Jay Singh

List of Publications by Year
in descending order

75 papers	3,739 citations	101543 36 h-index	128289 60 g-index
75 all docs	75 docs citations	75 times ranked	4939 citing authors

#	Article	IF	Citations
1	Biomedical applications of carboxymethyl chitosans. Carbohydrate Polymers, 2013, 91, 452-466.	10.2	267
2	Recent advances in mycotoxins detection. Biosensors and Bioelectronics, 2016, 81, 532-545.	10.1	237
3	The implications of recent advances in carboxymethyl chitosan based targeted drug delivery and tissue engineering applications. Journal of Controlled Release, 2014, 186, 54-87.	9.9	207
4	Recent advances in carbon based nanosystems for cancer theranostics. Biomaterials Science, 2017, 5, 901-952.	5.4	172
5	Recent advances in graphene and its metal-oxide hybrid nanostructures for lithium-ion batteries. Nanoscale, 2015, 7, 4820-4868.	5.6	169
6	Preparation and characterization of self-assembled layer by layer NiCo2O4â€“reduced graphene oxide nanocomposite with improved electrocatalytic properties. Journal of Alloys and Compounds, 2014, 590, 266-276.	5.5	109
7	Nanostructured nickel oxide-chitosan film for application to cholesterol sensor. Applied Physics Letters, 2011, 98, .	3.3	102
8	Synthesis of superparamagnetic bare Fe3O4 nanostructures and core/shell (Fe3O4/alginate) nanocomposites. Carbohydrate Polymers, 2012, 89, 821-829.	10.2	96
9	SnO₂quantum dots decorated on RGO: a superior sensitive, selective and reproducible performance for a H₂and LPG sensor. Nanoscale, 2015, 7, 11971-11979.	5.6	92
10	Potentialities of bioinspired metal and metal oxide nanoparticles in biomedical sciences. RSC Advances, 2021, 11, 24722-24746.	3.6	88
11	Improved production of reducing sugars from rice straw using crude cellulase activated with Fe3O4/Alginate nanocomposite. Bioresource Technology, 2015, 183, 262-266.	9.6	86
12	A novel electrochemical piezoelectric label free immunosensor for aflatoxin B1 detection in groundnut. Food Control, 2015, 52, 60-70.	5.5	83
13	Efficient water soluble nanostructured ZnO grafted O-carboxymethyl chitosan/curcumin-nanocomposite for cancer therapy. Process Biochemistry, 2015, 50, 678-688.	3.7	81
14	Plant-soil-microbes: A tripartite interaction for nutrient acquisition and better plant growth for sustainable agricultural practices. Environmental Research, 2022, 214, 113821.	7.5	81
15	A novel ternary NiFe2O4/CuO/FeO-chitosan nanocomposite as a cholesterol biosensor. Process Biochemistry, 2012, 47, 2189-2198.	3.7	79
16	Preparation and properties of hybrid monodispersed magnetic Î±-Fe2O3 based chitosan nanocomposite film for industrial and biomedical applications. International Journal of Biological Macromolecules, 2011, 48, 170-176.	7.5	73
17	Ring like self assembled Ni nanoparticles based biosensor for food toxin detection. Applied Physics Letters, 2012, 100, .	3.3	65
18	Highly Efficient Bienzyme Functionalized Biocompatible Nanostructured Nickel Ferriteâ€“Chitosan Nanocomposite Platform for Biomedical Application. Journal of Physical Chemistry C, 2013, 117, 8491-8502.	3.1	65

