Santosh Kumar

List of Publications by Citations

64 papers	1,912 citations	28 h-index	42 g-index
68 ext. papers	2,375 ext. citations	5.5 avg, IF	5.5 L-index

#	Paper	IF	Citations
64	Physiochemical, optical and biological activity of chitosan-chromone derivative for biomedical applications. *International Journal of Molecular Sciences*, **2012**, 13, 6102-16	6.3	159
63	Porphyrins as nanoreactors in the carbon dioxide capture and conversion: a review. *Journal of Materials Chemistry A*, **2015**, 3, 19615-19637	13	116
62	Bio-based (chitosan/PVA/ZnO) nanocomposites film: Thermally stable and photoluminescence material for removal of organic dye. *Carbohydrate Polymers*, **2019**, 205, 559-564	10.3	110
61	Preparation and characterization of N-heterocyclic chitosan derivative based gels for biomedical applications. *International Journal of Biological Macromolecules*, **2009**, 45, 330-7	7.9	89
60	Physiochemical and optical properties of chitosan based graphene oxide bionanocomposite. *International Journal of Biological Macromolecules*, **2014**, 70, 559-64	7.9	70
59	A new chitosan-thymine conjugate: synthesis, characterization and biological activity. *International Journal of Biological Macromolecules*, **2012**, 50, 493-502	7.9	64
58	Chitosan grafted graphene oxide aerogel: Synthesis, characterization and carbon dioxide capture study. *International Journal of Biological Macromolecules*, **2019**, 125, 300-306	7.9	64
57	Utilization of zeolites as CO2 capturing agents: Advances and future perspectives. *Journal of CO2 Utilization*, **2020**, 41, 101251	7.6	62
56	Chitosan Nanocomposite Coatings for Food, Paints, and Water Treatment Applications. *Applied Sciences (Switzerland)*, **2019**, 9, 2409	2.6	61
55	Antibacterial activity of diisocyanate-modified chitosan for biomedical applications. *International Journal of Biological Macromolecules*, **2016**, 84, 349-53	7.9	56
54	Bio-based chitosan/gelatin/Ag@ZnO bionanocomposites: synthesis and mechanical and antibacterial properties. *Cellulose*, **2019**, 26, 5347-5361	5.5	51
53	Mesoporous zeolite-chitosan composite for enhanced capture and catalytic activity in chemical fixation of CO. *Carbohydrate Polymers*, **2018**, 198, 401-406	10.3	51
52	Efficient one-pot synthesis of substituted pyridines through multicomponent reaction. *Organic and Biomolecular Chemistry*, **2010**, 8, 3078-82	3.9	50
51	A physico-chemical and biological study of novel chitosan-chloroquinoline derivative for biomedical applications. *International Journal of Biological Macromolecules*, **2011**, 49, 356-61	7.9	45
50	Methyl methacrylate modified chitosan: Synthesis, characterization and application in drug and gene delivery. *Carbohydrate Polymers*, **2019**, 211, 109-117	10.3	44
49	Synthesis, characterisation, optical and nonlinear optical properties of thiazole and benzothiazole derivatives: a dual approach. *Molecular Simulation*, **2018**, 44, 1191-1199	2	43
48	Enhanced chitosan-DNA interaction by 2-acrylamido-2-methylpropane coupling for an efficient transfection in cancer cells. *Journal of Materials Chemistry B*, **2015**, 3, 3465-3475	7.3	42

