Giovanni Isella

List of Publications by Year
in descending order

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378 papers	6,395 citations	81839 39 h-index	110317 64 g-index
381 all docs	381 docs citations	381 times ranked	4623 citing authors

#	Article	IF	Citations
1	Mid-infrared Integrated Electro-optic Modulator Operating up to 225 MHz between 6.4 and 10.7 Î¼m Wavelength. ACS Photonics, 2022, 9, 249-255.	3.2	17
2	Dynamics of Hole Singlet-Triplet Qubits with Large <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>g</mml:mi></mml:mrow></mml:math> -Factor Differences. Physical Review Letters, 2022, 128, 126803.	2.9	23
3	On-chip infrared photonics with Si-Ge-heterostructures: What is next?. APL Photonics, 2022, 7, .	3.0	18
4	Graphene/Ge microcrystal photodetectors with enhanced infrared responsivity. APL Photonics, 2022, 7, .	3.0	6
5	Large Rashba unidirectional magnetoresistance in the Fe/Ge(111) interface states. Physical Review B, 2021, 103, .	1.1	15
6	Design and simulation of waveguide-integrated Ge/SiGe quantum-confined Stark effect optical modulator based on adiabatic coupling with SiGe waveguide. AIP Advances, 2021, 11, .	0.6	4
7	A singlet-triplet hole spin qubit in planar Ge. Nature Materials, 2021, 20, 1106-1112.	13.3	73
8	Field-resolved detection of the temporal response of a single plasmonic antenna in the mid-infrared. Optica, 2021, 8, 898.	4.8	14
9	CMOS-Compatible Bias-Tunable Dual-Band Detector Based on GeSn/Ge/Si Coupled Photodiodes. ACS Photonics, 2021, 8, 2166-2173.	3.2	36
10	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.	1.6	4
11	Ge/Si electrically tunable VIS/SWIR photodetector. , 2021, , .		0
12	Mid-infrared second harmonic generation with Ge quantum wells. , 2021, , .		0
13	Ge micro-crystals photedetectors with enhanced infrared responsivity. , 2021, , .		0
14	Photonic Band Gap and Light Routing in Self-Assembled Lattices of Epitaxial <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Ge</mml:mi></mml:math> -on- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Si</mml:mi></mml:math> Microstructures. Physical Review Applied, 2021, 16, .	1.5	1
15	Ex-situ doping of epitaxially grown Ge on Si by ion-implantation and pulsed laser melting. Applied Surface Science, 2020, 509, 145277.	3.1	2
16	On-Chip Mid-Infrared Supercontinuum Generation from 3 to 13 Î¼m Wavelength. ACS Photonics, 2020, 7, 3423-3429.	3.2	52
17	Self-Assembly of Nanovoids in Si Microcrystals Epitaxially Grown on Deeply Patterned Substrates. Crystal Growth and Design, 2020, 20, 2914-2920.	1.4	2
18	Probing the in-plane electron spin polarization in Ge/ Si0.15Ge0.85 multiple quantum wells. Physical Review B, 2020, 101, .	1.1	4

