Pankaj Poddar

List of Publications by Year
in descending order

116 papers	5,358 citations	71061 41 h-index	88593 70 g-index
118 all docs	118 docs citations	118 times ranked	7982 citing authors

#	Article	IF	Citations
1	Metal and metal oxidenanoparticle synthesis from metal organic frameworks (MOFs): finding the border of metal and metal oxides. Nanoscale, 2012, 4, 591-599.	2.8	334
2	Room-Temperature Biosynthesis of Ferroelectric Barium Titanate Nanoparticles. Journal of the American Chemical Society, 2006, 128, 11958-11963.	6.6	285
3	Effect of Reduced Particle Size on the Magnetic Properties of Chemically Synthesized BiFeO₃ Nanocrystals. Journal of Physical Chemistry C, 2010, 114, 2108-2115.	1.5	191
4	Room temperature ferromagnetism in undoped and Fe doped ZnO nanorods: Microwave-assisted synthesis. Journal of Solid State Chemistry, 2011, 184, 391-400.	1.4	167
5	Synthesis and the physical properties of MnZn ferrite and NiMnZn ferriteâ€“polyaniline nanocomposite particles. Journal of Materials Chemistry, 2005, 15, 810-817.	6.7	164
6	Dipolar interactions in two- and three-dimensional magnetic nanoparticle arrays. Physical Review B, 2002, 66, .	1.1	154
7	In situ synthesis and surface functionalization of gold nanoparticles with curcumin and their antioxidant properties: an experimental and density functional theory investigation. Nanoscale, 2013, 5, 1882.	2.8	149
8	Directed assembly of metalâ€“organic cubes from deliberately predesigned molecular building blocks. Chemical Communications, 2004, , 2806-2807.	2.2	146
9	Challenges Associated with Metal Chelation Therapy in Alzheimer's Disease. Journal of Alzheimer's Disease, 2009, 17, 457-468.	1.2	139
10	Temperature-Dependent Spectroscopic Evidences of Curcumin in Aqueous Medium: A Mechanistic Study of Its Solubility and Stability. Journal of Physical Chemistry B, 2012, 116, 14533-14540.	1.2	134
11	Magnetocaloric effect in ferrite nanoparticles. Journal of Magnetism and Magnetic Materials, 2006, 307, 227-231.	1.0	132
12	First-order metal-insulator transition and spin-polarized tunneling inFe3O4nanocrystals. Physical Review B, 2002, 65, .	1.1	128
13	Polypyrrole composites for shielding applications. Synthetic Metals, 2005, 151, 211-217.	2.1	103
14	Solvothermal Synthesis, Structure, and Properties of Metal Organic Framework Isomers Derived from a Partially Fluorinated Link. Crystal Growth and Design, 2011, 11, 1215-1222.	1.4	101
15	Magnetic and dielectric properties and Raman spectroscopy of GdCrO3 nanoparticles. Journal of Applied Physics, 2010, 107, .	1.1	96
16	Syntheses, Crystal Structures, and Magnetic Properties of Metalâ€“Organic Hybrid Materials of Co(II) Using Flexible and Rigid Nitrogen-Based Ditopic Ligands as Spacers. Crystal Growth and Design, 2012, 12, 1571-1578.	1.4	94
17	Structural, Magnetic, and Gas Adsorption Study of a Series of Partially Fluorinated Metalâ^'Organic Frameworks (HF-MOFs). Inorganic Chemistry, 2011, 50, 3855-3865.	1.9	88
18	Construction of Polynuclear Lanthanide (Ln = Dy^{III}, Tb^{III}, and Nd^{III}) Cage Complexes Using Pyridineâ€“Pyrazole-Based Ligands: Versatile Molecular Topologies and SMM Behavior. Inorganic Chemistry, 2015, 54, 8197-8206.	1.9	85

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19	Tunable band gap and coercivity of bismuth ferriteâ€“polyaniline coreâ€“shell nanoparticles: the role of shell thickness. RSC Advances, 2015, 5, 23563-23568.	1.7	70
