Biswajit Choudhury

List of Publications by Year
in descending order

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Version: 2024-02-01

45 papers	3,396 citations	126907 33 h-index	254184 43 g-index
46 all docs	46 docs citations	46 times ranked	4900 citing authors

#	Article	IF	Citations
1	Defect generation, d-d transition, and band gap reduction in Cu-doped TiO2 nanoparticles. International Nano Letters, 2013, 3, 1.	5.0	313
2	Ce3+ and oxygen vacancy mediated tuning of structural and optical properties of CeO2 nanoparticles. Materials Chemistry and Physics, 2012, 131, 666-671.	4.0	302
3	Oxygen defect dependent variation of band gap, Urbach energy and luminescence property of anatase, anataseâ€“rutile mixed phase and of rutile phases of TiO2 nanoparticles. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 56, 364-371.	2.7	220
4	Oxygen defects and formation of Ce³⁺affecting the photocatalytic performance of CeO₂nanoparticles. RSC Advances, 2014, 4, 4663-4671.	3.6	181
5	Luminescence characteristics of cobalt doped TiO2 nanoparticles. Journal of Luminescence, 2012, 132, 178-184.	3.1	143
6	Shallow and deep trap emission and luminescence quenching of TiO2 nanoparticles on Cu doping. Applied Nanoscience (Switzerland), 2014, 4, 499-506.	3.1	142
7	Extending Photocatalytic Activity of TiO₂ Nanoparticles to Visible Region of Illumination by Doping of Cerium. Photochemistry and Photobiology, 2012, 88, 257-264.	2.5	124
8	A novel thermophotocatalyst of mixed-phase cerium oxide (CeO2/Ce2O3) homocomposite nanostructure: Role of interface and oxygen vacancies. Solar Energy Materials and Solar Cells, 2015, 141, 414-422.	6.2	119
9	Lattice distortion and corresponding changes in optical properties of CeO2 nanoparticles on Nd doping. Current Applied Physics, 2013, 13, 217-223.	2.4	118
10	Oxygen vacancy and dopant concentration dependent magnetic properties of Mn doped TiO2 nanoparticle. Current Applied Physics, 2013, 13, 1025-1031.	2.4	115
11	Local structure modification and phase transformation of TiO2 nanoparticles initiated by oxygen defects, grain size, and annealing temperature. International Nano Letters, 2013, 3, 1.	5.0	113
12	Room temperature ferromagnetism in defective TiO2 nanoparticles: Role of surface and grain boundary oxygen vacancies. Journal of Applied Physics, 2013, 114, .	2.5	109
13	Tailoring luminescence properties of TiO2 nanoparticles by Mn doping. Journal of Luminescence, 2013, 136, 339-346.	3.1	104
14	Annealing temperature and oxygen-vacancy-dependent variation of lattice strain, band gap and luminescence properties of CeO₂nanoparticles. Journal of Experimental Nanoscience, 2015, 10, 103-114.	2.4	103
15	Dopant induced changes in structural and optical properties of Cr3+ doped TiO2 nanoparticles. Materials Chemistry and Physics, 2012, 132, 1112-1118.	4.0	100
16	Effect of oxygen vacancy and dopant concentration on the magnetic properties of high spin Co2+ doped TiO2 nanoparticles. Journal of Magnetism and Magnetic Materials, 2011, 323, 440-446.	2.3	81
17	Oxygen defect assisted paramagnetic to ferromagnetic conversion in Fe doped TiO₂nanoparticles. RSC Advances, 2014, 4, 29314.	3.6	76
18	Interaction of Inorganic Nanoparticles with Graphene. ChemPhysChem, 2011, 12, 937-943.	2.1	72

