

Gopala Krishna Darbha

List of Publications by Year in descending order

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Version: 2024-02-01

56
papers

2,540
citations

279487

23
h-index

189595

50
g-index

57
all docs

57
docs citations

57
times ranked

2986
citing authors

#	ARTICLE	IF	CITATIONS
1	Selective Detection of Mercury (II) Ion Using Nonlinear Optical Properties of Gold Nanoparticles. <i>Journal of the American Chemical Society</i> , 2008, 130, 8038-8043.	6.6	419
2	Gold Nanoparticle-Based Miniaturized Nanomaterial Surface Energy Transfer Probe for Rapid and Ultrasensitive Detection of Mercury in Soil, Water, and Fish. <i>ACS Nano</i> , 2007, 1, 208-214.	7.3	284
3	Non-resonance SERS effects of silver colloids with different shapes. <i>Chemical Physics Letters</i> , 2007, 446, 77-82.	1.2	180
4	Gold Nanoparticle Based FRET Assay for the Detection of DNA Cleavage. <i>Journal of Physical Chemistry B</i> , 2006, 110, 20745-20748.	1.2	164
5	Gold Nanoparticle Based FRET for DNA Detection. <i>Plasmonics</i> , 2007, 2, 173-183.	1.8	144
6	Understanding the stability of nanoplastics in aqueous environments: effect of ionic strength, temperature, dissolved organic matter, clay, and heavy metals. <i>Environmental Science: Nano</i> , 2019, 6, 2968-2976.	2.2	126
7	Gold Nanoparticle-Based Sensing of Sequence Specific HIV-1 Virus DNA by Using Hyper-Rayleigh Scattering Spectroscopy. <i>Chemistry - A European Journal</i> , 2008, 14, 3896-3903.	1.7	109
8	Application of Zn/Al layered double hydroxides for the removal of nano-scale plastic debris from aqueous systems. <i>Journal of Hazardous Materials</i> , 2020, 397, 122769.	6.5	81
9	Gold-nanoparticle-based miniaturized laser-induced fluorescence probe for specific DNA hybridization detection: studies on size-dependent optical properties. <i>Nanotechnology</i> , 2006, 17, 3085-3093.	1.3	79
10	Characteristics and spatial distribution of microplastics in the lower Ganga River water and sediment. <i>Marine Pollution Bulletin</i> , 2021, 163, 111960.	2.3	74
11	Eco-friendly magnetic biochar: An effective trap for nanoplastics of varying surface functionality and size in the aqueous environment. <i>Chemical Engineering Journal</i> , 2021, 418, 129405.	6.6	71
12	Biochar-facilitated remediation of nanoplastic contaminated water: Effect of pyrolysis temperature induced surface modifications. <i>Journal of Hazardous Materials</i> , 2021, 417, 126096.	6.5	71
13	A gold-nanoparticle-based fluorescence resonance energy transfer probe for multiplexed hybridization detection: accurate identification of bio-agents DNA. <i>Nanotechnology</i> , 2007, 18, 375504.	1.3	48
14	Retention of Latex Colloids on Calcite as a Function of Surface Roughness and Topography. <i>Langmuir</i> , 2010, 26, 4743-4752.	1.6	48
15	Metal sorption onto nanoscale plastic debris and trojan horse effects in <i>Daphnia magna</i> : Role of dissolved organic matter. <i>Water Research</i> , 2020, 186, 116410.	5.3	42
16	Interaction of metal oxide nanoparticles with microplastics: Impact of weathering under riverine conditions. <i>Water Research</i> , 2021, 189, 116622.	5.3	41
17	Deposition of Latex Colloids at Rough Mineral Surfaces: An Analogue Study Using Nanopatterned Surfaces. <i>Langmuir</i> , 2012, 28, 6606-6617.	1.6	40
18	Site-Specific Retention of Colloids at Rough Rock Surfaces. <i>Environmental Science & Technology</i> , 2012, 46, 9378-9387.	4.6	38

