Daniel Chrastina

List of Publications by Year
in descending order

215	3,927	147801	149698
papers	citations	31 h-index	56 g-index

216	216	216	3283
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Analysis of enhanced light emission from highly strained germanium microbridges. Nature Photonics, 2013, 7, 466-472.	31.4	367
2	Integrated germanium optical interconnects on silicon substrates. Nature Photonics, 2014, 8, 482-488.	31.4	196
3	Scaling Hetero-Epitaxy from Layers to Three-Dimensional Crystals. Science, 2012, 335, 1330-1334.	12.6	149
4	Low-energy plasma-enhanced chemical vapor deposition for strained Si and Ge heterostructures and devices. Solid-State Electronics, 2004, 48, 1317-1323.	1.4	141
5	Germanium-based integrated photonics from near- to mid-infrared applications. Nanophotonics, 2018, 7, 1781-1793.	6.0	128
6	23 GHz Ge/SiGe multiple quantum well electro-absorption modulator. Optics Express, 2012, 20, 3219.	3.4	108
7	Scattering mechanisms in high-mobility strained Ge channels. Applied Physics Letters, 2004, 84, 3058-3060.	3.3	93
8	Ultralow dark current Ge/Si(100) photodiodes with low thermal budget. Applied Physics Letters, 2009, 94, .	3.3	89
9	Direct-Gap Gain and Optical Absorption in Germanium Correlated to the Density of Photoexcited Carriers, Doping, and Strain. Physical Review Letters, 2012, 109, 057402.	7.8	84
10	Raman spectroscopy determination of composition and strain in heterostructures. Materials Science in Semiconductor Processing, 2008, 11, 279-284.	4.0	78
11	Optical transitions in Ge/SiGe multiple quantum wells with Ge-rich barriers. Physical Review B, 2008, 78, .	3.2	73
12	Ultrafast nonlinear optical response of photoexcited Ge/SiGe quantum wells: Evidence for a femtosecond transient population inversion. Physical Review B, 2009, 79, .	3.2	73
13	A singlet-triplet hole spin qubit in planar Ge. Nature Materials, 2021, 20, 1106-1112.	27.5	73
14	The thermoelectric properties of Ge/SiGe modulation doped superlattices. Journal of Applied Physics, 2013, 113, .	2.5	65
15	Phonon strain shift coefficients in Si1â^'xGex alloys. Journal of Applied Physics, 2008, 103, .	2.5	63
16	Excess carrier lifetimes in Ge layers on Si. Applied Physics Letters, 2014, 104, .	3.3	62
17	Quantum-confined Stark effect measurements in Ge/SiGe quantum-well structures. Optics Letters, 2010, 35, 2913.	3.3	61
18	Characterization of Ge-on-Si virtual substrates and single junction GaAs solar cells. Semiconductor Science and Technology, 2006, 21, 775-780.	2.0	48

