

# Animesh K Ojha

## List of Publications by Year in descending order

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80  
papers

2,630  
citations

159585

30  
h-index

197818

49  
g-index

83  
all docs

83  
docs citations

83  
times ranked

3521  
citing authors

#	ARTICLE	IF	CITATIONS
1	Investigation on size dependent structural and magnetic behavior of nickel ferrite nanoparticles prepared by sol-gel and hydrothermal methods. <i>Materials Chemistry and Physics</i> , 2009, 118, 174-180.	4.0	219
2	Synthesis and optical characterization of nanocrystalline NiFe <sub>2</sub> O <sub>4</sub> structures. <i>Journal of Alloys and Compounds</i> , 2009, 481, 515-519.	5.5	137
3	Well-controlled in-situ growth of 2D WO <sub>3</sub> rectangular sheets on reduced graphene oxide with strong photocatalytic and antibacterial properties. <i>Journal of Hazardous Materials</i> , 2018, 347, 266-278.	12.4	107
4	Oxygen vacancy induced photoluminescence properties and enhanced photocatalytic activity of ferromagnetic ZrO <sub>2</sub> nanostructures on methylene blue dye under ultra-violet radiation. <i>Journal of Alloys and Compounds</i> , 2015, 644, 654-662.	5.5	104
5	Synthesis of superparamagnetic bare Fe <sub>3</sub> O <sub>4</sub> nanostructures and core/shell (Fe <sub>3</sub> O <sub>4</sub> /alginate) nanocomposites. <i>Carbohydrate Polymers</i> , 2012, 89, 821-829.	10.2	96
6	Tunable (violet to green) emission by high-yield graphene quantum dots and exploiting its unique properties towards sun-light-driven photocatalysis and supercapacitor electrode materials. <i>Materials Today Communications</i> , 2017, 11, 76-86.	1.9	96
7	Cadmium oxide nanoparticles grown in situ on reduced graphene oxide for enhanced photocatalytic degradation of methylene blue dye under ultraviolet irradiation. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2016, 159, 111-119.	3.8	89
8	One-step in situ synthesis of CeO <sub>2</sub> nanoparticles grown on reduced graphene oxide as an excellent fluorescent and photocatalyst material under sunlight irradiation. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 11157-11167.	2.8	89
9	Shape induced (spherical, sheets and rods) optical and magnetic properties of CdS nanostructures with enhanced photocatalytic activity for photodegradation of methylene blue dye under ultra-violet irradiation. <i>Journal of Alloys and Compounds</i> , 2016, 679, 324-334.	5.5	84
10	Influence of pH on structural morphology and magnetic properties of ordered phase cobalt doped lithium ferrites nanoparticles synthesized by sol-gel method. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010, 175, 14-21.	3.5	80
11	Effect of calcination temperature on phase transformation, structural and optical properties of sol-gel derived ZrO <sub>2</sub> nanostructures. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2015, 66, 74-80.	2.7	78
12	Facile and controlled synthesis of aligned WO <sub>3</sub> nanorods and nanosheets as an efficient photocatalyst material. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017, 175, 250-261.	3.9	77
13	Facile synthesis of CdO nanorods and exploiting its properties towards supercapacitor electrode materials and low power UV irradiation driven photocatalysis against methylene blue dye. <i>Materials Research Bulletin</i> , 2017, 90, 224-231.	5.2	71
14	Controlled synthesis of NiCo <sub>2</sub> S <sub>4</sub> @NiCo <sub>2</sub> O <sub>4</sub> core@Shell nanostructured arrays decorated over the rGO sheets for high-performance asymmetric supercapacitor. <i>Electrochimica Acta</i> , 2020, 349, 136349.	5.2	70
15	Facile synthesis of CuO nanowires and Cu <sub>2</sub> O nanospheres grown on rGO surface and exploiting its photocatalytic, antibacterial and supercapacitive properties. <i>Physica B: Condensed Matter</i> , 2019, 558, 74-81.	2.7	68
16	Facile synthesis of porous nanostructures of NiCo <sub>2</sub> O <sub>4</sub> grown on rGO sheet for high performance supercapacitors. <i>Synthetic Metals</i> , 2020, 259, 116215.	3.9	50
17	Investigation on magnetic properties of $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> nanoparticles synthesized under surfactant-free condition by hydrothermal process. <i>Journal of Alloys and Compounds</i> , 2010, 500, 206-210.	5.5	46
18	In-situ synthesis of reduced graphene oxide decorated with highly dispersed ferromagnetic CdS nanoparticles for enhanced photocatalytic activity under UV irradiation. <i>Materials Chemistry and Physics</i> , 2016, 171, 126-136.	4.0	46

