterostructure field effect transistors fabricated using a low thermal budget CMOS process. *Microelectronic Engineering*, **2000**, 53, 209-212	2.5	4
21	Si/SiGe electron resonant tunneling diodes. *Applied Physics Letters*, **2000**, 77, 1653-1655	3.4	34
20	Silicon-Germanium Strained Layer Materials in Microelectronics. *Advanced Materials*, **1999**, 11, 191-204	24	114
19	Silicon germanium heterostructures in electronics: the present and the future. *Thin Solid Films*, **1998**, 321, 172-180	2.2	66
18	Electrical properties of two-dimensional electron gases grown on cleaned SiGe virtual substrates. *Thin Solid Films*, **1998**, 321, 181-185	2.2	25
17	Silicon quantum integrated circuits an attempt to fabricate silicon-based quantum devices using CMOS fabrication techniques. *Thin Solid Films*, **1998**, 336, 130-136	2.2	15
16	Far-infrared cyclotron resonance study of the effect of strain and localisation in Si/SiGe two dimensional electron gases. *Solid-State Electronics*, **1998**, 42, 1159-1163	1.7	2
15	Two-dimensional electron gas mobility as a function of virtual substrate quality in strained Si/SiGe heterojunctions. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1998**, 16, 1634		27
14	Cyclotron resonance measurements of Si/SiGe two-dimensional electron gases with differing strain. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1998**, 16, 1655		4
13	Electrical properties and uniformity of two dimensional electron gases grown on cleaned SiGe virtual substrates. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1998**, 16, 1644		8
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