#	Article	IF	Citations
19	Room temperature photoluminescence of Ge multiple quantum wells with Ge-rich barriers. Applied Physics Letters, 2011, 98, 031106.	3.3	48
20	The cross-plane thermoelectric properties of p-Ge/Si0.5Ge0.5 superlattices. Applied Physics Letters, 2013, 103, .	3.3	47
21	Tuning of Electrical and Optical Properties of Highly Conducting and Transparent Ta-Doped TiO₂Polycrystalline Films. Journal of Physical Chemistry C, 2015, 119, 6988-6997.	3.1	46
22	Photocurrent and transmission spectroscopy of direct-gap interband transitions in Geâ^•SiGe quantum wells. Applied Physics Letters, 2006, 89, 262119.	3.3	44
23	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.	3.4	44
24	Mid-infrared sensing between 52 and 66 Âµm wavelengths using Ge-rich SiGe waveguides [Invited]. Optical Materials Express, 2018, 8, 1305.	3.0	43
25	Polarization-dependent absorption in Ge/SiGe multiple quantum wells: Theory and experiment. Physical Review B, 2009, 79, .	3.2	39
26	Application of Bryanâ€™s algorithm to the mobility spectrum analysis of semiconductor devices. Journal of Applied Physics, 2003, 94, 6583-6590.	2.5	38
27	Ge/SiGe multiple quantum well photodiode with 30 GHz bandwidth. Applied Physics Letters, 2011, 98, .	3.3	38
28	Room temperature direct gap electroluminescence from Ge/Si0.15Ge0.85 multiple quantum well waveguide. Applied Physics Letters, 2011, 99, .	3.3	37
29	Scanning X-ray strain microscopy of inhomogeneously strained Ge micro-bridges. Journal of Synchrotron Radiation, 2014, 21, 111-118.	2.4	37
30	Reduced self-heating in Si/SiGe field-effect transistors on thin virtual substrates prepared by low-energy plasma-enhanced chemical vapor deposition. Applied Physics Letters, 2003, 83, 5464-5466.	3.3	33
31	Nanocrystalline silicon films as multifunctional material for optoelectronic and photovoltaic applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2006, 134, 118-124.	3.5	32
32	Polarization dependence of quantum-confined Stark effect in Ge/SiGe quantum well planar waveguides. Optics Letters, 2011, 36, 1794.	3.3	31
33	Perfect crystals grown from imperfect interfaces. Scientific Reports, 2013, 3, 2276.	3.3	31
34	Quantum-confined Stark effect at 13ÂÎ¼m in Ge/Si_035Ge_065 quantum-well structure. Optics Letters, 2012, 37, 3960.	3.3	29
35	Thin SiGe virtual substrates for Ge heterostructures integration on silicon. Journal of Applied Physics, 2014, 115, .	2.5	28
36	Advances Toward Ge/SiGe Quantum-Well Waveguide Modulators at 1.3Î¼m. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 33-39.	2.9	27

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37	Recent progress in GeSi electro-absorption modulators. Science and Technology of Advanced Materials, 2014, 15, 014601.	6.1	27
38	Emission Engineering in Germanium Nanoresonators. ACS Photonics, 2015, 2, 53-59.	6.6	27
39	High mobility SiGe heterostructures fabricated by low-energy plasma-enhanced chemical vapor deposition. Microelectronic Engineering, 2004, 76, 279-284.	2.4	26
40	Strain-induced shift of phonon modes in alloys. Materials Science in Semiconductor Processing, 2006, 9, 541-545.	4.0	26
41	Recent Progress on Ge/SiGe Quantum Well Optical Modulators, Detectors, and Emitters for Optical Interconnects. Photonics, 2019, 6, 24.	2.0	26
42	Fabrication of high efficiency III-V quantum nanostructures at low thermal budget on Si. Applied Physics Letters, 2009, 95, 241102.	3.3	25
43	Extending the emission wavelength of Ge nanopillars to 225 Î¼m using silicon nitride stressors. Optics Express, 2015, 23, 18193.	3.4	25
44	10-Gb/s Ge/SiGe Multiple Quantum-Well Waveguide Photodetector. IEEE Photonics Technology Letters, 2011, 23, 1430-1432.	2.5	24
45	Patterning-induced strain relief in single lithographic SiGe nanostructures studied by nanobeam x-ray diffraction. Nanotechnology, 2012, 23, 155702.	2.6	24
46	SiGe wet chemical etchants with high compositional selectivity and low strain sensitivity. Semiconductor Science and Technology, 2008, 23, 085021.	2.0	23
47	Raman efficiency in SiGe alloys. Physical Review B, 2010, 82, .	3.2	23
48	Spin band-gap renormalization and hole spin dynamics in Ge/SiGe quantum wells. Physical Review B, 2012, 85, .	3.2	23
49	Ge/SiGe superlattices for thermoelectric energy conversion devices. Journal of Materials Science, 2013, 48, 2829-2835.	3.7	23
50	Giant electro-optic effect in Ge/SiGe coupled quantum wells. Scientific Reports, 2015, 5, 15398.	3.3	23
51	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.	7.8	23
52	Ge-rich islands grown on patterned Si substrates by low-energy plasma-enhanced chemical vapour deposition. Nanotechnology, 2010, 21, 475302.	2.6	22
53	Giant dynamical Stark shift in germanium quantum wells. Applied Physics Letters, 2011, 98, .	3.3	22
54	Photoluminescence decay of direct and indirect transitions in Ge/SiGe multiple quantum wells. Journal of Applied Physics, 2012, 111, 013501.	2.5	22