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19	Absence of room temperature ferromagnetism in Fe stabilized ZrO <sub>2</sub> nanostructures and effect of Fe doping on its structural, optical and luminescence properties. <i>Journal of Alloys and Compounds</i> , 2015, 649, 348-356.	5.5	45
20	Influence of calcinations temperature on physical properties of the nanocomposites containing spinel and CuO phases. <i>Journal of Alloys and Compounds</i> , 2010, 494, 275-284.	5.5	43
21	Controlled synthesis and magnetic properties of monodispersed ceria nanoparticles. <i>AIP Advances</i> , 2015, 5, .	1.3	43
22	Synthesis of well dispersed silver nanorods of different aspect ratios and their antimicrobial properties against gram positive and negative bacterial strains. <i>Journal of Nanobiotechnology</i> , 2013, 11, 42.	9.1	42
23	Synthesis, magnetic and Mössbauer spectroscopic studies of Cr doped lithium ferrite nanoparticles. <i>Journal of Alloys and Compounds</i> , 2014, 591, 174-180.	5.5	42
24	One-pot synthesis of Ni doped CdS nanosheets for near infrared emission and excellent photocatalytic materials for degradation of MB dye under UV and sunlight irradiation. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017, 179, 144-154.	3.9	42
25	Hydrogen storage in magnesium decorated boron clusters (Mg <sub>2</sub> B <sub>n</sub> , n = 4-14): A density functional theory study. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 12961-12971.	7.1	41
26	Ni, Co and Ni-Co codoping induced modification in shape, optical band gap and enhanced photocatalytic activity of CeO <sub>2</sub> nanostructures for photodegradation of methylene blue dye under visible light irradiation. <i>RSC Advances</i> , 2016, 6, 8651-8660.	3.6	39
27	Tailoring of enhanced interfacial polarization in WO <sub>3</sub> nanorods grown over reduced graphene oxide synthesized by a one-step hydrothermal method. <i>RSC Advances</i> , 2017, 7, 13985-13996.	3.6	37
28	Room temperature ferromagnetism in undoped and Mn doped t-ZrO <sub>2</sub> nanostructures originated due to oxygen vacancy and effect of Mn doping on its optical properties. <i>Materials Chemistry and Physics</i> , 2016, 169, 13-20.	4.0	36
29	Temperature induced modifications in shapes and crystal phases of MoO <sub>3</sub> for enhanced photocatalytic degradation of dye waste water pollutants under UV irradiation. <i>Journal of Alloys and Compounds</i> , 2019, 806, 1368-1376.	5.5	36
30	Photodegradation of phenanthrene catalyzed by rGO sheets and disk like structures synthesized using sugar cane juice as a reducing agent. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 204, 603-610.	3.9	33
31	Designing vertically aligned porous NiCo <sub>2</sub> O <sub>4</sub> @MnMoO <sub>4</sub> Core@Shell nanostructures for high-performance asymmetric supercapacitors. <i>Journal of Colloid and Interface Science</i> , 2020, 580, 720-729.	9.4	33
32	Investigation of hydrogen bonding and self-association in neat HCONH <sub>2</sub> and the binary mixture (HCONH <sub>2</sub> +CH <sub>3</sub> OH) by concentration dependent Raman study and ab initio calculations. <i>Journal of Molecular Structure</i> , 2004, 689, 127-135.	3.6	30
33	Room temperature ferromagnetism in undoped and Mn doped CdO nanostructures. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 393, 555-561.	2.3	29
34	Hydrogen bonding in different pyrimidine-methanol clusters probed by polarized Raman spectroscopy and DFT calculations. <i>Journal of Raman Spectroscopy</i> , 2011, 42, 667-675.	2.5	27
35	Synthesis, characterizations and antimicrobial activities of well dispersed ultra-long CdO nanowires. <i>AIP Advances</i> , 2013, 3, .	1.3	27
36	Concentration dependent wavenumber shifts and linewidth changes of some prominent vibrational modes of C <sub>4</sub> H <sub>8</sub> O investigated in a binary system (C <sub>4</sub> H <sub>8</sub> O+H <sub>2</sub> O) by polarized Raman study and ab initio calculations. <i>Journal of Molecular Structure</i> , 2005, 735-736, 349-357.	3.6	24

