

Umapada Pal

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5107688/publications.pdf>

Version: 2024-02-01

249
papers

10,442
citations

36271

51
h-index

40954

93
g-index

250
all docs

250
docs citations

250
times ranked

15135
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of crystallization and dopant concentration on the emission behavior of TiO ₂ :Eu nanophosphors. <i>Nanoscale Research Letters</i> , 2012, 7, 1.	3.1	1,685
2	Photoluminescence and FTIR study of ZnO nanoparticles: the impurity and defect perspective. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006, 3, 3577-3581.	0.8	382
3	Controlling the Morphology of ZnO Nanostructures in a Low-Temperature Hydrothermal Process. <i>Journal of Physical Chemistry B</i> , 2005, 109, 15317-15321.	1.2	267
4	Photoluminescence and Raman Scattering in Ag-doped ZnO Nanoparticles. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	254
5	Structural, Magnetic, and Catalytic Evaluation of Spinel Co, Ni, and Co-Ni Ferrite Nanoparticles Fabricated by Low-Temperature Solution Combustion Process. <i>ACS Omega</i> , 2018, 3, 14986-15001.	1.6	201
6	Effects of morphology, surface area, and defect content on the photocatalytic dye degradation performance of ZnO nanostructures. <i>RSC Advances</i> , 2014, 4, 41099-41110.	1.7	189
7	Photoluminescence (PL) Quenching and Enhanced Photocatalytic Activity of Au-Decorated ZnO Nanorods Fabricated through Microwave-Assisted Chemical Synthesis. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 4807-4816.	4.0	184
8	Size-Controlled Synthesis of Spherical TiO ₂ Nanoparticles: Morphology, Crystallization, and Phase Transition. <i>Journal of Physical Chemistry C</i> , 2007, 111, 96-102.	1.5	182
9	Correlations among size, defects, and photoluminescence in ZnO nanoparticles. <i>Journal of Applied Physics</i> , 2007, 101, 024317.	1.1	165
10	Scattering of electromagnetic radiation by a multilayered sphere. <i>Computer Physics Communications</i> , 2009, 180, 2348-2354.	3.0	145
11	Plasmon induced enhanced photocatalytic activity of gold loaded hydroxyapatite nanoparticles for methylene blue degradation under visible light. <i>RSC Advances</i> , 2017, 7, 8633-8645.	1.7	137
12	Photocatalytic behavior of ZnO and Pt-incorporated ZnO nanoparticles in phenol degradation. <i>Applied Catalysis A: General</i> , 2011, 394, 269-275.	2.2	131
13	Study on charge storage mechanism in working electrodes fabricated by sol-gel derived spinel NiMn ₂ O ₄ nanoparticles for supercapacitor application. <i>Applied Surface Science</i> , 2019, 463, 513-525.	3.1	129
14	Recent progress on fabrication and drug delivery applications of nanostructured hydroxyapatite. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2018, 10, e1504.	3.3	119
15	Optical constants of vacuum-evaporated polycrystalline cadmium selenide thin films. <i>Journal of Applied Physics</i> , 1993, 74, 6368-6374.	1.1	115
16	Biodiesel production from <i>Jatropha curcas</i> crude oil using ZnO/SiO ₂ photocatalyst for free fatty acids esterification. <i>Applied Catalysis B: Environmental</i> , 2013, 129, 39-47.	10.8	115
17	Synthesis and optical properties of ZnO nanostructures with different morphologies. <i>Optical Materials</i> , 2006, 29, 65-69.	1.7	107
18	Effect of Ag doping on the crystallization and phase transition of TiO ₂ nanoparticles. <i>Current Applied Physics</i> , 2009, 9, 1097-1105.	1.1	106

#	ARTICLE	IF	CITATIONS
19	Preparation of Dendritic Copper Nanostructures and Their Characterization for Electroreduction. <i>Journal of Physical Chemistry C</i> , 2009, 113, 15891-15896.	1.5	106
20	Natural origin hydroxyapatite scaffold as potential bone tissue engineering substitute. <i>Ceramics International</i> , 2016, 42, 18338-18346.	2.3	104
21	Surface functionalized halloysite nanotubes decorated with silver nanoparticles for enzyme immobilization and biosensing. <i>Journal of Materials Chemistry B</i> , 2016, 4, 2553-2560.	2.9	99
22	Electronic state of silver in Ag/SiO ₂ and Ag/ZnO catalysts and its effect on diesel particulate matter oxidation: An XPS study. <i>Applied Catalysis B: Environmental</i> , 2017, 216, 1-10.	10.8	98
23	Optical characterization of vacuum evaporated cadmium sulfide films. <i>Thin Solid Films</i> , 1997, 305, 345-350.	0.8	92
24	Structural incoherency and structure reversal in bimetallic Au ¹⁰⁰ Pd nanoclusters. <i>Physical Review B</i> , 2005, 71, .	1.1	91
25	Size controlled green synthesis of gold nanoparticles using <i>Coffea arabica</i> seed extract and their catalytic performance in 4-nitrophenol reduction. <i>RSC Advances</i> , 2018, 8, 24819-24826.	1.7	89
26	Surface Reconstruction and Decahedral Structure of Bimetallic Nanoparticles. <i>Physical Review Letters</i> , 2004, 92, 196102.	2.9	88
27	3D hydroxyapatite scaffold for bone regeneration and local drug delivery applications. <i>Journal of Drug Delivery Science and Technology</i> , 2019, 53, 101131.	1.4	87
28	Evolution of ZnO nanostructures in sol-gel synthesis. <i>Current Applied Physics</i> , 2009, 9, 792-796.	1.1	83
29	Enhanced Fano Resonance in Asymmetrical Au:Ag Heterodimers. <i>Journal of Physical Chemistry C</i> , 2011, 115, 6410-6414.	1.5	83
30	Improving electrochromic behavior of spray pyrolysed WO ₃ thin solid films by Mo doping. <i>Electrochimica Acta</i> , 2011, 56, 2599-2605.	2.6	82
31	Au@Ag core-shell nanoparticles: efficient all-plasmonic Fano-resonance generators. <i>Nanoscale</i> , 2011, 3, 3609.	2.8	80
32	Generation of biogas from coffee-pulp and cow-dung co-digestion: Infrared studies of postcombustion emissions. <i>Energy Conversion and Management</i> , 2013, 74, 471-481.	4.4	78
33	Synthesis of CuS nanoparticles by a wet chemical route and their photocatalytic activity. <i>Journal of Nanoparticle Research</i> , 2015, 17, 1.	0.8	78
34	Mixed titanium, silicon, and aluminum oxide nanostructures as novel adsorbent for removal of rhodamine 6G and methylene blue as cationic dyes from aqueous solution. <i>Chemosphere</i> , 2016, 163, 142-152.	4.2	77
35	Enhanced plasmonic behavior of bimetallic (Ag-Au) multilayered spheres. <i>Nanoscale Research Letters</i> , 2011, 6, 279.	3.1	76
36	Thermodynamic Stability and Melting Mechanism of Bimetallic Au ¹⁰⁰ Pt Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2008, 112, 19173-19177.	1.5	74

