

MarÃ-a de la Mata

List of Publications by Year in descending order

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75
papers

2,453
citations

218381

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docs citations

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times ranked

4544
citing authors

#	ARTICLE	IF	CITATIONS
1	STEM Tools for Semiconductor Characterization: Beyond High-Resolution Imaging. <i>Nanomaterials</i> , 2022, 12, 337.	1.9	8
2	Synthesis of Silver Nanocomposites for Stereolithography: In Situ Formation of Nanoparticles. <i>Polymers</i> , 2022, 14, 1168.	2.0	12
3	Self-Assembly of CsPbBr ₃ Perovskites in Micropatterned Polymeric Surfaces: Toward Luminescent Materials with Self-Cleaning Properties. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 20023-20031.	4.0	5
4	Induced damage during STEM-EELS analyses on acrylic-based materials for Stereolithography. <i>Polymer Degradation and Stability</i> , 2022, 203, 110044.	2.7	4
5	Structural Characterization of Al _{0.37} In _{0.63} N/AlN/p-Si (111) Heterojunctions Grown by RF Sputtering for Solar Cell Applications. <i>Materials</i> , 2021, 14, 2236.	1.3	0
6	Solution-Processed Ni-Based Nanocomposite Electrocatalysts: An Approach to Highly Efficient Electrochemical Water Splitting. <i>ACS Applied Energy Materials</i> , 2021, 4, 5255-5264.	2.5	16
7	Additive Manufacturing of Gold Nanostructures Using Nonlinear Photoreduction under Controlled Ionic Diffusion. <i>International Journal of Molecular Sciences</i> , 2021, 22, 7465.	1.8	2
8	Modification of the Mechanical Properties of Core-Shell Liquid Gallium Nanoparticles by Thermal Oxidation at Low Temperature. <i>Particle and Particle Systems Characterization</i> , 2021, 38, 2100141.	1.2	3
9	Disentangling phonon channels in nanoscale heat transport. <i>Physical Review B</i> , 2021, 104, .	1.1	0
10	Hybrid hierarchically structured materials combining breath figures and thermal decomposition of KAuCl ₄ . <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 624, 126766.	2.3	6
11	Effect of the cap layer growth temperature on the Sb distribution in InAs/InSb/InAs sub-monolayer heterostructures for mid-infrared devices. <i>Nanotechnology</i> , 2020, 31, 105702.	1.3	1
12	Purcell Enhancement and Wavelength Shift of Emitted Light by CsPbI ₃ Perovskite Nanocrystals Coupled to Hyperbolic Metamaterials. <i>ACS Photonics</i> , 2020, 7, 3152-3160.	3.2	22
13	Development of carbon fiber acrylonitrile styrene acrylate composite for large format additive manufacturing. <i>Materials and Design</i> , 2020, 191, 108577.	3.3	30
14	Heterometallic Titanium-Organic Frameworks by Metal-Induced Dynamic Topological Transformations. <i>Journal of the American Chemical Society</i> , 2020, 142, 6638-6648.	6.6	40
15	Au-NiO _x nanocomposite for hot electron-assisted plasmonic photocatalysis. <i>Journal of Materials Chemistry C</i> , 2020, 8, 9885-9897.	2.7	11
16	Optical properties of metamorphic type-I InAs _{1-x} Sb _x /Al _y In _{1-y} As quantum wells grown on GaAs for the mid-infrared spectral range. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 465102.	1.3	7
17	High Spatial Resolution Mapping of Localized Surface Plasmon Resonances in Single Gallium Nanoparticles. <i>Small</i> , 2019, 15, 1902920.	5.2	8
18	Insights into Preformed Human Serum Albumin Corona on Iron Oxide Nanoparticles: Structure, Effect of Particle Size, Impact on MRI Efficiency, and Metabolization. <i>ACS Applied Bio Materials</i> , 2019, 2, 3084-3094.	2.3	27

