

Giovanni Capellini

List of Publications by Year in descending order

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201
papers

4,429
citations

109321

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144013

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203
all docs

203
docs citations

203
times ranked

3657
citing authors

#	ARTICLE	IF	CITATIONS
1	Metal-semiconductor-metal near-infrared light detector based on epitaxial Ge/Si. Applied Physics Letters, 1998, 72, 3175-3177.	3.3	238
2	SiGe intermixing in Ge/Si(100) islands. Applied Physics Letters, 2001, 78, 303-305.	3.3	167
3	Ge-Si intermixing in Ge quantum dots on Si(001) and Si(111). Applied Physics Letters, 2000, 76, 682-684.	3.3	131
4	Germanium photodetector with 60 GHz bandwidth using inductive gain peaking. Optics Express, 2013, 21, 28387.	3.4	121
5	Spectroscopic Signatures of MoS_2 and AB Stacking of Chemical Vapor Deposited Bilayer MoS_2 . ACS Nano, 2015, 9, 12246-12254.	14.6	117
6	Gate-controlled quantum dots and superconductivity in planar germanium. Nature Communications, 2018, 9, 2835.	12.8	101
7	Title is missing!. Nanotechnology, 1999, 10, 458-463.	2.6	97
8	Tensile Ge microstructures for lasing fabricated by means of a silicon complementary metal-oxide-semiconductor process. Optics Express, 2014, 22, 399.	3.4	96
9	Low-Energy Yield Spectroscopy as a Novel Technique for Determining Band Offsets: Application to the $\text{Si}(100)/\text{Si:H}$ Heterostructure. Physical Review Letters, 1995, 75, 3352-3355.	7.8	88
10	GeSn/SiGeSn Heterostructure and Multi Quantum Well Lasers. ACS Photonics, 2018, 5, 4628-4636.	6.6	84
11	Strain analysis in SiN/Ge microstructures obtained via Si-complementary metal oxide semiconductor compatible approach. Journal of Applied Physics, 2013, 113, .	2.5	82
12	Atomic force microscopy study of self-organized Ge islands grown on Si(100) by low pressure chemical vapor deposition. Applied Physics Letters, 1997, 70, 493-495.	3.3	81
13	Shallow and Undoped Germanium Quantum Wells: A Playground for Spin and Hybrid Quantum Technology. Advanced Functional Materials, 2019, 29, 1807613.	14.9	81
14	Strain relaxation in high Ge content SiGe layers deposited on Si. Journal of Applied Physics, 2010, 107, 063504.	2.5	67
15	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
16	Radiative recombination and optical gain spectra in biaxially strained n -type germanium. Physical Review B, 2013, 87, .	3.2	64
17	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
18	Advanced GeSn/SiGeSn Group IV Heterostructure Lasers. Advanced Science, 2018, 5, 1700955.	11.2	61