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19	Particle number-based trophic transfer of gold nanomaterials in an aquatic food chain. <i>Nature Communications</i> , 2021, 12, 899.	5.8	38
20	Metal oxide nanoparticles and polycyclic aromatic hydrocarbons alter nanoplasticâ€™s stability and toxicity to zebrafish. <i>Journal of Hazardous Materials</i> , 2021, 407, 124382.	6.5	36
21	The groundwater arsenic contamination in the Bengal Basin-A review in brief. <i>Chemosphere</i> , 2022, 299, 134369.	4.2	33
22	Influence of mineralogical and morphological properties on the cation exchange behavior of dioctahedral smectites. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2015, 481, 591-599.	2.3	28
23	The surface chemistry of sapphire-c: A literature review and a study on various factors influencing its IEP. <i>Advances in Colloid and Interface Science</i> , 2018, 251, 1-25.	7.0	25
24	A decade of exploring MXenes as aquatic cleaners: Covering a broad range of contaminants, current challenges and future trends. <i>Chemosphere</i> , 2021, 279, 130587.	4.2	25
25	Novel synthesis of a clay supported amorphous aluminum nanocomposite and its application in removal of hexavalent chromium from aqueous solutions. <i>RSC Advances</i> , 2019, 9, 11160-11169.	1.7	22
26	Miniaturized Sensor for Microbial Pathogens DNA and Chemical Toxins. <i>IEEE Sensors Journal</i> , 2008, 8, 693-700.	2.4	21
27	Impact of long-term storage of various redox-sensitive supported nanocomposites on their application in removal of dyes from wastewater: Mechanisms delineation through spectroscopic investigations. <i>Journal of Hazardous Materials</i> , 2021, 401, 123375.	6.5	20
28	Biocharâ€™nZVI nanocomposite: optimization of grain size and FeO loading, application and removal mechanism of anionic metal species from soft water, hard water and groundwater. <i>Clean Technologies and Environmental Policy</i> , 2020, 22, 1015-1024.	2.1	19
29	Effect of the irrigation water type and other environmental parameters on CeO ₂ nanopesticideâ€™clay colloid interactions. <i>Environmental Sciences: Processes and Impacts</i> , 2020, 22, 84-94.	1.7	18
30	Interaction between a nano-formulation of atrazine and rhizosphere bacterial communities: atrazine degradation and bacterial community alterations. <i>Environmental Science: Nano</i> , 2020, 7, 3372-3384.	2.2	18
31	New Features and Uncovered Benefits of Polycrystalline Magnetite as Reusable Catalyst in Reductive Chemical Conversion. <i>Journal of Physical Chemistry C</i> , 2017, 121, 25195-25205.	1.5	15
32	A Dose Metrics Perspective on the Association of Gold Nanomaterials with Algal Cells. <i>Environmental Science and Technology Letters</i> , 2019, 6, 732-738.	3.9	15
33	Sonochemical synthesis of nanospherical TiO ₂ within graphene oxide nanosheets and its application as a photocatalyst and a Schottky diode. <i>FlatChem</i> , 2020, 22, 100180.	2.8	14
34	Impact of gravity, collector surface roughness and fracture orientation on colloid retention kinetics in an artificial fracture. <i>Journal of Colloid and Interface Science</i> , 2016, 475, 171-183.	5.0	13
35	Deposition of mineral colloids on rough rock surfaces. <i>Numerische Mathematik</i> , 2012, 312, 885-906.	0.7	12
36	Engineered nanoselenium supplemented fish diet: toxicity comparison with ionic selenium and stability against particle dissolution, aggregation and release. <i>Environmental Science: Nano</i> , 2020, 7, 2325-2336.	2.2	12

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37	Heterogeneously Porous Multiadsorbent Clay-Biochar Surface to Support Redox-Sensitive Nanoparticles: Applications of Novel Clay-Biochar Nanoscale Zerovalent Iron Nanotrident (C-BC-nZVI) in Continuous Water Filtration. ACS ES&T Water, 2021, 1, 641-652.	2.3	11
38	Nanoplastics interaction with feldspar and weathering originated secondary minerals (kaolinite and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	3.9	10
39	Removal and recovery of toxic nanosized Cerium Oxide using eco-friendly Iron Oxide Nanoparticles. Frontiers of Environmental Science and Engineering, 2020, 14, 1.	3.3	9
40	Near infrared photo-induced DNA damage in the presence of copper-dppz complex: Evidence for the involvement of singlet oxygen. Chemical Physics Letters, 2007, 434, 127-132.	1.2	7
41	The carrier transport properties and photodegradation ability of low temperature synthesized phase pure rutile titanium oxide nanostructured materials. Materials Chemistry and Physics, 2019, 226, 362-370.	2.0	7
42	Removal of chromate ions from leachate-contaminated groundwater samples of Khan Chandpur, India, using chitin modified iron-enriched hydroxyapatite nanocomposite. Environmental Science and Pollution Research, 2021, 28, 41760-41771.	2.7	7
43	Study of the photocatalytic activity of Mn-doped ZnO nanocomposites depending on their morphology and structure with the variation of manganese concentration. Surfaces and Interfaces, 2021, 23, 100902.	1.5	7
44	The stochastic association of nanoparticles with algae at the cellular level: Effects of NOM, particle size and particle shape. Ecotoxicology and Environmental Safety, 2021, 218, 112280.	2.9	7
45	Crystal structure dependent photocatalytic degradation of manganese and titanium oxides composites. SN Applied Sciences, 2020, 2, 1.	1.5	5
46	Combined antioxidant capped and surface supported redox-sensitive nanoparticles for continuous elimination of multi-metallic species. Chemical Communications, 2021, 57, 7280-7283.	2.2	5
47	Effect of clay colloid - CuO nanoparticles interaction on retention of nanoparticles in different types of soils: role of clay fraction and environmental parameters. Environmental Research, 2022, 203, 111885.	3.7	4
48	Strain influence on the structural properties of nitrogen and fluorine codoped TiO2. Optik, 2020, 206, 164029.	1.4	4
49	Spectroscopic behavior of ZnS nanostructured materials. Chinese Journal of Physics, 2020, 63, 13-20.	2.0	3
50	Modelling the photocatalytic behaviour of p-n nickel-titanium oxide nanocomposite. Chemical Engineering Research and Design, 2020, 161, 82-94.	2.7	3
51	Gold Nanoparticle Based Surface Energy Transfer Probe for Accurate Identification of Biological Agents DNA. ACS Symposium Series, 2009, , 115-129.	0.5	2
52	Experimental approaches to the formation of early-diagenetic grain coats on quartz surfaces. Zeitschrift Der Deutschen Gesellschaft Fur Geowissenschaften, 2013, 164, 225-236.	0.1	2
53	Interaction of Polyoxometalates and Nanoparticles with Collector Surfaces-Focus on the Use of Streaming Current Measurements at Flat Surfaces. Colloids and Interfaces, 2020, 4, 39.	0.9	1
54	Continuous Filtration of Multimetal-Contaminated River Water and Groundwater Using Antioxidants Preserved Redox-Sensitive Nanocomposites: Ultrahigh Reactivity and Self-Sedimentation Possibility. ACS ES&T Water, 2022, 2, 1073-1086.	2.3	1

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55	Influence of natural soil colloidâ€™s stability on transport of copper-based nanoparticles in saturated porous media. Environmental Nanotechnology, Monitoring and Management, 2022, 17, 100633.	1.7	0
56	Nano Geochemistry. Nanomaterials, 2022, 12, 1039.	1.9	0