#	ARTICLE	IF	CITATIONS
37	Effect of metal-ion doping on the optical properties of nanocrystalline ZnO thin films. Journal of Applied Physics, 2006, 99, 014306.	1.1	73
38	MieLab: A Software Tool to Perform Calculations on the Scattering of Electromagnetic Waves by Multilayered Spheres. International Journal of Spectroscopy, 2011, 2011, 1-10.	1.4	68
39	Some optical properties of evaporated zinc telluride films. Journal Physics D: Applied Physics, 1989, 22, 965-970.	1.3	67
40	Platinum nanoparticle-assembled porous biogenic silica 3D hybrid structures with outstanding 4-nitrophenol degradation performance. Chemical Engineering Journal, 2020, 388, 124237.	6.6	67
41	Structural Transformation of Au ⁺ Pd Bimetallic Nanoclusters on Thermal Heating and Cooling: A Dynamic Analysis. Journal of Physical Chemistry B, 2006, 110, 5191-5195.	1.2	64
42	Linear optical response of metallic nanoshells in different dielectric media. Journal of the Optical Society of America B: Optical Physics, 2008, 25, 1371.	0.9	64
43	Tunable Fano resonance in symmetric multilayered gold nanoshells. Nanoscale, 2013, 5, 209-216.	2.8	63
44	Biodiesel production from waste frying oil using waste animal bone and solar heat. Waste Management, 2016, 47, 105-113.	3.7	63
45	Stable Tin(n= 2~15) Clusters and Their Geometries: DFT Calculations. Journal of Physical Chemistry A, 2006, 110, 10274-10278.	1.1	61
46	Red emitting Y ₂ O ₃ :Eu ³⁺ nanophosphors with >80% down conversion efficiency. Journal of Materials Chemistry C, 2014, 2, 496-500.	2.7	61
47	Encapsulated Dye All-Organic Charged Colored Ink Nanoparticles for Electrophoretic Image Display. Advanced Materials, 2009, 21, 4987-4991.	11.1	60
48	Optical nonlinearities of Au nanoparticles embedded in a zinc oxide matrix. Optics Communications, 2007, 273, 538-543.	1.0	55
49	Synthesis and Optical Properties of Au-Ag Alloy Nanoclusters with Controlled Composition. Journal of Nanomaterials, 2008, 2008, 1-9.	1.5	55
50	Fabrication of Monodispersed Au@SiO ₂ Nanoparticles with Highly Stable Silica Layers by Ultrasound-Assisted Stober Method. Journal of Physical Chemistry C, 2017, 121, 9543-9551.	1.5	55
51	Controlled synthesis of Pt nanoparticle supported TiO ₂ nanorods as efficient and stable electrocatalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2018, 6, 23435-23444.	5.2	55
52	Defect annihilation and morphological improvement of hydrothermally grown ZnO nanorods by Ga doping. Applied Physics Letters, 2008, 93, 193120.	1.5	54
53	Indium doping in nanostructured ZnO through low-temperature hydrothermal process. Optical Materials, 2006, 29, 100-104.	1.7	52
54	CdTe/CdS Solar cells on flexible molybdenum substrates. Solar Energy Materials and Solar Cells, 2004, 82, 307-314.	3.0	51