#	ARTICLE	IF	CITATIONS
19	A Complete Fabrication Route for Atomic-Scale, Donor-Based Devices in Single-Crystal Germanium. Nano Letters, 2011, 11, 2272-2279.	9.1	60
20	Intermixing-promoted scaling of Ge/Si(100) island sizes. Journal of Applied Physics, 2002, 92, 614-619.	2.5	59
21	The thermal stability of epitaxial GeSn layers. APL Materials, 2018, 6, .	5.1	59
22	Ordering self-assembled islands without substrate patterning. Applied Physics Letters, 2003, 82, 1772-1774.	3.3	57
23	Monolithically integrated high-speed CMOS photonic transceivers. , 2008, , .		54
24	Atomic force microscopy and photoluminescence study of Ge layers and self-organized Ge quantum dots on Si(100). Applied Physics Letters, 1996, 68, 2982-2984.	3.3	50
25	Ge-Si intermixing in Ge quantum dots on Si. Thin Solid Films, 2000, 380, 173-175.	1.8	50
26	Light effective hole mass in undoped Ge/SiGe quantum wells. Physical Review B, 2019, 100, .	3.2	47
27	Ultradense phosphorus in germanium delta-doped layers. Applied Physics Letters, 2009, 94, 162106.	3.3	45
28	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
29	New avenues to an old material: controlled nanoscale doping of germanium. Nanoscale, 2013, 5, 2600.	5.6	43
30	Self-Ordering of a Ge Island Single Layer Induced by Si Overgrowth. Physical Review Letters, 2006, 96, 106102.	7.8	42
31	Ge/Si (001) Photodetector for Near Infrared Light. Solid State Phenomena, 1997, 54, 55-58.	0.3	40
32	Growth and characterization of SiGeSn quantum well photodiodes. Optics Express, 2015, 23, 25048.	3.4	40
33	In vitro biocompatibility study of sub-50nm silica-coated magnetic iron oxide fluorescent nanoparticles for potential biomedical application. Scientific Reports, 2017, 7, 46513.	3.3	39
34	Formation of the wetting layer in Ge/Si(111) studied by STM and XAFS. Thin Solid Films, 2000, 369, 29-32.	1.8	37
35	Near- and far-infrared absorption and electronic structure of Ge-SiGe multiple quantum wells. Physical Review B, 2010, 82, .	3.2	37
36	Ge/Si(100) islands: Growth dynamics versus growth rate. Journal of Applied Physics, 2003, 93, 291-295.	2.5	36

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37	Strain-induced ordering of small Ge islands in clusters at the surface of multilayered SiGe nanostructures. Applied Physics Letters, 2005, 87, 261919.	3.3	36
38	CMOS-Compatible Bias-Tunable Dual-Band Detector Based on GeSn/Ge/Si Coupled Photodiodes. ACS Photonics, 2021, 8, 2166-2173.	6.6	36
39	Preparation of the Ge(001) surface towards fabrication of atomic-scale germanium devices. Nanotechnology, 2011, 22, 145604.	2.6	34
40	Evolution of the intermixing process in Ge/Si(111) self-assembled islands. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 88, 264-268.	3.5	33
41	Fully coherent growth of Ge on free-standing Si(001) nanomesas. Physical Review B, 2014, 89, .	3.2	32
42	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
43	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
44	Atomic-scale patterning of hydrogen terminated Ge(001) by scanning tunneling microscopy. Nanotechnology, 2009, 20, 495302.	2.6	28
45	Influence of the growth parameters on self-assembled Ge islands on Si(100). Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 89, 184-187.	3.5	27
46	Evolution of Ge/Si(001) islands during Si capping at high temperature. Journal of Applied Physics, 2005, 98, 124901.	2.5	27
47	Compositional dependence of the band-gap of Ge _{1-x} Si _x Sn _y alloys. Applied Physics Letters, 2016, 108, .	3.3	27
48	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
49	Conduction band intersubband transitions in Ge/SiGe quantum wells. Applied Physics Letters, 2009, 95, 051918.	3.3	26
50	Long intersubband relaxation times in n-type germanium quantum wells. Applied Physics Letters, 2011, 99, .	3.3	26
51	Phosphorus atomic layer doping of germanium by the stacking of multiple Γ layers. Nanotechnology, 2011, 22, 375203.	2.6	26
52	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
53	Strain and lattice orientation distribution in SiN/Ge complementary metal-oxide-semiconductor compatible light emitting microstructures by quick x-ray nano-diffraction microscopy. Applied Physics Letters, 2015, 106, .	3.3	26
54	Evolution of strained Ge islands grown on Si(111): a scanning probe microscopy study. Solid State Communications, 1999, 112, 145-149.	1.9	25

