

Ashutosh Kumar

List of Publications by Year in descending order

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Version: 2024-02-01

121
papers

9,402
citations

57681

46
h-index

43601

95
g-index

123
all docs

123
docs citations

123
times ranked

13377
citing authors

#	ARTICLE	IF	CITATIONS
1	Development of food-grade antimicrobials of fenugreek oil nanoemulsion's bioactivity and toxicity analysis. <i>Environmental Science and Pollution Research</i> , 2023, 30, 24907-24918.	2.7	8
2	Fate and potential hazards of nanoparticles in the environment. , 2022, , 581-602.		0
3	A critical review on the role of abiotic factors on the transformation, environmental identity and toxicity of engineered nanomaterials in aquatic environment. <i>Environmental Pollution</i> , 2022, 296, 118726.	3.7	22
4	MiR-206 conjugated gold nanoparticle based targeted therapy in breast cancer cells. <i>Scientific Reports</i> , 2022, 12, 4713.	1.6	17
5	Fabrication of methotrexate-loaded gold nanoconjugates and its enhanced anticancer activity in breast cancer. <i>3 Biotech</i> , 2021, 11, 175.	1.1	4
6	Clinically comparable impedimetric immunosensor for serum alkaline phosphatase detection based on electrochemically engineered Au-nano-Dendroids and graphene oxide nanocomposite. <i>Biosensors and Bioelectronics</i> , 2020, 148, 111815.	5.3	70
7	Design and Development of Ultrafast Sinapic Acid Sensor Based on Electrochemically Nanotuned Gold Nanoparticles and Solvothermally Reduced Graphene Oxide. <i>Electroanalysis</i> , 2020, 32, 59-69.	1.5	38
8	Combination of humic acid and clay reduce the ecotoxic effect of TiO ₂ NPs: A combined physico-chemical and genetic study using zebrafish embryo. <i>Science of the Total Environment</i> , 2020, 698, 134133.	3.9	24
9	Novel Sensing Assembly Comprising Engineered Gold Dendrites and MWCNT@AuNPs Nanohybrid for Acetaminophen Detection in Human Urine. <i>Electroanalysis</i> , 2020, 32, 561-570.	1.5	34
10	In vitro methods to assess the cellular toxicity of nanoparticles. , 2020, , 21-40.		3
11	Introduction to Nanofood. <i>Food Engineering Series</i> , 2020, , 1-23.	0.3	6
12	Nanomaterial Functionalization Strategies in Bio-Interface Development for Modern Diagnostic Devices. , 2020, , 195-214.		9
13	Impact of humic acid on the fate and toxicity of titanium dioxide nanoparticles in <i>Tetrahymena pyriformis</i> and zebrafish embryos. <i>Nanoscale Advances</i> , 2019, 1, 219-227.	2.2	16
14	Gold@Chitosan Bimetallic Nanoparticles Impregnated Reduced Graphene Oxide Based Nanosensor for Label-free Detection of Biomarker Related to Non-alcoholic Fatty Liver Disease. <i>Electroanalysis</i> , 2019, 31, 2417-2428.	1.5	34
15	ZnO nanoparticles-associated mitochondrial stress-induced apoptosis and G2/M arrest in HaCaT cells: a mechanistic approach. <i>Mutagenesis</i> , 2019, 34, 265-277.	1.0	17
16	Sputtering enhanced peroxidase like activity of a dendritic nanochip for amperometric determination of hydrogen peroxide in blood samples. <i>Mikrochimica Acta</i> , 2019, 186, 658.	2.5	45
17	Montmorillonite clay and humic acid modulate the behavior of copper oxide nanoparticles in aqueous environment and induces developmental defects in zebrafish embryo. <i>Environmental Pollution</i> , 2019, 255, 113313.	3.7	33
18	Red blood cells as an efficient in vitro model for evaluating the efficacy of metallic nanoparticles. <i>3 Biotech</i> , 2019, 9, 279.	1.1	42