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19	Tuning Transport Properties in Thermoelectric Nanocomposites through Inorganic Ligands and Heterostructured Building Blocks. ACS Nano, 2019, 13, 6572-6580.	7.3	27
20	The Role of Polarity in Nonplanar Semiconductor Nanostructures. Nano Letters, 2019, 19, 3396-3408.	4.5	31
21	Growth of self-assembled and position-controlled InN nanowires on Si (1 1 1) by molecular beam epitaxy. Journal of Crystal Growth, 2019, 510, 56-64.	0.7	7
22	Reduction of Thermal Conductivity in Nanowires by Combined Engineering of Crystal Phase and Isotope Disorder. Nano Letters, 2018, 18, 3066-3075.	4.5	9
23	Growth and Luminescence of Polytropic InP on Epitaxial Graphene. Advanced Functional Materials, 2018, 28, 1705592.	7.8	17
24	Passivation layers for nanostructured photoanodes: ultra-thin oxides on InGaN nanowires. Journal of Materials Chemistry A, 2018, 6, 565-573.	5.2	26
25	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, .	0.6	6
26	Understanding GaAs Nanowire Growth in the Ag-Au Seed Materials System. Crystal Growth and Design, 2018, 18, 6702-6712.	1.4	5
27	Optical Analysis of Oxygen Self-Diffusion in Ultrathin CeO ₂ Layers at Low Temperatures. Advanced Energy Materials, 2018, 8, 1802120.	10.2	4
28	Quality improvement of AlInN/p-Si heterojunctions with AlN buffer layer deposited by RF-sputtering. Journal of Alloys and Compounds, 2018, 769, 824-830.	2.8	15
29	Growth of Au-Pd ₂ Sn Nanorods via Galvanic Replacement and Their Catalytic Performance on Hydrogenation and Sonogashira Coupling Reactions. Langmuir, 2018, 34, 10634-10643.	1.6	13
30	Ultrathin High Surface Area Nickel Boride (Ni _x B) Nanosheets as Highly Efficient Electrocatalyst for Oxygen Evolution. Advanced Energy Materials, 2017, 7, 1700381.	10.2	348
31	Low-Temperature Growth of Axial Si/Ge Nanowire Heterostructures Enabled by Trisilane. Chemistry of Materials, 2017, 29, 3397-3402.	3.2	18
32	Unveiling the Nucleation and Coarsening Mechanisms of Solution-Derived Self-Assembled Epitaxial Ce _{0.9} Gd _{0.1} O ₂ Nanostructures. Crystal Growth and Design, 2017, 17, 504-516.	1.4	17
33	Solution-based synthesis and processing of Sn- and Bi-doped Cu ₃ SbSe ₄ nanocrystals, nanomaterials and ring-shaped thermoelectric generators. Journal of Materials Chemistry A, 2017, 5, 2592-2602.	5.2	73
34	Colloidal Silicon-Germanium Nanorod Heterostructures. Chemistry of Materials, 2017, 29, 9786-9792.	3.2	14
35	Surface Hydrogen Enables Subeutectic Vapor-Liquid-Solid Semiconductor Nanowire Growth. Nano Letters, 2016, 16, 6717-6723.	4.5	25
36	UV Photosensing Characteristics of Nanowire-Based GaN/AlN Superlattices. Nano Letters, 2016, 16, 3260-3267.	4.5	53

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37	Fe ₃ O ₄ @NiFe ₂ O ₄ Nanoparticles with Enhanced Electrocatalytic Properties for Oxygen Evolution in Carbonate Electrolyte. ACS Applied Materials & Interfaces, 2016, 8, 29461-29469.	4.0	34
38	Orientation symmetry breaking in self-assembled Ce _{1-x} Gd _x O _{2-y} nanowires derived from chemical solutions. RSC Advances, 2016, 6, 97226-97236.	1.7	8
39	Ultrafast Epitaxial Growth Kinetics in Functional Oxide Thin Films Grown by Pulsed Laser Annealing of Chemical Solutions. Chemistry of Materials, 2016, 28, 6136-6145.	3.2	28
40	Quantum heterostructures based on GaAs nanomembranes for photonic applications. , 2016, , .		0
41	Disentangling Epitaxial Growth Mechanisms of Solution Derived Functional Oxide Thin Films. Advanced Materials Interfaces, 2016, 3, 1600392.	1.9	33
42	Orientationally Ordered Silicon Nanocrystal Cuboctahedra in Superlattices. Nano Letters, 2016, 16, 7814-7821.	4.5	33
43	Enhanced thermoelectric performance of solution-derived bismuth telluride based nanocomposites via liquid-phase Sintering. Nano Energy, 2016, 30, 630-638.	8.2	78
44	Mn ₃ O ₄ @CoMn ₂ O ₄ "Co _x O _y " Nanoparticle Partial Cation Exchange Synthesis and Electrocatalytic Properties toward the Oxygen Reduction and Evolution Reactions. ACS Applied Materials & Interfaces, 2016, 8, 17435-17444.	4.0	72
45	Ultraviolet pulsed laser crystallization of Ba _{0.8} Sr _{0.2} TiO ₃ films on LaNiO ₃ -coated silicon substrates. Ceramics International, 2016, 42, 4039-4047.	2.3	23
46	Twin-Induced InSb Nanosails: A Convenient High Mobility Quantum System. Nano Letters, 2016, 16, 825-833.	4.5	74
47	Growth of ferroelectric Ba _{0.8} Sr _{0.2} TiO ₃ epitaxial films by ultraviolet pulsed laser irradiation of chemical solution derived precursor layers. Applied Physics Letters, 2015, 106, 262903.	1.5	22
48	Long-lived excitons in GaN/AlN nanowire heterostructures. Physical Review B, 2015, 91, .	1.1	17
49	Phonon Engineering in Isotopically Disordered Silicon Nanowires. Nano Letters, 2015, 15, 3885-3893.	4.5	36
50	Role of Silicon Nanowire Diameter for Alkyl (Chain Lengths C ₁ "C ₁₈) Passivation Efficiency through Si "C Bonds. Langmuir, 2015, 31, 2430-2437.	1.6	7
51	Position-Controlled Growth of GaN Nanowires and Nanotubes on Diamond by Molecular Beam Epitaxy. Nano Letters, 2015, 15, 1773-1779.	4.5	69
52	Whispering Gallery Mode Lasing from Hexagonal Shaped Layered Lead Iodide Crystals. ACS Nano, 2015, 9, 687-695.	7.3	118
53	Ultrafast Crystallization of Ce _{0.9} Zr _{0.1} O _{2-y} Epitaxial Films on Flexible Technical Substrates by Pulsed Laser Irradiation of Chemical Solution Derived Precursor Layers. Crystal Growth and Design, 2015, 15, 1957-1967.	1.4	15
54	High Yield of GaAs Nanowire Arrays on Si Mediated by the Pinning and Contact Angle of Ga. Nano Letters, 2015, 15, 2869-2874.	4.5	34

