

Sadanand Pandey

List of Publications by Year in descending order

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Version: 2024-02-01

100
papers

5,857
citations

76196

40
h-index

79541

73
g-index

107
all docs

107
docs citations

107
times ranked

5239
citing authors

#	ARTICLE	IF	CITATIONS
1	Development of a sodium alginate-based organic/inorganic superabsorbent composite hydrogel for adsorption of methylene blue. <i>Carbohydrate Polymers</i> , 2016, 153, 34-46.	5.1	306
2	Green synthesis of biopolymer-silver nanoparticle nanocomposite: An optical sensor for ammonia detection. <i>International Journal of Biological Macromolecules</i> , 2012, 51, 583-589.	3.6	295
3	A comprehensive review on recent developments in bentonite-based materials used as adsorbents for wastewater treatment. <i>Journal of Molecular Liquids</i> , 2017, 241, 1091-1113.	2.3	250
4	Organic-inorganic hybrid of chitosan/organoclay bionanocomposites for hexavalent chromium uptake. <i>Journal of Colloid and Interface Science</i> , 2011, 361, 509-520.	5.0	233
5	Catalytic reduction of p-nitrophenol by using platinum nanoparticles stabilised by guar gum. <i>Carbohydrate Polymers</i> , 2014, 113, 525-531.	5.1	233
6	Sol-gel derived organic-inorganic hybrid materials: synthesis, characterizations and applications. <i>Journal of Sol-Gel Science and Technology</i> , 2011, 59, 73-94.	1.1	215
7	Fast and highly efficient catalytic degradation of dyes using λ -carrageenan stabilized silver nanoparticles nanocatalyst. <i>Carbohydrate Polymers</i> , 2020, 230, 115597.	5.1	204
8	Fast and highly efficient removal of dye from aqueous solution using natural locust bean gum based hydrogels as adsorbent. <i>International Journal of Biological Macromolecules</i> , 2020, 143, 60-75.	3.6	185
9	Highly sensitive and selective chemiresistor gas/vapor sensors based on polyaniline nanocomposite: A comprehensive review. <i>Journal of Science: Advanced Materials and Devices</i> , 2016, 1, 431-453.	1.5	184
10	Preparation and characterization of xanthan gum-cl-poly(acrylic acid)/o-MWCNTs hydrogel nanocomposite as highly effective re-usable adsorbent for removal of methylene blue from aqueous solutions. <i>Journal of Colloid and Interface Science</i> , 2018, 513, 700-714.	5.0	154
11	Green synthesis of polysaccharide/gold nanoparticle nanocomposite: An efficient ammonia sensor. <i>Carbohydrate Polymers</i> , 2013, 94, 229-234.	5.1	148
12	Au Nanocomposite Based Chemiresistive Ammonia Sensor for Health Monitoring. <i>ACS Sensors</i> , 2016, 1, 55-62.	4.0	148
13	Microwave assisted synthesis of xanthan gum-cl-poly (acrylic acid) based-reduced graphene oxide hydrogel composite for adsorption of methylene blue and methyl violet from aqueous solution. <i>International Journal of Biological Macromolecules</i> , 2018, 119, 255-269.	3.6	120
14	Nanocomposite based flexible ultrasensitive resistive gas sensor for chemical reactions studies. <i>Scientific Reports</i> , 2013, 3, 2082.	1.6	114
15	Removal of cadmium from aqueous solutions by adsorption using poly(acrylamide) modified guar gum-silica nanocomposites. <i>Separation and Purification Technology</i> , 2009, 67, 251-261.	3.9	107
16	Facile approach to synthesize chitosan based composite-Characterization and cadmium(II) ion adsorption studies. <i>Carbohydrate Polymers</i> , 2015, 134, 646-656.	5.1	107
17	Sodium alginate stabilized silver nanoparticles-silica nanohybrid and their antibacterial characteristics. <i>International Journal of Biological Macromolecules</i> , 2016, 93, 712-723.	3.6	102
18	Sequestration of methylene blue dye using sodium alginate poly(acrylic acid)@ZnO hydrogel nanocomposite: Kinetic, Isotherm, and Thermodynamic Investigations. <i>International Journal of Biological Macromolecules</i> , 2020, 162, 60-73.	3.6	102