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19	Engineered Nanomaterial Assisted Signal Amplification Strategies for Enhancing Analytical Performance of Electrochemical Biosensors. <i>Electroanalysis</i> , 2019, 31, 1615-1629.	1.5	102
20	The Comet Assay: Assessment of In Vitro and In Vivo DNA Damage. <i>Methods in Molecular Biology</i> , 2019, 2031, 237-257.	0.4	18
21	CHAPTER 3. Factors Affecting a Nanoparticle's Protein Corona Formation. <i>Issues in Toxicology</i> , 2019, , 61-79.	0.2	2
22	Nanotherapeutics for the Treatment of Cancer and Arthritis. <i>Current Drug Metabolism</i> , 2019, 20, 430-445.	0.7	10
23	ZnO nanoparticles dissolution, penetration and toxicity in human epidermal cells. Influence of pH. <i>Environmental Chemistry Letters</i> , 2018, 16, 1129-1135.	8.3	27
24	Chitosan: An undisputed bio-fabrication material for tissue engineering and bio-sensing applications. <i>International Journal of Biological Macromolecules</i> , 2018, 110, 110-123.	3.6	149
25	In Silico Approaches for Predictive Toxicology. , 2018, , 91-109.		19
26	Formulation of vitamin D encapsulated cinnamon oil nanoemulsion: Its potential anti-cancerous activity in human alveolar carcinoma cells. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 166, 349-357.	2.5	51
27	Shifting paradigm of cancer diagnoses in clinically relevant samples based on miniaturized electrochemical nanobiosensors and microfluidic devices. <i>Biosensors and Bioelectronics</i> , 2018, 100, 411-428.	5.3	108
28	Detection of Mutation in Prokaryotic Cells. , 2018, , 35-48.		1
29	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
30	Synthesis of biocompatible iron oxide nanoparticles as a drug delivery vehicle. <i>International Journal of Nanomedicine</i> , 2018, Volume 13, 79-82.	3.3	34
31	Titanium dioxide nanoparticle–protein interaction explained by docking approach. <i>International Journal of Nanomedicine</i> , 2018, Volume 13, 47-50.	3.3	22
32	Design of commercially comparable nanotherapeutic agent against human disease-causing parasite, Leishmania. <i>Scientific Reports</i> , 2018, 8, 8814.	1.6	34
33	A Novel Approach to Evaluate Titanium Dioxide Nanoparticle"Protein Interaction Through Docking: An Insight into Mechanism of Action. <i>Proceedings of the National Academy of Sciences India Section B - Biological Sciences</i> , 2017, 87, 937-943.	0.4	38
34	Laboratory Scale Microbial Food Chain To Study Bioaccumulation, Biomagnification, and Ecotoxicity of Cadmium Telluride Quantum Dots. <i>Environmental Science & Technology</i> , 2017, 51, 1695-1706.	4.6	37
35	Heteroagglomeration of zinc oxide nanoparticles with clay mineral modulates the bioavailability and toxicity of nanoparticle in <i>Tetrahymena pyriformis</i> . <i>Journal of Colloid and Interface Science</i> , 2017, 495, 9-18.	5.0	36
36	Zinc oxide nanoparticle induced age dependent immunotoxicity in BALB/c mice. <i>Toxicology Research</i> , 2017, 6, 342-352.	0.9	20

