Marco Felici

List of Publications by Year
in descending order

82 papers	1,637 citations	304602 22 h-index	302012 39 g-index
84 all docs	84 docs citations	84 times ranked	1260 citing authors

#	Article	IF	Citations
1	Selective Effects of the Host Matrix in Hydrogenated InGaAsN Alloys: Toward an Integrated Matrix/Defect Engineering Paradigm. Advanced Functional Materials, 2022, 32, 2108862.	7.8	0
2	Energy Distribution in Tin Halide Perovskite. Solar Rrl, 2022, 6, 2100825.	3.1	8
3	Vibrational Properties in Highly Strained Hexagonal Boron Nitride Bubbles. Nano Letters, 2022, 22, 1525-1533.	4.5	30
4	Tailoring the optical properties of 2D transition metal dichalcogenides by strain. Optical Materials, 2022, 125, 112087.	1.7	9
5	Mechanical, Elastic, and Adhesive Properties of Twoâ€Dimensional Materials: From Straining Techniques to Stateâ€ofâ€theâ€Art Local Probe Measurements. Advanced Materials Interfaces, 2022, 9, .	1.9	24
6	Tailoring the optical properties of dilute nitride semiconductors at the nanometer scale. Nanotechnology, 2021, 32, 185301.	1.3	0
7	Brightly Luminescent and Moisture Tolerant Phenyl Viologen Lead Iodide Perovskites for Light Emission Applications. Journal of Physical Chemistry Letters, 2021, 12, 5456-5462.	2.1	5
8	Strain-tuning of the electronic, optical, and vibrational properties of two-dimensional crystals. Applied Physics Reviews, 2021, 8, .	5.5	67
9	Photonic Jet Writing of Quantum Dots Selfâ€Aligned to Dielectric Microspheres. Advanced Quantum Technologies, 2021, 4, 2100045.	1.8	6
10	Exceptional Elasticity of Microscale Constrained MoS₂ Domes. ACS Applied Materials & Interfaces, 2021, 13, 48228-48238.	4.0	13
11	Nanoscale Measurements of Elastic Properties and Hydrostatic Pressure in H₂â€Bulged MoS₂ Membranes. Advanced Materials Interfaces, 2020, 7, 2001024.	1.9	26
12	Opposite Hydrogen Behaviors in GaAsN and InAsN Alloys: Band Gap Opening Versus Donor Doping. Journal of Physical Chemistry C, 2020, 124, 19240-19251.	1.5	5
13	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="normal">N</mml:mi><mml:mtext>â^’</mml:mtext><mml:mi>n</mml:mi><mml:mi mathvariant="normal">H</mml:mi></mml:math> complexes in GaAs studied at the atomic scale by cross-sectional scanning tunneling microscopy. Physical Review B, 2020, 102, .	1.1	4
14	Imaging shape and strain in nanoscale engineered semiconductors for photonics by coherent x-ray diffraction. Communications Materials, 2020, 1, .	2.9	2
15	Broadband enhancement of light-matter interaction in photonic crystal cavities integrating site-controlled quantum dots. Physical Review B, 2020, 101, .	1.1	14
16	Engineered Creation of Periodic Giant, Nonuniform Strains in MoS₂ Monolayers. Advanced Materials Interfaces, 2020, 7, 2000621.	1.9	38
17	Evidence of the direct-to-indirect band gap transition in strained two-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>WS</mml:mi></mml:mrow><mml:mn>2</m , <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>MoS</mml:mi></mml:mrow><mml:mn>2</m , and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>WSe</mml:mi></mml:mrow><mml:mn>2</m	1.3	100
18	Controlled Micro/Nanodome Formation in Protonâ€Irradiated Bulk Transitionâ€Metal Dichalcogenides. Advanced Materials, 2019, 31, e1903795.	11.1	60