#	ARTICLE	IF	CITATIONS
55	Transmission electron microscopy and theoretical analysis of AuCu nanoparticles: Atomic distribution and dynamic behavior. <i>Microscopy Research and Technique</i> , 2006, 69, 522-530.	1.2	51
56	Biodiesel and fossil-fuel diesel soot oxidation activities of Ag/CeO ₂ catalyst. <i>Fuel</i> , 2019, 250, 17-26.	3.4	51
57	Thermolytic Growth of ZnO Nanocrystals: Morphology Control and Optical Properties. <i>Crystal Growth and Design</i> , 2009, 9, 297-300.	1.4	49
58	Third-order nonlinear-optical parameters of gold nanoparticles in different matrices. <i>Journal of Luminescence</i> , 2007, 127, 181-185.	1.5	47
59	One-Step "Green" Synthesis and Stabilization of Au and Ag Nanoparticles Using Ionic Polymers. <i>Chemistry of Materials</i> , 2008, 20, 5146-5153.	3.2	47
60	Borohydride-Assisted Surface Activation of Co ₃ O ₄ /CoFe ₂ O ₄ Composite and Its Catalytic Activity for 4-Nitrophenol Reduction. <i>ACS Omega</i> , 2019, 4, 10129-10139.	1.6	47
61	Optical Properties of CdTe Thin Films. <i>Physica Status Solidi A</i> , 1989, 114, 721-729.	1.7	46
62	Solar-irradiation driven biodiesel production using Cr/SiO ₂ photocatalyst exploiting cooperative interaction between Cr ⁶⁺ and Cr ³⁺ moieties. <i>Applied Catalysis B: Environmental</i> , 2017, 203, 43-52.	10.8	46
63	Sputtered deposited nanocrystalline ZnO films: A correlation between electrical, optical and microstructural properties. <i>Applied Physics A: Materials Science and Processing</i> , 2005, 80, 1641-1646.	1.1	45
64	Effect of Different Surfactants on the Size Control and Optical Properties of Y ₂ O ₃ :Eu ³⁺ Nanoparticles Prepared by Coprecipitation Method. <i>Journal of Physical Chemistry C</i> , 2009, 113, 13600-13604.	1.5	44
65	Ultrasound-Assisted Synthesis of Mesoporous ZnO Nanostructures of Different Porosities. <i>Journal of Physical Chemistry C</i> , 2009, 113, 14676-14680.	1.5	44
66	Green synthesis of Au nanoparticles using potato extract: stability and growth mechanism. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	0.8	44
67	Effects of surface oxidation on the linear optical properties of Cu nanoparticles. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2011, 28, 2735.	0.9	42
68	Mie calculation of electromagnetic near-field for a multilayered sphere. <i>Computer Physics Communications</i> , 2017, 214, 225-230.	3.0	42
69	Au@Al ₂ O ₃ nanocomposites: XPS and FTIR spectroscopic studies. <i>Solar Energy Materials and Solar Cells</i> , 2004, 82, 291-298.	3.0	41
70	Magnetic Nanoparticles with Core/Shell Structures. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 2781-2792.	0.9	41
71	Structure and optical properties of M/ZnO (M=Au, Cu, Pt) nanocomposites. <i>Solar Energy Materials and Solar Cells</i> , 2004, 81, 339-348.	3.0	40
72	Diesel soot oxidation over silver-loaded SiO ₂ catalysts. <i>Catalysis Today</i> , 2013, 212, 63-69.	2.2	40

#	ARTICLE	IF	CITATIONS
73	Structural characterization of cadmium selenide thin films by X-ray diffraction and electron microscopy. <i>Journal Physics D: Applied Physics</i> , 1992, 25, 1488-1494.	1.3	39
74	Effect of thermal annealing on Te precipitates in CdTe wafers studied by Raman scattering and cathodoluminescence. <i>Journal of Applied Physics</i> , 1995, 77, 2806-2808.	1.1	39
75	Fabrication of Fe ₃ O ₄ @mSiO ₂ Core-Shell Composite Nanoparticles for Drug Delivery Applications. <i>Nanoscale Research Letters</i> , 2015, 10, 217.	3.1	39
76	Synthesis and structure determination of bimetallic Au/Cu nanoparticles. <i>Applied Physics A: Materials Science and Processing</i> , 2004, 79, 79-84.	1.1	38
77	Formation of Au~Ag Core~Shell Nanostructures in Silica Matrix by Sequential Ion Implantation. <i>Journal of Physical Chemistry C</i> , 2009, 113, 2296-2300.	1.5	38
78	Synthesis and characterization of colloidal platinum nanoparticles for electrochemical applications. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 4215-4221.	3.8	38
79	Enhanced biogas production from coffee pulp through deligninocellulosic photocatalytic pretreatment. <i>Energy Science and Engineering</i> , 2014, 2, 177-187.	1.9	38
80	Cathodoluminescence characterization of Ge~doped CdTe crystals. <i>Journal of Applied Physics</i> , 1995, 78, 1992-1995.	1.1	37
81	Thermoluminescence properties of ZnO and ZnO:Yb nanophosphors. <i>Applied Physics Letters</i> , 2006, 89, 183118.	1.5	36
82	Nonlinear optical properties of gold nanoparticles dispersed in different optically transparent matrices. <i>Physics of the Solid State</i> , 2009, 51, 55-60.	0.2	36
83	Blue and red dual emission nanophosphor CaMgSi ₂ O ₆ :Eu ⁺ ; crystal structure and electronic configuration. <i>Journal of Luminescence</i> , 2012, 132, 659-664.	1.5	36
84	Synthesis and characterization of Au nanoparticles in Al ₂ O ₃ matrix. <i>International Journal of Hydrogen Energy</i> , 2003, 28, 637-640.	3.8	35
85	Effect of Different Additives on the Size Control and Emission Properties of Y ₂ O ₃ :Eu ³⁺ Nanoparticles Prepared through the Coprecipitation Method. <i>Journal of Physical Chemistry C</i> , 2009, 113, 16652-16657.	1.5	35
86	Synthesis and Photocatalytic Activity of Yb Doped TiO ₂ Nanoparticles under Visible Light. <i>Journal of Nano Research</i> , 0, 5, 193-200.	0.8	35
87	Synthesis and Growth Mechanism of One-Dimensional Zn/ZnO Core~Shell Nanostructures in Low-Temperature Hydrothermal Process. <i>Crystal Growth and Design</i> , 2009, 9, 3024-3030.	1.4	33
88	Au~Au ³⁺ bifunctional site mediated enhanced catalytic activity of Au/ZnO composite in diesel particulate matter oxidation. <i>Journal of Catalysis</i> , 2017, 347, 148-156.	3.1	33
89	Generalizing segregation and chemical ordering in bimetallic nanoclusters through atomistic view points. <i>Physical Review B</i> , 2009, 80, .	1.1	32
90	Electrical characterization of stable air-oxidized CdSe films prepared by thermal evaporation. <i>Semiconductor Science and Technology</i> , 1996, 11, 548-553.	1.0	31