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55	Direct gap related optical transitions in Ge/SiGe quantum wells. Physica E: Low-Dimensional Systems and Nanostructures, 2009, 41, 972-975.	2.7	21
56	Si/SiGe quantum cascade superlattice designs for terahertz emission. Journal of Applied Physics, 2010, 107, 053109.	2.5	21
57	Prospects for SiGe thermoelectric generators. Solid-State Electronics, 2014, 98, 70-74.	1.4	21
58	An experimental and theoretical investigation of a magnetically confined dc plasma discharge. Journal of Applied Physics, 2008, 104, .	2.5	20
59	Ordered arrays of embedded Ga nanoparticles on patterned silicon substrates. Nanotechnology, 2014, 25, 205301.	2.6	20
60	Vertical arrays of nanofluidic channels fabricated without nanolithography. Lab on A Chip, 2009, 9, 1556.	6.0	19
61	Comparison of ultrafast carrier thermalization in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ga</mml:mtext></mml:mrow><mml:mi>x</mml:mi></mml:msub> Ge quantum wells. Physical Review B, 2010, 81, .	3.2	19
62	1.55â€‰Î¼m direct bandgap electroluminescence from strained n-Ge quantum wells grown on Si substrates. Applied Physics Letters, 2012, 101, .	3.3	19
63	Controlling the Electrical Properties of Undoped and Taâ€Doped TiO₂ Polycrystalline Films via Ultraâ€Fastâ€Annealing Treatments. Advanced Electronic Materials, 2016, 2, 1500316.	5.1	19
64	Quantum-confined direct-gap transitions in tensile-strained Ge/SiGe multiple quantum wells. Applied Physics Letters, 2011, 99, 031907.	3.3	18
65	Above-room-temperature photoluminescence from a strain-compensated Ge/Si0.15Ge0.85 multiple-quantum-well structure. Applied Physics Letters, 2012, 100, .	3.3	18
66	3D heteroepitaxy of mismatched semiconductors on silicon. Thin Solid Films, 2014, 557, 42-49.	1.8	18
67	Local uniaxial tensile strain in germanium of up to 4% induced by SiGe epitaxial nanostructures. Applied Physics Letters, 2015, 107, .	3.3	18
68	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, .	2.5	17
69	Formation of strain-induced Si-rich and Ge-rich nanowires at misfit dislocations in SiGe: A model supported by photoluminescence data. Applied Physics Letters, 2004, 84, 2895-2897.	3.3	16
70	Crystallinity and microstructure in Si films grown by plasma-enhanced chemical vapor deposition: A simple atomic-scale model validated by experiments. Applied Physics Letters, 2009, 94, 051904.	3.3	16
71	Ge/SiGe superlattices for nanostructured thermoelectric modules. Thin Solid Films, 2013, 543, 153-156.	1.8	16
72	Ge/SiGe heterostructures as emitters of polarized electrons. Journal of Applied Physics, 2012, 111, 063916.	2.5	15

