Laura Lazzarini

List of Publications by Year in descending order

92 papers	1,683 citations	218677 26 h-index	330143 37 g-index
93 all docs	93 docs citations	93 times ranked	2332 citing authors

#	Article	IF	Citations
1	Green Extraction of Cellulose Nanocrystals of Polymorph II from Cynara scolymus L.: Challenge for a â€œZero Wasteâ€•Economy. Crystals, 2022, 12, 672.	2.2	5
2	Vapor phase epitaxy of antimonene-like nanocrystals on germanium by an MOCVD process. Applied Surface Science, 2021, 535, 147729.	6.1	6
3	Ultra-small FeS₂ nanoparticles for highly efficient chemoselective transfer hydrogenation of nitroarenes. New Journal of Chemistry, 2021, 45, 17808-17815.	2.8	4
4	Ag-functionalized nanocrystalline cellulose for paper preservation and strengthening. Carbohydrate Polymers, 2020, 231, 115773.	10.2	29
5	Epitaxial and large area Sb₂Te₃ thin films on silicon by MOCVD. RSC Advances, 2020, 10, 19936-19942.	3.6	15
6	ALD growth of ultra-thin Co layers on the topological insulator Sb2Te3. Nano Research, 2020, 13, 570-575.	10.4	10
7	Photocatalytic N-doped TiO2 for self-cleaning of limestones. European Physical Journal Plus, 2019, 134, 1.	2.6	10
8	Highâ€Density Sb 2 Te 3 Nanopillars Arrays by Templated, Bottomâ€Up MOCVD Growth. Small, 2019, 15, 1901743.	10.0	10
9	Single-step Au-catalysed synthesis and microstructural characterization of coreâ€“shell Ge/Inâ€“Te nanowires by MOCVD. Materials Research Letters, 2018, 6, 29-35.	8.7	5
10	Weak Antilocalization in Granular Sb₂Te₃ Thin Films Deposited by MOCVD. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800155.	2.4	15
11	Growth and characterization of Î²-Ga2O3 nanowires obtained on not-catalyzed and Au/Pt catalyzed substrates. Journal of Crystal Growth, 2017, 457, 255-261.	1.5	12
12	Synthesis and characterization of photocatalytic hydrophobic hybrid TiO 2 -SiO 2 coatings for building applications. Building and Environment, 2017, 111, 72-79.	6.9	60
13	Crystal structure assessment of Ge-Sb-Te nanowires. Materials Science in Semiconductor Processing, 2017, 65, 77-87.	4.0	4
14	Degradation mechanisms in heterostructure devices and their correlation with defects. , 2017, , 503-514.		0
15	Nanoscale mapping of plasmon and exciton in ZnO tetrapods coupled with Au nanoparticles. Scientific Reports, 2016, 6, 19168.	3.3	27
16	Evidence of Native Cs Impurities and Metalâ€“Insulator Transition in MoS₂ Natural Crystals. Advanced Electronic Materials, 2016, 2, 1600091.	5.1	12
17	A Novel Sb₂Te₃ Polymorph Stable at the Nanoscale. Chemistry of Materials, 2015, 27, 4368-4373.	6.7	13
18	â€œStainlessâ€•Gold Nanorods: Preserving Shape, Optical Properties, and SERS Activity in Oxidative Environment. ACS Applied Materials & Interfaces, 2015, 7, 18794-18802.	8.0	33

