Sergio I. Molina

List of Publications by Year
in descending order

200	3,349	172457	182427
papers	citations	29 h-index	51 g-index

204	204	204	4060
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Peak Pairs algorithm for strain mapping from HRTEM images. Ultramicroscopy, 2007, 107, 1186-1193.	1.9	230
2	Growth of III-nitrides on Si(111) by molecular beam epitaxy Doping, optical, and electrical properties. Journal of Crystal Growth, 1999, 201-202, 296-317.	1.5	189
3	Reducing carrier escape in the InAs/GaAs quantum dot intermediate band solar cell. Journal of Applied Physics, 2010, 108, .	2.5	156
4	Point Defect Configurations of Supersaturated Au Atoms Inside Si Nanowires. Nano Letters, 2008, 8, 1016-1019.	9.1	119
5	Room temperature emission at 1.6Î¼m from InGaAs quantum dots capped with GaAsSb. Applied Physics Letters, 2005, 87, 202108.	3.3	106
6	Aberration-corrected scanning transmission electron microscopy: from atomic imaging and analysis to solving energy problems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 3709-3733.	3.4	89
7	Materials with enhanced adhesive properties based on acrylonitrile-butadiene-styrene (ABS)/thermoplastic polyurethane (TPU) blends for fused filament fabrication (FFF). Materials and Design, 2019, 182, 108044.	7.0	88
8	Aqueous Nearâ€Infrared Fluorescent Composites Based on Apoferritinâ€Encapsulated PbS Quantum Dots. Advanced Materials, 2008, 20, 3592-3596.	21.0	79
9	Vertical order in stacked layers of self-assembled In(Ga)As quantum rings on GaAs (001). Applied Physics Letters, 2005, 86, 071918.	3.3	71
10	Design of InGaAs linear graded buffer structures. Applied Physics Letters, 1995, 66, 3334-3336.	3.3	70
11	Size effect and scaling power-law for superelasticity in shape-memory alloys at the nanoscale. Nature Nanotechnology, 2017, 12, 790-796.	31.5	70
12	Column-by-column compositional mapping by Z-contrast imaging. Ultramicroscopy, 2009, 109, 172-176.	1.9	68
13	Analysis of electron beam damage of exfoliated MoS2 sheets and quantitative HAADF-STEM imaging. Ultramicroscopy, 2014, 146, 33-38.	1.9	63
14	Large-format polymeric pellet-based additive manufacturing for the naval industry. Additive Manufacturing, 2018, 23, 79-85.	3.0	57
15	The effect of Si doping on the defect structure of GaN/AlN/Si(111). Applied Physics Letters, 1999, 74, 3362-3364.	3.3	55
16	Carrier localization in GaBiAs probed by photomodulated transmittance and photoluminescence. Journal of Applied Physics, 2009, 106, 023518.	2.5	55
17	Novel Method of Preparation of Goldâ€Nanoparticleâ€Doped TiO₂ and SiO₂ Plasmonic Thin Films: Optical Characterization and Comparison with Maxwellâ€“Garnett Modeling. Advanced Functional Materials, 2011, 21, 3502-3507.	14.9	55
18	Small-pore driven high capacitance in a hierarchical carbon via carbonization of Ni-MOF-74 at low temperatures. Chemical Communications, 2016, 52, 9141-9144.	4.1	51

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19	Molecular beam epitaxy of GaBiAs on (311)B GaAs substrates. Applied Physics Letters, 2007, 91, 251909.	3.3	50
20	Charge transfer interactions in self-assembled single walled carbon nanotubes/Dawsonâ€“Wells polyoxometalate hybrids. Chemical Science, 2014, 5, 4346-4354.	7.4	49
21	Strain relief in linearly graded composition buffer layers: A design scheme to grow dislocationâ€free (<105cmâ^'2) and unstrained epilayers. Applied Physics Letters, 1994, 65, 2460-2462.	3.3	47
22	Carrier recombination effects in strain compensated quantum dot stacks embedded in solar cells. Applied Physics Letters, 2008, 93, 123114.	3.3	46
23	Simulation of high angle annular dark field scanning transmission electron microscopy images of large nanostructures. Applied Physics Letters, 2008, 93, 153107.	3.3	43
