

# Sanjay Singh

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5390090/publications.pdf>

Version: 2024-02-01

94  
papers

6,683  
citations

76294

40  
h-index

60583

81  
g-index

96  
all docs

96  
docs citations

96  
times ranked

8282  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanoceria exhibit redox state-dependent catalase mimetic activity. <i>Chemical Communications</i> , 2010, 46, 2736.	2.2	912
2	Redox-active radical scavenging nanomaterials. <i>Chemical Society Reviews</i> , 2010, 39, 4422.	18.7	458
3	PEGylated Nanoceria as Radical Scavenger with Tunable Redox Chemistry. <i>Journal of the American Chemical Society</i> , 2009, 131, 14144-14145.	6.6	302
4	A phosphate-dependent shift in redox state of cerium oxide nanoparticles and its effects on catalytic properties. <i>Biomaterials</i> , 2011, 32, 6745-6753.	5.7	285
5	Bio-distribution and <i>in vivo</i> antioxidant effects of cerium oxide nanoparticles in mice. <i>Environmental Toxicology</i> , 2013, 28, 107-118.	2.1	249
6	The induction of angiogenesis by cerium oxide nanoparticles through the modulation of oxygen in intracellular environments. <i>Biomaterials</i> , 2012, 33, 7746-7755.	5.7	247
7	Nanostructured silver fabric as a free-standing NanoZyme for colorimetric detection of glucose in urine. <i>Biosensors and Bioelectronics</i> , 2018, 110, 8-15.	5.3	221
8	Recent advances and future prospects of iron oxide nanoparticles in biomedicine and diagnostics. <i>3 Biotech</i> , 2018, 8, 279.	1.1	221
9	Surface functionalization of quantum dots for biological applications. <i>Advances in Colloid and Interface Science</i> , 2015, 215, 28-45.	7.0	199
10	Nanomaterials Exhibiting Enzyme-Like Properties (Nanozymes): Current Advances and Future Perspectives. <i>Frontiers in Chemistry</i> , 2019, 7, 46.	1.8	182
11	Oxygenated Functional Group Density on Graphene Oxide: Its Effect on Cell Toxicity. <i>Particle and Particle Systems Characterization</i> , 2013, 30, 148-157.	1.2	173
12	Unveiling the mechanism of uptake and sub-cellular distribution of cerium oxide nanoparticles. <i>Molecular BioSystems</i> , 2010, 6, 1813.	2.9	144
13	Visible-Light-Triggered Reactive-Oxygen-Species-Mediated Antibacterial Activity of Peroxidase-Mimic CuO Nanorods. <i>ACS Applied Nano Materials</i> , 2018, 1, 1694-1704.	2.4	144
14	ATP-mediated intrinsic peroxidase-like activity of Fe <sub>3</sub> O <sub>4</sub> -based nanozyme: One step detection of blood glucose at physiological pH. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 153, 52-60.	2.5	142
15	Antioxidative study of Cerium Oxide nanoparticle functionalised PCL-Gelatin electrospun fibers for wound healing application. <i>Bioactive Materials</i> , 2018, 3, 201-211.	8.6	142
16	A direct method for the preparation of glycolipid-metal nanoparticle conjugates: sophorolipids as reducing and capping agents for the synthesis of water re-dispersible silver nanoparticles and their antibacterial activity. <i>New Journal of Chemistry</i> , 2009, 33, 646-652.	1.4	113
17	Cerium oxide based nanozymes: Redox phenomenon at biointerfaces. <i>Biointerphases</i> , 2016, 11, 04B202.	0.6	110
18	TiO <sub>2</sub> nanoparticles induce DNA double strand breaks and cell cycle arrest in human alveolar cells. <i>Environmental and Molecular Mutagenesis</i> , 2015, 56, 204-217.	0.9	105