20	Synthesis, Characterization, and Magnetic Studies of Coordination Polymers with Co(II) and Mn(II) Ions. Crystal Growth and Design, 2012, 12, 4624-4632.	1.4	67
21	Probing interaction of Gram-positive and Gram-negative bacterial cells with ZnO nanorods. Materials Science and Engineering C, 2013, 33, 1247-1253.	3.8	66
22	Temperature-Dependent Raman and Dielectric Spectroscopy of BiFeO₃ Nanoparticles: Signatures of Spin-Phonon and Magnetoelectric Coupling. Journal of Physical Chemistry C, 2010, 114, 12432-12439.	1.5	65
23	Static and dynamic magnetic properties and effect of surface chemistry on the morphology and crystallinity of DyCrO3 nanoplatelets. RSC Advances, 2013, 3, 26427.	1.7	65
24	Extracellular Bacterial Synthesis of Protein-Functionalized Ferromagnetic Co₃O₄ Nanocrystals and Imaging of Self-Organization of Bacterial Cells under Stress after Exposure to Metal Ions. Chemistry of Materials, 2008, 20, 1484-1491.	3.2	64
25	Magnetic properties of conducting polymer doped with manganeseâ€“zinc ferrite nanoparticles. Nanotechnology, 2004, 15, S570-S574.	1.3	58
26	Structure and Microbial Synthesis of Sub-10 nm Bi₂O₃ Nanocrystals. Journal of Nanoscience and Nanotechnology, 2008, 8, 3909-3913.	0.9	58
27	Photopatternable nano-composite (SU-8/ZnO) thin films for piezo-electric applications. Applied Physics Letters, 2012, 101, .	1.5	56
28	Ligand-Free One-Step Synthesis of {001} Faceted Semiconducting BiOCl Single Crystals and Their Photocatalytic Activity. Crystal Growth and Design, 2014, 14, 236-239.	1.4	56
29	Preparation of Nearly Monodisperse Nickel Nanoparticles by a Facile Solution Based Methodology and Their Ordered Assemblies. Journal of Physical Chemistry C, 2009, 113, 3426-3429.	1.5	54
30	Synthesis, Characterization and In Vitro Study of Biocompatible Cinnamaldehyde Functionalized Magnetite Nanoparticles (CPGF Nps) For Hyperthermia and Drug Delivery Applications in Breast Cancer. PLoS ONE, 2014, 9, e107315.	1.1	53
31	Magnetic Transition and Large Magnetocaloric Effect Associated with Surface Spin Disorder in Co and Co_{core}Ag_{shell} Nanoparticles. Journal of Physical Chemistry C, 2007, 111, 14060-14066.	1.5	52
32	Inter-particle interactions and magnetism in manganeseâ€“zinc ferrite nanoparticles. Journal of Magnetism and Magnetic Materials, 2005, 288, 443-451.	1.0	50
33	Colossal increase in negative magnetization, exchange bias and coercivity in samarium chromite due to a strong coupling between Sm³⁺â€“Cr³⁺spins sublattices. Journal Physics D: Applied Physics, 2015, 48, 025004.	1.3	50
34	Human Blood Vesselâ€“Derived Endothelial Progenitors for Endothelialization of Small Diameter Vascular Prosthesis. PLoS ONE, 2009, 4, e7718.	1.1	50
35	Fluorescent metal quantum clusters: an updated overview of the synthesis, properties, and biological applications. Journal of Materials Chemistry B, 2017, 5, 9055-9084.	2.9	49
36	Structural, Magnetic, and Gas Adsorption Study of a Two-Dimensional Tetrazole-Pyrimidine Based Metalâ^'Organic Framework. Crystal Growth and Design, 2010, 10, 2475-2478.	1.4	48

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37	Metalâ"Organic Framework Diversity via Heterocoordination of a Multifunctional Ligand:â€‰ SrAl2 and a Novel (3,4)-Connected Network. Crystal Growth and Design, 2006, 6, 1453-1457.	1.4	46
38	Using Raman and dielectric spectroscopy to elucidate the spin phonon and magnetoelectric coupling in DyCrO₃ nanoplatelets. RSC Advances, 2015, 5, 10094-10101.	1.7	46
