Giovanni Capellini

List of Publications by Year
in descending order

201	4,429	109321	144013
papers	citations	35 h-index	57 g-index

203	203	203	3657
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	New insights into the electronic states of the Ge(0 0 1) surface by joint angle-resolved photoelectron spectroscopy and first-principle calculation investigation. Applied Surface Science, 2022, 571, 151264.	6.1	1
2	Biocompatibility and antibacterial properties of TiCu(Ag) thin films produced by physical vapor deposition magnetron sputtering. Applied Surface Science, 2022, 573, 151604.	6.1	12
3	Modeling and design of an electrically pumped SiGeSn microring laser. , 2022, , .		1
4	On-chip infrared photonics with Si-Ge-heterostructures: What is next?. APL Photonics, 2022, 7, .	5.7	18
5	Modification of the Ge(001) Subsurface Electronic Structure after Adsorption of Sn. Applied Surface Science, 2022, , 153884.	6.1	0
6	Growth Phase- and Desiccation-Dependent Acinetobacter baumannii Morphology: An Atomic Force Microscopy Investigation. Langmuir, 2021, 37, 1110-1119.	3.5	8
7	Three-Dimensional Interfacing of Cells with Hierarchical Silicon Nano/Microstructures for Midinfrared Interrogation of In Situ Captured Proteins. ACS Applied Materials & Interfaces, 2021, 13, 8049-8059.	8.0	3
8	n-type Ge/Si antennas for THz sensing. Optics Express, 2021, 29, 7680.	3.4	6
9	Raman shifts in MBEâ€grown Si x Ge 1â€‰â^'â€‰ x â€‰â^'â€‰ y Sn y alloys with large Si content. Journal of Raman Spectroscopy, 2021, 52, 1167-1175.	2.5	2
10	THz intersubband electroluminescence from n-type Ge/SiGe quantum cascade structures. Applied Physics Letters, 2021, 118, .	3.3	15
11	THz intersubband absorption in n-type Si1â^'xGex parabolic quantum wells. Applied Physics Letters, 2021, 118, .	3.3	8
12	Terahertz intersubband electroluminescence from n-type germanium quantum wells. , 2021, , .		0
13	Thermoelectric Efficiency of Epitaxial GeSn Alloys for Integrated Si-Based Applications: Assessing the Lattice Thermal Conductivity by Raman Thermometry. ACS Applied Energy Materials, 2021, 4, 7385-7392.	5.1	13
14	CMOS-Compatible Bias-Tunable Dual-Band Detector Based on GeSn/Ge/Si Coupled Photodiodes. ACS Photonics, 2021, 8, 2166-2173.	6.6	36
15	The formation of a Sn monolayer on Ge(1 0 0) studied at the atomic scale. Applied Surface Science, 2021, 561, 149961.	6.1	3
16	Biomolecule sensing in THz range with n-Ge/Si antennas. , 2021, , .		0
17	Current leakage mechanisms related to threading dislocations in Ge-rich SiGe heterostructures grown on Si(001). Applied Physics Letters, 2021, 119, .	3.3	3
18	Electron Population Dynamics in Optically Pumped Asymmetric Coupled Ge/SiGe Quantum Wells: Experiment and Models. Photonics, 2020, 7, 2.	2.0	5

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19	Ge/SiGe multiple quantum well fabrication by reduced-pressure chemical vapor deposition. Japanese Journal of Applied Physics, 2020, 59, SGGK10.	1.5	10
20	Electron-phonon coupling in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>n</mml:mi></mml:math> -type Ge two-dimensional systems. Physical Review B, 2020, 102, .	3.2	7
21	Ge(Sn) nano-island/Si heterostructure photodetectors with plasmonic antennas. Nanotechnology, 2020, 31, 345203.	2.6	8
22	Disentangling elastic and inelastic scattering pathways in the intersubband electron dynamics of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>n</mml:mi></mml:math> -type Ge/SiGe quantum fountains. Physical Review B, 2020, 101, .	3.2	4
23	Carbon related hillock formation and its impact on the optoelectronic properties of GaN/AlGaN heterostructures grown on Si(111). Applied Physics Letters, 2020, 116, .	3.3	4
