Reza R Zamani

List of Publications by Year
in descending order

55 papers	2,587 citations	236925 25 h-index	182427 51 g-index
59 all docs	59 docs citations	59 times ranked	4364 citing authors

#	Article	IF	Citations
1	Cubic versus hexagonal â€“ phase, size and morphology effects on the photoluminescence quantum yield of NaGdF₄:Er³⁺/Yb³⁺ upconverting nanoparticles. Nanoscale, 2022, 14, 1492-1504.	5.6	21
2	Towards defect-free thin films of the earth-abundant absorber zinc phosphide by nanopatterning. Nanoscale Advances, 2021, 3, 326-332.	4.6	13
3	Catalytic hydrocracking of synthetic polymers into grid-compatible gas streams. Cell Reports Physical Science, 2021, 2, 100332.	5.6	28
4	Silica-copper catalyst interfaces enable carbon-carbon coupling towards ethylene electrosynthesis. Nature Communications, 2021, 12, 2808.	12.8	91
5	The path towards 1 Âµm monocrystalline Zn₃P₂ films on InP: substrate preparation, growth conditions and luminescence properties. JPhys Energy, 2021, 3, 034011.	5.3	8
6	Direct Growth of Hexagonal Boron Nitride on Photonic Chips for High-Throughput Characterization. ACS Photonics, 2021, 8, 2033-2040.	6.6	13
7	Unraveling electronic band structure of narrow-bandgap pâ€“n nanojunctions in heterostructured nanowires. Physical Chemistry Chemical Physics, 2021, 23, 25019-25023.	2.8	6
8	Multiple morphologies and functionality of nanowires made from earth-abundant zinc phosphide. Nanoscale Horizons, 2020, 5, 274-282.	8.0	15
9	Heterotwin Zn₃P₂superlattice nanowires: the role of indium insertion in the superlattice formation mechanism and their optical properties. Nanoscale, 2020, 12, 22534-22540.	5.6	7
10	The Role of Polarity in Nonplanar Semiconductor Nanostructures. Nano Letters, 2019, 19, 3396-3408.	9.1	31
11	Understanding semiconductor nanostructures via advanced electron microscopy and spectroscopy. Nanotechnology, 2019, 30, 262001.	2.6	15
12	Sb Incorporation in Wurtzite and Zinc Blende InAs_{1â^’}_xSb_x Branches on InAs Template Nanowires. Small, 2018, 14, e1703785.	10.0	5
13	Spin injection in epitaxial MnGa(111)/GaN(0001) heterostructures. Journal of Applied Physics, 2018, 123, .	2.5	7
14	Imaging Stray Magnetic Field of Individual Ferromagnetic Nanotubes. Nano Letters, 2018, 18, 964-970.	9.1	32
15	Atomic-Resolution Spectrum Imaging of Semiconductor Nanowires. Nano Letters, 2018, 18, 1557-1563.	9.1	21
16	Understanding GaAs Nanowire Growth in the Agâ€“Au Seed Materials System. Crystal Growth and Design, 2018, 18, 6702-6712.	3.0	5
17	Realization of Wurtzite GaSb Using InAs Nanowire Templates. Advanced Functional Materials, 2018, 28, 1800512.	14.9	13
18	Kinetic Engineering of Wurtzite and Zinc-Blende AlSb Shells on InAs Nanowires. Nano Letters, 2018, 18, 5775-5781.	9.1	6

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19	Polarity and growth directions in Sn-seeded GaSb nanowires. Nanoscale, 2017, 9, 3159-3168.	5.6	24
20	Direct nucleation, morphology and compositional tuning of InAs_{1â^'x}Sb_xnanowires on InAs (111) B substrates. Nanotechnology, 2017, 28, 165601.	2.6	23
21	Characterization of individual stacking faults in aÂwurtzite GaAs nanowire by nanobeam X-ray diffraction. Journal of Synchrotron Radiation, 2017, 24, 981-990.	2.4	9
22	Demonstration of Sn-seeded GaSb homo- and GaAsâ€“GaSb heterostructural nanowires. Nanotechnology, 2016, 27, 175602.	2.6	11
23	Hybrid ZnO/GaN distributed Bragg reflectors grown by plasma-assisted molecular beam epitaxy. APL Materials, 2016, 4, 086106.	5.1	7
24	Spatially controlled growth of highly crystalline ZnO nanowires by an inkjet-printing catalyst-free method. Materials Research Express, 2016, 3, 025010.	1.6	8
25	Polarity dependent strongly inhomogeneous In-incorporation in GaN nanocolumns. Nanotechnology, 2016, 27, 355703.	2.6	7
26	Glancing angle deposition in a pulsed laser ablation/vaporâ€“liquidâ€“solid grow system. Applied Surface Science, 2015, 327, 262-267.	6.1	2
27	Colloidal synthesis and functional properties of quaternary Cu-based semiconductors: Cu2HgGeSe4. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	7
28	Polarity-Driven Polytypic Branching in Cu-Based Quaternary Chalcogenide Nanostructures. ACS Nano, 2014, 8, 2290-2301.	14.6	47
29	Anisotropic magnetoresistance of individual CoFeB and Ni nanotubes with values of up to 1.4% at room temperature. APL Materials, 2014, 2, .	5.1	29
30	p-GaN/n-ZnO Heterojunction Nanowires: Optoelectronic Properties and the Role of Interface Polarity. ACS Nano, 2014, 8, 4376-4384.	14.6	99
31	Soft chemistry routes to transparent metal oxide thin films. The case of solâ€“gel synthesis and structural characterization of Ta2O5 thin films from tantalum chloromethoxide. Thin Solid Films, 2014, 555, 39-41.	1.8	10
32	High repetition rate laser ablation for vaporâ€“liquidâ€“solid nanowire growth. Current Applied Physics, 2014, 14, 614-620.	2.4	5
33	Oxideâ€“oxide nanojunctions in coaxial SnO2/TiO2, SnO2/V2O3 and SnO2/(Ti0.5V0.5)2O3 nanowire heterostructures. CrystEngComm, 2013, 15, 4532.	2.6	7
34	Cu2HgSnSe4 nanoparticles: synthesis and thermoelectric properties. CrystEngComm, 2013, 15, 8966.	2.6	25
35	Heterostructured p-CuO (nanoparticle)/n-SnO2 (nanowire) devices for selective H2S detection. Sensors and Actuators B: Chemical, 2013, 181, 130-135.	7.8	148
36	Enhanced Photovoltaic Performance of Nanowire Dye-Sensitized Solar Cells Based on Coaxial TiO₂@TiO Heterostructures with a Cobalt(II/III) Redox Electrolyte. ACS Applied Materials & Interfaces, 2013, 5, 9872-9877.	8.0	24