#	ARTICLE	IF	CITATIONS
91	Geometrical Tunability of Linear Optical Response of Silica@Gold Double Concentric Nanoshells. <i>Journal of Physical Chemistry C</i> , 2010, 114, 4414-4417.	1.5	31
92	Effect of In, Sb and Ga doping on the structure and vibrational modes of hydrothermally grown ZnO nanostructures. <i>Current Applied Physics</i> , 2011, 11, 525-531.	1.1	31
93	Enhanced magnetic properties and MRI performance of bi-magnetic core-shell nanoparticles. <i>RSC Advances</i> , 2016, 6, 77558-77568.	1.7	30
94	Near-Electric-Field Tuned Plasmonic Au@SiO ₂ and Ag@SiO ₂ Nanoparticles for Efficient Utilization in Luminescence Enhancement and Surface-Enhanced Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2017, 121, 23062-23071.	1.5	30
95	Morphology evolution of hydrothermally grown ZnO nanostructures on gallium doping and their defect structures. <i>Materials Chemistry and Physics</i> , 2012, 135, 810-817.	2.0	27
96	S and Te inter-diffusion in CdTe/CdS hetero junction. <i>Solar Energy Materials and Solar Cells</i> , 2007, 91, 1392-1397.	3.0	25
97	Estimating Near Electric Field of Polyhedral Gold Nanoparticles for Plasmon-Enhanced Spectroscopies. <i>Journal of Physical Chemistry C</i> , 2019, 123, 11833-11839.	1.5	25
98	Catalytic and pseudocapacitive energy storage performance of metal (Co, Ni, Cu and Mn) ferrite nanostructures and nanocomposites. <i>Progress in Materials Science</i> , 2022, 130, 100995.	16.0	25
99	Structural basis for homogeneous CdS nanorods: synthesis and HREM characterization. <i>Applied Physics A: Materials Science and Processing</i> , 2004, 78, 5-7.	1.1	24
100	Facile synthesis and magnetic phase transformation of Nd@Fe@B nanoclusters by oxygen bridging. <i>Journal of Materials Chemistry C</i> , 2013, 1, 275-281.	2.7	24
101	Dose enhancing behavior of hydrothermally grown Eu-doped SnO ₂ nanoparticles. <i>Journal of Applied Physics</i> , 2013, 113, .	1.1	24
102	The structure and interaction mechanism of a polyelectrolyte complex: a dissipative particle dynamics study. <i>Soft Matter</i> , 2015, 11, 5889-5897.	1.2	24
103	Effects of Plasmonic Nanoparticle Incorporation on Electrodynamics and Photovoltaic Performance of Dye Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2016, 120, 10129-10136.	1.5	24
104	Structure, Stability and Catalytic Activity of Chemically Synthesized Pt, Au, and Au@Pt Nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , 2005, 5, 641-647.	0.9	23
105	Total Oxidation of Methane over Pt/Cr ₂ O ₃ Catalyst at Low Temperature: Effect of Pt@Pt _x Dipoles at the Metal-Support Interface. <i>Journal of Physical Chemistry C</i> , 2019, 123, 2882-2893.	1.5	23
106	Effect of thermal annealing on the optical properties of high-energy Cu-implanted silica glass. <i>Journal of Non-Crystalline Solids</i> , 2000, 275, 65-71.	1.5	22
107	The Completion of the Platonic Atomic Polyhedra: The Dodecahedron. <i>Small</i> , 2006, 2, 351-355.	5.2	22
108	Controlled synthesis of ZnO nanoparticles by bioreduction. <i>Materials Chemistry and Physics</i> , 2006, 97, 321-329.	2.0	22