24	Heterometallic Titaniumâ€“Organic Frameworks by Metal-Induced Dynamic Topological Transformations. Journal of the American Chemical Society, 2020, 142, 6638-6648.	13.7	40
25	Size control of InAsâ^•InP(001) quantum wires by tailoring Pâ^•As exchange. Applied Physics Letters, 2004, 85, 1424-1426.	3.3	38
26	Distribution of bismuth atoms in epitaxial GaAsBi. Applied Physics Letters, 2011, 98, 101902.	3.3	38
27	Tuning the properties of exciton complexes in self-assembled GaSb/GaAs quantum rings. Physical Review B, 2011, 83, .	3.2	34
28	Stacking of InAs/InP(001) quantum wires studied by in situ stress measurements: Role of inhomogeneous stress fields. Applied Physics Letters, 2004, 84, 4723-4725.	3.3	31
29	Determination of the strain generated in InAs/InP quantum wires: prediction of nucleation sites. Nanotechnology, 2006, 17, 5652-5658.	2.6	30
30	Development of carbon fiber acrylonitrile styrene acrylate composite for large format additive manufacturing. Materials and Design, 2020, 191, 108577.	7.0	30
31	Incorporation of Sb in InAsâ^•GaAs quantum dots. Applied Physics Letters, 2007, 91, 263105.	3.3	29
32	Surface nanostructuring of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>TiO</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> films by high energy ion irradiation. Physical Review B, 2010, 82, .	3.2	29
33	Development of Surface-Coated Polylactic Acid/Polyhydroxyalkanoate (PLA/PHA) Nanocomposites. Polymers, 2019, 11, 400.	4.5	29
34	Size-filtering effects by stacking InAs/InP (001) self-assembled quantum wires into multilayers. Physical Review B, 2002, 65, .	3.2	25
35	Excitons in coupledInAsâ^•InPself-assembled quantum wires. Physical Review B, 2007, 75, .	3.2	25
36	InAs/AlGaAs quantum dot intermediate band solar cells with enlarged sub-bandgaps. , 2012, , .		25

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37	Production of Nanometer-Size GaAs Nanocristals by Nanosecond Laser Ablation in Liquid. Journal of Nanoscience and Nanotechnology, 2012, 12, 6774-6778.	0.9	24
38	Large-format fused deposition additive manufacturing: a review. Rapid Prototyping Journal, 2019, 26, 793-799.	3.2	24
39	A sugar-beet waste based thermoplastic agro-composite as substitute for raw materials. Journal of Cleaner Production, 2020, 257, 120382.	9.3	23
40	Extreme voltage recovery in GaAs:Ti intermediate band solar cells. Solar Energy Materials and Solar Cells, 2013, 108, 175-179.	6.2	22
41	CVD synthesis of carbon spheres using NiFe-LDHs as catalytic precursors: structural, electrochemical and magnetoresistive properties. Journal of Materials Chemistry C, 2016, 4, 440-448.	5.5	22
42	Structural and chemical characterization of CdSe-ZnS core-shell quantum dots. Applied Surface Science, 2018, 457, 93-97.	6.1	22
43	Influence of the Degree of Cure in the Bulk Properties of Graphite Nanoplatelets Nanocomposites Printed via Stereolithography. Polymers, 2020, 12, 1103.	4.5	21
44	MBE growth of GaN and AlGaN layers on Si(111) substrates: doping effects. Journal of Crystal Growth, 1999, 201-202, 415-418.	1.5	20
45	Error Quantification in Strain Mapping Methods. Microscopy and Microanalysis, 2007, 13, 320-328.	0.4	20
46	Calculation of integrated intensities in aberration-corrected Z-contrast images. Journal of Electron Microscopy, 2011, 60, 29-33.	0.9	20
47	Critical strain region evaluation of self-assembled semiconductor quantum dots. Nanotechnology, 2007, 18, 475503.	2.6	19
48	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mstyle		

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55	Accuracy assessment of strain mapping from Z-contrast images of strained nanostructures. Applied Physics Letters, 2009, 95, .	3.3	16
56	Effect of annealing on the structural and optical properties of (311)B GaAsBi layers. Applied Surface Science, 2010, 256, 5688-5690.	6.1	16