39	Surface Effects on Morin Transition, Exchange Bias, and Enchanced Spin Reorientation in Chemically Synthesized DyFeO₃ Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 2954-2960.	1.5	44
40	Template-Free Fabrication of Highly-Oriented Single-Crystalline 1D-Rutile TiO₂-MWCNT Composite for Enhanced Photoelectrochemical Activity. Journal of Physical Chemistry C, 2014, 118, 19363-19373.	1.5	44
41	Observation of Enhanced Dielectric Coupling and Room-Temperature Ferromagnetism in Chemically Synthesized BiFeO₃@SiO₂ Coreâ€"Shell Particles. Journal of Physical Chemistry C, 2012, 116, 19503-19511.	1.5	43
42	Imaging the interaction between dengue 2 virus and human blood platelets using atomic force and electron microscopy. Journal of Electron Microscopy, 2008, 57, 113-118.	0.9	42
43	Growth of oriented single crystalline La-doped TiO2 nanorod arrays electrode and investigation of optoelectronic properties for enhanced photoelectrochemical activity. RSC Advances, 2013, 3, 10363.	1.7	41
44	Static and dynamic photoluminescence and photocatalytic properties of uniform, monodispersed up/down-converting, highly luminescent, lanthanide-ion-doped Î²-NaYF₄phosphor microcrystals with controlled multiform morphologies. Journal of Materials Chemistry A, 2014, 2, 19189-19200.	5.2	39
45	Dielectric and spin relaxation behaviour in DyFeO3 nanocrystals. Journal of Applied Physics, 2011, 110, .	1.1	38
46	Retention of Anticancer Activity of Curcumin after Conjugation with Fluorescent Gold Quantum Clusters: An in Vitro and in Vivo Xenograft Study. ACS Omega, 2018, 3, 4776-4785.	1.6	38
47	Cephalexin-Mediated Synthesis of Quasi-Spherical and Anisotropic Gold Nanoparticles and Their in Situ Capping by the Antibiotic. Journal of Physical Chemistry C, 2007, 111, 6933-6938.	1.5	37
48	Synthesis and optical studies of GdCrO3 nanoparticles. Journal of Nanoparticle Research, 2011, 13, 1019-1027.	0.8	37
49	Study of the nucleation and growth of antibiotic labeled Au NPs and blue luminescent Au₈ quantum clusters for Hg²⁺ ion sensing, cellular imaging and antibacterial applications. Nanoscale, 2015, 7, 19985-20002.	2.8	37
50	Oxidant mediated one-step complete conversion of multi-walled carbon nanotubes to graphene quantum dots and their bioactivity against mammalian and bacterial cells. Journal of Materials Chemistry B, 2017, 5, 785-796.	2.9	37
51	Magnetic properties of polydisperse and monodisperse NiZn ferrite nanoparticles interpreted in a surface structure model. Journal of Applied Physics, 2005, 97, 10G104.	1.1	36
52	Mechanistic Study of Surface Functionalization of Enzyme Lysozyme Synthesized Ag and Au Nanoparticles Using Surface Enhanced Raman Spectroscopy. Journal of Physical Chemistry C, 2009, 113, 21493-21500.	1.5	36
53	Design and in situ synthesis of a Cu-based porous framework featuring isolated double chain magnetic character. Chemical Communications, 2011, 47, 11008.	2.2	33
54	Structural and Selective Gas Adsorption Studies of Polyoxometalate and Tris(ethylenediamine) Cobalt(III) Based Ionic Crystals. Crystal Growth and Design, 2011, 11, 139-146.	1.4	33

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55	Doxorubicin-conjugated Î²-NaYF₄:Gd³⁺/Tb³⁺ multifunctional, phosphor nanorods: a multi-modal, luminescent, magnetic probe for simultaneous optical and magnetic resonance imaging and an excellent pH-triggered anti-cancer drug delivery nanovehicle. Nanoscale, 2015, 7, 19501-19518.	2.8	33