24	Temperature dependence of strainâ€“phonon coefficient in epitaxial Ge/Si(001): A comprehensive analysis. Journal of Raman Spectroscopy, 2020, 51, 989-996.	2.5	20
25	Intersubband Transition Engineering in the Conduction Band of Asymmetric Coupled Ge/SiGe Quantum Wells. Crystals, 2020, 10, 179.	2.2	11
26	Atomic-Scale Insights into Semiconductor Heterostructures: From Experimental Three-Dimensional Analysis of the Interface to a Generalized Theory of Interfacial Roughness Scattering. Physical Review Applied, 2020, 13, .	3.8	27
27	Controlling the relaxation mechanism of low strain Si1â^'xGex/Si(001) layers and reducing the threading dislocation density by providing a preexisting dislocation source. Journal of Applied Physics, 2020, 128, .	2.5	6
28	Reduction of threading dislocation density beyond the saturation limit by optimized reverse grading. Physical Review Materials, 2020, 4, .	2.4	20
29	Terahertz absorption-saturation and emission from electron-doped germanium quantum wells. Optics Express, 2020, 28, 7245.	3.4	12
30	Design and simulation of losses in Ge/SiGe terahertz quantum cascade laser waveguides. Optics Express, 2020, 28, 4786.	3.4	11
31	Composition analysis and transition energies of ultrathin Sn-rich GeSn quantum wells. Physical Review Materials, 2020, 4, .	2.4	10
32	Light effective hole mass in undoped Ge/SiGe quantum wells. Physical Review B, 2019, 100, .	3.2	47
33	Impedance Matching of THz Plasmonic Antennas. Journal of Infrared, Millimeter, and Terahertz Waves, 2019, 40, 929-942.	2.2	0
34	Dynamics of crosshatch patterns in heteroepitaxy. Physical Review B, 2019, 100, .	3.2	8
35	Shallow and Undoped Germanium Quantum Wells: A Playground for Spin and Hybrid Quantum Technology. Advanced Functional Materials, 2019, 29, 1807613.	14.9	81
36	Ultrafast carrier recombination in highly n-doped Ge-on-Si films. Applied Physics Letters, 2019, 114, .	3.3	3

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37	Coherent X-ray Diffraction and Electron Microscopy of Individual <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mrow><mml:mi>In</mml:mi><mml:mi mathvariant="normal">P</mml:mi></mml:mrow></mml:math> Nanocrystals on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Si</mml:mi></mml:math> Nanotips for III-V-on-	3.8	2
38	Room temperature operation of n-type Ge/SiGe terahertz quantum cascade lasers predicted by non-equilibrium Green's functions. Applied Physics Letters, 2019, 114, .	3.3	45
39	Epitaxy of Si-Ge-Sn-based heterostructures for CMOS-integratable light emitters. Solid-State Electronics, 2019, 155, 139-143.	1.4	16
40	Self-Ordered Ge Nanodot Fabrication by Using Reduced Pressure Chemical Vapor Deposition. ECS Journal of Solid State Science and Technology, 2019, 8, P190-P195.	1.8	4
41	Electron-doped SiGe Quantum Well Terahertz Emitters pumped by FEL pulses. , 2019, , .		0
42	N-Type Ge/SiGe Quantum Cascade Heterostructures for THz Emission. , 2019, , .		1
43	Si-based n-type THz Quantum Cascade Emitter. , 2019, , .		0
44	High-Quality n-Type Ge/SiGe Multilayers for THz Quantum Cascade Lasers. , 2019, , .		0
45	Control of Electron-State Coupling in Asymmetric <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Ge</mml:mi><mml:mo>/</mml:mo><mml:mrow><mml:mrow><mml:mi>Si</mml:mi><mml:mtext>â^'</mml:m Quantum Wells. Physical Review Applied, 2019, 11, .	3.8	25
46	Germanium Plasmon Enhanced Resonators for Label-Free Terahertz Protein Sensing. Frequenz, 2018, 72, 113-122.	0.9	7
47	Advanced GeSn/SiGeSn Group IV Heterostructure Lasers. Advanced Science, 2018, 5, 1700955.	11.2	61