#	Article	IF	Citations
19	Evolution of Nitrogen-Related Defects in Graphitic Carbon Nitride Nanosheets Probed by Positron Annihilation and Photoluminescence Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 9209-9219.	3.1	66
20	Room temperature ferromagnetism in SnO₂ nanoparticles: an experimental and density functional study. Journal of Materials Chemistry C, 2014, 2, 9294-9302.	5.5	65
21	Ceâ€“Nd codoping effect on the structural and optical properties of TiO2 nanoparticles. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2013, 178, 239-247.	3.5	62
22	Isotype heterostructure of bulk and nanosheets of graphitic carbon nitride for efficient visible light photodegradation of methylene blue. RSC Advances, 2016, 6, 24976-24984.	3.6	60
23	Narrowing of band gap and effective charge carrier separation in oxygen deficient TiO 2 nanotubes with improved visible light photocatalytic activity. Journal of Colloid and Interface Science, 2016, 465, 1-10.	9.4	60
24	Structural, optical and ferromagnetic properties of Cr doped TiO2 nanoparticles. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2013, 178, 794-800.	3.5	57
25	Magnetic property study of Gd doped TiO2 nanoparticles. Journal of Alloys and Compounds, 2014, 601, 201-206.	5.5	53
26	In situdecoration of plasmonic Au nanoparticles on graphene quantum dots-graphitic carbon nitride hybrid and evaluation of its visible light photocatalytic performance. Nanotechnology, 2017, 28, 395703.	2.6	53
27	Enhanced visible light photocatalytic activity of Gadolinium doped nanocrystalline titania: An experimental and theoretical study. Journal of Colloid and Interface Science, 2015, 439, 54-61.	9.4	45
28	Microstructural, optical and magnetic properties study of nanocrystalline MgO. Materials Research Express, 2014, 1, 025026.	1.6	39
29	Unraveling the Catalytic and Plasmonic Roles of g-C₃N₄ Supported Ag and Au Nanoparticles Under Selective Photoexcitation. ACS Sustainable Chemistry and Engineering, 2019, 7, 19295-19302.	6.7	39
30	Evidence for plasmonic hot electron injection induced superior visible light photocatalysis by g-C3N4 nanosheets decorated with Agâ€“TiO2(B) and Auâ€“TiO2(B) nanorods. Solar Energy Materials and Solar Cells, 2019, 201, 110053.	6.2	38
31	Plasmon activation versus plasmon quenching on the overall photocatalytic performance of Ag/Au bimetal decorated g-C3N4 nanosheets under selective photoexcitation: A mechanistic understanding with experiment and theory. Applied Catalysis B: Environmental, 2021, 298, 120614.	20.2	38
32	Monitoring F, F+ and F22+ related intense defect emissions from nanocrystalline MgO. Journal of Luminescence, 2014, 149, 280-286.	3.1	37
33	Interplay of dopants and defects in making Cu doped TiO2 nanoparticle a ferromagnetic semiconductor. Journal of Alloys and Compounds, 2015, 646, 692-698.	5.5	37
34	Plasmon-enhanced strong visible light photocatalysis by defect engineered CVD graphene and graphene oxide physically functionalized with Au nanoparticles. Catalysis Science and Technology, 2016, 6, 7101-7112.	4.1	24
35	Hydrated Orthorhombic/Hexagonal Mixed-Phase WO₃ Coreâ€“Shell Nanoribbons for Hole-Mediated Photocatalysis. ACS Applied Nano Materials, 2022, 5, 3599-3610.	5.0	17
36	Synergy of Adsorption and Plasmonic Photocatalysis in the Auâ€“CeO₂ Nanosystem: Experimental Validation and Plasmonic Modeling. Langmuir, 2022, 38, 7628-7638.	3.5	14

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37	Adverse effect of Mn doping on the magnetic ordering in Mn doped TiO₂nanoparticles. Materials Research Express, 2015, 2, 096104.	1.6	12
38	Contribution of Paramagnetic Surface F⁺ and Ti³⁺ Centers to Ferromagnetism in Pure and Defective TiO₂ Nanoparticles. Science of Advanced Materials, 2014, 6, 2115-2123.	0.7	12
39	Vacancy induced p-orbital ferromagnetism in MgO nanocrystallite. Journal of Alloys and Compounds, 2020, 819, 153060.	5.5	11
40	Simultaneous layer exfoliation and defect activation in g-C₃N₄ nanosheets with airâ€“water interfacial plasma: spectroscopic defect probing with tailored optical properties. Nanoscale Advances, 2021, 3, 3260-3271.	4.6	11
41	A comprehensive secondary ion mass spectrometry analysis of ZnO nanowalls: Correlation to photocatalytic responses. Journal of Applied Physics, 2015, 117, .	2.5	9
42	Carbon Nitride: A Wonder Photocatalyst. Environmental Chemistry for A Sustainable World, 2019, , 167-209.	0.5	1
43	Inside Cover: Interaction of Inorganic Nanoparticles with Graphene (ChemPhysChem 5/2011). ChemPhysChem, 2011, 12, 882-882.	2.1	0
44	MAGNETIC PROPERTIES STUDY OF SOLâ€“GEL SYNTHESIZED COBALT-DOPED ANATASE TiO₂ NANOPOWDER. International Journal of Nanoscience, 2011, 10, 581-585.	0.7	0
45	Plasmonic photocatalyst for hydrogen energy generation. , 2021, , 253-278.		0