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37	Synthesis and Raman signature for the formation of CdO/MnO <sub>2</sub> (core/shell) nanostructures. <i>Journal of Raman Spectroscopy</i> , 2014, 45, 717-722.	2.5	24
38	Charcoal derived graphene quantum dots for flexible supercapacitor oriented applications. <i>New Journal of Chemistry</i> , 2020, 44, 11085-11091.	2.8	22
39	Dynamics and mechanism of the Crystal II $\rightarrow$ smecticG phase transition in TB7A by a temperature-dependent micro-Raman study and DFT calculations. <i>Journal of Raman Spectroscopy</i> , 2009, 40, 881-886.	2.5	21
40	Facile synthesis and photophysics of graphene quantum dots. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018, 364, 671-678.	3.9	18
41	Interaction of alanine with small water clusters; Ala $\cdots$ (H <sub>2</sub> O) <sub>n</sub> (n=1, 2 and 3): A density functional study. <i>Computational and Theoretical Chemistry</i> , 2010, 940, 95-102.	1.5	17
42	Simulation of the Raman spectra of zwitterionic glycine+nH <sub>2</sub> O (n=1, 2, 3, 4, 5) by means of DFT calculations and comparison to the experimentally observed Raman spectra of glycine in aqueous medium. <i>Vibrational Spectroscopy</i> , 2011, 55, 69-76.	2.2	17
43	Sun/UV-light driven photocatalytic degradation of rhodamine B dye by Zn doped CdS nanostructures as photocatalyst. <i>Materials Chemistry and Physics</i> , 2022, 277, 125531.	4.0	17
44	Coal derived graphene as an efficient supercapacitor electrode material. <i>Chemical Physics</i> , 2020, 530, 110607.	1.9	16
45	In-situ synthesis of magnetic (NiFe <sub>2</sub> O <sub>4</sub> /CuO/FeO) nanocomposites. <i>Journal of Solid State Chemistry</i> , 2010, 183, 2669-2674.	2.9	15
46	Interaction of gold nanoclusters of different size with adenine: A density functional theory study of neutral, anionic and cationic forms of [adenine+(Au) <sub>n=3,6,9,12</sub> ] complexes. <i>Computational and Theoretical Chemistry</i> , 2012, 984, 93-101.	2.5	14
47	Glycolic acid assisted one-step synthesis of Cu $\cdots$ Ni $\cdots$ Fe metal oxide nanocomposites by sol-gel-combustion method: Structural, spectroscopic and magnetic studies. <i>Materials Chemistry and Physics</i> , 2010, 120, 493-500.	4.0	12
48	Designing Organic Electron Transport Materials for Stable and Efficient Performance of Perovskite Solar Cells: A Theoretical Study. <i>ACS Omega</i> , 2021, 6, 7086-7093.	3.5	12
49	Complex concentration dependence of SERS and UV-Vis absorption of glycine/Ag $\cdots$ substrates because of glycine-mediated Ag $\cdots$ nanostructure modifications. <i>Journal of Raman Spectroscopy</i> , 2012, 43, 1183-1190.	2.5	11
50	A vibrational and conformational characterization of arginine at different pH values investigated using Raman spectroscopy combined with DFT calculations. <i>Journal of Raman Spectroscopy</i> , 2016, 47, 1073-1085.	2.5	11
51	Experimental and theoretical evidence for the presence of room temperature ferromagnetism in undoped and Mn doped tetragonal ZrO <sub>2</sub> nanostructures. <i>Chemical Physics Letters</i> , 2016, 644, 271-275.	2.6	11
52	Light and stable LinB <sub>14</sub> (n=1 $\cdots$ 5) clusters for high capacity hydrogen storage at room temperature: A DFT study. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 7861-7869.	7.1	11
53	Strategic Design and Utilization of Molecular Flexibility for Straddling the Application of Organic Superbases: A DFT Study. <i>ChemistrySelect</i> , 2018, 3, 837-842.	1.5	10
54	Investigation of $\hat{\nu}_{1/2}$ (NH) and $\hat{\nu}_{1/2}$ (CN) stretching modes of propylamine (C <sub>3</sub> H <sub>7</sub> NH <sub>2</sub> ) in a binary system C <sub>3</sub> H <sub>7</sub> NH <sub>2</sub> +CH <sub>3</sub> OH via concentration dependent Raman study and ab initio calculations. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2005, 61, 2832-2839.	3.9	9