48	Morphological evolution of Ge/Si nano-strips driven by Rayleigh-like instability. Applied Physics Letters, 2018, 112, 022101.	3.3	10
49	Photoluminescence study of interband transitions in few-layer, pseudomorphic, and strain-unbalanced Ge/GeSi multiple quantum wells. Physical Review B, 2018, 98, .	3.2	10
50	Alignment control of self-ordered three dimensional SiGe nanodots. Semiconductor Science and Technology, 2018, 33, 114014.	2.0	5
51	Misfit-Dislocation Distributions in Heteroepitaxy: From Mesoscale Measurements to Individual Defects and Back. Physical Review Applied, 2018, 10, .	3.8	8
52	(Invited) Epitaxy of Direct Bandgap Group IV Si-Ge-Sn Alloys towards Heterostructure Light Emitters. ECS Transactions, 2018, 86, 189-197.	0.5	3
53	Self-Ordered Ge Nanodot Fabrication by Reduced Pressure Chemical Vapor Deposition. ECS Transactions, 2018, 86, 259-266.	0.5	0
54	GeSn/SiGeSn Heterostructure and Multi Quantum Well Lasers. ACS Photonics, 2018, 5, 4628-4636.	6.6	84

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55	The thermal stability of epitaxial GeSn layers. APL Materials, 2018, 6, .	5.1	59
56	Photoluminescence from GeSn nano-heterostructures. Nanotechnology, 2018, 29, 415702.	2.6	9
57	Gate-controlled quantum dots and superconductivity in planar germanium. Nature Communications, 2018, 9, 2835.	12.8	101
58	Stable and selective self-assembly of Î±-lipoic acid on Ge(001) for biomolecule immobilization. Journal of Applied Physics, 2018, 123, .	2.5	7
59	Planar Semiconductor THz Antennas Using Spoof Plasmons for Surface Sensing. , 2018, , .		0
60	Structural and optical characterization of GaAs nano-crystals selectively grown on Si nano-tips by MOVPE. Nanotechnology, 2017, 28, 135301.	2.6	19
61	Bi-modal nanoheteroepitaxy of GaAs on Si by metal organic vapor phase epitaxy. Nanotechnology, 2017, 28, 135701.	2.6	15
62	In vitro biocompatibility study of sub-5â€‰nm silica-coated magnetic iron oxide fluorescent nanoparticles for potential biomedical application. Scientific Reports, 2017, 7, 46513.	3.3	39
63	Fully coherent Ge islands growth on Si nano-pillars by selective epitaxy. Materials Science in Semiconductor Processing, 2017, 70, 30-37.	4.0	2
64	Exceptional thermal strain reduction by a tilting pillar architecture: Suspended Ge layers on Si (001). Materials and Design, 2017, 116, 144-151.	7.0	9
65	Optical critical points of SixGe1â^'xâ^'ySnyalloys with high Si content. Semiconductor Science and Technology, 2017, 32, 124004.	2.0	3
66	Strain relaxation in epitaxial GaAs/Si (0Â0Â1) nanostructures. Philosophical Magazine, 2017, 97, 2845-2857.	1.6	8
67	Electrical and optical properties improvement of GeSn layers formed at high temperature under well-controlled Sn migration. Materials Science in Semiconductor Processing, 2017, 70, 139-144.	4.0	7
68	Photoluminescence of phosphorus atomic layer doped Ge grown on Si. Semiconductor Science and Technology, 2017, 32, 104005.	2.0	1
69	The impact of donors on recombination mechanisms in heavily doped Ge/Si layers. Journal of Applied Physics, 2017, 121, 245701.	2.5	19
70	Epitaxy of direct bandgap group IV heterostructure lasers. , 2017, , .		0
71	Reduced threshold microdisk lasers from GeSn/SiGeSn heterostructures. , 2017, , .		2
72	Electrical and optical properties improvement of GeSn layers formed at high temperature under well-controlled Sn migration. Materials Science in Semiconductor Processing, 2017, 57, 48-53.	4.0	16

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73	Photoluminescence of phosphorous doped Ge on Si (100). Materials Science in Semiconductor Processing, 2017, 70, 111-116.	4.0	8