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19	Synthesis and characterization of nanocrystalline TiO2 with application as photoactive coating on stones. Environmental Science and Pollution Research, 2014, 21, 13264-13277.	5.3	37
20	InZnO nanorods obtained via zinc vapour phase deposition on liquid indium seeded substrates. CrystEngComm, 2014, 16, 1696.	2.6	2
21	Visible and Infra-red Light Emission in Boron-Doped Wurtzite Silicon Nanowires. Scientific Reports, 2014, 4, 3603.	3.3	46
22	High Temperature Stability of Onion-Like Carbon vs Highly Oriented Pyrolytic Graphite. PLoS ONE, 2014, 9, e105788.	2.5	7
23	Cathodoluminescence of Self-assembled Nanosystems. , 2013, , 557-601.		2
24	Transmission Electron Microscopy Techniques for Imaging and Compositional Evaluation in Semiconductor Heterostructures. , 2013, , 413-465.		1
25	Crystal structure assessment of Geâ€“Sbâ€“Te phase change nanowires. Nanoscale, 2013, 5, 1557.	5.6	23
26	Preparing the Way for Doping Wurtzite Silicon Nanowires while Retaining the Phase. Nano Letters, 2013, 13, 5900-5906.	9.1	32
27	Efficiency Improvement of DSSC Photoanode by Scandium Doping of Mesoporous Titania Beads. Journal of Physical Chemistry C, 2013, 117, 25276-25289.	3.1	69
28	Determination of the atomic stacking sequence of Ge-Sb-Te nanowires by HAADF STEM. Materials Research Society Symposia Proceedings, 2013, 1512, 1.	0.1	0
29	Extended functionality of ZnO nanotetrapods by solution-based coupling with CdS nanoparticles. Journal of Materials Chemistry, 2012, 22, 5694.	6.7	42
30	Excitonic recombination in superstoichiometric nanocrystalline TiO2 grown by cluster precursors at room temperature. Physical Chemistry Chemical Physics, 2012, 14, 5705.	2.8	6
31	Metal Organic Chemical Vapor Deposition of Phase Change Ge₁Sb₂Te₄ Nanowires. Nano Letters, 2012, 12, 1509-1515.	9.1	34
32	Efficiency improvement and full characterization of dye-sensitized solar cells with MWCNT/anatase Schottky junctions. Journal of Power Sources, 2012, 204, 249-256.	7.8	18
33	High-Temperature Resistivity of Dense Mats of Single-Walled Carbon Nanotube Bundles. Journal of Physical Chemistry C, 2011, 115, 11023-11029.	3.1	2
34	Low-temperature germanium thin films on silicon. Optical Materials Express, 2011, 1, 856.	3.0	39
35	High-Temperature Determination of Surface Free Energy of Copper Nanoparticles. Journal of Physical Chemistry C, 2010, 114, 12117-12124.	3.1	11
36	Unpredicted Nucleation of Extended Zinc Blende Phases in Wurtzite ZnO Nanotetrapod Arms. ACS Nano, 2009, 3, 3158-3164.	14.6	49

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37	The Challenge for Large-scale Vapor-phase Growths of Not-catalyzed ZnO Nanostructures: Purity vs. Yield. Materials Research Society Symposia Proceedings, 2009, 1174, 43.	0.1	0
38	Experimental Thermodynamics of High Temperature Transformations in Single-Walled Carbon Nanotube Bundles. Journal of the American Chemical Society, 2009, 131, 12474-12482.	13.7	12
39	Luminescence of GaAs/AlGaAs coreâ€“shell nanowires grown by MOVPE using tertiarybutylarsine. Journal of Crystal Growth, 2008, 310, 5114-5118.	1.5	35
40	Large-area self-catalysed and selective growth of ZnO nanowires. Nanotechnology, 2008, 19, 325603.	2.6	36
41	Lanthanide-Doped Scandia and Yttria Cathodoluminescent Films: A Comparative Study. Chemistry of Materials, 2008, 20, 5666-5674.	6.7	8
42	Chemical Differentiation of Carbon Nanotubes in a Carbonaceous Matrix. Chemistry of Materials, 2008, 20, 4126-4134.	6.7	11
43	Power-dependent cathodoluminescence in IIIâ€“nitrides heterostructures: from internal field screening to controlled band-gap modulation. , 2008, , 209-248.		3
44	Transmission electron microscopy techniques for imaging and compositional evaluation in semiconductor heterostructures. , 2008, , 133-173.		0
45	Hydrogen-induced Nitrogen Passivation in Dilute Nitrides: A Novel Approach to Defect Engineering. Materials Research Society Symposia Proceedings, 2007, 994, 1.	0.1	0
46	Low-temperature In₂O₃nanowire luminescence properties as a function of oxidizing thermal treatments. Nanotechnology, 2007, 18, 355707.	2.6	78
47	In-catalyzed growth of high-purity indium oxide nanowires. Chemical Physics Letters, 2007, 445, 251-254.	2.6	26
48	On the Role of Oxygen Vacancies in the Determination of the Gas-Sensing Properties of Tin-Oxide Nanowires. Materials Research Society Symposia Proceedings, 2006, 915, 1.	0.1	2
49	Cathodoluminescence characterization of SnO2 nanoribbons grown by vapor transport technique. Materials Science in Semiconductor Processing, 2006, 9, 331-336.	4.0	9
50	In-Plane Bandgap Engineering by Modulated Hydrogenation of Dilute Nitride Semiconductors. Advanced Materials, 2006, 18, 1993-1997.	21.0	51
51	Nucleation and growth of SnO2 nanowires. Journal of Crystal Growth, 2005, 275, e2083-e2087.	1.5	43
52	Structural and optical study of SnO2 nanobelts and nanowires. Materials Science and Engineering C, 2005, 25, 625-630.	7.3	75
53	Investigation of the recombination dynamics in low In-content InGaN MQWs by means of cathodoluminescence and photoluminescence excitation. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 817-821.	0.8	1
54	Cathodoluminescence spectroscopy of single SnO2nanowires and nanobelts. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 2963-2970.	1.8	20

