

Sergio Bietti

List of Publications by Year in descending order

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85
papers

1,247
citations

361296

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395590

33
g-index

87
all docs

87
docs citations

87
times ranked

1036
citing authors

#	ARTICLE	IF	CITATIONS
1	Fabrication of Multiple Concentric Nanoring Structures. Nano Letters, 2009, 9, 3419-3424.	4.5	177
2	Unified model of droplet epitaxy for compound semiconductor nanostructures: Experiments and theory. Physical Review B, 2013, 87, .	1.1	74
3	Self-assembled GaAs/AlGaAs coupled quantum ring-disk structures by droplet epitaxy. Nanotechnology, 2010, 21, 125601.	1.3	70
4	Coupled quantum dot-ring structures by droplet epitaxy. Nanotechnology, 2011, 22, 185602.	1.3	65
5	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
6	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
7	Rapid thermal annealing effects on self-assembled quantum dot and quantum ring structures. Journal of Applied Physics, 2008, 104, .	1.1	40
8	Shape control via surface reconstruction kinetics of droplet epitaxy nanostructures. Applied Physics Letters, 2010, 97, .	1.5	39
9	High temperature single photon emitter monolithically integrated on silicon. Applied Physics Letters, 2012, 100, .	1.5	34
10	Precise shape engineering of epitaxial quantum dots by growth kinetics. Physical Review B, 2015, 92, .	1.1	34
11	Gallium surface diffusion on GaAs (001) surfaces measured by crystallization dynamics of Ga droplets. Journal of Applied Physics, 2014, 116, .	1.1	33
12	Diffraction of Quantum Dots Reveals Nanoscale Ultrafast Energy Localization. Nano Letters, 2014, 14, 6148-6154.	4.5	27
13	Fabrication of high efficiency III-V quantum nanostructures at low thermal budget on Si. Applied Physics Letters, 2009, 95, 241102.	1.5	25
14	Evidence of two-photon absorption in strain-free quantum dot GaAs/AlGaAs solar cells. Physica Status Solidi - Rapid Research Letters, 2013, 7, 173-176.	1.2	25
15	Monolithic integration of optical grade GaAs on Si (001) substrates deeply patterned at a micron scale. Applied Physics Letters, 2013, 103, .	1.5	24
16	Concentric Multiple Rings by Droplet Epitaxy: Fabrication and Study of the Morphological Anisotropy. Nanoscale Research Letters, 2010, 5, 1865-1867.	3.1	23
17	High-temperature droplet epitaxy of symmetric GaAs/AlGaAs quantum dots. Scientific Reports, 2020, 10, 6532.	1.6	22
18	Ehrlich-Schwoebel effect on the growth dynamics of GaAs(111)A surfaces. Physical Review Materials, 2017, 1, .	0.9	21

#	ARTICLE	IF	CITATIONS
19	Crystallization kinetics of Ga metallic nano-droplets under As flux. <i>Nanotechnology</i> , 2013, 24, 205603.	1.3	20
20	Ordered arrays of embedded Ga nanoparticles on patterned silicon substrates. <i>Nanotechnology</i> , 2014, 25, 205301.	1.3	20
21	InAs/GaAs Sharply Defined Axial Heterostructures in Self-Assisted Nanowires. <i>Nano Letters</i> , 2015, 15, 3677-3683.	4.5	20
22	Self-assembled GaAs islands on Si by droplet epitaxy. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	19
23	Individual GaAs quantum emitters grown on Ge substrates. <i>Applied Physics Letters</i> , 2011, 98, .	1.5	18
24	Characterization and Effect of Thermal Annealing on InAs Quantum Dots Grown by Droplet Epitaxy on GaAs(111)A Substrates. <i>Nanoscale Research Letters</i> , 2015, 10, 930.	3.1	17
25	Self-Assembly of Quantum Dot-Disk Nanostructures via Growth Kinetics Control. <i>Crystal Growth and Design</i> , 2012, 12, 1180-1184.	1.4	16
26	Germanium-based quantum emitters towards a time-reordering entanglement scheme with degenerate exciton and biexciton states. <i>Physical Review B</i> , 2015, 91, .	1.1	16
27	GaAs epilayers grown on patterned (001) silicon substrates via suspended Ge layers. <i>Scientific Reports</i> , 2019, 9, 17529.	1.6	14
28	Spectral broadening in self-assembled GaAs quantum dots with narrow size distribution. <i>Journal of Applied Physics</i> , 2019, 126, .	1.1	13
29	Annealing induced anisotropy in GaAs/AlGaAs quantum dots grown by droplet epitaxy. <i>Journal of Crystal Growth</i> , 2013, 378, 515-518.	0.7	12
30	Kinetic growth mode of epitaxial GaAs on Si(001) micro-pillars. <i>Journal of Applied Physics</i> , 2016, 120, .	1.1	12
31	Droplet Epitaxy of Nanostructures. , 2018, , 293-314.		12
32	Telecom-wavelength InAs QDs with low fine structure splitting grown by droplet epitaxy on GaAs(111)A vicinal substrates. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	12
33	Temperature Activated Dimensionality Crossover in the Nucleation of Quantum Dots by Droplet Epitaxy on GaAs(111)A Vicinal Substrates. <i>Scientific Reports</i> , 2019, 9, 14520.	1.6	11
34	Ga crystallization dynamics during annealing of self-assisted GaAs nanowires. <i>Nanotechnology</i> , 2017, 28, 045605.	1.3	10
35	Droplet Controlled Growth Dynamics in Molecular Beam Epitaxy of Nitride Semiconductors. <i>Scientific Reports</i> , 2018, 8, 11278.	1.6	10
36	Droplet epitaxy quantum dot based infrared photodetectors. <i>Nanotechnology</i> , 2020, 31, 245203.	1.3	10