#	Article	IF	Citations
19	Strain related relaxation of the GaAs-like Raman mode selection rules in hydrogenated GaAs1â^’xNx layers. Journal of Applied Physics, 2019, 125, 175701.	1.1	3
20	Plasmon-assisted bandgap engineering in dilute nitrides. Nanophotonics, 2019, 8, 1465-1476.	2.9	4
21	Coupled Photonic Crystal Nanocavities as a Tool to Tailor and Control Photon Emission. Ceramics, 2019, 2, 34-55.	1.0	2
22	Spatially Selective Hydrogen Irradiation/Removal of Dilute Nitrides: A Versatile Nanofabrication Tool for Photonic Applications. , 2019, , .		0
23	Spatially selective hydrogen irradiation of dilute nitride semiconductors: a brief review. Semiconductor Science and Technology, 2018, 33, 053001.	1.0	5
24	Siteâ€Controlled Singleâ€Photon Emitters Fabricated by Nearâ€Field Illumination. Advanced Materials, 2018, 30, e1705450.	11.1	23
25	Site-Controlled Quantum Emitters in Dilute Nitrides and their Integration in Photonic Crystal Cavities. Photonics, 2018, 5, 10.	0.9	12
26	A lithographic approach for quantum dot-photonic crystal nanocavity coupling in dilute nitrides. Microelectronic Engineering, 2017, 174, 16-19.	1.1	10
27	Addressing the Fundamental Electronic Properties of Wurtzite GaAs Nanowires by High-Field Magneto-Photoluminescence Spectroscopy. Nano Letters, 2017, 17, 6540-6547.	4.5	10
28	Dense arrays of site-controlled quantum dots with tailored emission wavelength: Growth mechanisms and optical properties. Applied Physics Letters, 2017, 111, .	1.5	10
29	Polarization properties and disorder effects in H3 photonic crystal cavities incorporating site-controlled, high-symmetry quantum dot arrays. Applied Physics Letters, 2015, 107, 031106.	1.5	5
30	Single photon emitters in dilute nitrides: Towards a determinist approach of quantum dot-photonic crystal nanocavity coupling. , 2015, , .		0
31	Synchrotron x-ray diffraction study of micro-patterns obtained by spatially selective hydrogenation of GaAsN. Applied Physics Letters, 2015, 106, 051905.	1.5	3
32	Nanoscale Tailoring of the Polarization Properties of Dilute-Nitride Semiconductors via H-Assisted Strain Engineering. Physical Review Applied, 2014, 2, .	1.5	10
33	H irradiation effects on the GaAs-like Raman modes in GaAs1-<i>x</i>N<i>x</i>/GaAs1-<i>x</i>N<i>x</i>:H planar heterostructures. Journal of Applied Physics, 2014, 116, .	1.1	3
34	Single Photons on Demand from Novel Site-Controlled GaAsN/GaAsN:H Quantum Dots. Nano Letters, 2014, 14, 1275-1280.	4.5	32
35	Hydrogen effects in dilute III-N-V alloys: From defect engineering to nanostructuring. Journal of Applied Physics, 2014, 115, 012011.	1.1	9
36	Effects of hydrogen irradiation on the optical and electronic properties of site-controlled InGaAsN V-groove quantum wires. , 2013, , .		1

#	Article	IF	Citations
37	Effects of hydrogen irradiation on the optical and electronic properties of siteâ€controlled InGaAsN Vâ€groove quantum wires. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 556-560.	0.8	0
38	Resonant depletion of photogenerated carriers in InGaAs/GaAs nanowire mats. Applied Physics Letters, 2013, 102, .	1.5	11
39	Reduced temperature sensitivity of the polarization properties of hydrogenated InGaAsN V-groove quantum wires. Applied Physics Letters, 2012, 101, 151114.	1.5	8
40	Magneto-optical properties of single site-controlled InGaAsN quantum wires grown on prepatterned GaAs substrates. Physical Review B, 2012, 85, .	1.1	9
41	Engineering conduction and valence band states in site-controlled pyramidal quantum dots. Applied Physics Letters, 2011, 98, 253102.	1.5	5
42	Active semiconductor nanophotonics based on deterministic quantum wire and dot systems. Proceedings of SPIE, 2011, , .	0.8	0
43	Ordered systems of site-controlled pyramidal quantum dots incorporated in photonic crystal cavities. Nanotechnology, 2011, 22, 465203.	1.3	19
44	Phonon-Mediated Coupling of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>InGaAs</mml:mi><mml:mo>/</mml:mo><mml:mi>GaAs</mml:mi></mml:math>Quantum-Dot Excitons to Photonic Crystal Cavities. Physical Review Letters, 2011, 106, 227402.	2.9	85
45	Dilute nitride InGaAsN/GaAs V-groove quantum wires emitting at 1.3 <i>Î¼</i>m wavelength at room temperature. Applied Physics Letters, 2011, 99, .	1.5	21
46	Recordâ€Low Inhomogeneous Broadening of Siteâ€Controlled Quantum Dots for Nanophotonics. Small, 2010, 6, 1268-1272.	5.2	77
47	Polarization-entangled photons produced with high-symmetry site-controlled quantum dots. Nature Photonics, 2010, 4, 302-306.	15.6	156
48	Semianalytical approach to the design of photonic crystal cavities. Physical Review B, 2010, 82, .	1.1	17
49	Site-controlled quantum-wire and quantum-dot photonic-crystal microcavity lasers. , 2010, , .		0
50	1D photonic band formation and photon localization in finite-size photonic-crystal waveguides. Optics Express, 2010, 18, 117.	1.7	26
51	Entangled photons produced with high-symmetry site-controlled quantum dots. , 2009, , .		0
52	∼1meV inhomogeneous broadening of large area (∼cm²) arrays of site-controlled pyramidal quantum dots. , 2009, , .		0
53	Siteâ€Controlled InGaAs Quantum Dots with Tunable Emission Energy. Small, 2009, 5, 938-943.	5.2	70
54	Dense arrays of ordered pyramidal quantum dots with narrow linewidth photoluminescence spectra. Nanotechnology, 2009, 20, 415205.	1.3	26

