Sergio Bietti

List of Publications by Year
in descending order

85 papers	1,247 citations	361045 20 h-index	395343 33 g-index
87 all docs	87 docs citations	87 times ranked	1036 citing authors

#	Article	IF	Citations
1	Optically controlled dual-band quantum dot infrared photodetector. Nanomaterials and Nanotechnology, 2022, 12, 184798042210857.	1.2	2
2	Nucleation of Ga droplets self-assembly on GaAs(111)A substrates. Scientific Reports, 2021, 11, 6833.	1.6	6
3	Telecom-wavelength InAs QDs with low fine structure splitting grown by droplet epitaxy on GaAs(111)A vicinal substrates. Applied Physics Letters, 2021, 118, .	1.5	12
4	Quantum Dots Luminescence Collection Enhancement and Nanoscopy by Dielectric Microspheres. Particle and Particle Systems Characterization, 2020, 37, 1900431.	1.2	6
5	Reentrant Behavior of the Density vs. Temperature of Indium Islands on GaAs(111)A. Nanomaterials, 2020, 10, 1512.	1.9	2
6	Solid-State Dewetting Dynamics of Amorphous Ge Thin Films on Silicon Dioxide Substrates. Nanomaterials, 2020, 10, 2542.	1.9	7
7	Highâ€“temperature droplet epitaxy of symmetric GaAs/AlGaAs quantum dots. Scientific Reports, 2020, 10, 6532.	1.6	22
8	Droplet epitaxy quantum dot based infrared photodetectors. Nanotechnology, 2020, 31, 245203.	1.3	10
9	Selective Area Epitaxy of GaAs/Ge/Si Nanomembranes: A Morphological Study. Crystals, 2020, 10, 57.	1.0	8
10	Spectral broadening in self-assembled GaAs quantum dots with narrow size distribution. Journal of Applied Physics, 2019, 126, .	1.1	13
11	Temperature Activated Dimensionality Crossover in the Nucleation of Quantum Dots by Droplet Epitaxy on GaAs(111)A Vicinal Substrates. Scientific Reports, 2019, 9, 14520.	1.6	11
12	Raman spectroscopy of epitaxial InGaN/Si in the central composition range. Japanese Journal of Applied Physics, 2019, 58, SC1020.	0.8	2
13	GaAs epilayers grown on patterned (001) silicon substrates via suspended Ge layers. Scientific Reports, 2019, 9, 17529.	1.6	14
14	High-Yield Fabrication of Entangled Photon Emitters for Hybrid Quantum Networking Using High-Temperature Droplet Epitaxy. Nano Letters, 2018, 18, 505-512.	4.5	44
15	Droplet Controlled Growth Dynamics in Molecular Beam Epitaxy of Nitride Semiconductors. Scientific Reports, 2018, 8, 11278.	1.6	10
16	Droplet Epitaxy of Nanostructures. , 2018, , 293-314.		12
17	Length measurement and spatial orientation reconstruction of single nanowires. Nanotechnology, 2018, 29, 375704.	1.3	1
18	Decoherence Dynamics of Localized States in a Single GaAs/AlGaAs Quantum Ring. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800176.	1.2	3