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37	Micro-photoluminescence of GaAs/AlGaAs triple concentric quantum rings. <i>Nanoscale Research Letters</i> , 2011, 6, 569.	3.1	8
38	Outer zone morphology in GaAs ring/disk nanostructures by droplet epitaxy. <i>Journal of Crystal Growth</i> , 2011, 323, 279-281.	0.7	8
39	Ordered array of Ga droplets on GaAs(001) by local anodic oxidation. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2014, 32, .	0.6	8
40	Selective Area Epitaxy of GaAs/Ge/Si Nanomembranes: A Morphological Study. <i>Crystals</i> , 2020, 10, 57.	1.0	8
41	Complex Nanostructures by Pulsed Droplet Epitaxy. <i>Nanomaterials and Nanotechnology</i> , 2011, 1, 4.	1.2	7
42	Kinetics of multiexciton complex in GaAs quantum dots on Si. <i>Applied Physics Letters</i> , 2013, 102, 053109.	1.5	7
43	Ultrafast atomic-scale visualization of acoustic phonons generated by optically excited quantum dots. <i>Structural Dynamics</i> , 2017, 4, 044034.	0.9	7
44	Solid-State Dewetting Dynamics of Amorphous Ge Thin Films on Silicon Dioxide Substrates. <i>Nanomaterials</i> , 2020, 10, 2542.	1.9	7
45	Photoluminescence Study of Low Thermal Budget III-V Nanostructures on Silicon by Droplet Epitaxy. <i>Nanoscale Research Letters</i> , 2010, 5, 1650-1653.	3.1	6
46	Growth Interruption Effect on the Fabrication of GaAs Concentric Multiple Rings by Droplet Epitaxy. <i>Nanoscale Research Letters</i> , 2010, 5, 1897-1900.	3.1	6
47	Self-assisted GaAs nanowires with selectable number density on Silicon without oxide layer. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 394002.	1.3	6
48	Quantum Dots Luminescence Collection Enhancement and Nanoscopy by Dielectric Microspheres. <i>Particle and Particle Systems Characterization</i> , 2020, 37, 1900431.	1.2	6
49	Nucleation of Ga droplets self-assembly on GaAs(111)A substrates. <i>Scientific Reports</i> , 2021, 11, 6833.	1.6	6
50	Thermal tunability of monolithic polymer microcavities. <i>Applied Physics Letters</i> , 2008, 92, 253310.	1.5	5
51	Self-assembled GaAs local artificial substrates on Si by droplet epitaxy. <i>Journal of Crystal Growth</i> , 2011, 323, 267-270.	0.7	5
52	Quantum dots to double concentric quantum ring structures transition. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009, 6, 928-931.	0.8	4
53	Fabrication of GaAs concentric multiple quantum rings by droplet epitaxy. <i>IOP Conference Series: Materials Science and Engineering</i> , 2009, 6, 012008.	0.3	4
54	Single photon emission from impurity centers in AlGaAs epilayers on Ge and Si substrates. <i>Applied Physics Letters</i> , 2012, 101, .	1.5	4