57	Blocking of indium incorporation by antimony in IIIâ€“V-Sb nanostructures. Nanotechnology, 2010, 21, 145606.	2.6	16
58	Compositional Analysis with Atomic Column Spatial Resolution by 5th-Order Aberration-Corrected Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2011, 17, 578-581.	0.4	16
59	A methodology for the fabrication by FIB of needle-shape specimens around sub-surface features at the nanometre scale. Micron, 2012, 43, 643-650.	2.2	15
60	Quality improvement of AlInN/p-Si heterojunctions with AlN buffer layer deposited by RF-sputtering. Journal of Alloys and Compounds, 2018, 769, 824-830.	5.5	15
61	Influence of the surface morphology on the relaxation of low-strained InxGa1 â^' xAs linear buffer structures. Journal of Crystal Growth, 1997, 182, 281-291.	1.5	14
62	Structural and optical changes induced by incorporation of antimony into InAs/GaAs(001) quantum dots. Physical Review B, 2010, 82, .	3.2	14
63	Three dimensional atom probe imaging of GaAsSb quantum rings. Ultramicroscopy, 2011, 111, 1073-1076.	1.9	14
64	Critical thickness of high-temperature AlN interlayers in GaN on sapphire (0001). Journal of Electronic Materials, 2001, 30, L17-L20.	2.2	13
65	A mechanism for the multiple atomic configurations of inversion domain boundaries in GaN layers grown on Si(111). Applied Physics Letters, 2001, 79, 3588-3590.	3.3	13
66	Atom-scale compositional distribution in InAlAsSb-based triple junction solar cells by atom probe tomography. Nanotechnology, 2016, 27, 305402.	2.6	13
67	Inversion domains in GaN layers grown on (111) silicon by molecular-beam epitaxy. Applied Physics Letters, 2001, 78, 2688-2690.	3.3	12
68	Emission wavelength engineering of InAs/InP(001) quantum wires. European Physical Journal B, 2004, 40, 433-437.	1.5	12
69	Direct experimental evidence of metastable epitaxial zinc-blende MgS. Applied Physics Letters, 2006, 89, 121907.	3.3	12
70	High spatial resolution mapping of individual and collective localized surface plasmon resonance modes of silver nanoparticle aggregates: correlation to optical measurements. Nanoscale Research Letters, 2015, 10, 1024.	5.7	12
71	3D compositional analysis at atomic scale of InAlGaAs capped InAs/GaAs QDs. Scripta Materialia, 2015, 103, 73-76.	5.2	12
72	Analysis of Bi Distribution in Epitaxial GaAsBi by Aberration-Corrected HAADF-STEM. Nanoscale Research Letters, 2018, 13, 125.	5.7	12

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73	Synthesis of Silver Nanocomposites for Stereolithography: In Situ Formation of Nanoparticles. Polymers, 2022, 14, 1168.	4.5	12
74	A Method to Determine the Strain and Nucleation Sites of Stacked Nano-Objects. Journal of Nanoscience and Nanotechnology, 2008, 8, 3422-3426.	0.9	11
75	Auâ€“NiO_x nanocomposite for hot electron-assisted plasmonic photocatalysis. Journal of Materials Chemistry C, 2020, 8, 9885-9897.	5.5	11
76	Step-graded buffer layer study of the strain relaxation by transmission electron microscopy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1994, 28, 497-501.	3.5	10
77	The role of Ge predeposition temperature in the MBE epitaxy of SiC on Ssilicon. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 341-346.	0.8	10
78	Microstructural improvements of InP on GaAs (001) grown by molecular beam epitaxy by in situ hydrogenation and postgrowth annealing. Applied Physics Letters, 2009, 94, 041919.	3.3	10
79	Formation of Spatially Addressed Ga(As)Sb Quantum Rings on GaAs(001) Substrates by Droplet Epitaxy. Crystal Growth and Design, 2009, 9, 1216-1218.	3.0	10
80	A study of the evolution process of antiphase boundaries in GaAs on Si. Journal of Electronic Materials, 1993, 22, 567-572.	2.2	9