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55	Electron-beam-induced current and cathodoluminescence characterization of InGaAs strain-balanced multiquantum well photovoltaic cells. Journal of Applied Physics, 2003, 94, 6341-6345.	2.5	10
56	Extended defects in InGaAs/InGaAs strain-balanced multiple quantum wells for photovoltaic applications. Journal of Physics Condensed Matter, 2002, 14, 13367-13373.	1.8	5
57	On the morphology and composition of InAs/GaAs quantum dots. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 91-92, 264-268.	3.5	6
58	Structural characterization of InGaAs/InP heterostructures grown under compressive and tensile stress. Applied Surface Science, 2002, 188, 36-48.	6.1	23
59	A TEM and SEM-cathodoluminescence study of oval defects in graded InGaAs/GaAs buffer layers. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 80, 120-124.	3.5	5
60	Study of GaAs spacer layers in InAs/GaAs vertically aligned quantum dot structures. Thin Solid Films, 2000, 380, 224-226.	1.8	8
61	Vertical coupling and transition energies in multilayerInAs/GaAsquantum-dot structures. Physical Review B, 2000, 62, 10220-10225.	3.2	30
62	Zn0.85Cd0.15Se active layers on graded-composition InxGa1â^'xAs buffer layers. Journal of Applied Physics, 1999, 85, 8160-8169.	2.5	8
63	Electrical and optical characterization of Er-doped silicon grown by liquid phase epitaxy. Journal of Applied Physics, 1999, 85, 1582-1586.	2.5	15
64	Strain relaxation in graded composition InxGa1â^'xAs/GaAs buffer layers. Journal of Applied Physics, 1999, 86, 4748-4755.	2.5	89
65	Electrical and optical analyses of Er-doped silicon grown by liquid-phase epitaxy. Journal of Luminescence, 1998, 80, 343-346.	3.1	2
66	Study of degradation mechanisms in compound semiconductor based devices by SEM-cathodoluminescence. Microelectronics Reliability, 1998, 38, 1199-1210.	1.7	6
67	Self-aggregated InAs quantum dots in GaAs. Journal of Applied Physics, 1998, 83, 5529-5535.	2.5	27
68	Cathodoluminescence evidence of stress-induced outdiffusion of beryllium in AlGaAs/GaAs heterojunction bipolar transistors. Journal Physics D: Applied Physics, 1998, 31, 3004-3008.	2.8	10
69	Structural and optical investigation of InAsxP1â^'x/InP strained superlattices. Journal of Applied Physics, 1998, 83, 1058-1077.	2.5	39
70	Selective ion-channeling study of misfit dislocation grids in semiconductor heterostructures: Theory and experiments. Physical Review B, 1997, 56, 6895-6910.	3.2	14
71	Impact of electron confinement on the lasing properties of ZnS/ZnSe superlattices. Applied Physics Letters, 1997, 70, 2943-2945.	3.3	6
72	On the formation of antiphase domains in the system of GaAs on Ge. Journal of Crystal Growth, 1996, 163, 195-202.	1.5	61