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19	Spin-charge interconversion in heterostructures based on group-IV semiconductors. Rivista Del Nuovo Cimento, 2020, 43, 45-96.	2.0	9
20	Optical modulation in Ge-rich SiGe waveguides in the mid-infrared wavelength range up to 11 Âµm. Communications Materials, 2020, 1, .	2.9	21
21	Observation of Large Unidirectional Rashba Magnetoresistance in Ge(111). Physical Review Letters, 2020, 124, 027201.	2.9	42
22	Ge-rich graded SiGe waveguides and interferometers from 5 to 11â€…Âµm wavelength range. Optics Express, 2020, 28, 12771.	1.7	21
23	Characterization of integrated waveguides by atomic-force-microscopy-assisted mid-infrared imaging and spectroscopy. Optics Express, 2020, 28, 22186.	1.7	9
24	Broadband control of the optical properties of semiconductors through site-controlled self-assembly of microcrystals. Optics Express, 2020, 28, 24981.	1.7	6
25	Mid-infrared second harmonic generation in Ge/SiGe coupled quantum wells. , 2020, , .		1
26	Field-resolved response of mid-infrared plasmonic antennas. , 2020, , .		0
27	Ge/SiGe parabolic quantum wells. Journal Physics D: Applied Physics, 2019, 52, 415105.	1.3	8
28	On-chip Fourier-transform spectrometer based on spatial heterodyning tuned by thermo-optic effect. Scientific Reports, 2019, 9, 14633.	1.6	41
29	Doping dependence of the electron spin diffusion length in germanium. APL Materials, 2019, 7, .	2.2	12
30	Field-Resolved Response of Plasmonic Antennas. , 2019, , .		0
31	Atomic-scale structural characterization of grain boundaries in epitaxial Ge/Si microcrystals by HAADF-STEM. Acta Materialia, 2019, 167, 159-166.	3.8	5
32	Design and Simulation of Ge-on-Si Photodetectors With Electrically Tunable Spectral Response. Journal of Lightwave Technology, 2019, 37, 3517-3525.	2.7	7
33	Effect of thermal annealing on the interface quality of Ge/Si heterostructures. Scripta Materialia, 2019, 170, 52-56.	2.6	7
34	Recent Progress on Ge/SiGe Quantum Well Optical Modulators, Detectors, and Emitters for Optical Interconnects. Photonics, 2019, 6, 24.	0.9	26
35	Vertical Geâ€“Si Nanowires with Suspended Graphene Top Contacts as Dynamically Tunable Multispectral Photodetectors. ACS Photonics, 2019, 6, 735-742.	3.2	15
36	Composition determination of semiconductor alloys towards atomic accuracy by HAADF-STEM. Ultramicroscopy, 2019, 200, 84-96.	0.8	15

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37	VIS-NIR GeSi Photodetector with Voltage Tunable Spectral Response. , 2019, , .		0
38	Strain analysis of a Ge micro disk using precession electron diffraction. Journal of Applied Physics, 2019, 126, .	1.1	10
39	GaAs epilayers grown on patterned (001) silicon substrates via suspended Ge layers. Scientific Reports, 2019, 9, 17529.	1.6	14
40	Spin transport and spin-charge interconversion phenomena in Ge-based structures. , 2019, , .		5
41	Voltage-tunable dual-band Ge/Si photodetector operating in VIS and NIR spectral range. Optics Express, 2019, 27, 8529.	1.7	31
42	Ultra-wideband Ge-rich silicon germanium mid-infrared polarization rotator with mode hybridization flattening. Optics Express, 2019, 27, 9838.	1.7	14
43	Plasmon-enhanced Ge-based metal-semiconductor-metal photodetector at near-IR wavelengths. Optics Express, 2019, 27, 20516.	1.7	16
44	Broadband integrated racetrack ring resonators for long-wave infrared photonics. Optics Letters, 2019, 44, 407.	1.7	25
45	Field-Resolved Detection of the Temporal Response of a Mid-Infrared Plasmonic Antenna. , 2019, , .		0
46	Effective g factor of 2D holes in strained Ge quantum wells. Journal of Applied Physics, 2018, 123, .	1.1	11
47	Interfacial sharpness and intermixing in a Ge-SiGe multiple quantum well structure. Journal of Applied Physics, 2018, 123, .	1.1	16
48	Spin-to-charge conversion for hot photoexcited electrons in germanium. Physical Review B, 2018, 97, .	1.1	18
49	Paramagnon-Enhanced Spin Currents in a Lattice near the Curie Point. Scientific Reports, 2018, 8, 17108.	1.6	2
50	Magnetotransport in Bi2Se3 thin films epitaxially grown on Ge(111). AIP Advances, 2018, 8, 115125.	0.6	17
51	Components for Integrated Ge on Si for Mid-Infrared Photonic Sensors. , 2018, , .		0
52	Plasmonic mid-infrared third harmonic generation in germanium nanoantennas. Light: Science and Applications, 2018, 7, 106.	7.7	42
53	Dislocation-Free SiGe/Si Heterostructures. Crystals, 2018, 8, 257.	1.0	18
54	Germanium-based integrated photonics from near- to mid-infrared applications. Nanophotonics, 2018, 7, 1781-1793.	2.9	128