#	ARTICLE	IF	CITATIONS
19	Gold core/ceria shell-based redox active nanozyme mimicking the biological multienzyme complex phenomenon. <i>Journal of Colloid and Interface Science</i> , 2018, 513, 831-842.	5.0	105
20	ATP-enhanced peroxidase-like activity of gold nanoparticles. <i>Journal of Colloid and Interface Science</i> , 2015, 456, 100-107.	5.0	101
21	Effective heart disease prediction system using data mining techniques. <i>International Journal of Nanomedicine</i> , 2018, Volume 13, 121-124.	3.3	92
22	Realizing the Clinical Potential of Cancer Nanotechnology by Minimizing Toxicologic and Targeted Delivery Concerns. <i>Cancer Research</i> , 2012, 72, 5663-5668.	0.4	90
23	Dextran-Coated Cerium Oxide Nanoparticles: A Computed Tomography Contrast Agent for Imaging the Gastrointestinal Tract and Inflammatory Bowel Disease. <i>ACS Nano</i> , 2020, 14, 10187-10197.	7.3	89
24	Cytotoxic and genotoxic assessment of glycolipid-reduced and -capped gold and silver nanoparticles. <i>New Journal of Chemistry</i> , 2010, 34, 294-301.	1.4	87
25	Role of phosphate on stability and catalase mimetic activity of cerium oxide nanoparticles. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 132, 78-84.	2.5	86
26	Polymer-Coated Cerium Oxide Nanoparticles as Oxidoreductase-like Catalysts. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 42056-42066.	4.0	83
27	Multiutility Sphorolipids as Nanoparticle Capping Agents: Synthesis of Stable and Water Dispersible Co Nanoparticles. <i>Langmuir</i> , 2007, 23, 11409-11412.	1.6	82
28	Redox-Sensitive Cerium Oxide Nanoparticles Protect Human Keratinocytes from Oxidative Stress Induced by Glutathione Depletion. <i>Langmuir</i> , 2016, 32, 12202-12211.	1.6	81
29	Redox Active Cerium Oxide Nanoparticles: Current Status and Burning Issues. <i>Small</i> , 2021, 17, e2102342.	5.2	79
30	Magnetic Nanoparticles: Current Trends and Future Aspects in Diagnostics and Nanomedicine. <i>Current Drug Metabolism</i> , 2019, 20, 457-472.	0.7	78
31	Exposure to Silver Nanoparticles Inhibits Selenoprotein Synthesis and the Activity of Thioredoxin Reductase. <i>Environmental Health Perspectives</i> , 2012, 120, 56-61.	2.8	73
32	Redox-dependent catalase mimetic cerium oxide-based nanozyme protect human hepatic cells from 3-AT induced acatalasemia. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 175, 625-635.	2.5	72
33	Nanoparticle-Based Celecoxib and Plumbagin for the Synergistic Treatment of Melanoma. <i>Molecular Cancer Therapeutics</i> , 2017, 16, 440-452.	1.9	59
34	Oxidative stress-mediated genotoxic effect of zinc oxide nanoparticles on <i>Deinococcus radiodurans</i> . <i>3 Biotech</i> , 2020, 10, 66.	1.1	58
35	Bacterial synthesis of silicon/silica nanocomposites. <i>Journal of Materials Chemistry</i> , 2008, 18, 2601.	6.7	57
36	Tuning the ATP-triggered pro-oxidant activity of iron oxide-based nanozyme towards an efficient antibacterial strategy. <i>Journal of Colloid and Interface Science</i> , 2020, 567, 154-164.	5.0	50

#	ARTICLE	IF	CITATIONS
37	A facile synthesis of PLGA encapsulated cerium oxide nanoparticles: release kinetics and biological activity. <i>Nanoscale</i> , 2012, 4, 2597.	2.8	48
38	Ligand-mediated reversal of the oxidation state dependent ROS scavenging and enzyme mimicking activity of ceria nanoparticles. <i>Chemical Communications</i> , 2018, 54, 13973-13976.	2.2	48
39	Effect of halogen addition to monolayer protected gold nanoparticles. <i>Journal of Materials Chemistry</i> , 2007, 17, 1614.	6.7	46
40	Nanotechnology in Disease Diagnostic Techniques. <i>Current Drug Metabolism</i> , 2015, 16, 645-661.	0.7	45
41	Liposome encapsulation of doxorubicin and celecoxib in combination inhibits progression of human skin cancer cells. <i>International Journal of Nanomedicine</i> , 2018, Volume 13, 11-13.	3.3	44
42	Bovine serum albumin decorated gold nanoclusters: A fluorescence-based nanoprobe for detection of intracellular hydrogen peroxide. <i>Sensors and Actuators B: Chemical</i> , 2021, 327, 128886.	4.0	43
43	Novel synthesis of polyoxyethylene cholesteryl ether coated Fe-Pt nanoalloys: A multifunctional and cytocompatible bimetallic alloy exhibiting intrinsic chemical catalysis and biological enzyme-like activities. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 553, 50-57.	2.3	32
44	Glucose decorated gold nanoclusters: A membrane potential independent fluorescence probe for rapid identification of cancer cells expressing Glut receptors. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 155, 25-34.	2.5	31
45	Cellular internalization and antioxidant activity of cerium oxide nanoparticles in human monocytic leukemia cells. <i>International Journal of Nanomedicine</i> , 2018, Volume 13, 39-41.	3.3	29
46	Site-specific delivery of a natural chemotherapeutic agent to human lung cancer cells using biotinylated 2D rGO nanocarriers. <i>Materials Science and Engineering C</i> , 2020, 112, 110884.	3.8	29
47	Unveiling the role of ATP in amplification of intrinsic peroxidase-like activity of gold nanoparticles. <i>3 Biotech</i> , 2018, 8, 67.	1.1	26
48	Serotonin- $\sigma$ -Stearic Acid Bioconjugate-Coated Completely Biodegradable Mn <sub>3</sub> O <sub>4</sub> Nanocuboids for Hepatocellular Carcinoma Targeting. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 10170-10182.	4.0	26
49	Polyoxometalate-Mediated Vacancy-Engineered Cerium Oxide Nanoparticles Exhibiting Controlled Biological Enzyme-Mimicking Activities. <i>Inorganic Chemistry</i> , 2021, 60, 7475-7489.	1.9	26
50	Calcium carbonate nano- and microparticles: synthesis methods and biological applications. <i>3 Biotech</i> , 2021, 11, 457.	1.1	26
51	Multifunctional antioxidant nanoliposome-mediated delivery of PTEN plasmids restore the expression of tumor suppressor protein and induce apoptosis in prostate cancer cells. <i>Journal of Biomedical Materials Research - Part A</i> , 2018, 106, 3152-3164.	2.1	25
52	Nanomaterials as Non-viral siRNA Delivery Agents for Cancer Therapy. <i>Biolmpacts</i> , 2013, 3, 53-65.	0.7	23
53	Biomimetic polycaprolactone-chitosan nanofibrous substrate influenced cell cycle and ECM secretion affect cellular uptake of nanoclusters. <i>Bioactive Materials</i> , 2019, 4, 79-86.	8.6	21
54	Biological Oxidase Enzyme Mimetic Cu-Pt Nanoalloys: A Multifunctional Nanozyme for Colorimetric Detection of Ascorbic Acid and Identification of Mammalian Cells. <i>ChemistrySelect</i> , 2019, 4, 6537-6546.	0.7	21