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55	Strain relaxation by pit formation in epitaxial SiGe alloy films grown on Si(001). Journal of Applied Physics, 2000, 88, 120-123.	2.5	25
56	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
57	Physical mechanisms of intersubband-absorption linewidth broadening in s -Ge/SiGe quantum wells. Physical Review B, 2014, 90, .	3.2	25
58	Dislocation-free Ge Nano-crystals via Pattern Independent Selective Ge Heteroepitaxy on Si Nano-Tip Wafers. Scientific Reports, 2016, 6, 22709.	3.3	25
59	Control of Electron-State Coupling in Asymmetric s -Ge/SiGe Quantum Wells. Physical Review Applied, 2019, 11, .	3.8	25
60	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
61	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
62	Influence of encapsulation temperature on Ge:P ⁻ -doped layers. Physical Review B, 2009, 80, .	3.2	23
63	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
64	Freezing shape and composition of Ge ⁺ -Si(001) self-assembled islands during silicon capping. Journal of Applied Physics, 2006, 100, 093516.	2.5	22
65	Bottom-up assembly of metallic germanium. Scientific Reports, 2015, 5, 12948.	3.3	21
66	Influence of dislocations on vertical ordering of Ge islands in Si/Ge multilayers grown by low pressure chemical vapour deposition. Semiconductor Science and Technology, 1999, 14, L21-L23.	2.0	20
67	GeSi intermixing in Ge nanostructures on Si(111): An XAFS versus STM study. Physical Review B, 2007, 75, .	3.2	20
68	Agglomeration process in thin silicon-, strained silicon-, and silicon germanium-on-insulator substrates. Journal of Applied Physics, 2009, 105, .	2.5	20
69	Radiative and non-radiative recombinations in tensile strained Ge microstrips: Photoluminescence experiments and modeling. Journal of Applied Physics, 2015, 118, .	2.5	20
70	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
71	Temperature dependence of strain-phonon coefficient in epitaxial Ge/Si(001): A comprehensive analysis. Journal of Raman Spectroscopy, 2020, 51, 989-996.	2.5	20
72	Reduction of threading dislocation density beyond the saturation limit by optimized reverse grading. Physical Review Materials, 2020, 4, .	2.4	20

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73	Structural and optical characterization of GaAs nano-crystals selectively grown on Si nano-tips by MOVPE. Nanotechnology, 2017, 28, 135301.	2.6	19
74	The impact of donors on recombination mechanisms in heavily doped Ge/Si layers. Journal of Applied Physics, 2017, 121, 245701.	2.5	19
75	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
76	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mi} \rangle \text{n} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -Type Doping of Germanium from Phosphine: Early Stages Resolved at the Atomic Level. Physical Review Letters, 2012, 109, 076101.	7.8	18
77	On-chip infrared photonics with Si-Ge-heterostructures: What is next?. APL Photonics, 2022, 7, .	5.7	18
78	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
79	Interface and nanostructure evolution of cobalt germanides on Ge(001). Journal of Applied Physics, 2014, 115, .	2.5	17
80	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
81	Atomic layer doping of strained Ge-on-insulator thin films with high electron densities. Applied Physics Letters, 2013, 102, 151103.	3.3	16
82	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
83	Epitaxy of Si-Ge-Sn-based heterostructures for CMOS-integratable light emitters. Solid-State Electronics, 2019, 155, 139-143.	1.4	16
84	Ordered growth of Ge island clusters on strain-engineered Si surfaces. Physical Review B, 2005, 71, .	3.2	15
85	Growth and evolution of nickel germanide nanostructures on Ge(001). Nanotechnology, 2015, 26, 385701.	2.6	15
86	Modeling of Edge-Emitting Lasers Based on Tensile Strained Germanium Microstrips. IEEE Photonics Journal, 2015, 7, 1-15.	2.0	15
87	Bi-modal nanoheteroepitaxy of GaAs on Si by metal organic vapor phase epitaxy. Nanotechnology, 2017, 28, 135701.	2.6	15
88	THz intersubband electroluminescence from n-type Ge/SiGe quantum cascade structures. Applied Physics Letters, 2021, 118, .	3.3	15
89	Demonstration of first WDM CMOS photonics transceiver with monolithically integrated photo-detectors. , 2008, , .		14
90	X-ray diffraction study of plastic relaxation in Ge-rich SiGe virtual substrates. Physical Review B, 2012, 85, .	3.2	14