81	A comparison of ZnMgSSe and MgS wide bandgap semiconductors used as barriers: Growth, structure and luminescence properties. Journal of Crystal Growth, 2009, 311, 2099-2101.	1.5	9
82	Photomodulated transmittance of GaBiAs layers grown on (001) and (311)B GaAs substrates. Microelectronics Journal, 2009, 40, 537-539.	2.0	9
83	Atomic-column scanning transmission electron microscopy analysis of misfit dislocations in GaSb/GaAs quantum dots. Journal of Materials Science, 2016, 51, 7691-7698.	3.7	9
84	High temperature AlN intermediate layer in GaN grown by molecular beam epitaxy. Journal of Crystal Growth, 2000, 216, 15-20.	1.5	8
85	AlN buffer layer thickness influence on inversion domains in GaN/AlN/Si(111). Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 93, 181-184.	3.5	8
86	High Reflectivity AlGaN/AlN DBR Mirrors Grown by PA-MBE. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 258-262.	0.8	8
87	High Spatial Resolution Mapping of Localized Surface Plasmon Resonances in Single Gallium Nanoparticles. Small, 2019, 15, 1902920.	10.0	8
88	STEM Tools for Semiconductor Characterization: Beyond High-Resolution Imaging. Nanomaterials, 2022, 12, 337.	4.1	8
89	Growth of Low-Density Vertical Quantum Dot Molecules with Control in Energy Emission. Nanoscale Research Letters, 2010, 5, 1913-1916.	5.7	7
90	Strain balanced quantum posts. Applied Physics Letters, 2011, 98, 173106.	3.3	7

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91	Towards high efficiency multi-junction solar cells grown on InP Substrates. , 2013, , .		7
92	Defect reduction in heteroepitaxial InP on Si by epitaxial lateral overgrowth. Materials Express, 2014, 4, 41-53.	0.5	7
93	Optical properties of metamorphic type-I InAs_{1â^'x}Sb_x/Al_{yâ€Š}In_{1â^'yâ€Š}As quantum wells grown on GaAs for the mid-infrared spectral range. Journal Physics D: Applied Physics, 2019, 52, 465102.	2.8	7
94	A comparative study of Coî—¸Re superlattices sputtered on glass and Si substrates by grazing angle of incidence RBS, HRTEM, PAC, magnetic and transport properties studies. Nuclear Instruments & Methods in Physics Research B, 1994, 85, 202-205.	1.4	6
95	Properties of Homoepitaxial and Heteroepitaxial GaN Layers Grown by Plasma-Assisted MBE. Physica Status Solidi A, 1999, 176, 447-452.	1.7	6
96	Modeling, design and experimental results for high efficiency multi-junction solar cells lattice matched to InP. Proceedings of SPIE, 2014, , .	0.8	6
97	Delta doping and positioning effects of type II GaSb quantum dots in GaAs solar cell. Materials Research Innovations, 2015, 19, 512-516.	2.3	6
98	Atom probe tomography analysis of InAlGaAs capped InAs/GaAs stacked quantum dots with variable barrier layer thickness. Acta Materialia, 2016, 103, 651-657.	7.9	6
99	Influence of the AlN interlayer thickness on the photovoltaic properties of in-rich AlInN on Si heterojunctions deposited by RF sputtering. AIP Advances, 2018, 8, .	1.3	6
100	Influence of the additivation of graphene-like materials on the properties of polyamide for Powder Bed Fusion. Progress in Additive Manufacturing, 2018, 3, 233-244.	4.8	6
101	Printable Graphene Oxide Nanocomposites as Versatile Platforms for Immobilization of Functional Biomolecules. Macromolecular Materials and Engineering, 2022, 307, .	3.6	6
102	Influence of Si Doping on the Subgrain Structure of GaN Grown on AlN/Si(111). Physica Status Solidi A, 1999, 176, 401-406.	1.7	5
103	SiC thin films obtained by Si carbonization. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 80, 342-344.	3.5	5
104	Structural characterization of high-dose C++N+ ion-implanted (111) Si. Nuclear Instruments & Methods in Physics Research B, 2001, 184, 361-370.	1.4	5
105	HRTEM study of AlxGa1â^'xN/AlN DBR mirrors. Diamond and Related Materials, 2003, 12, 1178-1181.	3.9	5