#	ARTICLE	IF	CITATIONS
55	Novel corona virus (COVID-19) pandemic: current status and possible strategies for detection and treatment of the disease. Expert Review of Anti-Infective Therapy, 2022, 20, 1275-1298.	2.0	21
56	Nearly Complete Oxidation of Au <sup>0</sup> in Hydrophobized Nanoparticles to Au <sup>3+</sup> Ions by <i>N</i> -Bromosuccinimide. Journal of Physical Chemistry C, 2007, 111, 14348-14352.	1.5	20
57	Pharmacological Drug Delivery Strategies for Improved Therapeutic Effects: Recent Advances. Current Pharmaceutical Design, 2016, 22, 1506-1520.	0.9	20
58	Fluorescent gold nanoclusters for efficient cancer cell targeting. International Journal of Nanomedicine, 2018, Volume 13, 15-17.	3.3	19
59	Unveiling the effect of 11-MUA coating on biocompatibility and catalytic activity of a gold-core cerium oxide-shell-based nanozyme. RSC Advances, 2019, 9, 33195-33206.	1.7	17
60	Liposomal formulation of vitamin A for the potential treatment of osteoporosis. International Journal of Nanomedicine, 2018, Volume 13, 51-53.	3.3	15
61	Curcumin Ag nanoconjugates for improved therapeutic effects in cancer. International Journal of Nanomedicine, 2018, Volume 13, 75-77.	3.3	15
62	Investigating the role of ATP towards amplified peroxidase activity of Iron oxide nanoparticles in different biologically relevant buffers. Applied Surface Science, 2019, 492, 337-348.	3.1	15
63	Iron oxide nanoparticle encapsulated; folic acid tethered dual metal organic framework-based nanocomposite for MRI and selective targeting of folate receptor expressing breast cancer cells. Microporous and Mesoporous Materials, 2022, 340, 112008.	2.2	15
64	Effect of gold nanoparticle size and surface coating on human red blood cells. Bioinspired, Biomimetic and Nanobiomaterials, 2016, 5, 121-131.	0.7	13
65	Phosphate-dependent modulation of antibacterial strategy: a redox state-controlled toxicity of cerium oxide nanoparticles. Bulletin of Materials Science, 2017, 40, 1231-1240.	0.8	13
66	SOD mimetic cerium oxide nanorods protect human hepatocytes from oxidative stress. Emergent Materials, 2021, 4, 1305-1317.	3.2	13
67	Co-delivery of AKT3 siRNA and PTEN Plasmid by Antioxidant Nanoliposomes for Enhanced Antiproliferation of Prostate Cancer Cells. ACS Applied Bio Materials, 2020, 3, 3999-4011.	2.3	12
68	Bacterial Synthesis of Photocatalytically Active and Biocompatible TiO <sub>2</sub> and ZnO Nanoparticles. International Journal of Green Nanotechnology: Physics and Chemistry, 2010, 2, P80-P99.	1.5	11
69	Phosphotungstate-sandwiched between cerium oxide and gold nanoparticles exhibit enhanced catalytic reduction of 4-nitrophenol and peroxidase enzyme-like activity. Colloids and Surfaces B: Biointerfaces, 2021, 198, 111478.	2.5	11
70	BSA-Decorated Magnesium Nanoparticles for Scavenging Hydrogen Peroxide from Human Hepatic Cells. ACS Applied Nano Materials, 2020, 3, 3355-3370.	2.4	8
71	A novel nanoliposomal formulation of the FDA approved drug Halofantrine causes cell death of Leishmania donovani promastigotes in vitro. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 582, 123852.	2.3	7
72	Nanotechnology in Disease Diagnostic Techniques. Current Drug Metabolism, 2015, 16, 645-61.	0.7	7