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19	Microwave-accelerated Synthesis and Characterization of Potato Starch-g-poly(acrylamide). Starch/Staerke, 2006, 58, 536-543.	1.1	98
20	Fast microwave-assisted green synthesis of xanthan gum grafted acrylic acid for enhanced methylene blue dye removal from aqueous solution. Carbohydrate Polymers, 2017, 176, 315-326.	5.1	97
21	Removal of chromium (VI) using poly(methylacrylate) functionalized guar gum. Bioresource Technology, 2009, 100, 1977-1982.	4.8	93
22	Peroxydisulfate initiated synthesis of potato starch-graft-poly(acrylonitrile) under microwave irradiation. EXPRESS Polymer Letters, 2007, 1, 51-58.	1.1	92
23	Environmentally Safe Biosynthesis of Gold Nanoparticles Using Plant Water Extracts. Nanomaterials, 2021, 11, 2033.	1.9	79
24	Glutaraldehyde-cross-linked chitosan- α -alginate composite for organic dyes removal from aqueous solutions. International Journal of Biological Macromolecules, 2021, 190, 862-875.	3.6	77
25	Nanotechnology-based approaches for effective detection of tumor markers: A comprehensive state-of-the-art review. International Journal of Biological Macromolecules, 2022, 195, 356-383.	3.6	72
26	Equilibrium, kinetic, and thermodynamic studies of lead ion adsorption from mine wastewater onto MoS ₂ -clinoptilolite composite. Materials Today Chemistry, 2020, 18, 100376.	1.7	69
27	Graft copolymerization of ethylacrylate onto xanthan gum, using potassium peroxydisulfate as an initiator. International Journal of Biological Macromolecules, 2011, 49, 527-535.	3.6	67
28	Recent Advances in Nanotechnology-Based Diagnosis and Treatments of Human Osteosarcoma. Biosensors, 2021, 11, 55.	2.3	64
29	Synergistic sorption performance of karaya gum crosslink poly(acrylamide-co-acrylonitrile) @ metal nanoparticle for organic pollutants. International Journal of Biological Macromolecules, 2022, 210, 300-314.	3.6	63
30	Nanomaterial-based biosorbents: Adsorbent for efficient removal of selected organic pollutants from industrial wastewater. Emerging Contaminants, 2022, 8, 46-58.	2.2	59
31	Microwave synthesized xanthan gum-g-poly(ethylacrylate): An efficient Pb ²⁺ ion binder. Carbohydrate Polymers, 2012, 90, 370-379.	5.1	58
32	Rapid, facile microwave-assisted synthesis of xanthan gum grafted polyaniline for chemical sensor. International Journal of Biological Macromolecules, 2016, 89, 89-98.	3.6	57
33	Nanotechnology in Bladder Cancer: Diagnosis and Treatment. Cancers, 2021, 13, 2214.	1.7	56
34	Microwave-assisted green synthesis of xanthan gum grafted diethylamino ethyl methacrylate: An efficient adsorption of hexavalent chromium. Carbohydrate Polymers, 2019, 222, 114989.	5.1	50
35	Multi-Functionalized Nanomaterials and Nanoparticles for Diagnosis and Treatment of Retinoblastoma. Biosensors, 2021, 11, 97.	2.3	49
36	Sol-gel derived xanthan gum/silica nanocomposite- α a highly efficient cationic dyes adsorbent in aqueous system. International Journal of Biological Macromolecules, 2017, 103, 596-604.	3.6	47