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55	Wideband Ge-Rich SiGe Polarization-Insensitive Waveguides for Mid-Infrared Free-Space Communications. Applied Sciences (Switzerland), 2018, 8, 1154.	1.3	10
56	Lattice tilt and strain mapped by X-ray scanning nanodiffraction in compositionally graded SiGe/Si microcrystals. Journal of Applied Crystallography, 2018, 51, 368-385.	1.9	11
57	Graded SiGe waveguides with broadband low-loss propagation in the mid infrared. Optics Express, 2018, 26, 870.	1.7	93
58	Benchmarking the Use of Heavily Doped Ge for Plasmonics and Sensing in the Mid-Infrared. ACS Photonics, 2018, 5, 3601-3607.	3.2	31
59	Modeling the photo-induced inverse spin-Hall effect in Pt/semiconductor junctions. Journal of Applied Physics, 2018, 124, .	1.1	13
60	Universal Frequency Dependence of the Hopping AC Conductance in p-Ge/GeSi Structures in the Integer Quantum Hall Effect Regime. Journal of Experimental and Theoretical Physics, 2018, 126, 246-254.	0.2	0
61	On-chip Bragg grating waveguides and Fabry-Perot resonators for long-wave infrared operation up to 84 Âµm. Optics Express, 2018, 26, 34366.	1.7	16
62	Dislocation density and structure in Si1-xGex buffer layers deposited by LEPECVD. , 2018, , 247-250.		0
63	Ge-rich graded-index Si1-xGex devices for Mid-IR integrated photonics. , 2018, , .		0
64	7.5 Âµm wavelength fiber-chip grating couplers for Ge-rich SiGe photonics integrated circuits. , 2018, , .		1
65	Functionalization of Scanning Probe Tips with Epitaxial Semiconductor Layers. Small Methods, 2017, 1, 1600033.	4.6	8
66	Optical generation of pure spin currents at the indirect gap of bulk Si. Applied Physics Letters, 2017, 110, .	1.5	11
67	Ge-rich SiGe waveguides for mid-infrared photonics. Proceedings of SPIE, 2017, , .	0.8	1
68	Polarization insensitive Ge-rich silicon germanium waveguides for optical interconnects on silicon. , 2017, , .		0
69	Exceptional thermal strain reduction by a tilting pillar architecture: Suspended Ge layers on Si (001). Materials and Design, 2017, 116, 144-151.	3.3	9
70	Optical properties of highly n-doped germanium obtained byin situdoping and laser annealing. Journal Physics D: Applied Physics, 2017, 50, 465103.	1.3	28
71	Silicon nitride waveguide-integrated Ge/SiGe quantum wells optical modulator. Journal of Physics: Conference Series, 2017, 901, 012152.	0.3	3
72	In situ ohmic contact formation for n-type Ge via non-equilibrium processing. Semiconductor Science and Technology, 2017, 32, 115006.	1.0	10

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73	Nonlinear Properties of Ge-rich Si1â^'xGex Materials with Different Ge Concentrations. Scientific Reports, 2017, 7, 14692.	1.6	28
74	Germanium-on-silicon waveguides for mid-infrared photonic sensing chips. , 2017, , .		0
75	Imaging spin diffusion in germanium at room temperature. Physical Review B, 2017, 96, .	1.1	22
76	Pure spin currents in Ge probed by inverse spin-Hall effect. AIP Advances, 2017, 7, 055907.	0.6	1
77	Spin-Hall Voltage over a Large Length Scale in Bulk Germanium. Physical Review Letters, 2017, 118, 167402.	2.9	29
78	Strain Engineering in Highly Mismatched SiGe/Si Heterostructures. Materials Science in Semiconductor Processing, 2017, 70, 117-122.	1.9	8
79	Strain relaxation in epitaxial Ge crystals grown on patterned Si(001)Âsubstrates. Scripta Materialia, 2017, 127, 169-172.	2.6	12
80	Mid-infrared n-Ge on Si plasmonic based microbolometer sensors. , 2017, , .		3
81	Heavily-doped germanium on silicon with activated doping exceeding 1020 cmâ^'3 as an alternative to gold for mid-infrared plasmonics. , 2017, , .		0
82	n-Ge on Si for mid-infrared plasmonic sensors. , 2017, , .		5
83	Ge-rich graded-index Si_1-xGex waveguides with broadband tight mode confinement and flat anomalous dispersion for nonlinear mid-infrared photonics. Optics Express, 2017, 25, 6561.	1.7	44
84	Ultra-wideband Ge-rich silicon germanium integrated Machâ€"Zehnder interferometer for mid-infrared spectroscopy. Optics Letters, 2017, 42, 3482.	1.7	38
85	Low-loss Ge-rich Si_02Ge_08 waveguides for mid-infrared photonics. Optics Letters, 2017, 42, 105.	1.7	56
86	Three-dimensional SiGe/Si heterostructures: Switching the dislocation sign by substrate under-etching. Physical Review Materials, 2017, 1, .	0.9	5
87	Mid-Infrared Third-Harmonic Emission from Heavily-Doped Germanium Plasmonic Nanoantennas. , 2017, , .		0
88	Optical Orientation and Inverse Spin Hall Effect as Effective Tools to Investigate Spin-Dependent Diffusion. Electronics (Switzerland), 2016, 5, 80.	1.8	4
89	Highly Mismatched, Dislocationâ€Free SiGe/Si Heterostructures. Advanced Materials, 2016, 28, 884-888.	11.1	37
90	Enhancing elastic stress relaxation in SiGe/Si heterostructures by Si pillar necking. Applied Physics Letters, 2016, 109, 182112.	1.5	3