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37	Monitoring characteristics and genotoxic effects of engineered nanoparticleâ€œprotein corona. <i>Mutagenesis</i> , 2017, 32, 479-490.	1.0	12
38	Impact of Nanomaterials on the Aquatic Food Chain. <i>Sustainable Agriculture Reviews</i> , 2017, , 309-333.	0.6	6
39	Chapter 1. Nanotoxicology: Challenges for Biologists. <i>Issues in Toxicology</i> , 2017, , 1-16.	0.2	4
40	Chapter 4. Protocols for In vitro and In vivo Toxicity Assessment of Engineered Nanoparticles. <i>Issues in Toxicology</i> , 2017, , 94-132.	0.2	4
41	Bovine serum albumin interacts with silver nanoparticles with a â€œside-onâ€œ or â€œend onâ€œ conformation. <i>Chemico-Biological Interactions</i> , 2016, 253, 100-111.	1.7	63
42	Cell cycle dependent cellular uptake of zinc oxide nanoparticles in human epidermal cells. <i>Mutagenesis</i> , 2016, 31, 481-490.	1.0	67
43	Microwave-irradiation-assisted hybrid chemical approach for titanium dioxide nanoparticle synthesis: microbial and cytotoxicological evaluation. <i>Environmental Science and Pollution Research</i> , 2016, 23, 12287-12302.	2.7	44
44	Nanoagriculture and Water Quality Management. <i>Sustainable Agriculture Reviews</i> , 2016, , 1-42.	0.6	16
45	Montmorillonite clay alters toxicity of silver nanoparticles in zebrafish (<i>Danio rerio</i>) eleutheroembryo. <i>Chemosphere</i> , 2016, 163, 242-251.	4.2	26
46	Effect of gold nanoparticle size and surface coating on human red blood cells. <i>Bioinspired, Biomimetic and Nanobiomaterials</i> , 2016, 5, 121-131.	0.7	13
47	Assessment of agglomeration, co-sedimentation and trophic transfer of titanium dioxide nanoparticles in a laboratory-scale predator-prey model system. <i>Scientific Reports</i> , 2016, 6, 31422.	1.6	26
48	Natural water as the test medium for Ag and CuO nanoparticle hazard evaluation: An interlaboratory case study. <i>Environmental Pollution</i> , 2016, 216, 689-699.	3.7	27
49	Fabrication of Food Grade Vitamin E Nanoemulsion by Low Energy Approach, Characterization and Its Application. <i>International Journal of Food Properties</i> , 2016, 19, 700-708.	1.3	138
50	Thermal co-reduction approach to vary size of silver nanoparticle: its microbial and cellular toxicology. <i>Environmental Science and Pollution Research</i> , 2016, 23, 4149-4163.	2.7	73
51	The Comet Assay: A Versatile Tool for Assessing DNA Damage. <i>Issues in Toxicology</i> , 2016, , 1-64.	0.2	4
52	Chapter 8. Detection of DNA Damage in <i>Drosophila</i> . <i>Issues in Toxicology</i> , 2016, , 177-192.	0.2	0
53	Chromium oxide nanoparticleâ€œinduced genotoxicity and p53â€œdependent apoptosis in human lung alveolar cells. <i>Journal of Applied Toxicology</i> , 2015, 35, 1179-1188.	1.4	24
54	Nanotechnology in agro-food: From field to plate. <i>Food Research International</i> , 2015, 69, 381-400.	2.9	325