#	ARTICLE	IF	CITATIONS
109	Non-Equilibrium Molecular Dynamics Simulation of Nanojet Injection with Adaptive-Spatial Decomposition Parallel Algorithm. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 3661-3673.	0.9	22
110	Seed-Mediated Growth of Ag@Au Nanodisks with Improved Chemical Stability and Surface-Enhanced Raman Scattering. <i>ACS Omega</i> , 2018, 3, 12600-12608.	1.6	22
111	Graphite-Incorporated MoS ₂ Nanotubes: A New Coaxial Binary System. <i>Journal of Physical Chemistry B</i> , 2005, 109, 17488-17495.	1.2	21
112	Study of Interlayer Spacing Collapse During Polymer/Clay Nanocomposite Melt Intercalation. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 1707-1713.	0.9	21
113	Enhanced Plasmonic Behavior of Incomplete Nanoshells: Effect of Local Field Irregularities on the Far-Field Optical Response. <i>Journal of Physical Chemistry C</i> , 2011, 115, 22271-22275.	1.5	21
114	Hydrogen-reduced Cu/ZnO composite as efficient reusable catalyst for diesel particulate matter oxidation. <i>Applied Catalysis B: Environmental</i> , 2015, 165, 555-565.	10.8	21
115	Computational Nanomechanics and Thermal Transport in Nanotubes and Nanowires. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 3628-3651.	0.9	20
116	Photocharging and Band Gap Narrowing Effects on the Performance of Plasmonic Photoelectrodes in Dye-Sensitized Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 31374-31383.	4.0	20
117	Particle dispersion and lattice distortion induced magnetic behavior of La _{1-x} Sr _x MnO ₃ perovskite nanoparticles grown by salt-assisted solid-state synthesis. <i>Materials Chemistry and Physics</i> , 2020, 246, 122834.	2.0	20
118	Tunable White-Light Emission of Co ²⁺ and Mn ²⁺ Co-Doped ZnS Nanoparticles by Energy Transfer between Dopant Ions. <i>Journal of Physical Chemistry C</i> , 2020, 124, 3857-3866.	1.5	20
119	Elimination of Te precipitates from CdTe wafers. <i>Semiconductor Science and Technology</i> , 1995, 10, 870-875.	1.0	19
120	Emission controlled dual emitting Eu-doped CaMgSi ₂ O ₆ nanophosphors. <i>Journal of Luminescence</i> , 2015, 157, 131-136.	1.5	19
121	Controlled Fabrication of Flower-Shaped Au@Cu Nanostructures Using a Deep Eutectic Solvent and Their Performance in Surface-Enhanced Raman Scattering-Based Molecular Sensing. <i>ACS Omega</i> , 2020, 5, 3699-3708.	1.6	19
122	Cross-Sectional STEM Observation of Nanoparticle-Attached Silicon Wafer: Specimen Prepared by Focused Ion-Beam. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 1518-1522.	0.9	18
123	Influence of morphology on the performance of ZnO-based dye-sensitized solar cells. <i>RSC Advances</i> , 2016, 6, 37424-37433.	1.7	18
124	Preparation of Au/ZnO nanocomposites by radio frequency co-sputtering. <i>Solar Energy Materials and Solar Cells</i> , 2001, 70, 363-368.	3.0	17
125	Configuring Au and Ag nanorods for sensing applications. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2011, 28, 714.	0.9	17
126	Optimizing the electric field around solid and core-shell alloy nanostructures for near-field applications. <i>Nanoscale</i> , 2016, 8, 14836-14845.	2.8	17

#	ARTICLE	IF	CITATIONS
127	Tuning magnetic and structural properties of MnFe ₂ O ₄ nanostructures by systematic introduction of transition metal ions M ²⁺ (M = Zn, Fe, Ni, Co). Journal of Magnetism and Magnetic Materials, 2019, 490, 165496.	1.0	17
128	Green fabrication of 2D platinum superstructures and their high catalytic activity for mitigation of organic pollutants. Catalysis Today, 2021, 360, 185-193.	2.2	17
129	Study of point defects in CdTe and CdTe:V by cathodoluminescence. Journal of Applied Physics, 1994, 76, 3720-3723.	1.1	16
130	Preparation of Ge/ZnO nanocomposites by radio frequency alternate sputtering. Solar Energy Materials and Solar Cells, 2003, 76, 305-312.	3.0	16
131	Synthesis of gold nanoparticles with different atomistic structural characteristics. Materials Characterization, 2007, 58, 694-700.	1.9	16
132	CL study of yellow emission in ZnO nanostructures annealed in Ar and O ₂ atmospheres. Superlattices and Microstructures, 2009, 45, 421-428.	1.4	16
133	Morphology and defect evolution in vapor-grown In ₂ O ₃ :Sn micro-/nanoparticles. Materials Science in Semiconductor Processing, 2015, 40, 943-953.	1.9	16
134	Photoluminescence in Si/ZnO nanocomposites. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 113, 24-29.	1.7	15
135	Gram-scale synthesis of highly crystalline, 0-D and 1-D SnO ₂ nanostructures through surfactant-free hydrothermal process. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	15
136	Effect of the Electronic State of Cu, Ag, and Au on Diesel Soot Abatement: Performance of Cu/ZnO, Ag/ZnO, and Au/ZnO Catalysts. ACS Omega, 2019, 4, 5795-5804.	1.6	15
137	Variations in magnetic properties caused by size dispersion and particle aggregation on CoFe ₂ O ₄ . SN Applied Sciences, 2019, 1, 1.	1.5	15
138	<i>Piper longum</i> Extract-Mediated Green Synthesis of Porous Cu ₂ O:Mo Microspheres and Their Superior Performance as Active Anode Material in Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2020, 8, 14557-14567.	3.2	15
139	Performance of asymmetric supercapacitor fabricated with perovskite-type Sr ²⁺ incorporated LaMnO ₃ (La _{0.7} Sr _{0.3}) _{1-x} Ti _x ETQq1 1 0.784314 rgBT /Overlock Journal of Energy Research, 2021, 45, 14021-14033.	2.2	15
140	Raman and infrared spectroscopy of Ge nanoparticles embedded in ZnO matrix. Applied Surface Science, 2005, 246, 23-29.	3.1	14
141	Thermal Diffusivity of Nanofluids Containing Au/Pd Bimetallic Nanoparticles of Different Compositions. Journal of Nanoscience and Nanotechnology, 2006, 6, 685-690.	0.9	14
142	Effect of Ag, Cu, and Au Incorporation on the Diesel Soot Oxidation Behavior of SiO ₂ : Role of Metallic Ag. Topics in Catalysis, 2013, 56, 467-472.	1.3	14
143	Enhancement of Peroxidase Stability Against Oxidative Self-Inactivation by Co-immobilization with a Redox-Active Protein in Mesoporous Silicon and Silica Microparticles. Nanoscale Research Letters, 2016, 11, 417.	3.1	14
144	Unusual variation of blocking temperature in bi-magnetic nanoparticles. Journal of Magnetism and Magnetic Materials, 2017, 441, 417-423.	1.0	14