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37	Metal Ions To Control the Morphology of Semiconductor Nanoparticles: Copper Selenide Nanocubes. Journal of the American Chemical Society, 2013, 135, 4664-4667.	13.7	112
38	Colloidal synthesis and thermoelectric properties of Cu₂SnSe₃nanocrystals. Journal of Materials Chemistry A, 2013, 1, 1421-1426.	10.3	86
39	Solution-growth and optoelectronic properties of ZnO:Cl@ZnS coreâ€“shell nanowires with tunable shell thickness. Journal of Alloys and Compounds, 2013, 555, 213-218.	5.5	25
40	Preparation of copper oxide nanowire-based conductometric chemical sensors. Sensors and Actuators B: Chemical, 2013, 182, 7-15.	7.8	58
41	Coreâ€“Shell Nanoparticles As Building Blocks for the Bottom-Up Production of Functional Nanocomposites: PbTeâ€“PbS Thermoelectric Properties. ACS Nano, 2013, 7, 2573-2586.	14.6	137
42	CuTe Nanocrystals: Shape and Size Control, Plasmonic Properties, and Use as SERS Probes and Photothermal Agents. Journal of the American Chemical Society, 2013, 135, 7098-7101.	13.7	403
43	Colloidal Counterpart of the TiO₂-Supported V₂O₅ System: A Case Study of Oxide-on-Oxide Deposition by Wet Chemical Techniques. Synthesis, Vanadium Speciation, and Gas-Sensing Enhancement. Journal of Physical Chemistry C, 2013, 117, 20697-20705.	3.1	34
44	Solution-growth and optoelectronic performance of ZnOâ€‰:â€‰Cl/TiO₂ and ZnOâ€‰:â€‰Cl/Zn_xTiO_y/TiO₂ coreâ€“shell nanowires with tunable shell thickness. Journal Physics D: Applied Physics, 2012, 45, 415301.	2.8	27
45	Extending the Nanocrystal Synthesis Control to Quaternary Compositions. Crystal Growth and Design, 2012, 12, 1085-1090.	3.0	67
46	Cu₂ZnGeSe₄ Nanocrystals: Synthesis and Thermoelectric Properties. Journal of the American Chemical Society, 2012, 134, 4060-4063.	13.7	199
47	Pt doping triggers growth of TiO2 nanorods: nanocomposite synthesis and gas-sensing properties. CrystEngComm, 2012, 14, 3882.	2.6	26
48	Composition Control and Thermoelectric Properties of Quaternary Chalcogenide Nanocrystals: The Case of Stannite Cu₂CdSnSe₄. Chemistry of Materials, 2012, 24, 562-570.	6.7	153
49	Tailored graphene materials by chemical reduction of graphene oxides of different atomic structure. RSC Advances, 2012, 2, 9643.	3.6	51
50	Crystallographic Control at the Nanoscale To Enhance Functionality: Polytypic Cu₂GeSe₃ Nanoparticles as Thermoelectric Materials. Chemistry of Materials, 2012, 24, 4615-4622.	6.7	79
51	Self-Assembled GaN Nanowires on Diamond. Nano Letters, 2012, 12, 2199-2204.	9.1	73
52	Active nano-CuPt3 electrocatalyst supported on graphene for enhancing reactions at the cathode in all-vanadium redox flow batteries. Carbon, 2012, 50, 2372-2374.	10.3	124
53	Catalyst size limitation in vaporâ€“liquidâ€“solid ZnO nanowire growth using pulsed laser deposition. Thin Solid Films, 2012, 520, 4626-4631.	1.8	24
54	Copper oxide nanowires prepared by thermal oxidation for chemical sensing. Procedia Engineering, 2011, 25, 753-756.	1.2	23

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55	Control of the doping concentration, morphology and optoelectronic properties of vertically aligned chlorine-doped ZnO nanowires. Acta Materialia, 2011, 59, 6790-6800.	7.9	57