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91	Combined effect of electron and lattice temperatures on the long intersubband relaxation times of Ge/Si \times Ge Physical Review B, 2014, 89, .	3.2	14
92	CMOS Photonics Using Germanium Photodetectors. ECS Transactions, 2006, 3, 17-24.	0.5	13
93	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
94	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
95	Low-energy yield spectroscopy determination of band offsets: application to the epitaxial heterostructure. Applied Surface Science, 1996, 104-105, 595-600.	6.1	12
96	Spectroscopic ellipsometric study of the size evolution of Ge islands grown on Si (100). Journal of Applied Physics, 1998, 83, 5840-5844.	2.5	12
97	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
98	Terahertz absorption-saturation and emission from electron-doped germanium quantum wells. Optics Express, 2020, 28, 7245.	3.4	12
99	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
100	Alloying in Ge Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 Td (math	3.2	11
101	Terahertz intersubband absorption and conduction band alignment in Ge/SiGe multiple quantum wells. Physical Review B, 2009, 79, .	3.2	11
102	Microstructure and magnetic properties of colloidal cobalt nano-clusters. Journal of Magnetism and Magnetic Materials, 2010, 322, 3565-3571.	2.3	11
103	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
104	Intersubband Transition Engineering in the Conduction Band of Asymmetric Coupled Ge/SiGe Quantum Wells. Crystals, 2020, 10, 179.	2.2	11
105	Design and simulation of losses in Ge/SiGe terahertz quantum cascade laser waveguides. Optics Express, 2020, 28, 4786.	3.4	11
106	Dual-temperature encapsulation of phosphorus in germanium $\hat{\Gamma}$ layers toward ultra-shallow junctions. Journal of Crystal Growth, 2011, 316, 81-84.	1.5	10
107	Modeling picosecond electron dynamics of pump-probe intersubband spectroscopy in Ge/SiGe quantum wells. Physical Review B, 2012, 86, .	3.2	10
108	Selective growth of fully relaxed GeSn nano-islands by nanoheteroepitaxy on patterned Si(001). Applied Physics Letters, 2016, 109, .	3.3	10

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109	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
110	A self-ordered, body-centered tetragonal superlattice of SiGe nanodot growth by reduced pressure CVD. Nanotechnology, 2017, 28, 485303.	2.6	10
111	Morphological evolution of Ge/Si nano-strips driven by Rayleigh-like instability. Applied Physics Letters, 2018, 112, 022101.	3.3	10
112	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
113	Ge/SiGe multiple quantum well fabrication by reduced-pressure chemical vapor deposition. Japanese Journal of Applied Physics, 2020, 59, SGGK10.	1.5	10
114	Composition analysis and transition energies of ultrathin Sn-rich GeSn quantum wells. Physical Review Materials, 2020, 4, .	2.4	10
115	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
116	Zero lattice mismatch and twin-free single crystalline ScN buffer layers for GaN growth on silicon. Applied Physics Letters, 2015, 107, .	3.3	9
117	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
118	Photoluminescence from GeSn nano-heterostructures. Nanotechnology, 2018, 29, 415702.	2.6	9
119	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
120	Photoluminescence from ultrathin Ge-rich multiple quantum wells observed up to room temperature: Experiments and modeling. Physical Review B, 2016, 94, .	3.2	8
121	Strain relaxation in epitaxial GaAs/Si (001) nanostructures. Philosophical Magazine, 2017, 97, 2845-2857.	1.6	8
122	Photoluminescence of phosphorous doped Ge on Si (100). Materials Science in Semiconductor Processing, 2017, 70, 111-116.	4.0	8
123	Misfit-Dislocation Distributions in Heteroepitaxy: From Mesoscale Measurements to Individual Defects and Back. Physical Review Applied, 2018, 10, .	3.8	8
124	Dynamics of crosshatch patterns in heteroepitaxy. Physical Review B, 2019, 100, .	3.2	8
125	Ge(Sn) nano-island/Si heterostructure photodetectors with plasmonic antennas. Nanotechnology, 2020, 31, 345203.	2.6	8
126	Growth Phase- and Desiccation-Dependent <i>Acinetobacter baumannii</i> Morphology: An Atomic Force Microscopy Investigation. Langmuir, 2021, 37, 1110-1119.	3.5	8