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73	Properties and structure of antiphase boundaries in GaAs/Ge solar cells. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1996, 42, 204-207.	3.5	14
74	Investigation of Strain Relaxation Mechanisms in InGaAs/GaAs Single Layer Films. Microscopy Microanalysis Microstructures, 1995, 6, 491-498.	0.4	1
75	Local structural investigation of buried InAsxP1â^'x/InP interfaces. Journal of Applied Physics, 1994, 76, 4581-4586.	2.5	14
76	On the sublattice location of GaAs grown on Ge. Journal of Applied Physics, 1994, 76, 5748-5753.	2.5	50
77	Structural characterization techniques for the analysis of semiconductor strained heterostructures. Mikrochimica Acta, 1994, 114-115, 431-440.	5.0	3
78	Transition from island to continuous InP layer growth on (001) GaAs by MOCVD. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1994, 28, 214-218.	3.5	0
79	Optimization of growth parameters of short period InGaAs/InP superlattices for Wannier-Stark modulators. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1994, 28, 305-309.	3.5	6
80	Structural properties of GaAs/Ge heterostructures as a function of growth conditions. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1994, 28, 502-506.	3.5	14
81	Mechanisms of strain release in molecular beam epitaxy grown InGaAs/GaAs buffer heterostructures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1994, 28, 510-514.	3.5	1
82	Quantitative studies of beam-induced defects in IIIâ€"V compounds by cathodoluminescence and transmission electron microscopy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1994, 24, 130-134.	3.5	2
83	Growth parameter optimization of short period (< 50 Ã...) InGaAs/InP short period superlattices by chemical beam epitaxy for photonic devices. Journal of Crystal Growth, 1994, 136, 293-296.	1.5	14
84	Metalorganic vapor phase epitaxial growth and structural characterization of GaAs/InP heterostructures. Journal of Electronic Materials, 1994, 23, 153-158.	2.2	12
85	Dislocations in medium to highly mismatched IIIâ€"V epitaxial heterostructures. Journal of Crystal Growth, 1993, 126, 133-143.	1.5	8
86	The effects of roughness and composition variation at the InP/InGaAs and InGaAs/InP interfaces on CBE grown quantum wells. Journal of Crystal Growth, 1993, 127, 189-193.	1.5	22
87	Electron Microscopy and Xâ€Ray Diffraction Characterization of Inâ€‰/â€‰GaAs Grown by Atomic Layer Epitaxy. Journal of the Electrochemical Society, 1993, 140, 1776-1779.	2.9	1
88	Electron Microscopy and Xâ€Ray Diffraction Determinations of Strain Release in InGaAsâ€‰/â€‰GaAs Superlattices Grown by Molecular Beam Epitaxy. Journal of the Electrochemical Society, 1993, 140, 2422-2427.	2.9	6
89	Structural Properties of Hâ€Implanted InP Crystals. Journal of the Electrochemical Society, 1993, 140, 2034-2038.	2.9	9
90	Scanning electron acoustic microscopy of misfit dislocations in InGaAs/GaAs superlattices. Journal Physics D: Applied Physics, 1993, 26, 1537-1539.	2.8	2

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91	The effect of the growth rate on the low pressure metalorganic vapour phase epitaxy of GaAs/Ge heterostructures. Journal of Crystal Growth, 1992, 125, 440-448.	1.5	31
92	Electronâ€beamâ€induced dislocations in GaAs and InP single crystals. Journal of Applied Physics, 1989, 66, 2947-2951.	2.5	9