#	ARTICLE	IF	CITATIONS
73	Fluorescent magnesium nanocomplex in a protein scaffold for cell nuclei imaging applications. RSC Advances, 2015, 5, 94236-94240.	1.7	6
74	Cerium Oxide-Based Nanozymes in Biology and Medicine. Springer Proceedings in Physics, 2019, , 193-213.	0.1	6
75	Tuning the enzyme-like activities of cerium oxide nanoparticles using a triethyl phosphite ligand. Biomaterials Science, 2022, 10, 3245-3258.	2.6	6
76	BSA coated gold nanoparticles exhibit size dependent interaction with lung cancer (A549) cells. Molecular Cytogenetics, 2014, 7, P83.	0.4	5
77	Rational design-aided discovery of novel 1,2,4-oxadiazole derivatives as potential EGFR inhibitors. Bioorganic Chemistry, 2021, 114, 105124.	2.0	5
78	CuO Nanoparticles as Copper-Ion Reservoirs for Elesclomol-Mediated Intracellular Oxidative Stress: Implications for Anticancer Therapies. ACS Applied Nano Materials, 2022, 5, 1607-1620.	2.4	5
79	Cultivating human tissues and organs over lab-on-a-chip models: Recent progress and applications. Progress in Molecular Biology and Translational Science, 2022, 187, 205-240.	0.9	5
80	Emerging Trends in Nanotechnology: Nanozymes, Imaging Probes and Biosensors and Nanocarriers. Current Drug Metabolism, 2019, 20, 414-415.	0.7	4
81	Catalytically active cerium oxide nanoparticles protect mammalian cells from endogenous reactive oxygen species. Materials Today: Proceedings, 2019, 10, 25-31.	0.9	4
82	Enhanced detection using stable isotope enriched <sup>65</sup> Cu doped ferrite nanoparticles for tracing studies. Journal of Alloys and Compounds, 2020, 822, 153502.	2.8	4
83	Nanomanipulation of Consumer Goods: Effects on Human Health and Environment. , 2019, , 221-254.		3
84	Standard biological assays to estimate nanoparticle toxicity and biodistribution. , 2020, , 71-104.		3
85	Nanomaterials-Based Next Generation Synthetic Enzymes. , 2019, , 37-58.		2
86	Transformation in band energetics of CuO nanoparticles as a function of solubility and its impact on cellular response. NanoImpact, 2021, 22, 100324.	2.4	2
87	Nanoparticles Catalyzing Enzymatic Reactions: Recent Developments and Future Prospects. , 2021, , 51-80.		2
88	Identification of 1,2,4-Oxadiazoles-Based Novel EGFR Inhibitors: Molecular Dynamics Simulation-Guided Identification and in vitro ADME Studies. OncoTargets and Therapy, 2022, Volume 15, 479-495.	1.0	2
89	Development of liposome-based antioxidant nanoconstruct for efficient delivery of PTEN plasmid. Materials Today: Proceedings, 2019, 10, 60-65.	0.9	1
90	Metal-Based Nanozyme: Strategies to Modulate the Catalytic Activity to Realize Environment Application. Environmental Chemistry for A Sustainable World, 2021, , 177-212.	0.3	1

#	ARTICLE	IF	CITATIONS
91	Surface modification of metal oxide nanoparticles to realize biological applications. , 2023, , 450-477.		1
92	Concluding Remarks and Future of Nanomedicines. , 2021, , 235-240.		0
93	Gold Nanoparticle-Based Methods for Detection of Oxidative Stress Biomarkers. , 2017, , 65-95.		0
94	Nanotechnology in Disease Diagnostic Techniques. Current Drug Metabolism, 2015, , .	0.7	0