#	Article	IF	Citations
55	Dense (10¹⁰ cm^{−2}) arrays of ordered quantum dots with narrow (≪ 10 meV) photoluminescence spectra. , 2009, , .		0
56	Photoluminescence under magnetic field and hydrostatic pressure for probing the electronic properties of GaAsN. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 107-113.	0.8	4
57	Integration of site-controlled pyramidal quantum dots and photonic crystal membrane cavities. Applied Physics Letters, 2008, 92, .	1.5	89
58	Role of strain and properties of N clusters at the onset of the alloy limit inGaAs1âˆ’xNx. Physical Review B, 2008, 77, .	1.1	18
59	Integration of site-controlled pyramidal quantum dots and photonic crystal membrane cavities. , 2008, , .		1
60	Controlled Band Gap Modulation of Hydrogenated Dilute Nitrides by SEM-Cathodoluminescence. Springer Proceedings in Physics, 2008, , 453-458.	0.1	0
61	X-ray absorption and diffraction study of IIâ€“VI dilute oxide semiconductor alloy epilayers. Journal of Physics Condensed Matter, 2007, 19, 446201.	0.7	2
62	Electron Mass in Dilute Nitrides and its Anomalous Dependence on Hydrostatic Pressure. Physical Review Letters, 2007, 98, 146402.	2.9	42
63	Hydrogen-induced Nitrogen Passivation in Dilute Nitrides: A Novel Approach to Defect Engineering. Materials Research Society Symposia Proceedings, 2007, 994, 1.	0.1	0
64	Investigation of Compositional Disorder in GaAsN:H. AIP Conference Proceedings, 2007, , .	0.3	0
65	Photoluminescence under magnetic field and hydrostatic pressure in GaAs1âˆ’xNx for probing the compositional dependence of carrier effective mass and gyromagnetic ratio. AIP Conference Proceedings, 2007, , .	0.3	0
66	In-Plane Band Gap Engineering by Hydrogenation of Dilute Nitride Semiconductors. AIP Conference Proceedings, 2007, , .	0.3	0
67	Thermal evolution of small N-D complexes in deuterated dilute nitrides revealed byin-situhigh resolution X-ray diffraction. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 2766-2771.	0.8	2
68	Influence of the Host Lattice on the O-H Interaction in II-VI Semiconductors. AIP Conference Proceedings, 2007, , .	0.3	0
69	Evidence of a New Hydrogen Complex in Dilute Nitride Alloys. AIP Conference Proceedings, 2007, , .	0.3	0
70	In-Plane Bandgap Engineering by Modulated Hydrogenation of Dilute Nitride Semiconductors. Advanced Materials, 2006, 18, 1993-1997.	11.1	51
71	Hydrogen-nitrogen complexes in dilute nitride alloys: Origin of the compressive lattice strain. Applied Physics Letters, 2006, 89, 061904.	1.5	38
72	Compositional disorder inGaAs1âˆ’xNx:Hinvestigated by photoluminescence. Physical Review B, 2006, 74, .	1.1	16

#	Article	IF	Citations
73	Influence of nitrogen-cluster states on the gyromagnetic factor of electrons inGaAs1âˆ'xNx. Physical Review B, 2006, 74, .	1.1	46
74	Nitrogen-induced perturbation of the valence band states inGaP1âˆ'xNxalloys. Physical Review B, 2006, 74, .	1.1	12
75	Interaction between conduction band edge and nitrogen states probed by carrier effective-mass measurements inGaAs1âˆ'xNx. Physical Review B, 2006, 73, .	1.1	106
76	Passivation of an isoelectronic impurity by atomic hydrogen: The case of ZnTe:O. Applied Physics Letters, 2006, 88, 101910.	1.5	22
77	High Energy Optical Transitions in Ga(PN): Contribution from Perturbed Valence Band. AIP Conference Proceedings, 2005, , .	0.3	0
78	Free carrier and/or exciton trapping by nitrogen pairs in diluteGaP1âˆ'xNx. Physical Review B, 2005, 71, .	1.1	22
79	Effect of lattice ionicity on hydrogen activity in IIâ€"VI materials containing isoelectronic oxygen impurities. IEE Proceedings: Optoelectronics, 2004, 151, 465-468.	0.8	1
80	Direct experimental evidence for unusual effects of hydrogen on the electronic and vibrational properties ofGaNxP1âˆ'xalloys: A proof for a general property of dilute nitrides. Physical Review B, 2004, 70, .	1.1	24
81	Hydrogen-related effects in diluted nitrides. Physica B: Condensed Matter, 2003, 340-342, 371-376.	1.3	3
82	Nitrogen passivation induced by atomic hydrogen:â€ƒTheGaP1âˆ'yNycase. Physical Review B, 2003, 67, .	1.1	53