106	Microchemical Analysis and Microstructural Development of Cr-Doped Mullites. Mikrochimica Acta, 2004, 145, 255-260.	5.0	5
107	Morphological evolution of InAs/InP quantum wires through aberration-corrected scanning transmission electron microscopy. Nanotechnology, 2010, 21, 325706.	2.6	5
108	Structural characterization of InAlAsSb/InGaAs/InP heterostructures for solar cells. Applied Surface Science, 2017, 395, 98-104.	6.1	5

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109	HAADF-STEM for the analysis of coreâ€“shell quantum dots. Journal of Materials Science, 2018, 53, 15226-15236.	3.7	5
110	Modified qHAADF method for atomic column-by-column compositional quantification of semiconductor heterostructures. Journal of Materials Science, 2019, 54, 3230-3241.	3.7	5
111	Structural characterization of bulk and nanoparticle lead halide perovskite thin films by (S)TEM techniques. Nanotechnology, 2019, 30, 135701.	2.6	5
112	Investigation on Sb distribution for InSb/InAs sub-monolayer heterostructure using TEM techniques. Nanotechnology, 2020, 31, 025706.	2.6	5
113	Synthesis and Characterisation of Acrylic Resin-Al Powder Composites Suitable for Additive Manufacturing. Polymers, 2020, 12, 1642.	4.5	5
114	Structural characterization of highly strained InAs N monolayer lasers and quantum well structures by X-ray diffraction and transmission electron microscopy. Journal of Crystal Growth, 1993, 127, 596-600.	1.5	4
115	Structural characterization of high temperature AlN intermediate layer in GaN grown by molecular beam epitaxy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 80, 299-303.	3.5	4
116	Origin of Inversion Domains in GaN/AlN/Si(111) Heterostructures Grown by Molecular Beam Epitaxy. Physica Status Solidi (B): Basic Research, 2002, 234, 935-938.	1.5	4
117	Structural Study of Micro and Nanotubes Synthesized by Rapid Thermal Chemical Vapor Deposition. Mikrochimica Acta, 2004, 145, 129-132.	5.0	4
118	Experimental and Simulated Strain Field Maps in Stacked Quantum Wires. Microscopy and Microanalysis, 2008, 14, 344-345.	0.4	4
119	Theoretical modelling of quaternary GaInAsSb/GaAs self-assembled quantum dots. Journal of Physics: Conference Series, 2010, 245, 012081.	0.4	4
120	Transmission electron microscopy study of vertical quantum dots molecules grown by droplet epitaxy. Applied Surface Science, 2010, 256, 5659-5661.	6.1	4
121	Structural characterization of GaSb-capped InAs/GaAs quantum dots with a GaAs intermediate layer. Materials Letters, 2011, 65, 1608-1610.	2.6	4
122	Quantitative study of the interfacial intermixing and segregation effects across the wetting layer of Ga(As,Sb)-capped InAs quantum dots. Applied Physics Letters, 2012, 101, .	3.3	4
123	Tuning the properties of Ge-quantum dots superlattices in amorphous silica matrix through deposition conditions. Journal of Applied Physics, 2012, 111, 074316.	2.5	4
124	Wide bandgap, strain-balanced quantum well tunnel junctions on InP substrates. Journal of Applied Physics, 2016, 119, 194503.	2.5	4
125	Effect of an in-situ thermal annealing on the structural properties of self-assembled GaSb/GaAs quantum dots. Applied Surface Science, 2017, 395, 136-139.	6.1	4
126	Influence of the growth temperature on the composition distribution at sub-nm scale of InAlAsSb for solar cells. Journal of Alloys and Compounds, 2018, 763, 1005-1011.	5.5	4

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127	Inhibition of light emission from the metastable tetragonal phase at low temperatures in island-like films of lead iodide perovskites. Nanoscale, 2019, 11, 22378-22386.	5.6	4
128	Synthesis and Characterisation of ASA-PEEK Composites for Fused Filament Fabrication. Polymers, 2022, 14, 496.	4.5	4