#	ARTICLE	IF	CITATIONS
145	Structural characterization of thin films of cadmium telluride. Thin Solid Films, 1988, 164, 85-89.	0.8	13
146	Synthesis of novel ionic polymers containing arsonic acid group. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 1627-1634.	2.4	13
147	Synthesis of Multifunctional Metal and Metal Oxide Core/Mesoporous Silica Shell Structures by Using a Wet Chemical Approach. Chemistry - A European Journal, 2012, 18, 12314-12321.	1.7	13
148	Morphology control and optical properties of ZnO nanostructures grown by ultrasonic synthesis. Advances in Nano Research, 2013, 1, 59-70.	0.9	13
149	Passivation of surface and bulk defects in GaSb by hydrogenated amorphous silicon treatment. Journal of Applied Physics, 1996, 79, 3246-3252.	1.1	12
150	Cell viability and MRI performance of highly efficient polyol-coated magnetic nanoparticles. Journal of Nanoparticle Research, 2016, 18, 1.	0.8	12
151	Phase controlled synthesis of CuSbS_2 nanostructures: Effect of reaction conditions on phase purity and morphology. Materials and Design, 2017, 136, 165-173.	3.3	12
152	Effect of laser annealing on the distribution of defect levels in CdSe films. Thin Solid Films, 2001, 381, 155-159.	0.8	11
153	Effects of Oxidizing/Reducing Agent Ratio on Phase Purity, Crystallinity, and Magnetic Behavior of Solution-Combustion-Grown BiFeO_3 Submicroparticles. Inorganic Chemistry, 2018, 57, 6152-6160.	1.9	11
154	pH dependent morphology and texture evolution of ZnO nanoparticles fabricated by microwave-assisted chemical synthesis and their photocatalytic dye degradation activities. Ceramics International, 2021, 47, 27469-27478.	2.3	11
155	Dark- and photoconductivity in doped and undoped zinc telluride films. Semiconductor Science and Technology, 1993, 8, 1331-1336.	1.0	10
156	Near band gap photorefectance studies in CdTe, CdTe:V and CdTe:Ge crystals. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1996, 42, 297-301.	1.7	10
157	Synthesis of Cu/ZnO nanocomposites by r.f. co-sputtering technique. Solar Energy Materials and Solar Cells, 2001, 70, 369-377.	3.0	10
158	Synthesis of Vertical ZnO Nanorods on Glass Substrates by Simple Chemical Method. Journal of Nano Research, 2009, 5, 223-230.	0.8	10
159	Concentration and Temperature Effect on Controlling Pore Size and Surface Area of Mesoporous Titania by Using Template of F-68 and F-127 Co-Polymer in the Sol-Gel Process. Journal of Nanoscience and Nanotechnology, 2012, 12, 5638-5643.	0.9	10
160	Crystallization induced porosity control and photocatalytic activity of ordered mesoporous TiO_2 . RSC Advances, 2012, 2, 11969.	1.7	10
161	Large Scale Synthesis of ZnO Nanostructures of Different Morphologies through Solvent-free Mechanochemical Synthesis and their Application in Photocatalytic Dye Degradation. American Journal of Engineering and Applied Sciences, 2016, 9, 41-52.	0.3	10
162	Structure and magnetic properties of the $\text{Co}_{1-x}\text{Ni}_x\text{Fe}_2\text{O}_4\text{-BaTiO}_3$ core-shell nanoparticles. Journal of Magnetism and Magnetic Materials, 2017, 442, 247-254.	1.0	10

#	ARTICLE	IF	CITATIONS
163	Large magnetostriction in chemically fabricated CoFe ₂ O ₄ nanoparticles and its temperature dependence. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 460, 141-145.	1.0	10
164	Nanoparticle-Assembled Gold Microtubes Built on Fungi Templates for SERS-Based Molecular Sensing. <i>ACS Applied Nano Materials</i> , 2019, 2, 2533-2541.	2.4	10
165	Total Oxidation of Methane Over Sulfur Poisoning Resistant Pt/ZrO ₂ Catalyst: Effect of Pt ₂ +Pt ₄ + and Pt ₂ +Zr ₄ + Dipoles at Metal-Support Interface. <i>Catalysis Letters</i> , 2021, 151, 1592-1603.	1.4	10
166	Synthesis of Monodispersed Red Emitting LiAl ₅ O ₈ :Fe ³⁺ Nanophosphors. <i>Science of Advanced Materials</i> , 2012, 4, 597-603.	0.1	10
167	Structure and optical properties of vapor grown In ₂ O ₃ : Ga nano-/microcrystals. <i>Advances in Nano Research</i> , 2015, 3, 81-96.	0.9	10
168	The anomalous photovoltaic effect in polycrystalline zinc telluride films. <i>Journal of Applied Physics</i> , 1991, 69, 6547-6555.	1.1	9
169	Study of defects in CdTe: Cl by cathodoluminescence microscopy. <i>Materials Letters</i> , 1995, 23, 227-230.	1.3	9
170	STM and STS characterization of ZnO nanorods. <i>Optical Materials</i> , 2005, 27, 1276-1280.	1.7	9
171	Surfactant-assisted room-temperature synthesis of CdSe nanoclusters. <i>Materials Chemistry and Physics</i> , 2007, 105, 20-24.	2.0	9
172	Cathodoluminescence defect characterization of hydrothermally grown SnO ₂ nanoparticles. <i>Journal of Applied Physics</i> , 2008, 103, .	1.1	9
173	Structural analysis and shape-dependent catalytic activity of Au, Pt and Au/Pt nanoparticles. <i>Revista Materia</i> , 2008, 13, 579-586.	0.1	9
174	Near- and Far-Field Optical Response of Eccentric Nanoshells. <i>Nanoscale Research Letters</i> , 2017, 12, 16.	3.1	9
175	Anomalous photovoltage in Cd _{0.80} Zn _{0.20} Te thin films. <i>Journal of Applied Physics</i> , 1994, 75, 2733-2735.	1.1	8
176	Kinetics of Decolorization of Spironaphthooxazine-Doped Photochromic Polymer Films. <i>Journal of Physical Chemistry B</i> , 2009, 113, 12923-12927.	1.2	8
177	Fabricating Necklace-, Tower-, and Rod-Shaped In ₂ O ₃ Nanostructures by Controlling Saturation Kinetics of Catalyst Droplets in a Vapor-Liquid-Solid Process. <i>Crystal Growth and Design</i> , 2017, 17, 4596-4602.	1.4	8
178	Facile Seed-Mediated Growth of Ultrathin AuCu Shells on Pd Nanocubes and Their Enhanced Nitrophenol Degradation Reactions. <i>Journal of Physical Chemistry C</i> , 2021, 125, 13759-13769.	1.5	8
179	Structure and transport behavior of hydrothermally grown phase pure Cu ₂ ZnSn _{1-x} GexS ₄ (x=0.0, 0.3) nanoparticles. <i>Applied Surface Science</i> , 2022, 571, 151261.	3.1	8
180	Effect of Nb Doping on Morphology, Optical and Magnetic Behaviors of Ultrasonically Grown ZnO Nanostructures. <i>Material Science Research India</i> , 2017, 14, 79-88.	0.9	8