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91	Lattice bending in three-dimensional Ge microcrystals studied by X-ray nanodiffraction and modelling. Journal of Applied Crystallography, 2016, 49, 976-986.	1.9	6
92	Ge-on-Si Photonics for Mid-infrared Sensing Applications. MRS Advances, 2016, 1, 3269-3279.	0.5	0
93	Disentangling nonradiative recombination processes in Ge micro-crystals on Si substrates. Applied Physics Letters, 2016, 108, .	1.5	14
94	Strong confinement-induced engineering of the g factor and lifetime of conduction electron spins in Ge quantum wells. Nature Communications, 2016, 7, 13886.	5.8	28
95	Mid-infrared intersubband absorption from p-Ge quantum wells on Si. , 2016, , .		0
96	GaAs/Ge crystals grown on Si substrates patterned down to the micron scale. Journal of Applied Physics, 2016, 119, .	1.1	26
97	Mid-infrared plasmonic platform based on n-doped Ge-on-Si: Molecular sensing with germanium nano-antennas on Si. , 2016, , .		1
98	Mid-infrared intersubband absorption from p-Ge quantum wells grown on Si substrates. Applied Physics Letters, 2016, 108, .	1.5	22
99	Ge/SiGe quantum well for photonic applications: modelling of the quantum confined Stark effect. Proceedings of SPIE, 2016, , .	0.8	1
100	Ge-rich silicon germanium as a new platform for optical interconnects on silicon. , 2016, , .		0
101	Silicon germanium on graded buffer as a new platform for optical interconnects on silicon. Proceedings of SPIE, 2016, , .	0.8	0
102	Electro-absorption and electro-refraction in Ge/SiGe coupled quantum wells. , 2016, , .		0
103	Silicon photonics based on Ge/SiGe quantum well structures. , 2016, , .		1
104	Analysis of Ge micro-cavities with in-plane tensile strains above 2 %. Optics Express, 2016, 24, 4365.	1.7	38
105	Tunability of the dielectric function of heavily doped germanium thin films for mid-infrared plasmonics. Physical Review B, 2016, 94, .	1.1	86
106	Broadband single mode SiGe graded waveguides with tight mode confinement for mid-infrared photonics. , 2016, , .		0
107	Optical Activation of Germanium Plasmonic Antennas in the Mid-Infrared. Physical Review Letters, 2016, 117, 047401.	2.9	55
108	Integration of InGaP/GaAs/Ge triple-junction solar cells on deeply patterned silicon substrates. Progress in Photovoltaics: Research and Applications, 2016, 24, 1368-1377.	4.4	7