129	N+BF 2 and N+C+BF 2 high-dose co-implantation in silicon. Applied Physics A: Materials Science and Processing, 2003, 76, 791-800.	2.3	3
130	Size self-filtering effect in vertical stacks of InAs/InP self-assembled quantum wires. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 174-176.	2.7	3
131	Transmission electron microscopy study of simultaneous high-dose C++N+ co-implantation into (111)Si. Thin Solid Films, 2003, 426, 16-30.	1.8	3
132	A TEM study of the evolution of InAs/GaAs self-assembled dots on (3â€‰1â€‰1)B GaAs with growth interruption. Semiconductor Science and Technology, 2007, 22, 168-170.	2.0	3
133	Investigation of saturation and excitation behavior of 1.5 Î¼m emission from Er³⁺ ions in SiO₂ sensitized with Si nanocrystals. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 2312-2317.	0.8	3
134	Analysis of the 3D distribution of stacked self-assembled quantum dots by electron tomography. Nanoscale Research Letters, 2012, 7, 681.	5.7	3
135	Strain analysis for the prediction of the preferential nucleation sites of stacked quantum dots by combination of FEM and APT. Nanoscale Research Letters, 2013, 8, 513.	5.7	3
136	A methodology for the extraction of quantitative information from electron microscopy images at the atomic level. Journal of Physics: Conference Series, 2014, 522, 012013.	0.4	3
137	Mapping the plasmonic response of gold nanoparticles embedded in TiO₂thin films. Nanotechnology, 2015, 26, 405702.	2.6	3
138	Gaussian kernel density functions for compositional quantification in atom probe tomography. Materials Characterization, 2018, 139, 63-69.	4.4	3
139	Influence of the crosstalk on the intensity of HAADFâ€STEM images of quaternary semiconductor materials. Journal of Microscopy, 2019, 273, 81-88.	1.8	3
140	Modification of the Mechanical Properties of Coreâ€Shell Liquid Gallium Nanoparticles by Thermal Oxidation at Low Temperature. Particle and Particle Systems Characterization, 2021, 38, 2100141.	2.3	3
141	Transmission electron microscopy study of ultra-thin SiC layers obtained by rapid thermal carbonization of Si wafers. Physica Status Solidi A, 2003, 195, 116-121.	1.7	2
142	Lateral absorption measurements of InAs/GaAs quantum dots stacks: Potential as intermediate band material for high efficiency solar cells. Energy Procedia, 2010, 2, 27-34.	1.8	2
143	Exploring semiconductor quantum dots and wires by high resolution electron microscopy. Journal of Physics: Conference Series, 2010, 209, 012004.	0.4	2
144	Strain balanced quantum posts for intermediate band solar cells. , 2010, , .		2

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145	Compositional analysis of InAs-GaAs-GaSb heterostructures by Low-Loss Electron Energy Loss Spectroscopy. Journal of Physics: Conference Series, 2013, 471, 012012.	0.4	2
146	Molecular beam epitaxy of InAlAsSb for the top cell in high-efficiency InP-based lattice-matched triple-junction solar cells. , 2015, , .		2
147	HAADF-STEM analysis of the composition distribution in InAlAsSb/InGaAs/InP layers for solar cells applications. Microscopy and Microanalysis, 2016, 22, 30-31.	0.4	2
148	Effect of annealing on the compositional modulation of InAlAsSb. Applied Surface Science, 2017, 395, 105-109.	6.1	2
149	Effect of the thermal annealing and the nominal composition in the elemental distribution of InxAl1-xAsySb1-y for triple junction solar cells. Journal of Alloys and Compounds, 2019, 792, 1021-1027.	5.5	2
150	Design of a Bioâ€Based Device for Micro Total Analysis Combining Fused Deposition Modeling and Layerâ€byâ€Layer Technologies. Macromolecular Materials and Engineering, 2020, 305, 2000461.	3.6	2
151	Additive Manufacturing of Gold Nanostructures Using Nonlinear Photoreduction under Controlled Ionic Diffusion. International Journal of Molecular Sciences, 2021, 22, 7465.	4.1	2