74	A self-ordered, body-centered tetragonal superlattice of SiGe nanodot growth by reduced pressure CVD. Nanotechnology, 2017, 28, 485303.	2.6	10
75	A NIR-LED based on tensile strained, heavily doped Ge/Si Î¼-strips fabricated in a BiCMOS pilot line. , 2017, , .		0
76	Quantum confinement effects in GeSn/SiGeSn heterostructure lasers. , 2017, , .		1
77	Site controlled InAs/GaAs nanostructures on Si nano-tips. , 2017, , .		0
78	Xâ€ray characterization of selfâ€organized periodic bodyâ€centered tetragonal lattices of SiGe dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2017, 14, 1700004.	0.8	0
79	Dislocation-free Ge Nano-crystals via Pattern Independent Selective Ge Heteroepitaxy on Si Nano-Tip Wafers. Scientific Reports, 2016, 6, 22709.	3.3	25
80	Photoluminescence from ultrathin Ge-rich multiple quantum wells observed up to room temperature: Experiments and modeling. Physical Review B, 2016, 94, .	3.2	8
81	Compositional dependence of the band-gap of Ge1â^'xâ^'ySixSny alloys. Applied Physics Letters, 2016, 108, .	3.3	27
82	Selective growth of fully relaxed GeSn nano-islands by nanoheteroepitaxy on patterned Si(001). Applied Physics Letters, 2016, 109, .	3.3	10
83	Reduced-Pressure Chemical Vapor Deposition Growth of Isolated Ge Crystals and Suspended Layers on Micrometric Si Pillars. ACS Applied Materials & Interfaces, 2016, 8, 26374-26380.	8.0	10
84	Selective Epitaxy of InP on Si and Rectification in Graphene/InP/Si Hybrid Structure. ACS Applied Materials & Interfaces, 2016, 8, 26948-26955.	8.0	23
85	Photodetection in Hybrid Single-Layer Graphene/Fully Coherent Germanium Island Nanostructures Selectively Grown on Silicon Nanotip Patterns. ACS Applied Materials & Interfaces, 2016, 8, 2017-2026.	8.0	32
86	Robustness analysis of a device concept for edge-emitting lasers based on strained germanium. Optical and Quantum Electronics, 2016, 48, 1.	3.3	5
87	Sn migration control at high temperature due to high deposition speed for forming high-quality GeSn layer. Applied Physics Express, 2016, 9, 031201.	2.4	11
88	Growth and evolution of nickel germanide nanostructures on Ge(001). Nanotechnology, 2015, 26, 385701.	2.6	15
89	On device concepts for CMOS-compatible edge-emitters based on strained germanium. , 2015, , .		0
90	Bottom-up assembly of metallic germanium. Scientific Reports, 2015, 5, 12948.	3.3	21

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91	Radiative and non-radiative recombinations in tensile strained Ge microstrips: Photoluminescence experiments and modeling. Journal of Applied Physics, 2015, 118, .	2.5	20
92	Zero lattice mismatch and twin-free single crystalline ScN buffer layers for GaN growth on silicon. Applied Physics Letters, 2015, 107, .	3.3	9
93	Structural Mapping of Functional Ge Layers Grown on Graded SiGe Buffers for sub-10 nm CMOS Applications Using Advanced X-ray Nanodiffraction. ACS Applied Materials & Interfaces, 2015, 7, 26696-26700.	8.0	12
94	Ba termination of Ge(001) studied with STM. Nanotechnology, 2015, 26, 155701.	2.6	7
95	Misfit Dislocation Free Epitaxial Growth of SiGe on Compliant Nano-Structured Silicon. Solid State Phenomena, 2015, 242, 402-407.	0.3	2
96	Tailoring the strain in Si nano-structures for defect-free epitaxial Ge over growth. Nanotechnology, 2015, 26, 355707.	2.6	6
97	CMOS-compatible optical switching concept based on strain-induced refractive-index tuning. Optics Express, 2015, 23, 5930.	3.4	6
98	Modeling of Edge-Emitting Lasers Based on Tensile Strained Germanium Microstrips. IEEE Photonics Journal, 2015, 7, 1-15.	2.0	15