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55	Effect of graphene oxide on the conformational transitions of amyloid beta peptide: A molecular dynamics simulation study. <i>Journal of Molecular Graphics and Modelling</i> , 2015, 61, 175-185.	1.3	72
56	ZnO nanoparticles induced inflammatory response and genotoxicity in human blood cells: A mechanistic approach. <i>Food and Chemical Toxicology</i> , 2015, 85, 61-70.	1.8	85
57	TiO ₂ 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
58	Zinc oxide nanoparticles affect the expression of p53, Ras p21 and JNKs: an ex vivo/in vitro exposure study in respiratory disease patients. <i>Mutagenesis</i> , 2015, 30, 237-245.	1.0	39
59	Nanotechnology in Disease Diagnostic Techniques. <i>Current Drug Metabolism</i> , 2015, 16, 645-661.	0.7	45
60	TiO ₂ NPs induced hepatic injury in mammals: a mechanistic approach. <i>Molecular Cytogenetics</i> , 2014, 7, P82.	0.4	1
61	PEGylated nanoceria protect human epidermal cells from reactive oxygen species. <i>Molecular Cytogenetics</i> , 2014, 7, P78.	0.4	2
62	Cytotoxicity assessment of ZnO nanoparticles on human epidermal cells. <i>Molecular Cytogenetics</i> , 2014, 7, P81.	0.4	5
63	TiO ₂ nanoparticles induced micronucleus formation in human liver (HepG2) cells: comparison of conventional and flow cytometry based methods. <i>Molecular Cytogenetics</i> , 2014, 7, P79.	0.4	8
64	BSA coated gold nanoparticles exhibit size dependent interaction with lung cancer (A549) cells. <i>Molecular Cytogenetics</i> , 2014, 7, P83.	0.4	5
65	TiO ₂ nanoparticles induce cytotoxicity and genotoxicity in human alveolar cells. <i>Molecular Cytogenetics</i> , 2014, 7, P77.	0.4	9
66	Effects of titanium dioxide nanoparticles in human gastric epithelial cells in vitro. <i>Biomedicine and Pharmacotherapy</i> , 2014, 68, 59-64.	2.5	70
67	Titanium dioxide nanoparticle-induced oxidative stress triggers DNA damage and hepatic injury in mice. <i>Nanomedicine</i> , 2014, 9, 1423-1434.	1.7	132
68	Nanoscience and nanotechnologies in food industries: opportunities and research trends. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	0.8	231
69	Mechanisms of genotoxicity. A review of <i>in vitro</i> and <i>in vivo</i> studies with engineered nanoparticles. <i>Nanotoxicology</i> , 2014, 8, 233-278.	1.6	523
70	Comprehensive Molecular Analysis of the Responses Induced by Titanium Dioxide Nanoparticles in Human Keratinocyte Cells. <i>Journal of Translational Toxicology</i> , 2014, 1, 28-39.	0.3	7
71	Impact of Titanium Dioxide Nanoparticle Dispersion State and Dispersion Method on Their Toxicity Towards A549 Lung Cells and <i>Escherichia coli</i> Bacteria. <i>Journal of Translational Toxicology</i> , 2014, 1, 10-20.	0.3	6
72	Methods for Detection of Oxidative Stress and Genotoxicity of Engineered Nanoparticles. <i>Methods in Molecular Biology</i> , 2013, 1028, 231-246.	0.4	18