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109	Intersubband absorption in p-Ge QWs on Si. , 2016, , .		0
110	Elastic and Plastic Stress Relaxation in Highly Mismatched SiGe/Si Crystals. MRS Advances, 2016, 1, 3403-3408.	0.5	1
111	Expanding the Ge emission wavelength to 2.25 Î¼m with SixNy strain engineering. Thin Solid Films, 2016, 602, 60-63.	0.8	3
112	From plastic to elastic stress relaxation in highly mismatched SiGe/Si heterostructures. Acta Materialia, 2016, 114, 97-105.	3.8	7
113	Temperature-controlled coalescence during the growth of Ge crystals on deeply patterned Si substrates. Journal of Crystal Growth, 2016, 440, 86-95.	0.7	11
114	Fabrication of mid-infrared plasmonic antennas based on heavily doped germanium thin films. Thin Solid Films, 2016, 602, 52-55.	0.8	8
115	Thermoelectric cross-plane properties on p- and n-Ge/SixGe1-x superlattices. Thin Solid Films, 2016, 602, 90-94.	0.8	4
116	Burgers Vector Analysis of Vertical Dislocations in Ge Crystals by Large-Angle Convergent Beam Electron Diffraction. Microscopy and Microanalysis, 2015, 21, 637-645.	0.2	5
117	Sharp bends and Mach-Zehnder interferometer based on Ge-rich-SiGe waveguides on SiGe graded buffer. Optics Express, 2015, 23, 30821.	1.7	15
118	Spin-dependent direct gap emission in tensile-strained Ge films on Si substrates. Physical Review B, 2015, 92, .	1.1	11
119	Spin diffusion in Pt as probed by optically generated spin currents. Physical Review B, 2015, 92, .	1.1	14
120	Giant electro-optic effect in Ge/SiGe coupled quantum wells. Scientific Reports, 2015, 5, 15398.	1.6	23
121	Analysis of edge threading dislocations bâ†'=12ã€ˆ110ã€‰ in three dimensional Ge crystals grown on (001)-Si substrates. Applied Physics Letters, 2015, 107, .	1.5	5
122	Photon energy dependence of photo-induced inverse spin-Hall effect in Pt/GaAs and Pt/Ge. Applied Physics Letters, 2015, 106, .	1.5	21
123	Highly strained Ge on Si microdisks with silicon nitride stressors. , 2015, , .		0
124	Group-IV midinfrared plasmonics. Journal of Nanophotonics, 2015, 9, 093789.	0.4	27
125	Silicon photonics based on Ge/SiGe quantum well structures. , 2015, , .		0
126	Ge/SiGe multiple quantum wells for photonic integrated circuits on silicon. , 2015, , .		0

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127	GaAs nanostructures on Si platform. , 2015, , .		1
128	Optical Switching of Mid-Infrared Plasmonic Nanoantennas Based on Germanium. , 2015, , .		0
129	Structural investigations of the Î±12Siâ€“Ge superstructure. Journal of Applied Crystallography, 2015, 48, 262-268.	1.9	3
130	Three-dimensional fabrication of free-standing epitaxial semiconductor nanostructures obtained by focused ion beam. Microelectronic Engineering, 2015, 141, 168-172.	1.1	7
131	Mid-infrared plasmonic resonances exploiting heavily-doped Ge on Si. Proceedings of SPIE, 2015, , .	0.8	1
132	Extending the emission wavelength of Ge nanopillars to 225 Î¼m using silicon nitride stressors. Optics Express, 2015, 23, 18193.	1.7	25
133	Optical Interconnects based on Ge/SiGe Multiple Quantum Well Structures. , 2015, , .		0
134	Engineered Coalescence by Annealing 3D Ge Microstructures into High-Quality Suspended Layers on Si. ACS Applied Materials & Interfaces, 2015, 7, 19219-19225.	4.0	24
135	Delayed plastic relaxation limit in SiGe islands grown by Ge diffusion from a local source. Journal of Applied Physics, 2015, 117, 104309.	1.1	1
136	Three-dimensional Ge/SiGe multiple quantum wells deposited on Si(001) and Si(111) patterned substrates. Semiconductor Science and Technology, 2015, 30, 105001.	1.0	10
137	Integration of GaN Crystals on Micropatterned Si(0 0 1) Substrates by Plasma-Assisted Molecular Beam Epitaxy. Crystal Growth and Design, 2015, 15, 4886-4892.	1.4	10
138	Midinfrared Plasmon-Enhanced Spectroscopy with Germanium Antennas on Silicon Substrates. Nano Letters, 2015, 15, 7225-7231.	4.5	173
139	Heterointegration of InGaAs/GaAs quantum wells on micro-patterned Si substrates. Journal of Applied Physics, 2015, 118, 075701.	1.1	5
140	Emission Engineering in Germanium Nanoresonators. ACS Photonics, 2015, 2, 53-59.	3.2	27
141	Silicon Photonics Based on Ge/SiGe Quantum Well Structures. , 2015, , .		0
142	O-band quantum-confined Stark effect optical modulator from Ge/Si0.15Ge0.85 quantum wells by well thickness tuning. Journal of Applied Physics, 2014, 116, .	1.1	17
143	Mid-infrared plasmonic germanium antennas on silicon. , 2014, , .		1
144	Excess carrier lifetimes in Ge layers on Si. Applied Physics Letters, 2014, 104, .	1.5	62