99	Imaging Structure and Composition Homogeneity of 300 mm SiGe Virtual Substrates for Advanced CMOS Applications by Scanning X-ray Diffraction Microscopy. ACS Applied Materials & Interfaces, 2015, 7, 9031-9037.	8.0	30
100	Growth and characterization of SiGeSn quantum well photodiodes. Optics Express, 2015, 23, 25048.	3.4	40
101	Engineered Coalescence by Annealing 3D Ge Microstructures into High-Quality Suspended Layers on Si. ACS Applied Materials & Interfaces, 2015, 7, 19219-19225.	8.0	24
102	Epi-cleaning of Ge/GeSn heterostructures. Journal of Applied Physics, 2015, 117, .	2.5	4
103	Non-uniform depth distributions of Sn concentration induced by Sn migration and desorption during GeSnSi layer formation. Applied Physics Letters, 2015, 106, .	3.3	20
104	Strain and lattice orientation distribution in SiN/Ge complementary metalâ€“oxideâ€“semiconductor compatible light emitting microstructures by quick x-ray nano-diffraction microscopy. Applied Physics Letters, 2015, 106, .	3.3	26
105	Delayed plastic relaxation limit in SiGe islands grown by Ge diffusion from a local source. Journal of Applied Physics, 2015, 117, 104309.	2.5	1
106	Spectroscopic Signatures of AAâ€² and AB Stacking of Chemical Vapor Deposited Bilayer MoS₂. ACS Nano, 2015, 9, 12246-12254.	14.6	117
107	Modeling of an Edge-Emitting strained-Ge laser. , 2015, , .		1
108	(Invited) Alternative High n-Type Doping Techniques in Germanium. ECS Transactions, 2014, 64, 163-171.	0.5	3

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109	Fully coherent growth of Ge on free-standing Si(001) nanomesas. Physical Review B, 2014, 89, .	3.2	32
110	Interface and nanostructure evolution of cobalt germanides on Ge(001). Journal of Applied Physics, 2014, 115, .	2.5	17
111	Physical mechanisms of intersubband-absorption linewidth broadening in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>s</mml:mi></mml:math>-Ge/SiGe quantum wells. Physical Review B, 2014, 90, .	3.2	25
112	Tensile Ge microstructures for lasing fabricated by means of a silicon complementary metal-oxide-semiconductor process. Optics Express, 2014, 22, 399.	3.4	96
113	Monitoring the kinetic evolution of self-assembled SiGe islands grown by Ge surface thermal diffusion from a local source. Nanotechnology, 2014, 25, 135606.	2.6	4
114	Combined effect of electron and lattice temperatures on the long intersubband relaxation times of Ge/SixGe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>quantum wells. Physical Review B, 2014, 89, .	3.2	14
115	Si CMOS compatible, compliant integration of lattice-mismatched semiconductors on Si(001): Example of fully coherent Ge/Si nanostructures. , 2014, , .		0
116	CMOS-fabricated tensile Ge microstructures: towards an edge-emitting laser. , 2014, , .		1
117	Determination of the free carrier concentration in atomic-layer doped germanium thin films by infrared spectroscopy. Journal of Optics (United Kingdom), 2014, 16, 094010.	2.2	8
118	New avenues to an old material: controlled nanoscale doping of germanium. Nanoscale, 2013, 5, 2600.	5.6	43
119	Radiative recombination and optical gain spectra in biaxially strained<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>n</mml:mi></mml:math>-type germanium. Physical Review B, 2013, 87, .	3.2	64
120	Phosphorus Molecules on Ge(001): A Playground for Controlled n-Doping of Germanium at High Densities. ACS Nano, 2013, 7, 11310-11316.	14.6	24
121	Germanium photodetector with 60 GHz bandwidth using inductive gain peaking. Optics Express, 2013, 21, 28387.	3.4	121
122	Onset of plastic relaxation in the growth of Ge on Si(001) at low temperatures: Atomic-scale microscopy and dislocation modeling. Physical Review B, 2013, 88, .	3.2	13