47	Triphenylamine coupled chitosan with high buffering capacity and low viscosity for enhanced transfection in mammalian cells, in vitro and in vivo. *Journal of Materials Chemistry B*, **2013**, 1, 6053-6065	7.3	37
46	Carbon dioxide capture and conversion by an environmentally friendly chitosan based meso-tetrakis(4-sulfonatophenyl) porphyrin. *Carbohydrate Polymers*, **2017**, 175, 575-583	10.3	36
45	Preparation, characterization, and optical properties of a chitosan–anthraldehyde crosslinkable film. *Journal of Applied Polymer Science*, **2010**, 115, 3056-3062	2.9	36
44	Chitosan Biopolymer Schiff Base: Preparation, Characterization, Optical, and Antibacterial Activity. *International Journal of Polymeric Materials and Polymeric Biomaterials*, **2014**, 63, 173-177	3	35
43	Facile and efficient synthesis of quinolin-2(1H)-ones via cyclization of penta-2,4-dienamides mediated by H2SO4. *Organic and Biomolecular Chemistry*, **2012**, 10, 5643-6	3.9	34
42	Physiochemical and optical study of chitosan-terephthaldehyde derivative for biomedical applications. *International Journal of Biological Macromolecules*, **2012**, 51, 1167-72	7.9	34
41	Carbon dioxide adsorption and cycloaddition reaction of epoxides using chitosan-graphene oxide nanocomposite as a catalyst. *Journal of Environmental Sciences*, **2018**, 69, 77-84	6.4	33
40	A systematic study on chitosan-liposome based systems for biomedical applications. *International Journal of Biological Macromolecules*, **2020**, 160, 470-481	7.9	31
39	Preparation, characterization and optical properties of a novel azo-based chitosan biopolymer. *Materials Chemistry and Physics*, **2010**, 120, 361-370	4.4	31
38	Preparation and characterization of optical property of crosslinkable film of chitosan with 2-thiophenecarboxaldehyde. *Carbohydrate Polymers*, **2010**, 80, 563-569	10.3	31
37	Synthesis, physiochemical and optical properties of chitosan based dye containing naphthalimide group. *Carbohydrate Polymers*, **2013**, 94, 221-8	10.3	29
36	A dual approach to study the key features of nickel (II) and copper (II) coordination complexes: Synthesis, crystal structure, optical and nonlinear properties. *Inorganica Chimica Acta*, **2019**, 484, 148-159	2.7	27
35	Preparation, Characterization and Optical Property of Chitosan-Phenothiazine Derivative by Microwave Assisted Synthesis. *Journal of Macromolecular Science - Pure and Applied Chemistry*, **2009** , 46, 1095-1102	2.2	25
34	Cycloaddition of CO2 to epoxides using di-nuclear transition metal complexes as catalysts. *New Journal of Chemistry*, **2016**, 40, 4974-4980	3.6	24
33	Graphene oxide modified cobalt metallated porphyrin photocatalyst for conversion of formic acid from carbon dioxide. *Journal of CO2 Utilization*, **2018**, 27, 107-114	7.6	24
32	Studies of Carbon Dioxide Capture on Porous Chitosan Derivative. *Journal of Dispersion Science and Technology*, **2016**, 37, 155-158	1.5	22
31	Highly active P25@Pd/C nanocomposite for the degradation of Naphthol Blue Black with visible light. *Journal of Molecular Structure*, **2018**, 1153, 346-352	3.4	22
30	Syntheses, characterizations, crystal structures and efficient NLO applications of new organic compounds bearing 2-methoxy-4-nitrobenzeneamine moiety and copper (II) complex of (E)-N'(3, 5-dichloro-2-hydroxybenzylidene) benzohydrazide. *Journal of Molecular Structure*, **2019**, 1190, 54-67	3.4	21