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127	THz intersubband absorption in n-type Si $\hat{\wedge}$ Ge parabolic quantum wells. Applied Physics Letters, 2021, 118, .	3.3	8
128	Ge/Si(100) heterostructures: a photoemission and low-energy yield spectroscopy investigation. Applied Surface Science, 1996, 102, 94-97.	6.1	7
129	Island and wetting-layer intermixing in the Ge/Si(001) system upon capping. Superlattices and Microstructures, 2009, 46, 328-332.	3.1	7
130	Ba termination of Ge(001) studied with STM. Nanotechnology, 2015, 26, 155701.	2.6	7
131	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
132	Germanium Plasmon Enhanced Resonators for Label-Free Terahertz Protein Sensing. Frequenz, 2018, 72, 113-122.	0.9	7
133	Stable and selective self-assembly of $\hat{\pm}$ -lipoic acid on Ge(001) for biomolecule immobilization. Journal of Applied Physics, 2018, 123, .	2.5	7
134	Electron-phonon coupling in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mi} \text{n} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle \text{-type Ge two-dimensional systems. Physical Review B, 2020, 102, .}$	3.2	7
135	Strain relief mechanisms in Ge/Si(100) islands. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2003, 101, 106-110.	3.5	6
136	Tailoring the strain in Si nano-structures for defect-free epitaxial Ge over growth. Nanotechnology, 2015, 26, 355707.	2.6	6
137	CMOS-compatible optical switching concept based on strain-induced refractive-index tuning. Optics Express, 2015, 23, 5930.	3.4	6
138	n-type Ge/Si antennas for THz sensing. Optics Express, 2021, 29, 7680.	3.4	6
139	Controlling the relaxation mechanism of low strain Si $\hat{\wedge}$ Ge/Si(001) layers and reducing the threading dislocation density by providing a preexisting dislocation source. Journal of Applied Physics, 2020, 128, .	2.5	6
140	10Gbit/s transceiver on silicon. , 2008, , .		5
141	Ge photodetectors integrated in CMOS photonic circuits. Proceedings of SPIE, 2008, , .	0.8	5
142	Robustness analysis of a device concept for edge-emitting lasers based on strained germanium. Optical and Quantum Electronics, 2016, 48, 1.	3.3	5
143	Alignment control of self-ordered three dimensional SiGe nanodots. Semiconductor Science and Technology, 2018, 33, 114014.	2.0	5
144	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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145	Near Infrared Light Detectors Based on UHVCVD Epitaxial Ge on Si (100). Materials Research Society Symposia Proceedings, 1997, 486, 193.	0.1	4
146	Relaxed state of GeSi _{1-x} islands embedded in Si. Nuclear Instruments & Methods in Physics Research B, 2006, 246, 64-68.	1.4	4
147	Fabrication of air-bridge Schottky diodes on germanium for high speed IR detectors. Microelectronic Engineering, 2011, 88, 2714-2716.	2.4	4
148	Electronic structure of phosphorus and arsenic-doped germanium. Physical Review B, 2013, 88, .	3.2	4
149	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
150	Epi-cleaning of Ge/GeSn heterostructures. Journal of Applied Physics, 2015, 117, .	2.5	4
151	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
152	Disentangling elastic and inelastic scattering pathways in the intersubband electron dynamics of Ge/SiGe quantum fountains. Physical Review B, 2020, 101, .	3.2	4
153	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
154	Spontaneous ordering of self-assembled-Ge island. Crystal Research and Technology, 2005, 40, 942-947.	1.3	3
155	(Invited) Alternative High n-Type Doping Techniques in Germanium. ECS Transactions, 2014, 64, 163-171.	0.5	3
156	Optical critical points of SixGe _{1-x} Sn alloys with high Si content. Semiconductor Science and Technology, 2017, 32, 124004.	2.0	3
157	(Invited) Epitaxy of Direct Bandgap Group IV Si-Ge-Sn Alloys towards Heterostructure Light Emitters. ECS Transactions, 2018, 86, 189-197.	0.5	3
158	Ultrafast carrier recombination in highly n-doped Ge-on-Si films. Applied Physics Letters, 2019, 114, .	3.3	3
159	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
160	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
161	Current leakage mechanisms related to threading dislocations in Ge-rich SiGe heterostructures grown on Si(001). Applied Physics Letters, 2021, 119, .	3.3	3
162	Photoluminescence of strained and relaxed multilayered Ge islands on Si(001). Applied Physics Letters, 2002, 81, 1186-1188.	3.3	2