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55	Fast emission dynamics in droplet epitaxy GaAs ring-disk nanostructures integrated on Si. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 104017.	0.7	4
56	Controlled suppression of the photoluminescence superlinear dependence on excitation density in quantum dots. <i>Nanoscale Research Letters</i> , 2012, 7, 551.	3.1	4
57	Structural characterization of GaAs self-assembled quantum dots grown by Droplet Epitaxy on Ge virtual substrates on Si. <i>Applied Surface Science</i> , 2013, 267, 86-89.	3.1	4
58	Multiexciton complex from extrinsic centers in AlGaAs epilayers on Ge and Si substrates. <i>Journal of Applied Physics</i> , 2013, 114, 224314.	1.1	4
59	Temperature activated coupling in topologically distinct semiconductor nanostructures. <i>Journal of Applied Physics</i> , 2016, 120, 134312.	1.1	4
60	Structure, interface abruptness and strain relaxation in self-assisted grown InAs/GaAs nanowires. <i>Applied Surface Science</i> , 2017, 395, 29-36.	3.1	4
61	Ga metal nanoparticle-GaAs quantum molecule complexes for terahertz generation. <i>Nanotechnology</i> , 2018, 29, 365602.	1.3	4
62	Fabrication of GaAs quantum dots by droplet epitaxy on Si/Ge virtual substrate. <i>IOP Conference Series: Materials Science and Engineering</i> , 2009, 6, 012009.	0.3	3
63	Self-Assembled Local Artificial Substrates of GaAs on Si Substrate. <i>Nanoscale Research Letters</i> , 2010, 5, 1905-1907.	3.1	3
64	Decoherence Dynamics of Localized States in a Single GaAs/AlGaAs Quantum Ring. <i>Physica Status Solidi - Rapid Research Letters</i> , 2018, 12, 1800176.	1.2	3
65	A Structural Characterization of GaAs MBE Grown on Si Pillars. <i>Acta Physica Polonica A</i> , 2014, 125, 986-990.	0.2	3
66	Photoluminescence study of the strain relaxation of GaAs crystals grown on deeply patterned Si substrates. <i>Journal of Crystal Growth</i> , 2014, 401, 559-562.	0.7	2
67	Raman spectroscopy of epitaxial InGaN/Si in the central composition range. <i>Japanese Journal of Applied Physics</i> , 2019, 58, SC1020.	0.8	2
68	Reentrant Behavior of the Density vs. Temperature of Indium Islands on GaAs(111)A. <i>Nanomaterials</i> , 2020, 10, 1512.	1.9	2
69	Optically controlled dual-band quantum dot infrared photodetector. <i>Nanomaterials and Nanotechnology</i> , 2022, 12, 184798042210857.	1.2	2
70	Semiconductor quantum nanostructures by droplet epitaxy. , 2012, , .		1
71	Effects of As pressure on the quality of GaAs/AlGaAs quantum dots grown on silicon by droplet epitaxy. <i>Journal of Crystal Growth</i> , 2013, 378, 497-500.	0.7	1
72	Fabrication of Ge-on-Si Substrates for the Integration of High-Quality GaAs Nanostructures on Si. <i>ECS Transactions</i> , 2013, 50, 783-789.	0.3	1

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73	Axial InAs/GaAs heterostructures on silicon in a nanowire geometry. Nanotechnology, 2014, 25, 485602.	1.3	1
74	GaAs nanostructures on Si platform. , 2015, , .		1
75	Length measurement and spatial orientation reconstruction of single nanowires. Nanotechnology, 2018, 29, 375704.	1.3	1
76	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
77	Control of the lateral growth morphology in GaAs Droplet Epitaxy. Journal of Physics: Conference Series, 2010, 245, 012082.	0.3	0
78	Low Thermal Budget Fabrication of III-V Quantum Nanostructures on Si Substrates. Journal of Physics: Conference Series, 2010, 245, 012078.	0.3	0
79	Stacking-layer-number dependence of highly stacked InAs quantum dot laser diodes fabricated using strain-compensation technique. Proceedings of SPIE, 2012, , .	0.8	0
80	High quality GaAs quantum nanostructures grown by droplet epitaxy on Ge and Ge ϵ on ϵ Si substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 202-205.	0.8	0
81	High quality GaAs single photon emitters on Si substrate. , 2013, , .		0
82	Optical characterization of individual GaAs quantum dots grown with height control technique. Journal of Applied Physics, 2013, 114, 124301.	1.1	0
83	Flat top formation in self-assisted GaAs nanowires. , 2015, , .		0
84	TEM CHARACTERIZATION OF GaAs NANOISLANDS ON Si. , 2011, , .		0
85	Integration of Strain Free III ϵ V Quantum Dots on Silicon. Springer Series in Materials Science, 2013, , 327-356.	0.4	0