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73	Dislocation engineering in SiGe on periodic and aperiodic Si(001) templates studied by fast scanning X-ray nanodiffraction. Applied Physics Letters, 2014, 104, .	3.3	15
74	Vertical Geâ€“Si Nanowires with Suspended Graphene Top Contacts as Dynamically Tunable Multispectral Photodetectors. ACS Photonics, 2019, 6, 735-742.	6.6	15
75	Straining Ge bulk and nanomembranes for optoelectronic applications: a systematic numerical analysis. Semiconductor Science and Technology, 2014, 29, 095012.	2.0	15
76	Ge/SiGe quantum wells on Si(111): Growth, structural, and optical properties. Journal of Applied Physics, 2014, 116, .	2.5	14
77	(Invited) Three-Dimensional Epitaxial Si_{1-X}Ge_x, Ge and SiC Crystals on Deeply Patterned Si Substrates. ECS Transactions, 2014, 64, 631-648.	0.5	14
78	Strained Si HFETs for microwave applications: state-of-the-art and further approaches. Solid-State Electronics, 2004, 48, 1443-1452.	1.4	13
79	Measurement of carrier lifetime and interface recombination velocity in Siâ€“Ge waveguides. Applied Physics Letters, 2007, 91, .	3.3	13
80	Hydrostatic strain enhancement in laterally confined SiGe nanostripes. Physical Review B, 2013, 88, .	3.2	13
81	Strong quantum-confined Stark effect from light hole related direct-gap transitions in Ge quantum wells. Applied Physics Letters, 2013, 102, .	3.3	13
82	Second Harmonic Generation in Germanium Quantum Wells for Nonlinear Silicon Photonics. ACS Photonics, 2021, 8, 3573-3582.	6.6	13
83	Thin relaxed SiGe virtual substrates grown by low-energy plasma-enhanced chemical vapor deposition. Journal of Crystal Growth, 2005, 281, 281-289.	1.5	12
84	Substrate strain manipulation by nanostructure perimeter forces. Journal of Applied Physics, 2013, 113, 164308.	2.5	12
85	Telecom-wavelength InAs QDs with low fine structure splitting grown by droplet epitaxy on GaAs(111)A vicinal substrates. Applied Physics Letters, 2021, 118, .	3.3	12
86	Homogeneity of Ge-rich nanostructures as characterized by chemical etching and transmission electron microscopy. Nanotechnology, 2012, 23, 045302.	2.6	11
87	Ultra high hole mobilities in a pure strained Ge quantum well. Thin Solid Films, 2014, 557, 329-333.	1.8	11
88	Effective g factor of 2D holes in strained Ge quantum wells. Journal of Applied Physics, 2018, 123, .	2.5	11
89	High quality SiGe electronic material grown by low energy plasma enhanced chemical vapour deposition. Thin Solid Films, 2004, 459, 37-40.	1.8	10
90	Ge/SiGe Superlattices for Thermoelectric Devices Grown by Low-Energy Plasma-Enhanced Chemical Vapor Deposition. Journal of Electronic Materials, 2013, 42, 2030-2034.	2.2	10

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91	Ge quantum well optoelectronic devices for light modulation, detection, and emission. Solid-State Electronics, 2013, 83, 92-98.	1.4	10
92	Metastability and relaxation in tensile SiGe on Ge(001) virtual substrates. Journal of Applied Physics, 2014, 116, 113507.	2.5	10
93	Topâ€“down SiGe nanostructures on Ge membranes realized by e-beam lithography and wet etching. Microelectronic Engineering, 2016, 153, 88-91.	2.4	10
94	Droplet Controlled Growth Dynamics in Molecular Beam Epitaxy of Nitride Semiconductors. Scientific Reports, 2018, 8, 11278.	3.3	10
95	32â€…GHz MMIC distributed amplifier based on N-channel SiGe MODFETs. Electronics Letters, 2003, 39, 1448.	1.0	9
96	Thermal Conductivity Measurement Methods for SiGe Thermoelectric Materials. Journal of Electronic Materials, 2013, 42, 2376-2380.	2.2	9
97	Engineering of the spin on dopant process on silicon on insulator substrate. Nanotechnology, 2021, 32, 025303.	2.6	9
98	2-D hole gas with two-subband occupation in a strained Ge channel: Scattering mechanisms. Thin Solid Films, 2006, 508, 351-354.	1.8	8
99	Lithographically defined low dimensional SiGe nanostripes as silicon stressors. Journal of Applied Physics, 2012, 112, .	2.5	8
100	Controlling the polarization dynamics by strong THz fields in photoexcited germanium quantum wells. New Journal of Physics, 2013, 15, 075004.	2.9	8
101	Reconstruction of crystal shapes by X-ray nanodiffraction from three-dimensional superlattices. Journal of Applied Crystallography, 2014, 47, 2030-2037.	4.5	8
102	Ge/SiGe parabolic quantum wells. Journal Physics D: Applied Physics, 2019, 52, 415105.	2.8	8
103	Effective mass measurement: the influence of hole band nonparabolicity in SiGe/Ge quantum wells. Semiconductor Science and Technology, 2007, 22, S191-S194.	2.0	7
104	Defect analysis of hydrogenated nanocrystalline Si thin films. Physica B: Condensed Matter, 2007, 401-402, 519-522.	2.7	7
105	Power Factor Characterization of Ge/SiGe Thermoelectric Superlattices at 300ÂK. Journal of Electronic Materials, 2013, 42, 1449-1453.	2.2	7
106	Micro and nanofabrication of SiGe/Ge bridges and membranes by wet-anisotropic etching. Microelectronic Engineering, 2015, 141, 256-260.	2.4	7
107	Relaxed SiGe heteroepitaxy on Si with very thin buffer layers: experimental LEPECVD indications and an interpretation based on strain-dependent dislocation nature. Microelectronic Engineering, 2004, 76, 290-296.	2.4	6
108	Ge/Si (100) heterojunction photodiodes fabricated from material grown by low-energy plasma-enhanced chemical vapour deposition. Thin Solid Films, 2008, 517, 380-382.	1.8	6