152	High-Resolution Electron Microscopy of Semiconductor Heterostructures and Nanostructures. Springer Series in Materials Science, 2012, , 23-62.	0.6	2
153	High-resolution electron microscopy study of ALMBE InAs grown on (001) GaAs substrates. Ultramicroscopy, 1992, 40, 370-375.	1.9	1
154	A study of the defect structure in GaAs layers grown at low and high temperatures on Si(001) substrates. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1994, 28, 196-199.	3.5	1
155	Transmission electron microscopy study of multilayer buffer structures used as dislocation filters. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1994, 28, 515-519.	3.5	1
156	Effect of High Temperature Single and Multiple AlN Intermediate Layers on N-polar and Ga-polar GaN Grown by Molecular Beam Epitaxy. Materials Research Society Symposia Proceedings, 2001, 693, 459.	0.1	1
157	Size and critical thickness evolution during growth of stacked layers of InAs/InP(001) quantum wires studied by in situ stress measurements. Materials Research Society Symposia Proceedings, 2003, 794, 154.	0.1	1
158	Strain mapping from HRTEM images. , 2005, , 191-194.		1
159	Through-focal HAADF-STEM of buried nanostructures. Journal of Physics: Conference Series, 2010, 209, 012032.	0.4	1
160	Quantification of corrugation in simulated graphene by electron tomography techniques. Applied Physics Letters, 2012, 101, 213106.	3.3	1
161	Cubic and hexagonal InGaAsN dilute arsenides by unintentional homogeneous incorporation of As into InGaN. Scripta Materialia, 2012, 66, 351-354.	5.2	1
162	Influence of RF-sputtering power on formation of vertically stacked Si_{1â^'x}Ge_xnanocrystals between ultra-thin amorphous Al₂O₃layers: structural and photoluminescence properties. Journal Physics D: Applied Physics, 2013, 46, 385301.	2.8	1

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163	Effect of doping on the morphology of GaSb/GaAs nanostructures for solar cells. Applied Surface Science, 2015, 359, 676-678.	6.1	1
164	Effect of the cap layer growth temperature on the Sb distribution in InAs/InSb/InAs sub-monolayer heterostructures for mid-infrared devices. Nanotechnology, 2020, 31, 105702.	2.6	1
165	Efecto del dopado con Si sobre la estructura de defectos en sistemas heteroepitaxiales GaN/AlN/Si(111). Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2000, 39, 468-471.	1.9	1
166	Estudio por microscopÃa electrÃ³nica y espectroscopÃa de infra-rojos de capas de SiC obtenidas mediante carburizaciÃ³n de obleas de Si. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2004, 43, 363-366.	1.9	1
167	DESIGN AND DEVELOPMENT OF A PARAMETRIZABLE ELECTRIC GUITAR THROUGH ADDITIVE MANUFACTURING. Dyna (Spain), 2019, 94, 26-31.	0.2	1
168	Quantitative measurements of the inhomogeneous strain field of stacked self-assembled InAs/InP(001) quantum wires by the Peak Finding Method. , 0, , 299-302.		1
169	Structural Characterization of GaP/GaAs/GaP Heterostructure by TEM. Materials Research Society Symposia Proceedings, 1992, 280, 449.	0.1	0
170	Experimental evidence of the structure of annihilation of antiphase boundaries in GaAs on Si. Materials Letters, 1993, 15, 353-355.	2.6	0
171	Errors in the determination by HREM of steps at AlAs/GaAs interfaces. , 1993, , .		0
172	Optical emission of a one-dimensional electron gas in semiconductor V-shaped quantum wires. Physical Review B, 1998, 58, 10705-10708.	3.2	0
173	Characterisation by TEM and X-ray diffraction of linearly graded composition InGaAs buffer layers on (001) GaAs. Materials Science and Technology, 1998, 14, 1273-1278.	1.6	0
174	Correlation Between the AlN Buffer Layer Thickness and the GaN Polarity in GaN/AlN/Si(111) Grown by MBE. Materials Research Society Symposia Proceedings, 2002, 743, L3.25.1.	0.1	0