#	ARTICLE	IF	CITATIONS
181	X-Ray Line Broadening and Electron Microscopic Studies on ZnTe Thin Films. <i>Physica Status Solidi A</i> , 1989, 111, 515-522.	1.7	7
182	On the mechanism of long-term relaxation in polycrystalline cadmium telluride and zinc telluride films. <i>Semiconductor Science and Technology</i> , 1990, 5, 429-434.	1.0	7
183	Determination of optical constants of Si/ZnO polycrystalline nanocomposites by spectroscopic ellipsometry. <i>Journal of Materials Research</i> , 2001, 16, 3554-3559.	1.2	7
184	Structure and Growth Mechanism Study of Wurtzite CdSe Nanorods Grown by Solvothermal Techniques. <i>Journal of Nanoscience and Nanotechnology</i> , 2005, 5, 609-614.	0.9	7
185	Encapsulation and surface charge manipulation of organic and inorganic colloidal substrates by multilayered polyelectrolyte films. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013, 434, 253-259.	2.3	7
186	Inducing Superparamagnetism and High Magnetization in Nickel Cobaltite (Ni _x Co _{3-x} O ₄) Spinel Nanoparticles by Controlling Ni Mole Fraction and Cation Distribution. <i>Journal of Physical Chemistry C</i> , 2020, 124, 18264-18274.	1.5	7
187	Electron Beam Induced Structural Modification of the Oxidized Silicon Micro-Clusters in ZnO Matrix. <i>Microscopy Microanalysis Microstructures</i> , 1997, 8, 403-411.	0.4	7
188	PL and TL behaviors of Ag-doped SnO ₂ nanoparticles: effects of thermal annealing and Ag concentration. <i>Advances in Nano Research</i> , 2013, 1, 193-202.	0.9	7
189	Performance of Pt/Cr ₂ O ₃ , Pt/ZrO ₂ , and, Pt/β-Al ₂ O ₃ Catalysts in Total Oxidation of Methane: Effect of Metal-Support Interaction. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 18841-18852.	1.8	7
190	Deep Level Cathodoluminescence in Deformed CdTe Crystals. <i>Physica Status Solidi A</i> , 1995, 147, 75-80.	1.7	6
191	Synthesis of GaAs nanoparticles embedded in SiO ₂ matrix by radio frequency co-sputtering technique. <i>Scripta Materialia</i> , 2001, 44, 1841-1846.	2.6	6
192	Organization of metal nanoclusters on fatty amine films using ion-dipole interaction. <i>Applied Physics A: Materials Science and Processing</i> , 2005, 80, 477-481.	1.1	6
193	Structural and electrochemical characterization of sputter-deposited nitrided NiCr alloys. <i>Journal of Solid State Electrochemistry</i> , 2005, 9, 535-546.	1.2	6
194	Chemical synthesis and structural characterization of small AuZn nanoparticles. <i>Applied Physics A: Materials Science and Processing</i> , 2007, 86, 441-446.	1.1	6
195	Quasicontinuum-Like Reduction of Density Functional Theory Calculations of Nanostructures. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 3729-3740.	0.9	6
196	Cathodoluminescence Quenching in Yb-Doped ZnO Nanostructures. <i>Journal of Nano Research</i> , 2009, 5, 177-183.	0.8	6
197	Comparison of implantation and diffusion behavior of Ti, Sb and N in ion-implanted single crystal and polycrystalline ZnO: A SIMS study. <i>Applied Surface Science</i> , 2010, 256, 2143-2146.	3.1	6
198	Doping-induced electron density modification at lattice sites of ZnO:Ga nanostructures: effects on vibrational and optical properties. <i>Journal of Materials Science</i> , 2014, 49, 5529-5536.	1.7	6