56	Transverse susceptibility study of the effect of varying dipolar interactions on anisotropy peaks in a three-dimensional assembly of soft ferrite nanoparticles. Journal of Applied Physics, 2008, 104, 063901.	1.1	32
57	Investigations of magnetic and dielectric properties of cupric oxide nanoparticles. Solid State Communications, 2011, 151, 55-60.	0.9	31
58	Large Increase in the Energy Product of Fe₃Se₄ by Fe-Site Doping. Journal of Physical Chemistry C, 2014, 118, 4016-4022.	1.5	31
59	Nanocomposite Magneto-Rheological Fluids with Uniformly Dispersed Fe Nanoparticles. Journal of Nanoscience and Nanotechnology, 2004, 4, 192-196.	0.9	31
60	Temperature and Magnetic Field-Assisted Switching of Magnetization and Observation of Exchange Bias in YbCrO₃ Nanocrystals. Inorganic Chemistry, 2015, 54, 9509-9516.	1.9	29
61	Self-assembled vertically aligned gold nanorod superlattices for ultra-high sensitive detection of molecules. Nano Research, 2015, 8, 907-919.	5.8	28
62	Manifestation of the Verwey transition in the tunneling spectra of magnetite nanocrystals. Europhysics Letters, 2003, 64, 98-103.	0.7	27
63	Static and dynamic magnetic properties and interplay of Dy³⁺, Gd³⁺and Mn³⁺spins in orthorhombic DyMnO₃and GdMnO₃nanoparticles. Journal Physics D: Applied Physics, 2013, 46, 045301.	1.3	26
64	Study of magnetic and thermal properties of SmCrO₃ polycrystallites. RSC Advances, 2016, 6, 82014-82023.	1.7	26
65	Bio-milling technique for the size reduction of chemically synthesized BiMnO3 nanoplates. Journal of Materials Chemistry, 2007, 17, 3910.	6.7	25
66	Effect of particle size and annealing on spin and phonon behavior in TbMnO3. Journal of Applied Physics, 2011, 109, .	1.1	25
67	Grain size influence on soft ferromagnetic properties in Feâ€“Co nanoparticles. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 106, 95-100.	1.7	24
68	Observation of charge ordering and the ferromagnetic phase transition in single crystal LSMO using rf transverse susceptibility. Journal of Applied Physics, 2005, 97, 10C104.	1.1	24
69	Origin of Magnetic Anomalies below the NÃ©el Temperature in Nanocrystalline LuMnO₃. Journal of Physical Chemistry C, 2010, 114, 12104-12109.	1.5	24
70	The mechanistic insight into the biomilling of goethite (Î±-FeO(OH)) nanorods using the yeast Saccharomyces cerevisiae. RSC Advances, 2015, 5, 91785-91794.	1.7	22
71	Sheet-forming abiotic hetero foldamers. Chemical Communications, 2008, , 712-714.	2.2	21
72	Real-Time Nanomechanical and Topographical Mapping on Live Bacterial Cellsâ€”Brevibacterium casei under Stress Due to Their Exposure to Co²⁺ Ions during Microbial Synthesis of Co₃O₄ Nanoparticles. Journal of Physical Chemistry B, 2009, 113, 7927-7933.	1.2	21

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73	Designing Multifunctional MOFs Using the Inorganic Motif [Cu₃(Î¼₃₋OH)(Î¼-Pyz)] as an SBU and Their Properties. Crystal Growth and Design, 2019, 19, 992-1004.	1.4	21
74	Study of Interfacial Adhesion between Nickel-Titanium Shape Memory Alloy and a Polymer Matrix by Laser Surface Pattern. Applied Sciences (Switzerland), 2020, 10, 2172.	1.3	21
75	Solid Phase Morphological Diversity of a Rare Vanadium Cubane (V4O16) Based Metal Organic Framework. Crystal Growth and Design, 2012, 12, 12-17.	1.4	20
76	Global Conformation of Tau Protein Mapped by Raman Spectroscopy. Methods in Molecular Biology, 2017, 1523, 21-31.	0.4	20
77	Green Approach Towards Size Controlled Synthesis of Biocompatible Antibacterial Metal Nanoparticles in Aqueous Phase Using Lysozyme. Current Nanoscience, 2012, 8, 130-140.	0.7	19