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109	Langmuir probe plasma parameters and kinetic rates in a Arâ€“SiH4â€“H2plasma during nc-Si films deposition for photovoltaic applications. Journal Physics D: Applied Physics, 2009, 42, 225202.	2.8	6
110	Threshold ionization mass spectrometry in the presence of excited silane radicals. Journal Physics D: Applied Physics, 2009, 42, 072003.	2.8	6
111	Photoluminescence Study of Low Thermal Budget IIIâ€“V Nanostructures on Silicon by Droplet Epitaxy. Nanoscale Research Letters, 2010, 5, 1650-1653.	5.7	6
112	Photoluminescence and ultrafast intersubband relaxation in Ge/SiGe multiple quantum wells. Physical Review B, 2011, 84, .	3.2	6
113	Lattice bending in three-dimensional Ge microcrystals studied by X-ray nanodiffraction and modelling. Journal of Applied Crystallography, 2016, 49, 976-986.	4.5	6
114	Plasma Composition by Mass Spectrometry in a Ar-SiH4-H2 LEPECVD Process During nc-Si Deposition. Plasma Chemistry and Plasma Processing, 2011, 31, 157-174.	2.4	5
115	Tensile strained Ge quantum wells on Si substrate: Post-growth annealing versus low temperature re-growth. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 696-699.	3.5	5
116	Towards low energy consumption integrated photonic circuits based on Ge/SiGe quantum wells. Nanophotonics, 2013, 2, 279-288.	6.0	5
117	Multilayered Ge/SiGe Material in Microfabricated Thermoelectric Modules. Journal of Electronic Materials, 2014, 43, 3838-3843.	2.2	5
118	Epitaxial Ge-crystal arrays for X-ray detection. Journal of Instrumentation, 2014, 9, C03019-C03019.	1.2	5
119	Si/SiGe Bound-to-Continuum Quantum Cascade Emitters. ECS Transactions, 2009, 16, 865-874.	0.5	4
120	Ordered Arrays of SiGe Islands from Low-Energy PECVD. Nanoscale Research Letters, 2010, 5, 1917-1920.	5.7	4
121	Tensile strain in Ge membranes induced by SiGe nanostressors. Applied Physics Letters, 2016, 109, .	3.3	4
122	Thermoelectric cross-plane properties on p- and n-Ge/SixGe1-x superlattices. Thin Solid Films, 2016, 602, 90-94.	1.8	4
123	Probing the in-plane electron spin polarization in Ge/ Si0.15Ge0.85 multiple quantum wells. Physical Review B, 2020, 101, .	3.2	4
124	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, .	1.3	4
125	Hole band nonparabolicity and effective mass measurement in p-SiGe/Ge heterostructures. Materials Science in Semiconductor Processing, 2006, 9, 777-780.	4.0	3
126	Tuning by means of laser annealing of electronic and structural properties of nc-Si/a-Si:H. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 159-160, 31-33.	3.5	3