#	ARTICLE	IF	CITATIONS
199	Waveguiding behavior of VLS-grown one-dimensional Ga-doped In ₂ O ₃ nanostructures. <i>Current Applied Physics</i> , 2018, 18, 785-792.	1.1	6
200	Hydrothermally Grown Ultra-Fine SnO ₂ and SnO ₂ :Ag Nanoparticles and Their Optical Characteristics. <i>Science of Advanced Materials</i> , 2012, 4, 591-596.	0.1	6
201	Improved thermoelectric performance of nanostructured Bi ₂ Te ₃ fabricated by solvent-free mechanical alloying. <i>Materials Chemistry and Physics</i> , 2022, 279, 125736.	2.0	6
202	Effect of preferred orientation on photovoltage of CdTe thin films. <i>Solid State Communications</i> , 1990, 74, 839-841.	0.9	5
203	Infrared absorption and evidence of Si ₃ nanocluster formation in Si/ZnO composites. <i>Solid State Communications</i> , 1999, 111, 427-430.	0.9	5
204	PREPARATION AND CHARACTERIZATION OF Cu/ZnO NANOCOMPOSITES. <i>Modern Physics Letters B</i> , 2001, 15, 675-678.	1.0	5
205	Infrared study of free carriers in X/ZnO (X=semiconductor, metal) nanocomposites. <i>Thin Solid Films</i> , 2005, 490, 137-141.	0.8	5
206	HAADF Imaging: An Effective Technique for the Study of Nonhomogeneous Nanostructures. <i>Journal of Nanoscience and Nanotechnology</i> , 2005, 5, 1172-1176.	0.9	5
207	Thermoluminescence and Optically Stimulated Luminescence Properties of TiO_2/Yb Nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 1851-1857.	0.9	5
208	Ferrites as magnetic fluids for hyperthermia and MRI contrast agents. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	5
209	Re-evaluating the role of phosphinic acid (DINHOP) adsorption at the photoanode surface in the performance of dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 1756-1766.	1.3	5
210	Chemical synthesis of Nd ₂ Fe ₁₄ B/Fe ²⁺ Co nanocomposite with high magnetic energy product. <i>RSC Advances</i> , 2021, 11, 32376-32382.	1.7	5
211	Molybdenum-Doped Nickel Disulfide (NiS ₂ :Mo) Microspheres as an Active Anode Material for High-Performance Durable Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2022, 5, 6734-6745.	2.5	5
212	Upgradation and studies on semiconducting properties of pyrite (FeS ₂) for device applications. <i>Materials Letters</i> , 1990, 10, 99-104.	1.3	4
213	New conducting polymers, 3. Doping, stability, electrical, and optical characteristics of poly-(P-phenylphosphoethynediyl). <i>Colloid and Polymer Science</i> , 1991, 269, 576-582.	1.0	4
214	(2-Acryloylaminophenyl)arsonic acid. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2005, 61, m2752-m2754.	0.2	4
215	Rapid activation of MmNi ₅ ~xMx based MH alloy through Pd nanoparticle impregnation. <i>Journal of Power Sources</i> , 2006, 155, 470-474.	4.0	4
216	Synthesis of Zn-GaO(OH) Nanorods and Their Optical Properties. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 1982-1988.	0.9	4

#	ARTICLE	IF	CITATIONS
235	Drastic improvement of electrical properties of Nafion® 112 membrane on impregnation of bimetallic Au/Pd nanoclusters. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2003, 0, 2944-2948.	0.8	2
236	Exciton energies of wurtzite CdS nanoparticles. <i>Solar Energy Materials and Solar Cells</i> , 2003, 79, 539-547.	3.0	2
237	Effect of Iron Substitution on Structure and Optical Properties of Nanocrystalline CaTiO ₃ . <i>Journal of Nano Research</i> , 2008, 3, 123-128.	0.8	2
238	Exploiting the Tunable Optical Response of Metallic Nanoshells. , 2013, , 99-149.		2
239	Morphology Defined ZnO Nanostructures Through Microwave Assisted Chemical Synthesis: Growth Mechanism, Defect Structure, and Emission Behaviours. <i>Advanced Science Letters</i> , 2012, 6, 159-166.	0.2	2
240	X-ray and electron microscopic determination of Debye characteristic temperature, stacking fault energy and other microstructural parameters in zinc telluride films. <i>Zeitschrift für Kristallographie</i> , 1990, 193, 33-45.	1.1	1
241	Experimental and theoretical analysis of electropolymerized PMeT thin films. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2005, 43, 3058-3068.	2.4	1
242	Synthesis of ZnO ₂ Nanocrystals Produced by Hydrothermal Process. <i>Materials Research Society Symposia Proceedings</i> , 2009, 1242, 1.	0.1	1
243	Correlation of Silver Size Nanoparticles Between TEM and QELS. <i>Materials Research Society Symposia Proceedings</i> , 2010, 1275, 1.	0.1	1
244	Cathodoluminescence Spectroscopy For Evaluation Of Defect Passivation In GaSb. <i>Materials Research Society Symposia Proceedings</i> , 1995, 406, 537.	0.1	0
245	Cathodoluminescence in Europium doped KCl crystals. <i>Radiation Effects and Defects in Solids</i> , 2001, 154, 313-317.	0.4	0
246	Cathodoluminescence and Optically Active Regions of Intrinsic and Induced Defects in Eu ²⁺ -Doped KCl Crystals. <i>Physica Status Solidi (B): Basic Research</i> , 2002, 233, 364-372.	0.7	0
247	Formation of Cux clusters in Cu/ZnO nanocomposites studied by IR spectroscopy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2003, 0, 2956-2960.	0.8	0
248	Development of a substrate configuration CdTe/CdS solar cell on flexible molybdenum substrate. , 0, , .		0
249	Coalescence of palladium nanoparticles assembled on carbon and SiC surfaces: STM and STS studies. <i>Optical Materials</i> , 2006, 29, 144-149.	1.7	0