123	Strain analysis in SiN/Ge microstructures obtained via Si-complementary metal oxide semiconductor compatible approach. Journal of Applied Physics, 2013, 113, .	2.5	82
124	Photoluminescence, recombination rate, and gain spectra in optically excited n-type and tensile strained germanium layers. Journal of Applied Physics, 2013, 114, .	2.5	26
125	Electronic structure of phosphorus and arsenicÎ´-doped germanium. Physical Review B, 2013, 88, .	3.2	4
126	Atomic layer doping of strained Ge-on-insulator thin films with high electron densities. Applied Physics Letters, 2013, 102, 151103.	3.3	16

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127	Narrow intersubband transitions in n-type Ge/SiGe multi-quantum wells: control of the terahertz absorption energy trough the temperature dependent depolarization shift. Nanotechnology, 2012, 23, 465708.	2.6	25
128	Modeling picosecond electron dynamics of pump-probe intersubband spectroscopy in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi mathvariant="bold-italic">n</mml:mi></mml:math>-type Ge/SiGe quantum wells. Physical Review B, 2012, 86, .	3.2	10
129	Tensile Strained Ge Layers Obtained via a Si-CMOS Compatible Approach. , 2012, , .		2
130	Terahertz spectroscopy of germanium quantum wells on silicon substrate for terahertz photonics. , 2012, , .		0
131	X-ray diffraction study of plastic relaxation in Ge-rich SiGe virtual substrates. Physical Review B, 2012, 85, .	3.2	14
132	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>n</mml:mi></mml:math>-Type Doping of Germanium from Phosphine: Early Stages Resolved at the Atomic Level. Physical Review Letters, 2012, 109, 076101.	7.8	18
133	Stacking of 2D Electron Gases in Ge Probed at the Atomic Level and Its Correlation to Low-Temperature Magnetotransport. Nano Letters, 2012, 12, 4953-4959.	9.1	17
134	High temperature x ray diffraction measurements on Ge/Si(001) heterostructures: A study on the residual tensile strain. Journal of Applied Physics, 2012, 111, .	2.5	62
135	A Complete Fabrication Route for Atomic-Scale, Donor-Based Devices in Single-Crystal Germanium. Nano Letters, 2011, 11, 2272-2279.	9.1	60
136	Towards substrate removal in quasi-optical Schottky detector arrays. , 2011, , .		1
137	Long intersubband relaxation times in n-type germanium quantum wells. Applied Physics Letters, 2011, 99, .	3.3	26
138	Fabrication of air-bridge Schottky diodes on germanium for high speed IR detectors. Microelectronic Engineering, 2011, 88, 2714-2716.	2.4	4
139	Dual-temperature encapsulation of phosphorus in germanium Î´â€layers toward ultra-shallow junctions. Journal of Crystal Growth, 2011, 316, 81-84.	1.5	10
140	Phosphorus atomic layer doping of germanium by the stacking of multiple Î´ layers. Nanotechnology, 2011, 22, 375203.	2.6	26
141	Preparation of the Ge(001) surface towards fabrication of atomic-scale germanium devices. Nanotechnology, 2011, 22, 145604.	2.6	34
142	Microstructure and magnetic properties of colloidal cobalt nano-clusters. Journal of Magnetism and Magnetic Materials, 2010, 322, 3565-3571.	2.3	11
143	Near- and far-infrared absorption and electronic structure of Ge-SiGe multiple quantum wells. Physical Review B, 2010, 82, .	3.2	37
144	Magnetic properties of colloidal cobalt nanoclusters. Journal of Physics: Conference Series, 2010, 200, 072100.	0.4	0

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145	Strain relaxation in high Ge content SiGe layers deposited on Si. Journal of Applied Physics, 2010, 107, 063504.	2.5	67
146	Terahertz intersubband transitions in the conduction band of Ge/SiGe multi quantum wells. , 2010, , .		0