29	Synthesis, physicochemical and optical properties of bis-thiosemicarbazone functionalized graphene oxide. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2018**, 188, 183-188	4.4	21
28	Chitosan-based zeolite-Y and ZSM-5 porous biocomposites for H and CO storage. *Carbohydrate Polymers*, **2020**, 232, 115808	10.3	20
27	Chitosan containing azo-based Schiff bases: thermal, antibacterial and birefringence properties for bio-optical devices. *RSC Advances*, **2016**, 6, 5575-5581	3.7	19
26	Capture and chemical fixation of carbon dioxide by chitosan grafted multi-walled carbon nanotubes. *Journal of CO2 Utilization*, **2020**, 41, 101237	7.6	17
25	Enhanced fluorescence norfloxacin substituted naphthalimide derivatives: Molecular docking and antibacterial activity. *Journal of Molecular Structure*, **2018**, 1157, 292-299	3.4	15
24	Can low concentrations of metal oxide and Ag loaded metal oxide nanoparticles pose a risk to stream plant litter microbial decomposers?. *Science of the Total Environment*, **2019**, 653, 930-937	10.2	14
23	CO2 adsorption and conversion of epoxides catalyzed by inexpensive and active mesoporous structured mixed-phase (anatase/brookite) TiO2. *Journal of CO2 Utilization*, **2019**, 34, 386-394	7.6	11
22	Optical Study of Chitosan-Ofloxacin Complex for Biomedical Applications. *Journal of Macromolecular Science - Pure and Applied Chemistry*, **2011**, 48, 789-795	2.2	10
21	A combined experimental and computational study of 2,2′-(diazene-1,2-diylbis(4,1-phenylene))bis(6-(butylamino)-1H-benzo[de]isoquinoline-1,3(2H)-dione): Synthesis, optical and nonlinear optical properties. *Optik*, **2019**, 192, 162952	2.5	9
20	An experimental and computational study of pyrimidine based bis-uracil derivatives as efficient candidates for optical, nonlinear optical, and drug discovery applications. *Synthetic Communications* , **2020**, 50, 2199-2225	1.7	9
19	Synthesis of Copper(II) Coordination Complex, Its Molecular Docking and Computational Exploration for Novel Functional Properties: A Dual Approach. *ChemistrySelect*, **2021**, 6, 738-745	1.8	9
18	Synthesis, characterizations, crystal structures, and theoretical studies of copper(II) and nickel(II) coordination complexes. *Journal of Coordination Chemistry*, **2020**, 73, 1256-1279	1.6	7
17	Synthesis and characterization of g/Ni–SiO2 composite for enhanced hydrogen storage applications. *International Journal of Hydrogen Energy*, **2019**, 44, 23249-23256	6.7	6
16	Studies on thermo-optic property of chitosan–alizarin yellow GG complex: a direction for devices for biomedical applications. *Bulletin of Materials Science*, **2015**, 38, 1639-1643	1.7	5
15	Chitosan modified by organo-functionalities as an efficient nanoplatform for anti-cancer drug delivery process. *Journal of Drug Delivery Science and Technology*, **2021**, 62, 102407	4.5	5
14	Dyeing of Polyester with 4-Fluorosulfonylphenylazo-5-pyrazolone Disperse Dyes and Application of Environment-Friendly Aftertreatment for Their High Color Fastness. *Materials*, **2019**, 12,	3.5	5
13	Impacts of low concentrations of nanoplastics on leaf litter decomposition and food quality for detritivores in streams.. *Journal of Hazardous Materials*, **2022**, 429, 128320	12.8	4
12	Synthesis of 2,5-furandicarboxylic acid-enriched-chitosan for anti-inflammatory and metal ion uptake. *International Journal of Biological Macromolecules*, **2021**, 179, 500-506	7.9	4

List of Publications

11	Copper(II) and Nickel(II) Complexes of Tridentate Hydrazide and Schiff Base Ligands Containing Phenyl and Naphthalyl Groups: Synthesis, Structural, Molecular Docking and Density Functional Study. *Journal of Inorganic and Organometallic Polymers and Materials*, **2020**, 30, 4426-4440	3.2	3
10	Synthesis, Characterization, and Functional Properties of ZnO-based Polyurethane Nanocomposite for Textile Applications. *Fibers and Polymers*, **2021**, 22, 2227-2237	2	3
9	Experimental and computational study of naphthalimide derivatives: Synthesis, optical, nonlinear optical and antiviral properties. *Optik*, **2021**, 246, 167748	2.5	3
8	Physiochemical, circular dichroism-induced helical conformation and optical property of chitosan azo-based amino methanesulfonate complex. *Journal of Applied Polymer Science*, **2011**, 124, n/a-n/a	2.9	1
7	Synthesis, characterization and application of chitosan-N-(4-hydroxyphenyl)-methacrylamide derivative as a drug and gene carrier. *International Journal of Biological Macromolecules*, **2021**,	7.9	1
6	Synthesis and Application of High-Washability 4-Amino-4?-Fluorosulfonylazobenzene Disperse Dyes to Cellulose Diacetate for High Color Fastness. *Fibers and Polymers*,1	2	1
5	Arginine containing chitosan-graphene oxide aerogels for highly efficient carbon capture and fixation. *Journal of CO2 Utilization*, **2022**, 59, 101958	7.6	1
4	Synthesis of Antibacterial Disulfide Derivatives and its Computational Molecular Docking Against Penicillin Binding Protein. *Analytical Chemistry Letters*, **2021**, 11, 618-634	1	0
3	Synthesis and characterization of mono-6-deoxy-6-aminopropylamino-Ecyclodextrin polymer functionalized with graphene oxide. *Inorganic and Nano-Metal Chemistry*, **2020**, 50, 286-291	1.2	
2	Rapid Determination of Nitrate in Brain Regions and Cerebrospinal Fluid of Transient Bilateral Common Carotid Artery Occlusion Rat Model by HPLCUV. *Proceedings of the National Academy of Sciences India Section A - Physical Sciences*, **2021**, 91, 361-368	0.9	
1	Chitin A Natural Bio-feedstock and Its Derivatives **2022**, 207-233		