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37	DNA Based and Stimuli-Responsive Smart Nanocarrier for Diagnosis and Treatment of Cancer: Applications and Challenges. <i>Cancers</i> , 2021, 13, 3396.	1.7	46
38	Hydrogen sensing based on nanoporous silica-embedded ultra dense ZnO nanobundles. <i>RSC Advances</i> , 2014, 4, 7476.	1.7	44
39	A Hyaluronic Acid Functionalized Self-Nano-Emulsifying Drug Delivery System (SNEDDS) for Enhancement in Ciprofloxacin Targeted Delivery against Intracellular Infection. <i>Nanomaterials</i> , 2021, 11, 1086.	1.9	44
40	Eco Friendly Approach for Synthesis, Characterization and Biological Activities of Milk Protein Stabilized Silver Nanoparticles. <i>Polymers</i> , 2020, 12, 1418.	2.0	42
41	Potential and future prospects of biochar-based materials and their applications in removal of organic contaminants from industrial wastewater. <i>Journal of Material Cycles and Waste Management</i> , 2022, 24, 852-876.	1.6	42
42	Synthesis and characterization of novel saponified guar-graft-poly(acrylonitrile)/silica nanocomposite materials. <i>Journal of Applied Polymer Science</i> , 2007, 104, 536-544.	1.3	40
43	Synthesis, characterization, toxicity and morphology assessments of newly prepared microemulsion systems for delivery of valproic acid. <i>Journal of Molecular Liquids</i> , 2021, 338, 116625.	2.3	40
44	Manganese-Doped Zinc Oxide Nanostructures as Potential Scaffold for Photocatalytic and Fluorescence Sensing Applications. <i>Chemosensors</i> , 2020, 8, 120.	1.8	39
45	Green synthesis of magnetic Fe ₃ O ₄ nanospheres using <i>Bridelia retusa</i> leaf extract for Fenton-like degradation of crystal violet dye. <i>Applied Nanoscience (Switzerland)</i> , 2021, 11, 2227-2234.	1.6	39
46	Amino Acids, Peptides, and Proteins: Implications for Nanotechnological Applications in Biosensing and Drug/Gene Delivery. <i>Nanomaterials</i> , 2021, 11, 3002.	1.9	38
47	Biopolymer starch-gelatin embedded with silver nanoparticle-based hydrogel composites for antibacterial application. <i>Biomass Conversion and Biorefinery</i> , 2022, 12, 5363-5384.	2.9	38
48	Guar gum-grafted poly(acrylonitrile)-templated silica xerogel: nanoengineered material for lead ion removal. <i>Journal of Analytical Science and Technology</i> , 2016, 7, .	1.0	37
49	Pluronic F127/Doxorubicin microemulsions: Preparation, characterization, and toxicity evaluations. <i>Journal of Molecular Liquids</i> , 2022, 345, 117028.	2.3	37
50	Development of a ghatti gum/poly (acrylic acid)/TiO ₂ hydrogel nanocomposite for malachite green adsorption from aqueous media: Statistical optimization using response surface methodology. <i>Chemosphere</i> , 2022, 306, 135524.	4.2	34
51	Novel Perspectives towards RNA-Based Nano-Theranostic Approaches for Cancer Management. <i>Nanomaterials</i> , 2021, 11, 3330.	1.9	33
52	Emerging remediation potentiality of struvite developed from municipal wastewater for the treatment of acid mine drainage. <i>Environmental Research</i> , 2022, 210, 112944.	3.7	31
53	Implication of biofilms in the sustainability of acid mine drainage and metal dispersion near coal tailings. <i>Science of the Total Environment</i> , 2021, 788, 147851.	3.9	30
54	Mesoporous Fe-Al-doped cellulose for the efficient removal of reactive dyes. <i>Materials Advances</i> , 2022, 3, 3278-3285.	2.6	30