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19	Ga metal nanoparticle-GaAs quantum molecule complexes for terahertz generation. Nanotechnology, 2018, 29, 365602.	1.3	4
20	Ga crystallization dynamics during annealing of self-assisted GaAs nanowires. Nanotechnology, 2017, 28, 045605.	1.3	10
21	Ultrafast atomic-scale visualization of acoustic phonons generated by optically excited quantum dots. Structural Dynamics, 2017, 4, 044034.	0.9	7
22	Structure, interface abruptness and strain relaxation in self-assisted grown InAs/GaAs nanowires. Applied Surface Science, 2017, 395, 29-36.	3.1	4
23	Ehrlich-SchwÃ¶bel effect on the growth dynamics of GaAs(111)A surfaces. Physical Review Materials, 2017, 1, .	0.9	21
24	Site-Controlled Natural GaAs(111) Quantum Dots Fabricated on Vertical GaAs/Ge Microcrystals on Deeply Patterned Si(001) Substrates. Nanoscience and Nanotechnology Letters, 2017, 9, 1108-1113.	0.4	1
25	Temperature activated coupling in topologically distinct semiconductor nanostructures. Journal of Applied Physics, 2016, 120, 134312.	1.1	4
26	Kinetic growth mode of epitaxial GaAs on Si(001) micro-pillars. Journal of Applied Physics, 2016, 120, .	1.1	12
27	Germanium-based quantum emitters towards a time-reordering entanglement scheme with degenerate exciton and biexciton states. Physical Review B, 2015, 91, .	1.1	16
28	Precise shape engineering of epitaxial quantum dots by growth kinetics. Physical Review B, 2015, 92, .	1.1	34
29	Flat top formation in self-assisted GaAs nanowires. , 2015, , .		0
30	GaAs nanostructures on Si platform. , 2015, , .		1
31	InAs/GaAs Sharply Defined Axial Heterostructures in Self-Assisted Nanowires. Nano Letters, 2015, 15, 3677-3683.	4.5	20
32	Characterization and Effect of Thermal Annealing on InAs Quantum Dots Grown by Droplet Epitaxy on GaAs(111)A Substrates. Nanoscale Research Letters, 2015, 10, 930.	3.1	17
33	Ordered array of Ga droplets on GaAs(001) by local anodic oxidation. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, .	0.6	8
34	Ordered arrays of embedded Ga nanoparticles on patterned silicon substrates. Nanotechnology, 2014, 25, 205301.	1.3	20
35	Self-assisted GaAs nanowires with selectable number density on Silicon without oxide layer. Journal Physics D: Applied Physics, 2014, 47, 394002.	1.3	6
36	Axial InAs/GaAs heterostructures on silicon in a nanowire geometry. Nanotechnology, 2014, 25, 485602.	1.3	1

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37	Gallium surface diffusion on GaAs (001) surfaces measured by crystallization dynamics of Ga droplets. Journal of Applied Physics, 2014, 116, .	1.1	33
38	Photoluminescence study of the strain relaxation of GaAs crystals grown on deeply patterned Si substrates. Journal of Crystal Growth, 2014, 401, 559-562.	0.7	2
39	Diffraction of Quantum Dots Reveals Nanoscale Ultrafast Energy Localization. Nano Letters, 2014, 14, 6148-6154.	4.5	27
40	A Structural Characterization of GaAs MBE Grown on Si Pillars. Acta Physica Polonica A, 2014, 125, 986-990.	0.2	3
41	Control over the Number Density and Diameter of GaAs Nanowires on Si(111) Mediated by Droplet Epitaxy. Nano Letters, 2013, 13, 3607-3613.	4.5	41
42	Unified model of droplet epitaxy for compound semiconductor nanostructures: Experiments and theory. Physical Review B, 2013, 87, .	1.1	74
43	Annealing induced anisotropy in GaAs/AlGaAs quantum dots grown by droplet epitaxy. Journal of Crystal Growth, 2013, 378, 515-518.	0.7	12
44	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
45	Evidence of twoâ€photon absorption in strainâ€free quantum dot GaAs/AlGaAs solar cells. Physica Status Solidi - Rapid Research Letters, 2013, 7, 173-176.	1.2	25
46	Kinetics of multiexciton complex in GaAs quantum dots on Si. Applied Physics Letters, 2013, 102, 053109.	1.5	7
47	Effects of As pressure on the quality of GaAs/AlGaAs quantum dots grown on silicon by droplet epitaxy. Journal of Crystal Growth, 2013, 378, 497-500.	0.7	1
48	Crystallization kinetics of Ga metallic nano-droplets under As flux. Nanotechnology, 2013, 24, 205603.	1.3	20
49	High quality GaAs single photon emitters on Si substrate. , 2013, , .		0
50	Multiexciton complex from extrinsic centers in AlGaAs epilayers on Ge and Si substrates. Journal of Applied Physics, 2013, 114, 224314.	1.1	4
51	Monolithic integration of optical grade GaAs on Si (001) substrates deeply patterned at a micron scale. Applied Physics Letters, 2013, 103, .	1.5	24
52	Fabrication of Ge-on-Si Substrates for the Integration of High-Quality GaAs Nanostructures on Si. ECS Transactions, 2013, 50, 783-789.	0.3	1
53	Optical characterization of individual GaAs quantum dots grown with height control technique. Journal of Applied Physics, 2013, 114, 124301.	1.1	0
54	Integration of Strain Free IIIâ€“V Quantum Dots on Silicon. Springer Series in Materials Science, 2013, , 327-356.	0.4	0