147	Terahertz intersubband absorption and conduction band alignment in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>n</mml:mi></mml:math>-type Si/SiGe multiple quantum wells. Physical Review B, 2009, 79, .	3.2	11
148	Agglomeration process in thin silicon-, strained silicon-, and silicon germanium-on-insulator substrates. Journal of Applied Physics, 2009, 105, .	2.5	20
149	Influence of encapsulation temperature on Ge:PÎ´-doped layers. Physical Review B, 2009, 80, .	3.2	23
150	Ultradense phosphorus in germanium delta-doped layers. Applied Physics Letters, 2009, 94, 162106.	3.3	45
151	High-speed, Monolithic CMOS Receivers with Ge on Si Waveguide Photodetectors. ECS Transactions, 2009, 16, 601-608.	0.5	0
152	Atomic-scale patterning of hydrogen terminated Ge(001) by scanning tunneling microscopy. Nanotechnology, 2009, 20, 495302.	2.6	28
153	Island and wetting-layer intermixing in the Ge/Si(001) system upon capping. Superlattices and Microstructures, 2009, 46, 328-332.	3.1	7
154	Conduction band intersubband transitions in Ge/SiGe quantum wells. Applied Physics Letters, 2009, 95, 051918.	3.3	26
155	2DEG based on strained Si on SGOI substrate. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1611-1613.	2.7	1
156	Alloying in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Ge</mml:mi><mml:mrow><mml:mo>(</mml:mo><mml:mi mathvariant="normal">Si</mml:mi><mml:mrow><mml:mo>(</mml:mo><mml:mn>001</mml:mn><mml:mo>)</mml:mo></mml:mrow></mml:mrow></mml:math> islands during their growth and capping: XPS and AFM study. Physical Review B, 2008, 77, .	3.2	11
157	Demonstration of first WDM CMOS photonics transceiver with monolithically integrated photo-detectors. , 2008, , .		14
158	Monolithically integrated high-speed CMOS photonic transceivers. , 2008, , .		54
159	10Gbit/s transceiver on silicon. , 2008, , .		5
160	Ge photodetectors integrated in CMOS photonic circuits. Proceedings of SPIE, 2008, , .	0.8	5
161	High-Speed Near Infrared Optical Receivers Based on Ge Waveguide Photodetectors Integrated in a CMOS Process. Advances in Optical Technologies, 2008, 2008, 1-5.	0.8	65
162	High-speed, monolithic CMOS receivers at 1550nm with Ge on Si waveguide photodetectors. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	9

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163	Vertical and lateral ordering of Ge islands grown on Si(001): theory and experiments. Journal of Physics Condensed Matter, 2007, 19, 225001.	1.8	18
164	GeSi intermixing in Ge nanostructures on Si(111): An XAFS versus STM study. Physical Review B, 2007, 75, .	3.2	20
165	Effect of interlayer strain interaction on the island composition and ordering in Ge/Si(001) island superlattices. Journal of Applied Physics, 2007, 102, 043518.	2.5	16
166	Effect of inter-layer strain interaction on the optical properties of Ge/Si(001) island multi-layers. Optoelectronics Letters, 2007, 3, 173-176.	0.8	0
167	Freezing shape and composition of Geâˆ•Si(001) self-assembled islands during silicon capping. Journal of Applied Physics, 2006, 100, 093516.	2.5	22
168	Spontaneous Ge island ordering promoted by partial silicon capping. Materials Science in Semiconductor Processing, 2006, 9, 823-827.	4.0	0
169	Relaxed state of GexSi1âˆ’x islands embedded in Si. Nuclear Instruments & Methods in Physics Research B, 2006, 246, 64-68.	1.4	4
170	CMOS Photonics Using Germanium Photodetectors. ECS Transactions, 2006, 3, 17-24.	0.5	13
171	Self-Ordering of a Ge Island Single Layer Induced by Si Overgrowth. Physical Review Letters, 2006, 96, 106102.	7.8	42
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