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55	Sol-gel polycondensation of tetraethoxysilane in ethanol in presence of vinyl modified guar gum: synthesis of novel nanocompositional adsorbent materials. <i>Journal of Sol-Gel Science and Technology</i> , 2008, 47, 58-67.	1.1	29
56	Achieving a long-term stability by self-redox property between Fe and Mn ions in the iron-manganese spinel structured electrode in oxygen evolution reaction. <i>Applied Surface Science</i> , 2021, 546, 149124.	3.1	28
57	Recent Modifications of bentonite Clay for Adsorption Applications. <i>Focus on Sciences</i> , 2016, 2, 1-10.	0.2	28
58	Synthesis of gum acacia-silver nanoparticles based hydrogel composites and their comparative anti-bacterial activity. <i>Journal of Polymer Research</i> , 2022, 29, 1.	1.2	28
59	Simulation, In Vitro, and In Vivo Cytotoxicity Assessments of Methotrexate-Loaded pH-Responsive Nanocarriers. <i>Polymers</i> , 2021, 13, 3153.	2.0	26
60	Synthesis and characterization of guar gum templated hybrid nano silica. <i>International Journal of Biological Macromolecules</i> , 2011, 49, 233-240.	3.6	25
61	Sol-gel synthesis and characterization of adsorbent and photoluminescent nanocomposites of starch and silica. <i>Journal of Non-Crystalline Solids</i> , 2011, 357, 194-201.	1.5	25
62	Application of titanium dioxide nanoparticles in photothermal and photodynamic therapy of cancer: An updated and comprehensive review. <i>Journal of Drug Delivery Science and Technology</i> , 2022, 75, 103605.	1.4	25
63	Chromatographic resolution of racemic \pm -amino acids: Chiral stationary phase derived from modified xanthan gum. <i>Carbohydrate Polymers</i> , 2013, 92, 2201-2205.	5.1	24
64	Applications of lignin nanoparticles for cancer drug delivery: An update. <i>Materials Letters</i> , 2022, 311, 131573.	1.3	24
65	Design of Mannose-Coated Rifampicin nanoparticles modulating the immune response and Rifampicin induced hepatotoxicity with improved oral drug delivery. <i>Arabian Journal of Chemistry</i> , 2021, 14, 103321.	2.3	23
66	Chitosan nanocarriers for microRNA delivery and detection: A preliminary review with emphasis on cancer. <i>Carbohydrate Polymers</i> , 2022, 290, 119489.	5.1	23
67	Opportunities and challenges of using high-sensitivity nanobiosensors to detect long noncoding RNAs: A preliminary review. <i>International Journal of Biological Macromolecules</i> , 2022, 205, 304-315.	3.6	22
68	Nano-Based Theranostic Platforms for Breast Cancer: A Review of Latest Advancements. <i>Bioengineering</i> , 2022, 9, 320.	1.6	22
69	Theranostic Advances of Bionanomaterials against Gestational Diabetes Mellitus: A Preliminary Review. <i>Journal of Functional Biomaterials</i> , 2021, 12, 54.	1.8	21
70	Nanomaterials for the Diagnosis and Treatment of Head and Neck Cancers: A Review. <i>Materials</i> , 2021, 14, 3706.	1.3	20
71	Active Targeted Nanoparticles for Delivery of Poly(ADP-ribose) Polymerase (PARP) Inhibitors: A Preliminary Review. <i>International Journal of Molecular Sciences</i> , 2021, 22, 10319.	1.8	20
72	Turning to Nanotechnology for Water Pollution Control: Applications of Nanocomposites. <i>Focus on Sciences</i> , 2016, 2, 1-10.	0.2	20