175	Filtering Study of Threading Dislocations in AlN Buffered MBE GaN/Sapphire Using Single and Multiple High Temperature AlN Intermediate Layers. Physica Status Solidi A, 2002, 192, 424-429.	1.7	0
176	Crystalline Inclusions Formed in C+N+BF 2 Coimplanted on Silicon (111). Mikrochimica Acta, 2004, 145, 165-169.	5.0	0
177	Stress compensation by GaP monolayers for stacked InAs/GaAs quantum dots solar cells. Conference Record of the IEEE Photovoltaic Specialists Conference, 2008, , .	0.0	0
178	HAADF-STEM image simulation of large scale nanostructures. , 2008, , 111-112.		0
179	Publisher's Note: Structural and optical changes induced by incorporation of antimony into InAs/GaAs(001) quantum dots [Phys. Rev. B82, 235316 (2010)]. Physical Review B, 2010, 82, .	3.2	0
180	Formation and Emission Properties of Single InGaAsâ^•GaAs Quantum Dots and Pairs Grown by Droplet Epitaxy. AIP Conference Proceedings, 2011, , .	0.4	0

#	Article	IF	Citations
181	Seeing inside materials by aberration-corrected electron microscopy. International Journal of Nanotechnology, 2011, 8, 935.	0.2	0
182	Aberration-corrected scanning transmission electron microscopy of nanostructures for photovoltaics. , 2011, , .		0
183	(Invited) Photoluminescence Excitation Spectroscopy of Si Nanocrystals in SiO2. ECS Transactions, 2012, 45, 3-8.	0.5	0
184	Initial Results from a 200 kV UltraSTEM. Microscopy and Microanalysis, 2012, 18, 326-327.	0.4	0
185	Fabrication of Needle-Shaped Specimens Containing Subsurface Nanostructures for Electron Tomography. Lecture Notes in Nanoscale Science and Technology, 2013, , 241-266.	0.8	0
186	Preferential sites for InAsP/InP quantum wire nucleation using molecular dynamics. European Physical Journal B, 2014, 87, 1.	1.5	0
187	Determination of Local Chemistry Composition of Low-Dimensional Semiconductor Nanostructures Through the use of High-Resolution HAADF images. Microscopy and Microanalysis, 2015, 21, 2083-2084.	0.4	0
188	Structural Quality of GaSb/GaAs Quantum Dots for Solar Cells Analyzed by Electron Microscopy Techniques. Microscopy and Microanalysis, 2016, 22, 38-39.	0.4	0
189	Structural and Compositional Analysis of Core/Shell QDs by Transmission Electron Microscopy Techniques. Microscopy and Microanalysis, 2017, 23, 1768-1769.	0.4	0
190	Geometric-Structural Study of the Accelerated Degradation of Mold Cavities for HDPE Injection. Journal of Failure Analysis and Prevention, 2018, 18, 55-65.	0.9	0
191	Exploring the Capability of HAADF-STEM Techniques to Characterize Graphene Distribution in Nanocomposites by Simulations. Journal of Nanomaterials, 2018, 2018, 1-12.	2.7	0
192	Structural Characterization of Al0.37In0.63N/AlN/p-Si (111) Heterojunctions Grown by RF Sputtering for Solar Cell Applications. Materials, 2021, 14, 2236.	2.9	0
193	Structural Origin of Enhanced Luminescence Efficiency of Antimony Irradiated InAs Quantum Dots. Advanced Science Letters, 2011, 4, 3776-3778.	0.2	0
194	Transmission Electron Microscopy of 1D-Nanostructures. , 2014, , 657-701.		0
195	Comparison of the thickness determined by Fresnel contrast and Rutherford backscattering spectrometry in ultra-thin layers. , 2018, , 305-308.		0
196	Multiple atomic configurations of inversion domain boundaries in GaN grown on (111)Si. , 2018, , 333-336.		0
197	Quantification of the influence of TEM operation parameters on the error of HREM image matching. , 2005, , 195-198.		0
198	Chemical composition and strain distribution of InAs/GaAs(001) stacked quantum rings. , 0, , 271-274.		0

#	Article	IF	Citations
199	PPA: An Improved Implementation of Peak Pairs procedure as a DM plug-in for Strain Mapping. , 2008, , 125-126.		0
200	TEM characterization of InAs/GaAs quantum dots capped by a GaSb/GaAs layer. , 2008, , 45-46.		0