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55	High temperature single photon emitter monolithically integrated on silicon. Applied Physics Letters, 2012, 100, .	1.5	34
56	Semiconductor quantum nanostructures by droplet epitaxy. , 2012, , .		1
57	Stacking-layer-number dependence of highly stacked InAs quantum dot laser diodes fabricated using strain-compensation technique. Proceedings of SPIE, 2012, , .	0.8	0
58	Single photon emission from impurity centers in AlGaAs epilayers on Ge and Si substrates. Applied Physics Letters, 2012, 101, .	1.5	4
59	Fast emission dynamics in droplet epitaxy GaAs ring-disk nanostructures integrated on Si. Journal of Physics Condensed Matter, 2012, 24, 104017.	0.7	4
60	Controlled suppression of the photoluminescence superlinear dependence on excitation density in quantum dots. Nanoscale Research Letters, 2012, 7, 551.	3.1	4
61	Self-Assembly of Quantum Dot-Disk Nanostructures via Growth Kinetics Control. Crystal Growth and Design, 2012, 12, 1180-1184.	1.4	16
62	High quality GaAs quantum nanostructures grown by droplet epitaxy on Ge and Geâ€onâ€Si substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 202-205.	0.8	0
63	Coupled quantum dotâ€“ring structures by droplet epitaxy. Nanotechnology, 2011, 22, 185602.	1.3	65
64	Complex Nanostructures by Pulsed Droplet Epitaxy. Nanomaterials and Nanotechnology, 2011, 1, 4.	1.2	7
65	Micro-photoluminescence of GaAs/AlGaAs triple concentric quantum rings. Nanoscale Research Letters, 2011, 6, 569.	3.1	8
66	Outer zone morphology in GaAs ring/disk nanostructures by droplet epitaxy. Journal of Crystal Growth, 2011, 323, 279-281.	0.7	8
67	Self-assembled GaAs local artificial substrates on Si by droplet epitaxy. Journal of Crystal Growth, 2011, 323, 267-270.	0.7	5
68	Individual GaAs quantum emitters grown on Ge substrates. Applied Physics Letters, 2011, 98, .	1.5	18
69	TEM CHARACTERIZATION OF GaAs NANOISLANDS ON Si. , 2011, , .		0
70	Control of the lateral growth morphology in GaAs Droplet Epitaxy. Journal of Physics: Conference Series, 2010, 245, 012082.	0.3	0
71	Photoluminescence Study of Low Thermal Budget IIIâ€“V Nanostructures on Silicon by Droplet Epitaxy. Nanoscale Research Letters, 2010, 5, 1650-1653.	3.1	6
72	Concentric Multiple Rings by Droplet Epitaxy: Fabrication and Study of the Morphological Anisotropy. Nanoscale Research Letters, 2010, 5, 1865-1867.	3.1	23

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73	Growth Interruption Effect on the Fabrication of GaAs Concentric Multiple Rings by Droplet Epitaxy. Nanoscale Research Letters, 2010, 5, 1897-1900.	3.1	6
74	Self-Assembled Local Artificial Substrates of GaAs on Si Substrate. Nanoscale Research Letters, 2010, 5, 1905-1907.	3.1	3
75	Shape control via surface reconstruction kinetics of droplet epitaxy nanostructures. Applied Physics Letters, 2010, 97, .	1.5	39
76	Self-assembled GaAs/AlGaAs coupled quantum ring-disk structures by droplet epitaxy. Nanotechnology, 2010, 21, 125601.	1.3	70
77	Low Thermal Budget Fabrication of III-V Quantum Nanostructures on Si Substrates. Journal of Physics: Conference Series, 2010, 245, 012078.	0.3	0
78	Self-assembled GaAs islands on Si by droplet epitaxy. Applied Physics Letters, 2010, 97, .	1.5	19
79	Quantum dots to double concentric quantum ring structures transition. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 928-931.	0.8	4
80	Fabrication of GaAs concentric multiple quantum rings by droplet epitaxy. IOP Conference Series: Materials Science and Engineering, 2009, 6, 012008.	0.3	4
81	Fabrication of Multiple Concentric Nanoring Structures. Nano Letters, 2009, 9, 3419-3424.	4.5	177
82	Fabrication of high efficiency III-V quantum nanostructures at low thermal budget on Si. Applied Physics Letters, 2009, 95, 241102.	1.5	25
83	Fabrication of GaAs quantum dots by droplet epitaxy on Si/Ge virtual substrate. IOP Conference Series: Materials Science and Engineering, 2009, 6, 012009.	0.3	3
84	Rapid thermal annealing effects on self-assembled quantum dot and quantum ring structures. Journal of Applied Physics, 2008, 104, .	1.1	40
85	Thermal tunability of monolithic polymer microcavities. Applied Physics Letters, 2008, 92, 253310.	1.5	5