78	Surface chemistry and growth mechanism of highly oriented, single crystalline TiO₂nanorods on transparent conducting oxide coated glass substrates. RSC Advances, 2013, 3, 1933-1940.	1.7	19
79	Surface disordered rutile TiO₂â€“graphene quantum dot hybrids: a new multifunctional material with superior photocatalytic and biofilm eradication properties. New Journal of Chemistry, 2017, 41, 2642-2657.	1.4	19
80	Physical Mechanism Behind Enhanced Photoelectrochemical and Photocatalytic Properties of Superhydrophilic Assemblies of 3D-TiO₂ Microspheres with Arrays of Oriented, Single-Crystalline TiO₂ Nanowires as Building Blocks Deposited on Fluorine-Doped Tin Oxide. ACS Applied Materials & Interfaces, 2017, 9, 11202-11211.	4.0	19
81	Advances in the Experimental and Theoretical Understandings of Antibiotic Conjugated Gold Nanoparticles for Antibacterial Applications. ChemistrySelect, 2019, 4, 6719-6738.	0.7	19
82	Downconversion Luminescence-Based Nanosensor for Label-Free Detection of Explosives. ACS Omega, 2019, 4, 4259-4268.	1.6	18
83	Bistable Dynamic Coordination Polymer Showing Reversible Structural and Functional Transformations. Inorganic Chemistry, 2012, 51, 8317-8321.	1.9	17
84	A broad spectrum photon responsive, paramagnetic Î²-NaGdF₄:Yb³⁺,Er³⁺â€“ mesoporous anatase titania nanocomposite. RSC Advances, 2016, 6, 53504-53518.	1.7	16
85	Raman spectroscopy-based sensitive, fast and reversible vapour phase detection of explosives adsorbed on metalâ€“organic frameworks UiO-67. New Journal of Chemistry, 2021, 45, 7145-7153.	1.4	16
86	Modulation of Reaction Kinetics for the Tuneable Synthesis of Gold Nanoparticles and Quantum Clusters: Application of Gold Quantum Clusters as â€œTurnâ€Offâ€•Sensing Probe for Sn⁴⁺ Ions. ChemPlusChem, 2014, 79, 134-142.	1.3	15
87	Immobilization of multivalent glycoprobes on gold surfaces for sensing proteins and macrophages. Analyst, The, 2016, 141, 2250-2258.	1.7	13
88	Magnetic studies of SiO2 coated CoFe2O4 nanoparticles. Journal of Magnetism and Magnetic Materials, 2017, 441, 683-690.	1.0	13
89	In Situ Observation of Antibiotic Mediated Concurrent Growth of Two Distinct Homogeneous Populations of Gold Nanoparticles in Solution Phase. Journal of Physical Chemistry C, 2009, 113, 3478-3486.	1.5	12
90	Biomilling of rod-shaped ZnO nanoparticles: a potential role of Saccharomyces cerevisiae extracellular proteins. RSC Advances, 2015, 5, 1883-1889.	1.7	12

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91	Modulation and Optimization of Drug Release from Uncoated Low Density Porous Carrier Based Delivery System. AAPS PharmSciTech, 2009, 10, 547-558.	1.5	10
92	Interchain relay of antiferromagnetic ordering in 1D Co(<scp>ii</scp>) coordination polymers via Ï€â€“Ï€ interactions. CrystEngComm, 2014, 16, 8523.	1.3	10
93	Graphene Quantum Dots-Driven Multiform Morphologies of Î²-NaYF₄:Gd³⁺/Tb³⁺ Phosphors: The Underlying Mechanism and Their Optical Properties. ACS Omega, 2018, 3, 1834-1849.	1.6	10
94	Study of the Phase-Evolution Mechanism of an Feâ€“Se System at the Nanoscale: Optimization of Synthesis Conditions for the Isolation of Pure Phases and Their Controlled Growth. Langmuir, 2020, 36, 2012-2022.	1.6	10
95	Novel Green Hemoglobin-Mediated Biosynthesis of Gold Nanoparticles. Materials Focus, 2013, 2, 80-85.	0.4	10
96	Remarkable Effect of Fe and Se Composition on Magnetic Propertiesâ”€Comparative Study of the Feâ€“Se System at the Nanoscale. Journal of Physical Chemistry C, 2022, 126, 4655-4663.	1.5	9