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73	The Comet Assay: Assessment of In Vitro and In Vivo DNA Damage. <i>Methods in Molecular Biology</i> , 2013, 1044, 325-345.	0.4	35
74	Polycyclic aromatic hydrocarbons and their quinones modulate the metabolic profile and induce DNA damage in human alveolar and bronchiolar cells. <i>International Journal of Hygiene and Environmental Health</i> , 2013, 216, 553-565.	2.1	53
75	TiO ₂ nanoparticles induce oxidative DNA damage and apoptosis in human liver cells. <i>Nanotoxicology</i> , 2013, 7, 48-60.	1.6	220
76	Genotoxic and carcinogenic potential of engineered nanoparticles: an update. <i>Archives of Toxicology</i> , 2013, 87, 1883-1900.	1.9	132
77	DNA and oxidative damage induced in somatic organs and tissues of mouse by municipal sludge leachate. <i>Toxicology and Industrial Health</i> , 2012, 28, 614-623.	0.6	26
78	Mechanism of Inhibition of the ATPase Domain of Human Topoisomerase III α by 1,4-Benzoquinone, 1,2-Naphthoquinone, 1,4-Naphthoquinone, and 9,10-Phenanthroquinone. <i>Toxicological Sciences</i> , 2012, 126, 372-390.	1.4	33
79	Induction of oxidative stress, DNA damage and apoptosis in mouse liver after sub-acute oral exposure to zinc oxide nanoparticles. <i>Mutation Research - Genetic Toxicology and Environmental Mutagenesis</i> , 2012, 745, 84-91.	0.9	383
80	Nanomaterials: Exposure, Effects and Toxicity Assessment. <i>Proceedings of the National Academy of Sciences India Section B - Biological Sciences</i> , 2012, 82, 3-11.	0.4	36
81	Microorganisms: A Versatile Model for Toxicity Assessment of Engineered Nanoparticles. , 2012, , 497-524.		2
82	Growth morphologies, phase formation, optical & biological responses of nanostructures of CuO and their application as cooling fluid in high energy density devices. <i>RSC Advances</i> , 2012, 2, 1387-1403.	1.7	61
83	Zinc oxide nanoparticles induce oxidative DNA damage and ROS-triggered mitochondria mediated apoptosis in human liver cells (HepG2). <i>Apoptosis: an International Journal on Programmed Cell Death</i> , 2012, 17, 852-870.	2.2	626
84	ROS-mediated genotoxicity induced by titanium dioxide nanoparticles in human epidermal cells. <i>Toxicology in Vitro</i> , 2011, 25, 231-241.	1.1	461
85	Titanium Dioxide Nanoparticles Induce Oxidative Stress-Mediated Apoptosis in Human Keratinocyte Cells. <i>Journal of Biomedical Nanotechnology</i> , 2011, 7, 100-101.	0.5	80
86	The Need for Novel Approaches in Ecotoxicity of Engineered Nanomaterials. <i>Journal of Biomedical Nanotechnology</i> , 2011, 7, 79-80.	0.5	18
87	Guidance for Safe Handling of Nanomaterials. <i>Journal of Biomedical Nanotechnology</i> , 2011, 7, 218-224.	0.5	41
88	Engineered ZnO and TiO ₂ nanoparticles induce oxidative stress and DNA damage leading to reduced viability of <i>Escherichia coli</i> . <i>Free Radical Biology and Medicine</i> , 2011, 51, 1872-1881.	1.3	410
89	Cellular uptake and mutagenic potential of metal oxide nanoparticles in bacterial cells. <i>Chemosphere</i> , 2011, 83, 1124-1132.	4.2	210
90	A flow cytometric method to assess nanoparticle uptake in bacteria. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2011, 79A, 707-712.	1.1	65

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91	C ₆₀ -Fullerene Binds with the ATP Binding Domain of Human DNA Topoisomerase II Alpha. Journal of Biomedical Nanotechnology, 2011, 7, 177-178.	0.5	29
92	Zinc Oxide Nanoparticles Induce Oxidative Stress and Genotoxicity in Human Liver Cells (HepG2). Journal of Biomedical Nanotechnology, 2011, 7, 98-99.	0.5	120
93	Toxicity of Graphene in Normal Human Lung Cells (BEAS-2B). Journal of Biomedical Nanotechnology, 2011, 7, 106-107.	0.5	141
94	Interaction of C ₆₀ Fullerene with the Proteins Involved in DNA Mismatch Repair Pathway. Journal of Biomedical Nanotechnology, 2011, 7, 179-180.	0.5	19
95	Zinc Oxide Nanoparticle Induced Genotoxicity in Primary Human Epidermal Keratinocytes. Journal of Nanoscience and Nanotechnology, 2011, 11, 3782-3788.	0.9	145
96	miR-497 and miR-302b Regulate Ethanol-induced Neuronal Cell Death through BCL2 Protein and Cyclin D2. Journal of Biological Chemistry, 2011, 286, 37347-37357.	1.6	133
97	Cellular Response to Metal Oxide Nanoparticles in Bacteria. Journal of Biomedical Nanotechnology, 2011, 7, 102-103.	0.5	18
98	Stable Metal Oxide Nanoparticle Formulation for Toxicity Studies. Journal of Biomedical Nanotechnology, 2011, 7, 104-105.	0.5	2
99	Toxicity assessment of nanomaterials: methods and challenges. Analytical and Bioanalytical Chemistry, 2010, 398, 589-605.	1.9	405
100	Bacterial Synthesis of Photocatalytically Active and Biocompatible TiO ₂ and ZnO Nanoparticles. International Journal of Green Nanotechnology: Physics and Chemistry, 2010, 2, P80-P99.	1.5	11
101	Cytotoxic and genotoxic assessment of glycolipid-reduced and -capped gold and silver nanoparticles. New Journal of Chemistry, 2010, 34, 294-301.	1.4	87
102	In silico studies with human DNA topoisomerase-II alpha to unravel the mechanism of in vitro genotoxicity of benzene and its metabolites. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2009, 661, 57-70.	0.4	37
103	Comet assay: a reliable tool for the assessment of DNA damage in different models. Cell Biology and Toxicology, 2009, 25, 5-32.	2.4	318
104	Nanomaterials: A challenge for toxicologists. Nanotoxicology, 2009, 3, 1-9.	1.6	143
105	DNA damaging potential of zinc oxide nanoparticles in human epidermal cells. Toxicology Letters, 2009, 185, 211-218.	0.4	526
106	Multipronged evaluation of genotoxicity in Indian petrol pump workers. Environmental and Molecular Mutagenesis, 2008, 49, 695-707.	0.9	34
107	Bacterial synthesis of silicon/silica nanocomposites. Journal of Materials Chemistry, 2008, 18, 2601.	6.7	57
108	In vitro induction of cytotoxicity and DNA strand breaks in CHO cells exposed to cypermethrin, pendimethalin and dichlorvos. Toxicology in Vitro, 2007, 21, 1409-1418.	1.1	71