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163	Tensile Strained Ge Layers Obtained via a Si-CMOS Compatible Approach. , 2012, , .		2
164	Misfit Dislocation Free Epitaxial Growth of SiGe on Compliant Nano-Structured Silicon. Solid State Phenomena, 2015, 242, 402-407.	0.3	2
165	Fully coherent Ge islands growth on Si nano-pillars by selective epitaxy. Materials Science in Semiconductor Processing, 2017, 70, 30-37.	4.0	2
166	Reduced threshold microdisk lasers from GeSn/SiGeSn heterostructures. , 2017, , . Advanced Coherent X-ray Diffraction and Electron Microscopy of Individual		2
167	Nanocrystals on \ln P Nanocrystals on Si Nanotips for III-V-on- Si	3.8	2
168	Raman shifts in MBE-grown $\text{Si}_x\text{Ge}_{1-x}$ $\text{Si}_x\text{Ge}_{1-x}$ Sn_y alloys with large Si content. Journal of Raman Spectroscopy, 2021, 52, 1167-1175.	2.5	2
169	Electronic states of thin epitaxial layers of Ge on Si(100). Applied Surface Science, 1998, 123-124, 738-741.	6.1	1
170	2DEG based on strained Si on SGOI substrate. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1611-1613.	2.7	1
171	Towards substrate removal in quasi-optical Schottky detector arrays. , 2011, , .		1
172	CMOS-fabricated tensile Ge microstructures: towards an edge-emitting laser. , 2014, , .		1
173	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
174	Photoluminescence of phosphorus atomic layer doped Ge grown on Si. Semiconductor Science and Technology, 2017, 32, 104005.	2.0	1
175	Quantum confinement effects in GeSn/SiGeSn heterostructure lasers. , 2017, , .		1
176	N-Type Ge/SiGe Quantum Cascade Heterostructures for THz Emission. , 2019, , .		1
177	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
178	Modeling of an Edge-Emitting strained-Ge laser. , 2015, , .		1
179	Modeling and design of an electrically pumped SiGeSn microring laser. , 2022, , .		1
180	Si/Ge Intermixing and Island-Island Interaction in Ge/Si(100) Self-Assembled Islands. Materials Research Society Symposia Proceedings, 2000, 638, 1.	0.1	0

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181	Spontaneous Ge island ordering promoted by partial silicon capping. Materials Science in Semiconductor Processing, 2006, 9, 823-827.	4.0	0
182	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
183	High-speed, Monolithic CMOS Receivers with Ge on Si Waveguide Photodetectors. ECS Transactions, 2009, 16, 601-608.	0.5	0
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