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145	(Invited) Photonic Interconnection Made by a Ge/SiGe MQW Modulator Connected to a Ge/SiGe MQW Photodetector through a SiGe Waveguide. ECS Transactions, 2014, 64, 761-773.	0.3	2
146	Infrared photodetectors fabricated on 3D epitaxial Ge-on-Si. , 2014, , .		0
147	High quality SiGe waveguide platform for Ge photonics on bulk silicon substrates. , 2014, , .		0
148	Carrier lifetimes in uniaxially strained Ge micro bridges. , 2014, , .		1
149	Process induced tensile strain of Ge on Si nanopillars by ICP-PECVD SiN stressor layers. , 2014, , .		0
150	Mid-infrared plasmonic platform based on heavily doped epitaxial Ge-on-Si: Retrieving the optical constants of thin Ge epilayers. , 2014, , .		5
151	Advances towards the demonstration of a Ge/SiGe modulator integrated on SOI. , 2014, , .		0
152	Strain relaxation of GaAs/Ge crystals on patterned Si substrates. Applied Physics Letters, 2014, 104, .	1.5	21
153	Thermal transport through short-period SiGe nanodot superlattices. Journal of Applied Physics, 2014, 115, 044312.	1.1	22
154	Ge/SiGe quantum wells on Si(111): Growth, structural, and optical properties. Journal of Applied Physics, 2014, 116, .	1.1	14
155	Ge Crystals on Si Show Their Light. Physical Review Applied, 2014, 1, .	1.5	34
156	Reconstruction of crystal shapes by X-ray nanodiffraction from three-dimensional superlattices. Journal of Applied Crystallography, 2014, 47, 2030-2037.	1.9	8
157	Metastability and relaxation in tensile SiGe on Ge(001) virtual substrates. Journal of Applied Physics, 2014, 116, 113507.	1.1	10
158	Individual heterojunctions of 3<scp>D</scp> germanium crystals on silicon <scp>CMOS</scp> for monolithically integrated Xâ€ray detector. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 131-135.	0.8	3
159	Ge quantum well plasmon-enhanced quantum confined Stark effect modulator. Materials Research Society Symposia Proceedings, 2014, 1627, 1.	0.1	2
160	(Invited) Three-Dimensional Epitaxial Si_{1-X}Ge_x, Ge and SiC Crystals on Deeply Patterned Si Substrates. ECS Transactions, 2014, 64, 631-648.	0.3	14
161	GeSi photonics for telecommunication applications. , 2014, , .		0
162	Monitoring the kinetic evolution of self-assembled SiGe islands grown by Ge surface thermal diffusion from a local source. Nanotechnology, 2014, 25, 135606.	1.3	4