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55	Modifications in structural morphology of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> perovskite using nitrilotriacetic acid and glycine as habit modifiers. <i>Materials Chemistry and Physics</i> , 2020, 240, 122149.	4.0	9
56	Gas phase structural stability of neutral and zwitterionic forms of alanine in presence of (H <sub>2</sub> O) <sub>n=1-7</sub> clusters: A density functional theory study. <i>Computational and Theoretical Chemistry</i> , 2012, 1002, 16-23.	2.5	8
57	A new approach to predict the formation of 3D hybrid organic-inorganic perovskites. <i>International Journal of Quantum Chemistry</i> , 2019, 119, e26012.	2.0	8
58	Size dependent electron-phonon coupling in Li <sub>0.5</sub> Co <sub>0.1</sub> Fe <sub>2.4</sub> O <sub>4</sub> nanoparticles investigated by Raman spectroscopy. <i>Vibrational Spectroscopy</i> , 2011, 56, 19-25.	2.2	6
59	Size dependent structural, electronic, and magnetic properties of ScN (N=2-14) clusters investigated by density functional theory. <i>Journal of Molecular Modeling</i> , 2014, 20, 2481.	1.8	6
60	Experimental and theoretical investigations of unusual enhancement of room temperature ferromagnetism in nickel-cobalt codoped CeO <sub>2</sub> nanostructures. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 465, 756-761.	2.3	6
61	Ionic and tautomeric conformers of adenine at different pH investigated by Raman spectroscopy combined with DFT calculations. <i>Journal of Raman Spectroscopy</i> , 2016, 47, 1086-1094.	2.5	5
62	Reshuffling of Electronic Environment by Introducing CH <sub>3</sub> NH <sub>2</sub> F <sup>+</sup> as an Organic Cation for Enhanced Power Conversion Efficiency and Stability of the Designed Hybrid Organic-Inorganic Perovskite. <i>Journal of Physical Chemistry C</i> , 2019, 123, 13385-13393.	3.1	5
63	Material Study of Co <sub>2</sub> CrAl Heusler Alloy Magnetic Thin Film and Co <sub>2</sub> CrAl/n-Si Schottky Junction Device. <i>Journal of Electronic Materials</i> , 2020, 49, 3652-3658.	2.2	5
64	Investigation on transition States of [Alanine + M <sup>2+</sup> ] (M = Ca, Cu, and Zn) complexes: A quantum chemical study. <i>International Journal of Quantum Chemistry</i> , 2012, 112, 1526-1536.	2.0	4
65	Different proton transfer channels for the transformation of zwitterionic alanine-(H <sub>2</sub> O) <sub>n=2-4</sub> to nonzwitterionic alanine-(H <sub>2</sub> O) <sub>n=2-4</sub> : a density functional theory study. <i>Journal of Molecular Modeling</i> , 2014, 20, 2124.	1.8	4
66	Un-catalyzed peptide bond formation between two monomers of glycine, alanine, serine, threonine, and aspartic acid in gas phase: a density functional theory study. <i>European Physical Journal D</i> , 2016, 70, 1.	1.3	4
67	Electronic structure of iron dinitrogen complex [(TPB)FeN <sub>2</sub> ] <sup>2+/1+</sup> : correlation to Mössbauer parameters. <i>RSC Advances</i> , 2020, 10, 7948-7955.	3.6	4
68	A study on interaction of Be <sup>++</sup> , Mg <sup>++</sup> and Ca <sup>++</sup> with phenylalanine: Binding energies, metal ion affinities and IR signature of complex stability. <i>Vibrational Spectroscopy</i> , 2011, 56, 42-50.	2.2	3
69	Effect of regular hydration on gas phase structural stability of [zwitterionic alanine+M <sup>+</sup> ] (M=Li <sup>+</sup> ). <i>TJ ETQq1 1 0.784314 rgBT<sub>3</sub>/Overlook</i>	1.9	3
70	Raman fingerprint of the interaction of K <sup>+</sup> with the COO <sup>-</sup> group of zwitterionic alanine. <i>Journal of Raman Spectroscopy</i> , 2015, 46, 1191-1199.	2.5	3
71	Direct visual evidence of end-on adsorption geometry of pyridine on silver surface investigated by surface enhanced Raman scattering and density functional theory calculations. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 151, 888-894.	3.9	3
72	Revisiting mechanistic studies on dinitrogen reduction to ammonia by an iron dinitrogen complex as nitrogenase mimic. <i>International Journal of Quantum Chemistry</i> , 2019, 119, e26025.	2.0	3