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55	Bottom-up engineering of InAs at the nanoscale: From V-shaped nanomembranes to nanowires. Journal of Crystal Growth, 2015, 420, 47-56.	0.7	5
56	Induced shape controllability by tailored precursor design in thermal and microwave-assisted synthesis of Fe_3O_4 nanoparticles. Journal of Nanoparticle Research, 2015, 17, 1.	0.8	14
57	Strain-induced spatially indirect exciton recombination in zinc-blende/wurtzite CdS heterostructures. Nano Research, 2015, 8, 3035-3044.	5.8	14
58	Towards defect-free 1-D GaAs/AlGaAs heterostructures based on GaAs nanomembranes. Nanoscale, 2015, 7, 19453-19460.	2.8	46
59	Interfacial effects on the tunneling magnetoresistance in $\text{L}_a\text{MnO}_3/\text{SrTiO}_3/\text{MnO}$ heterostructures. Applied Physics Letters, 2014, 104, .	1.1	9
60	Screening of the quantum-confined Stark effect in AlN/GaN nanowire superlattices by germanium doping. Applied Physics Letters, 2014, 104, .	1.5	23
61	Probing inhomogeneous composition in core/shell nanowires by Raman spectroscopy. Journal of Applied Physics, 2014, 116, 184303.	1.1	4
62	Te-seeded growth of few-quintuple layer Bi ₂ Te ₃ nanoplates. Nano Research, 2014, 7, 1243-1253.	5.8	22
63	Atomic Scale Strain Relaxation in Axial Semiconductor III-V Nanowire Heterostructures. Nano Letters, 2014, 14, 6614-6620.	4.5	94
64	Intraband Absorption in Self-Assembled Ge-Doped GaN/AlN Nanowire Heterostructures. Nano Letters, 2014, 14, 1665-1673.	4.5	33
65	Probing the Internal Electric Field in GaN/AlGaIn Nanowire Heterostructures. Nano Letters, 2014, 14, 5118-5122.	4.5	23
66	High Resolution in STEM Mode: Individual Atom Analysis in Semiconductor Nanowires. , 2014, , 375-425.		1
67	Bandgap engineering in a nanowire: self-assembled 0, 1 and 2D quantum structures. Materials Today, 2013, 16, 213-219.	8.3	30
68	A review of MBE grown 0D, 1D and 2D quantum structures in a nanowire. Journal of Materials Chemistry C, 2013, 1, 4300.	2.7	66
69	Solution phase van der Waals epitaxy of ZnO wire arrays. Nanoscale, 2013, 5, 7242.	2.8	27
70	The Growth of Ultralong ZnTe Micro/Nanostructures: The Influence of Polarity and Twin Direction on the Morphogenesis of Nanobelts and Nanosheets. Crystal Growth and Design, 2013, 13, 2590-2596.	1.4	18
71	Twinning, Polytypism, and Polarity-Induced Morphological Modulation in Nonplanar Nanostructures with van der Waals Epitaxy. Advanced Functional Materials, 2013, 23, 1636-1646.	7.8	59
72	Germanium doping of self-assembled GaN nanowires grown by plasma-assisted molecular beam epitaxy. Journal of Applied Physics, 2013, 114, .	1.1	41

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73	Highly Enhanced Exciton Recombination Rate by Strong Electron-Phonon Coupling in Single ZnTe Nanobelt. Nano Letters, 2012, 12, 6420-6427.	4.5	43
74	Polarity Assignment in ZnTe, GaAs, ZnO, and GaN-AlN Nanowires from Direct Dumbbell Analysis. Nano Letters, 2012, 12, 2579-2586.	4.5	161
75	Exciton-phonon coupling in individual ZnTe nanorods studied by resonant Raman spectroscopy. Physical Review B, 2012, 85, .	1.1	109