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19	A highly efficient rare earth metal oxide nanorods based platform for aflatoxin detection. Journal of Materials Chemistry B, 2013, 1, 4493.	5.8	63
20	In situ grafted nanostructured ZnO/carboxymethyl cellulose nanocomposites for efficient delivery of curcumin to cancer. Journal of Polymer Research, 2014, 21, 1.	2.4	63
21	Bienzyme-Functionalized Monodispersed Biocompatible Cuprous Oxide/Chitosan Nanocomposite Platform for Biomedical Application. Journal of Physical Chemistry B, 2013, 117, 141-152.	2.6	60
22	Tunable electrochemistry and efficient antibacterial activity of plant-mediated copper oxide nanoparticles synthesized by Annona squamosa seed extract for agricultural utility. RSC Advances, 2021, 11, 18050-18060.	3.6	60
23	Effect of Nickelâ€“Cobaltite Nanoparticles on Production and Thermostability of Cellulases from Newly Isolated Thermotolerant Aspergillus fumigatus NS (Class: Eurotiomycetes). Applied Biochemistry and Biotechnology, 2014, 174, 1092-1103.	2.9	58
24	A dual enzyme functionalized nanostructured thulium oxide based interface for biomedical application. Nanoscale, 2014, 6, 1195-1208.	5.6	56
25	Preparation, circular dichroism induced helical conformation and optical property of chitosan acid salt complexes for biomedical applications. International Journal of Biological Macromolecules, 2009, 45, 384-392.	7.5	54
26	Preparation of sulfonated poly(etherâ€“etherâ€“ketone) functionalized ternary graphene/AuNPs/chitosan nanocomposite for efficient glucose biosensor. Process Biochemistry, 2013, 48, 1724-1735.	3.7	54
27	Label-free piezoelectric immunosensor decorated with gold nanoparticles: Kinetic analysis and biosensing application. Sensors and Actuators B: Chemical, 2016, 222, 804-814.	7.8	54
28	Investigation on magnetic properties of Î±-Fe2O3 nanoparticles synthesized under surfactant-free condition by hydrothermal process. Journal of Alloys and Compounds, 2010, 500, 206-210.	5.5	46
29	Voltage holding and self-discharge phenomenon in ZnO-Co3O4 core-shell heterostructure for binder-free symmetric supercapacitors. Chemical Engineering Journal, 2022, 427, 131895.	12.7	46
30	Nano-enabled wearable sensors for the Internet of Things (IoT). Materials Letters, 2021, 304, 130614.	2.6	45
31	Bismuth oxide nanorods based immunosensor for mycotoxin detection. Materials Science and Engineering C, 2017, 70, 564-571.	7.3	44
32	Controlled synthesis and magnetic properties of monodispersed ceria nanoparticles. AIP Advances, 2015, 5, .	1.3	43
33	Nanostructured SnO 2 encapsulated guar-gum hybrid nanocomposites for electrocatalytic determination of hydrazine. Materials Science and Engineering C, 2016, 58, 432-441.	7.3	43
34	Synthesis, magnetic and MÃ¶ssbauer spectroscopic studies of Cr doped lithium ferrite nanoparticles. Journal of Alloys and Compounds, 2014, 591, 174-180.	5.5	42
35	Bioinspired triangular ZnO nanoclusters synthesized by Argyreia nervosa nascent leaf extract for the efficient electrochemical determination of vitamin C. RSC Advances, 2021, 11, 25752-25763.	3.6	40
36	Influence of crystal size on the electronâ€“phonon coupling in ZnO nanocrystals investigated by Raman spectroscopy. Vibrational Spectroscopy, 2014, 72, 90-96.	2.2	38

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37	Internet of things (IoT) in nano-integrated wearable biosensor devices for healthcare applications. Biosensors and Bioelectronics: X, 2022, 11, 100153.	1.7	38
38	Electrochemical piezoelectric reusable immunosensor for aflatoxin B1 detection. Biochemical Engineering Journal, 2015, 103, 103-113.	3.6	37
39	Hexagonal Ceria Located at the Interface of Anatase/Rutile TiO₂ Superstructure Optimized for High Activity under Combined UV and Visible-Light Irradiation. Journal of Physical Chemistry C, 2015, 119, 23899-23909.	3.1	36
40	Preparation, Antibacterial and Physicochemical Behavior of Chitosan/Ofloxacin Complexes. International Journal of Polymeric Materials and Polymeric Biomaterials, 2010, 59, 793-807.	3.4	35
41	Biocompatible self-assembled monolayer platform based on (3-glycidoxypropyl)trimethoxysilane for total cholesterol estimation. Analytical Methods, 2011, 3, 2237.	2.7	33
42	Bi-enzyme functionalized electro-chemically reduced transparent graphene oxide platform for triglyceride detection. Biomaterials Science, 2019, 7, 1598-1606.	5.4	32
43	Preparation, antibacterial activity, and electrocatalytic detection of hydrazine based on biogenic CuFeO₂/PANI nanocomposites synthesized using Aloe barbadensis miller. New Journal of Chemistry, 2022, 46, 8805-8816.	2.8	30
44	Electro-optical and magnetic properties of monodispersed colloidal Cu2O nanoparticles. Journal of Alloys and Compounds, 2013, 555, 123-130.	5.5	29
45	Melt-quenched vanadium pentoxide-stabilized chitosan nanohybrids for efficient hydrazine detection. Materials Advances, 2021, 2, 6665-6675.	5.4	28
46	Efficient electro-optical characteristics of bioinspired iron oxide nanoparticles synthesized by Terminalia chebula dried seed extract. Materials Letters, 2022, 307, 131053.	2.6	28
47	Smart and emerging nanomaterials-based biosensor for SARS-CoV-2 detection. Materials Letters, 2022, 307, 131092.	2.6	28
48	Consequence of pH variation on the dielectric properties of Cr-doped lithium ferrite nanoparticles synthesized by the solâ€“gel method. Journal of Alloys and Compounds, 2015, 645, 171-177.	5.5	25
49	Potentialities of core@shell nanomaterials for biosensor technologies. Materials Letters, 2022, 306, 130912.	2.6	25
50	Potentialities of nanomaterials for the management and treatment of metabolic syndrome: A new insight. Materials Today Advances, 2022, 13, 100198.	5.2	25
51	Bioinspired quantum dots for cancer therapy: A mini-review. Materials Letters, 2022, 313, 131742.	2.6	22
52	Recent advancements of biogenic iron nanoparticles in cancer theranostics. Materials Letters, 2022, 313, 131769.	2.6	21
53	Tin Oxide Quantum Dot Based DNA Sensor for Pathogen Detection. Journal of Nanoscience and Nanotechnology, 2013, 13, 1671-1678.	0.9	20
54	Quantum dots based platform for application to fish freshness biosensor. Sensors and Actuators B: Chemical, 2013, 177, 627-633.	7.8	19