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127	Fabrication of GaAs quantum dots by droplet epitaxy on Si/Ge virtual substrate. IOP Conference Series: Materials Science and Engineering, 2009, 6, 012009.	0.6	3
128	Patterning of Si substrates for Ge/Si(001) islands grown by low-energy plasma enhanced CVD. , 2009, , .		3
129	Temperature dependence of the direct interband transitions of a Ge/SiGe multiple-quantum-well structure with Ge-rich barriers. Physical Review B, 2012, 85, .	3.2	3
130	Dephasing in Ge/SiGe quantum wells measured by means of coherent oscillations. Physical Review B, 2012, 86, .	3.2	3
131	Photoreflectance study of direct-gap interband transitions in Ge/SiGe multiple quantum wells with Ge-rich barriers. Applied Physics Letters, 2012, 100, 041905.	3.3	3
132	Hole system heating by ultrafast interband energy transfer in optically excited Ge/SiGe quantum wells. Physical Review B, 2012, 85, .	3.2	3
133	Strain release management in SiGe/Si films by substrate patterning. Applied Physics Letters, 2014, 105, 242103.	3.3	3
134	Structural investigations of the Î±12Siâ€“Ge superstructure. Journal of Applied Crystallography, 2015, 48, 262-268.	4.5	3
135	Expanding the Ge emission wavelength to 2.25 Î¼m with SixNy strain engineering. Thin Solid Films, 2016, 602, 60-63.	1.8	3
136	LEPECVD â€" A Production Technique for SiGe MOSFETs and MODFETs. Engineering Materials and Processes, 2005, , 17-29.	0.4	3
137	Structural Characterization of Nanocrystalline Silicon Layers Grown by LEPECVD for Optoelectronic Applications. Springer Proceedings in Physics, 2008, , 305-308.	0.2	3
138	SiGe/Si quantum cascade structures deposited by low-energy plasma-enhanced CVD. , 2008, , .		2
139	Ge/SiGe multiple quantum wells for optical applications. , 2008, , .		2
140	Plasma Composition and Kinetic Reaction Rates in a LEPECVD Ar-SiH4-H2 Plasma During nc-Si Films Deposition for Photovoltaic Applicationss. ECS Transactions, 2009, 25, 1065-1072.	0.5	2
141	An Investigation of the Gas Phase and Surface Chemistry Active During the PECVD of nc-Silicon: A Detailed Model of the Gas Phase and Surface Chemistry. ECS Transactions, 2009, 25, 107-114.	0.5	2
142	Transient optical gain and carrier dynamics in Ge/SiGe quantum wells. Proceedings of SPIE, 2010, , .	0.8	2
143	Optical spin injection in SiGe heterostructures. Proceedings of SPIE, 2011, , .	0.8	2
144	Ultrafast transient gain in Ge/SiGe quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1109-1112.	0.8	2

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145	Low energy consumption and high speed germanium-based optoelectronic devices. , 2013, , .		2
146	(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.	0.5	2
147	Ge quantum well plasmon-enhanced quantum confined Stark effect modulator. Materials Research Society Symposia Proceedings, 2014, 1627, 1.	0.1	2
148	Cu2ZnSnSe4 device obtained by formate chemistry for metallic precursor layer fabrication. Solar Energy, 2015, 116, 287-292.	6.1	2
149	High energy pulsed laser deposition of ohmic tungsten contacts on silicon at room temperature. Thin Solid Films, 2018, 666, 121-129.	1.8	2
150	Raman spectroscopy of epitaxial InGaN/Si in the central composition range. Japanese Journal of Applied Physics, 2019, 58, SC1020.	1.5	2
151	Vertical Germanium Nanowire Photodetectors with Suspended Graphene Top Contact. , 2016, , .		2
152	Electronâ€“electron interaction in p-SiGe/Ge quantum wells. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 124-125, 184-187.	3.5	1
153	Logic gates with a single Hall bar heterostructure. Applied Physics Letters, 2006, 89, 152122.	3.3	1
154	Positron annihilation studies of defects in Si_{1â€“x}Ge_x/SOI heterostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2304-2306.	0.8	1
155	Electrical and structural properties of p â€type nanocrystalline silicon grown by LEPECVD for photovoltaic applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 712-715.	0.8	1
156	Three dimensional heteroepitaxy: A new path for monolithically integrating mismatched materials with silicon. , 2012, , .		1
157	High speed electro-absorption modulator based on quantum-confined stark effect from Ge/SiGe multiple quantum wells. , 2012, , .		1
158	Ge quantum well electro-absorption modulator with 23 GHz bandwidth. , 2012, , .		1
159	Prospects for SiGe thermoelectric generators. , 2013, , .		1
160	Ge/SiGe quantum well optical modulator. Proceedings of SPIE, 2013, , .	0.8	1
161	Si/SiGe Thermoelectric Generators. ECS Transactions, 2013, 50, 959-963.	0.5	1
162	Carrier lifetimes in uniaxially strained Ge micro bridges. , 2014, , .		1