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109	DNA damage induced in human peripheral blood lymphocytes by industrial solid waste and municipal sludge leachates. <i>Environmental and Molecular Mutagenesis</i> , 2007, 48, 30-37.	0.9	58
110	Protective effect of bioantioxidants on argemone oil/sanguinarine alkaloid induced genotoxicity in mice. <i>Cancer Letters</i> , 2006, 244, 109-118.	3.2	18
111	Stable Colloidal Dispersions of C60 Fullerenes in Water: Evidence for Genotoxicity. <i>Environmental Science & Technology</i> , 2006, 40, 7394-7401.	4.6	264
112	Cypermethrin-induced DNA damage in organs and tissues of the mouse: Evidence from the comet assay. <i>Mutation Research - Genetic Toxicology and Environmental Mutagenesis</i> , 2006, 607, 176-183.	0.9	100
113	Expression of constitutive and inducible cytochrome P450 2E1 in rat brain. <i>Molecular and Cellular Biochemistry</i> , 2006, 286, 171-180.	1.4	39
114	Regional specificity in deltamethrin induced cytochrome P450 expression in rat brain. <i>Toxicology and Applied Pharmacology</i> , 2006, 217, 15-24.	1.3	19
115	DNA damage and mutagenicity induced by endosulfan and its metabolites. <i>Environmental and Molecular Mutagenesis</i> , 2006, 47, 682-692.	0.9	75
116	Correlation of DNA damage in epidemic dropsy patients to carcinogenic potential of argemone oil and isolated sanguinarine alkaloid in mice. <i>International Journal of Cancer</i> , 2005, 117, 709-717.	2.3	49
117	Current Status of Short-Term Tests for Evaluation of Genotoxicity, Mutagenicity, and Carcinogenicity of Environmental Chemicals and NCEs. <i>Toxicology Mechanisms and Methods</i> , 2005, 15, 155-180.	1.3	31
118	Comet assay responses in human lymphocytes are not influenced by the menstrual cycle: a study in healthy Indian females. <i>Mutation Research - Genetic Toxicology and Environmental Mutagenesis</i> , 2005, 565, 163-172.	0.9	69
119	In vivo DNA damaging potential of sanguinarine alkaloid, isolated from argemone oil, using alkaline Comet assay in mice. <i>Food and Chemical Toxicology</i> , 2005, 43, 147-153.	1.8	53
120	Unequivocal evidence of genotoxic potential of argemone oil in mice. <i>International Journal of Cancer</i> , 2004, 112, 890-895.	2.3	41
121	Assessment of the impact of abiotic factors on the stability of engineered nanomaterials in fish embryo media. <i>Emergent Materials</i> , 0, , 1.	3.2	2