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163	(Invited) The Thermoelectric Properties of Ge/SiGe Based Superlattices: from Materials to Energy Harvesting Modules. ECS Transactions, 2014, 64, 929-937.	0.3	1
164	Thin SiGe virtual substrates for Ge heterostructures integration on silicon. Journal of Applied Physics, 2014, 115, .	1.1	28
165	Advances Toward Ge/SiGe Quantum-Well Waveguide Modulators at 1.3Î¼m. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 33-39.	1.9	27
166	Recent progress in GeSi electro-absorption modulators. Science and Technology of Advanced Materials, 2014, 15, 014601.	2.8	27
167	Spin voltage generation through optical excitation of complementary spin populations. Nature Materials, 2014, 13, 790-795.	13.3	46
168	Multilayered Ge/SiGe Material in Microfabricated Thermoelectric Modules. Journal of Electronic Materials, 2014, 43, 3838-3843.	1.0	5
169	Integrated germanium optical interconnects on silicon substrates. Nature Photonics, 2014, 8, 482-488.	15.6	196
170	3D heteroepitaxy of mismatched semiconductors on silicon. Thin Solid Films, 2014, 557, 42-49.	0.8	18
171	Prospects for SiGe thermoelectric generators. Solid-State Electronics, 2014, 98, 70-74.	0.8	21
172	Epitaxial Ge-crystal arrays for X-ray detection. Journal of Instrumentation, 2014, 9, C03019-C03019.	0.5	5
173	Individual heterojunctions of 3D germanium crystals on silicon CMOS for monolithically integrated X-ray detector (Phys. Status Solidi A 1âˆ•2014). Physica Status Solidi (A) Applications and Materials Science, 2014, 211, n/a-n/a.	0.8	1
174	Ge quantum-well waveguide modulator at 1.3Î¼m. Proceedings of SPIE, 2014, , .	0.8	0
175	Spin-resolved study of direct band-gap recombination in bulk Ge. Proceedings of SPIE, 2014, , .	0.8	0
176	Scanning X-ray strain microscopy of inhomogeneously strained Ge micro-bridges. Journal of Synchrotron Radiation, 2014, 21, 111-118.	1.0	37
177	Spin and energy relaxation in germanium studied by spin-polarized direct-gap photoluminescence. Physical Review B, 2013, 88, .	1.1	32
178	Thermal Conductivity Measurement Methods for SiGe Thermoelectric Materials. Journal of Electronic Materials, 2013, 42, 2376-2380.	1.0	9
179	Ge/SiGe Superlattices for Thermoelectric Devices Grown by Low-Energy Plasma-Enhanced Chemical Vapor Deposition. Journal of Electronic Materials, 2013, 42, 2030-2034.	1.0	10
180	Hydrostatic strain enhancement in laterally confined SiGe nanostripes. Physical Review B, 2013, 88, .	1.1	13

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181	Self-aligned Ge and SiGe three-dimensional epitaxy on dense Si pillar arrays. Surface Science Reports, 2013, 68, 390-417.	3.8	43
182	Power Factor Characterization of Ge/SiGe Thermoelectric Superlattices at 300ÂK. Journal of Electronic Materials, 2013, 42, 1449-1453.	1.0	7
183	Ge/SiGe superlattices for nanostructured thermoelectric modules. Thin Solid Films, 2013, 543, 153-156.	0.8	16
184	Strong quantum-confined Stark effect from light hole related direct-gap transitions in Ge quantum wells. Applied Physics Letters, 2013, 102, .	1.5	13
185	Prospects for SiGe thermoelectric generators. , 2013, , .		1
186	Onset of vertical threading dislocations in Si1â^'xGex/Si (001) at a critical Ge concentration. APL Materials, 2013, 1, .	2.2	14
187	The cross-plane thermoelectric properties of p-Ge/Si0.5Ge0.5 superlattices. Applied Physics Letters, 2013, 103, .	1.5	47
188	Strong quantum-confined Stark effect from light hole excitonic transition in Ge quantum wells for ultra-compact optical modulator. , 2013, , .		0
189	Ge/SiGe superlattices for thermoelectric energy conversion devices. Journal of Materials Science, 2013, 48, 2829-2835.	1.7	23
190	Structural characterization of GaAs self-assembled quantum dots grown by Droplet Epitaxy on Ge virtual substrates on Si. Applied Surface Science, 2013, 267, 86-89.	3.1	4
191	Ge quantum well optoelectronic devices for light modulation, detection, and emission. Solid-State Electronics, 2013, 83, 92-98.	0.8	10
192	Electro-refractive effect in Ge/SiGe multiple quantum wells. Applied Physics Letters, 2013, 102, .	1.5	23
193	Analysis of enhanced light emission from highly strained germanium microbridges. Nature Photonics, 2013, 7, 466-472.	15.6	367
194	Photoinduced inverse spin Hall effect in Pt/Ge(001) at room temperature. Applied Physics Letters, 2013, 102, .	1.5	23
195	Kinetics of multiexciton complex in GaAs quantum dots on Si. Applied Physics Letters, 2013, 102, 053109.	1.5	7
196	Ge/SiGe quantum well optical modulator. Proceedings of SPIE, 2013, , .	0.8	1
197	Phase-shift in waveguide integrated Ge quantum wells. , 2013, , .		0
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