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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.	0.5	1
164	Anisotropic extended misfit dislocations in overcritical SiGe films by local substrate patterning. Nanotechnology, 2016, 27, 425301.	2.6	1
165	Silicon photonics based on Ge/SiGe quantum well structures. , 2016, , .		1
166	Ge-rich SiGe waveguides for mid-infrared photonics. Proceedings of SPIE, 2017, , .	0.8	1
167	Raman Spectroscopy for the Analysis Î¿f Temperature-Dependent Plastic Relaxation Î¿f SiGe Layers. Acta Physica Polonica A, 2009, 116, 78-80.	0.5	1
168	Mid-infrared second harmonic generation in Ge/SiGe coupled quantum wells. , 2020, , .		1
169	Comment on â€œSmooth relaxed Si0.75Ge0.25 layers on Si(001) via in situ rapid thermal annealingâ€•[Appl. Phys. Lett. 83, 4321 (2003)]. Applied Physics Letters, 2004, 85, 5469-5469.	3.3	0
170	MEASUREMENT OF THE LIFETIME OF PHOTO-GENERATED FREE CARRIERS IN SiGe WAVEGUIDES. Journal of Nonlinear Optical Physics and Materials, 2007, 16, 207-216.	1.8	0
171	Hydrogenated Nanocrystalline Silicon Investigated by Conductive Atomic Force Microscopy. Springer Proceedings in Physics, 2008, , 301-304.	0.2	0
172	High speed Ge photodetector integrated on silicon-on-insulator operating at very low bias voltage. , 2008, , .		0
173	Gate-controlled rectifying barrier in a two-dimensional hole gas. Nanotechnology, 2008, 19, 335201.	2.6	0
174	8 Gb/s 0.5 V integrated Ge-on-SOI photodetector. , 2009, , .		0
175	Impact of misfit dislocations on wavefront distortion in Si/SiGe/Si optical waveguides. Optics Communications, 2009, 282, 4716-4722.	2.1	0
176	Phenomenological model of nanocrystalline silicon film formation by plasma-enhanced chemical vapor deposition. Optoelectronics, Instrumentation and Data Processing, 2009, 45, 322-327.	0.6	0
177	Low Thermal Budget Fabrication of III-V Quantum Nanostructures on Si Substrates. Journal of Physics: Conference Series, 2010, 245, 012078.	0.4	0
178	Determination of Raman Efficiency in SiGe Alloys. , 2010, , .		0
179	Ge/SiGe quantum wells structures for optical modulation. , 2010, , .		0
180	30 GHz Ge/SiGe multiple quantum well photodiode. , 2011, , .		0

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181	Giant AC Stark shift in Germanium. , 2011, , .		0
182	Space-Filling Arrays of Three-Dimensional Epitaxial Ge and Si1-xGex Crystals. , 2012, , .		0
183	Electroabsorption based on quantum-confined Stark effect from Ge/SiGe multiple quantum wells. Proceedings of SPIE, 2012, , .	0.8	0
184	Room temperature direct-gap electroluminescence in Ge/SiGe quantum well waveguides. Proceedings of SPIE, 2012, , .	0.8	0
185	Ultra-fast inter-subband relaxation and non-thermal carrier distribution in Ge/SiGe quantum wells. , 2012, , .		0
186	Measurement of room temperature electroluminescence from Ge quantum well waveguides. , 2012, , .		0
187	Si/SiGe nanoscale engineered thermoelectric materials for energy harvesting. , 2012, , .		0
188	Design of electroabsorption modulator based on Ge/SiGe multiple quantum wells, integrated on SOI waveguides. , 2013, , .		0
189	Strong quantum-confined Stark effect from light hole excitonic transition in Ge quantum wells for ultra-compact optical modulator. , 2013, , .		0
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