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73	F127/Cisplatin Microemulsions: In Vitro, In Vivo and Computational Studies. Applied Sciences (Switzerland), 2021, 11, 3006.	1.3	18
74	Nb ₂ O ₅ –SnS ₂ –CdS heteronanostructures as efficient visible-light-harvesting materials for production of H ₂ under solar light irradiation. Journal of Alloys and Compounds, 2020, 835, 155399.	2.8	16
75	Fabrication of solar-driven hierarchical ZnIn ₂ S ₄ /rGO/SnS ₂ heterojunction photocatalyst for hydrogen generation and environmental pollutant elimination. Separation and Purification Technology, 2022, 293, 121119.	3.9	16
76	A Green Approach for the Synthesis of Silver Nanoparticle-Embedded Chitosan Bionanocomposite as a Potential Device for the Sustained Release of the Itraconazole Drug and Its Antibacterial Characteristics. Polymers, 2022, 14, 1911.	2.0	16
77	Cassia Grandis Seed Gum-graft-poly(acrylamide)-silica Hybrid: An Excellent Cadmium (II) Adsorbent. Advanced Materials Letters, 2015, 6, 19-26.	0.3	14
78	Highly efficient hydrogen evolution reaction performance and long-term stability of spherical Ni ₁₀₀ xFe alloy grown directly on a carbon paper electrode. Journal of Alloys and Compounds, 2021, 869, 159265.	2.8	13
79	Adsorption Behavior of Potato Starch-silica Nanobiocomposite. Advanced Materials Letters, 2010, 1, 40-47.	0.3	13
80	Synthesis, In Silico Study, and Anti-Cancer Activity of Thiosemicarbazone Derivatives. Biomedicines, 2021, 9, 1375.	1.4	11
81	Advance Nanomaterials for Biosensors. Biosensors, 2022, 12, 219.	2.3	11
82	Can nanomaterials support the diagnosis and treatment of human infertility? A preliminary review. Life Sciences, 2022, 299, 120539.	2.0	11
83	Environmental Remediation Potential of Ferrous Sulfate Waste as an Eco-Friendly Coagulant for the Removal of NH ₃ -N and COD from the Rubber Processing Effluent. International Journal of Environmental Research and Public Health, 2021, 18, 12427.	1.2	10
84	Potential Immunomodulatory Activities of Plant Products. South African Journal of Botany, 2022, 149, 937-943.	1.2	10
85	Fe(III)–Chitosan Microbeads for Adsorptive Removal of Cr(VI) and Phosphate Ions. Minerals (Basel), 2021, 11, 1078-1091.	0.8	10
86	Preparation of highly crystalline quaternary heterostructure catalyst for hydrogen evolution under solar light: Improved photoexcited charge separation. Materials Research Bulletin, 2020, 122, 110695.	2.7	9
87	Plasmon-Induced Hot Electron Amplification and Effective Charge Separation by Au Nanoparticles Sandwiched between Copper Titanium Phosphate Nanosheets and Improved Carbon Dioxide Conversion to Methane. ACS Sustainable Chemistry and Engineering, 2020, 8, 18646-18660.	3.2	9
88	Response of Bacterial Biosorbents to Chemical Treatment as Influenced by Cell Membrane Structure and Impact on the Adsorption Behaviour of Dyes. Current Science, 2018, 114, 826.	0.4	8
89	Design and synergistic effect of nano-sized epoxy-NiCo ₂ O ₄ nanocomposites for anticorrosion applications. RSC Advances, 2022, 12, 14888-14901.	1.7	8
90	Alumina-supported microwave synthesis of <i>Cassia marginata</i> seed gum-graft-polyacrylamide. Journal of Applied Polymer Science, 2010, 117, 3630-3638.	1.3	7

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91	Oil spill remediation by grafted natural polysaccharide gum tragacanth: its kinetics and isotherms studies. <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 383-392.	2.9	7
92	Managing Apoptosis in Lung Diseases using Nano-assisted Drug Delivery System. <i>Current Pharmaceutical Design</i> , 2022, 28, 3202-3211.	0.9	7
93	Development of mucoadhesive thiomeric chitosan nanoparticles for the targeted ocular delivery of vancomycin against <i>Staphylococcus aureus</i> resistant strains. <i>Nanofabrication</i> , 2021, 6, 16-24.	1.1	6
94	Potassium-induced partial inhibition of lactoperoxidase: structure of the complex of lactoperoxidase with potassium ion at 2.20 Å resolution. <i>Journal of Biological Inorganic Chemistry</i> , 2021, 26, 149-159.	1.1	4
95	Low power consumption pressure sensor based on carbon nanotubes. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	3
96	Recent Advances in Metal Nanoparticles for the Synthesis of N-Containing Heterocyclic Compounds. <i>Asian Journal of Chemistry</i> , 2021, 33, 949-955.	0.1	3
97	Reduction of carcinogenic PAHs from petrodiesel engine exhaust by blending of green diesel (A new) <i>Tj ETQq1 1 0.784314 rgBT /Over Innovation</i> , 2022, 25, 102089.	3.0	3
98	Acknowledgement to Reviewers of Chemosensors in 2019. <i>Chemosensors</i> , 2020, 8, 9.	1.8	1
99	Acknowledgement to Reviewers of Polymers in 2019. <i>Polymers</i> , 2020, 12, 172.	2.0	0
100	Nanocomposite based flexible ultrasensitive resistive gas sensor for chemical reactions studies. <i>Protocol Exchange</i> , 0, , .	0.3	0