97	Observation of exchange bias below incommensurate antiferromagnetic (ICAFM) to canted A-type antiferromagnetic (cAAFM) transition in nanocrystalline orthorhombic EuMnO3. RSC Advances, 2014, 4, 10614.	1.7	8
98	Extracellular Biosynthesis of Water Dispersible, Protein Capped Mn₅O₈ Nanoparticles Using the Fungus <I>Fusarium oxysporum</I> and Study of Their Magnetic Behavior. Journal of Nanoengineering and Nanomanufacturing, 2013, 3, 91-97.	0.3	8
99	Probing Magnetic Anisotropy and Spin Polarization in Spintronic Materials. IEEE Nanotechnology Magazine, 2005, 4, 59-64.	1.1	7
100	Observation of a New Magnetic Anomaly below the Ferromagnetic Curie Temperature inYb14MnSb11. Physical Review Letters, 2005, 95, 227205.	2.9	6
101	Large Magnetocaloric Effect, Moment, and Coercivity Enhancement after Coating Ni Nanoparticles with Ag. ChemPhysChem, 2014, 15, 1619-1623.	1.0	6
102	Ln₈ (Ln= Gd, Ho, Er, Yb) Butterfly Coreâ€Exhibiting Magnetocaloric Effect and Fieldâ€Induced SMM Behavior for Er Analouge. ChemistrySelect, 2017, 2, 11341-11345.	0.7	6
103	Growth of flower-like patterns of TiO₂nanorods over FTO substrate. Integrated Ferroelectrics, 2017, 184, 166-171.	0.3	6
104	Observation of the Verwey Transition in Fe3O4 Nanocrystals. Materials Research Society Symposia Proceedings, 2002, 746, 1.	0.1	5
105	Fabrication of homogeneous nanoparticle/nanoneedle BaTiO<SUB align=right>3 and Ba<SUB align=right>0.8Sr<SUB align=right>0.2TiO<SUB align=right>3 smooth thin films by simple dip coating. International Journal of Nanotechnology, 2010, 7, 919.	0.1	4
106	Modification of crystal anisotropy and enhancement of magnetic moment of Co-doped SnO2 thin films annealed under magnetic field. Nanoscale Research Letters, 2014, 9, 635.	3.1	4
107	Ionic Control on the Morphology of Ytterbium Manganese Oxide Nanorods and Nanoplates in a Surfactant-Free Synthesis and Their Magnetic Properties. Journal of Physical Chemistry C, 2014, 118, 13268-13275.	1.5	4
108	Spin polarization measurements on polycrystalline strontium ruthenates using point-contact Andreev reflection. Journal of Applied Physics, 2005, 97, 10C912.	1.1	3

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109	Effect of Cultural Conditions and Media Constituents on Production of Penicillin V Acylase and CTAB Treatment to Enhance Whole-Cell Enzyme Activity of Rhodotorula aurantiaca (NCIM 3425). Applied Biochemistry and Biotechnology, 2009, 157, 463-472.	1.4	3
110	Metal-Insulator Transition in AxVS2 Compounds. Physica Status Solidi (B): Basic Research, 2000, 218, 229-232.	0.7	2
111	Field emission studies of silver nanoparticles synthesized by electron cyclotron resonance plasma. Applied Surface Science, 2011, 257, 7184-7189.	3.1	2
112	Polycrystalline MnGe2 thin films on InAs(001) substrates. Thin Solid Films, 2018, 657, 38-41.	0.8	2
113	Study of Growth Kinetics of Fe₃Se₄ Nanocrystallites and the Influence of Size and Shape Tunability on their Magnetic Properties. Journal of Physical Chemistry C, 2021, 125, 7932-7943.	1.5	2
114	Luminescence turn-off detection of metal ions and explosives using graphene quantum dots. MRS Communications, 2022, 12, 168-174.	0.8	2
115	Static and Dynamic Magnetic Properties of Co Nanoparticles. Journal of Nanoscience and Nanotechnology, 2008, 8, 4086-4091.	0.9	1
116	Optical and Structural Properties of CTAB Templated Mesoporous ZnO. Journal of Nanoengineering and Nanomanufacturing, 2013, 3, 243-247.	0.3	1