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55	A highly efficient nanostructured Au@La2O3 based platform for dopamine detection. Materials Letters, 2022, 308, 131231.	2.6	18
56	Nanostructured nickel oxide film for application to fish freshness biosensor. Applied Physics Letters, 2012, 101, .	3.3	16
57	In-situ synthesis of magnetic (NiFe2O4/CuO/FeO) nanocomposites. Journal of Solid State Chemistry, 2010, 183, 2669-2674.	2.9	15
58	Antibacterial and Physiochemical Behavior of Prepared Chitosan/pyridine-3,5-di-carboxylic Acid Complex for Biomedical Applications. Journal of Macromolecular Science - Pure and Applied Chemistry, 2011, 48, 246-253.	2.2	15
59	Optical and electro-catalytic studies of nanostructured thulium oxide for vitamin C detection. Journal of Alloys and Compounds, 2013, 578, 405-412.	5.5	15
60	Trends of bioderived carbonaceous materials for futuristic biomedical applications. Materials Letters, 2022, 311, 131606.	2.6	15
61	Autonomous self-optimizing defects by refining energy levels through hydrogenation in CeO_{2â€“x} polymorphism: a walking mobility of oxygen vacancy with enhanced adsorption capabilities and photocatalytic stability. New Journal of Chemistry, 2022, 46, 5869-5880.	2.8	15
62	Novel conducting lithium ferrite/chitosan nanocomposite: Synthesis, characterization, magnetic and dielectric properties. Current Applied Physics, 2014, 14, 980-990.	2.4	10
63	Phase modulation kinetics in TiO2 by manipulating pH: A dynamic of photoactivity at different combination of phase and pH. Journal of Alloys and Compounds, 2022, 904, 164019.	5.5	8
64	Design and synergistic effect of nano-sized epoxy-NiCo₂O₄nanocomposites for anticorrosion applications. RSC Advances, 2022, 12, 14888-14901.	3.6	8
65	Synthesis, Growth Mechanism and Characterization of Single Crystalline Î±-Fe₂O₃ Spherical Nanoparticles. Journal of Nanoscience and Nanotechnology, 2012, 12, 6248-6257.	0.9	7
66	Carboxymethyl cellulose stabilized lead sulï¬de nanocrystals: Synthesis, characterization and catalytic applications. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 620, 126572.	4.7	6
67	Rapid Electrochemical Quantification for In Vitro Release Trait of Ophthalmic Drug Loaded within Mucoadhesive Metal Organic Framework (MOF). ChemistrySelect, 2021, 6, 3006-3012.	1.5	5
68	Recent Progress in Antimicrobial Applications of Nanostructured Materials. Journal of Nanopharmaceutics and Drug Delivery, 2013, 1, 4-17.	0.3	4
69	Optical properties of carbon nanodots synthesized by laser induced fragmentation of graphite powder suspended in water. Materials Science in Semiconductor Processing, 2014, 27, 150-153.	4.0	3
70	Biogenic Synthesis Of Copper Oxide Nanoparticles: Characterization And Biosensing Application. ECS Transactions, 2022, 107, 20127-20133.	0.5	3
71	Nanomaterials for Energy Storage Applications. Clean Energy Production Technologies, 2021, , 135-156.	0.5	1
72	Bioderived Magnetic Iron Oxide Nanoparticles from Leaf Extract of Argyreia Nervosa for Electrochemical Biosensing of Pesticide. ECS Transactions, 2022, 107, 16343-16349.	0.5	1

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73	Preparation and Characterization of Nanohybrid La₂O₃-K Complexes for Electrochemical Study. ECS Transactions, 2022, 107, 15771-15776.	0.5	1
74	Natural Resources as Flame Retardants for Polyurethanes. ACS Symposium Series, 0, , 1-11.	0.5	1
75	Phytosynthesized Magnetic Iron Oxide Nanoparticle from Terminalia Chebula (Harra) Seed Extract and its Sensing Application. ECS Transactions, 2022, 107, 20041-20048.	0.5	0