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73	Improved environmental stability of cobalt incorporated methylammonium lead iodide perovskite for resistive switching applications. <i>Chemical Physics</i> , 2020, 538, 110900.	1.9	3
74	Calculation of dissociation constants and chemical hardness of some biologically important molecules: A theoretical study. <i>International Journal of Quantum Chemistry</i> , 2011, 111, 3961-3970.	2.0	2
75	Investigation of the encapsulation of metal cations (Cu <sup>2+</sup> , Zn <sup>2+</sup> , Ca <sup>2+</sup> and Ba <sup>2+</sup> ) by the dipeptide Phe-Phe using natural bond orbital theory and molecular dynamics simulation. <i>Journal of Molecular Modeling</i> , 2017, 23, 88.	1.8	2
76	Binding patterns of metal cations (Na <sup>+</sup> , K <sup>+</sup> , Cu <sup>2+</sup> , and Zn <sup>2+</sup> ) with Trp-Trp di-peptide investigated by DFT, NBO, and MD simulation. <i>Computational and Theoretical Chemistry</i> , 2018, 1141, 7-14.	2.5	2
77	Environmental stability and excited state dynamics of MAI-(PbI <sub>2</sub> ) <sub>1-x</sub> (NiCl <sub>2</sub> ) <sub>x</sub> . <i>Materials Chemistry and Physics</i> , 2021, 259, 124179.	4.0	1
78	Tuning of structural and magnetic properties by intriguing radical-radical interaction by double electron oxidation in U-A-U <sup>2+</sup> triplex formation. <i>Chemical Physics</i> , 2020, 528, 110527.	1.9	0
79	Self-assembling of interconnected strips of CoMoO <sub>4</sub> on graphene sheet as supercapacitor electrodes. <i>AIP Conference Proceedings</i> , 2020, , .	0.4	0
80	Role of Annealing Temperature on Structural Modification of MoO <sub>3</sub> for Enhanced Electrochemical Properties. , 2021, , 19-26.		0