Eudald Casals

List of Publications by Year
in descending order

73 papers	5,843 citations	109137 35 h-index	88477 70 g-index
79 all docs	79 docs citations	79 times ranked	9442 citing authors

#	Article	IF	Citations
1	Time Evolution of the Nanoparticle Protein Corona. ACS Nano, 2010, 4, 3623-3632.	7.3	1,034
2	Evaluation of the ecotoxicity of model nanoparticles. Chemosphere, 2009, 75, 850-857.	4.2	444
3	Shape matters: effects of silver nanospheres and wires on human alveolar epithelial cells. Particle and Fibre Toxicology, 2011, 8, 36.	2.8	223
4	Hardening of the Nanoparticleâ€“Protein Corona in Metal (Au, Ag) and Oxide (Fe₃O₄, CoO, and CeO₂) Nanoparticles. Small, 2011, 7, 3479-3486.	5.2	207
5	Effect of cerium dioxide, titanium dioxide, silver, and gold nanoparticles on the activity of microbial communities intended in wastewater treatment. Journal of Hazardous Materials, 2012, 199-200, 64-72.	6.5	202
6	Physicochemical Characteristics of Proteinâ€“NP Bioconjugates: The Role of Particle Curvature and Solution Conditions on Human Serum Albumin Conformation and Fibrillogenesis Inhibition. Langmuir, 2012, 28, 9113-9126.	1.6	192
7	Formation of the Protein Corona: The Interface between Nanoparticles and the Immune System. Seminars in Immunology, 2017, 34, 52-60.	2.7	191
8	Acute toxicity of cerium oxide, titanium oxide and iron oxide nanoparticles using standardized tests. Desalination, 2011, 269, 136-141.	4.0	187
9	The oxidative potential of differently charged silver and gold nanoparticles on three human lung epithelial cell types. Journal of Nanobiotechnology, 2015, 13, 1.	4.2	185
10	Cerium oxide nanoparticles reduce steatosis, portal hypertension and display anti-inflammatory properties in rats with liver fibrosis. Journal of Hepatology, 2016, 64, 691-698.	1.8	178
11	Problems and challenges in the development and validation of human cell-based assays to determine nanoparticle-induced immunomodulatory effects. Particle and Fibre Toxicology, 2011, 8, 8.	2.8	170
12	Absence of Ce³⁺ Sites in Chemically Active Colloidal Ceria Nanoparticles. ACS Nano, 2013, 7, 10726-10732.	7.3	160
13	Programmed Iron Oxide Nanoparticles Disintegration in Anaerobic Digesters Boosts Biogas Production. Small, 2014, 10, 2801-2808.	5.2	153
14	Chromium VI adsorption on cerium oxide nanoparticles and morphology changes during the process. Journal of Hazardous Materials, 2010, 184, 425-431.	6.5	146
15	Synthesis of Platinum Cubes, Polypods, Cuboctahedrons, and Raspberries Assisted by Cobalt Nanocrystals. Nano Letters, 2010, 10, 964-973.	4.5	129
16	Use of CeO2, TiO2 and Fe3O4 nanoparticles for the removal of lead from water. Desalination, 2011, 277, 213-220.	4.0	123
17	Distribution and potential toxicity of engineered inorganic nanoparticles and carbon nanostructures in biological systems. TrAC - Trends in Analytical Chemistry, 2008, 27, 672-683.	5.8	120
18	Ecotoxicity of, and remediation with, engineered inorganic nanoparticles in the environment. TrAC - Trends in Analytical Chemistry, 2011, 30, 507-516.	5.8	116

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19	The suitability of different cellularin vitroimmunotoxicity and genotoxicity methods for the analysis of nanoparticle-induced events. Nanotoxicology, 2010, 4, 52-72.	1.6	94
20	Cerium Oxide Nanoparticles: Advances in Biodistribution, Toxicity, and Preclinical Exploration. Small, 2020, 16, e1907322.	5.2	85
21	Bacterial endotoxin (lipopolysaccharide) binds to the surface of gold nanoparticles, interferes with biocorona formation and induces human monocyte inflammatory activation. Nanotoxicology, 2017, 11, 1157-1175.	1.6	80
22	Inorganic nanoparticle biomolecular corona: formation, evolution and biological impact. Nanomedicine, 2012, 7, 1917-1930.	1.7	78
23	Chitosan functionalisation of gold nanoparticles encourages particle uptake and induces cytotoxicity and pro-inflammatory conditions in phagocytic cells, as well as enhancing particle interactions with serum components. Journal of Nanobiotechnology, 2015, 13, 84.	4.2	75
24	Reactivity of inorganic nanoparticles in biological environments: insights into nanotoxicity mechanisms. Journal Physics D: Applied Physics, 2012, 45, 443001.	1.3	74
25	Engineered Inorganic Nanoparticles for Drug Delivery Applications. Current Drug Metabolism, 2013, 14, 518-530.	0.7	58
26	Stimuli-responsive hybrid nanocarriers developed by controllable integration of hyperbranched PEI with mesoporous silica nanoparticles for sustained intracellular siRNA delivery. International Journal of Nanomedicine, 2016, Volume 11, 6591-6608.	3.3	53
27	Reactivity of engineered inorganic nanoparticles and carbon nanostructures in biological media. Nanotoxicology, 2008, 2, 99-112.	1.6	52
28	Optimising the use of commercial LAL assays for the analysis of endotoxin contamination in metal colloids and metal oxide nanoparticles. Nanotoxicology, 2015, 9, 462-473.	1.6	52
29	Nanoparticle microinjection and Raman spectroscopy as tools for nanotoxicology studies. Analyst, The, 2011, 136, 4402.	1.7	47
30	Intrinsic and Extrinsic Properties Affecting Innate Immune Responses to Nanoparticles: The Case of Cerium Oxide. Frontiers in Immunology, 2017, 8, 970.	2.2	45
31	Analyses in zebrafish embryos reveal that nanotoxicity profiles are dependent on surface-functionalization controlled penetrance of biological membranes. Scientific Reports, 2017, 7, 8423.	1.6	44
32	Cerium Oxide Nanoparticles: A New Therapeutic Tool in Liver Diseases. Antioxidants, 2021, 10, 660.	2.2	41
33	Assessing the Immunosafety of Engineered Nanoparticles with a Novel in Vitro Model Based on Human Primary Monocytes. ACS Applied Materials & Interfaces, 2016, 8, 28437-28447.	4.0	39
34	Cancer resistance to treatment and antiresistance tools offered by multimodal multifunctional nanoparticles. Cancer Nanotechnology, 2017, 8, 7.	1.9	39
35	Cerium oxide nanoparticles improve liver regeneration after acetaminophen-induced liver injury and partial hepatectomy in rats. Journal of Nanobiotechnology, 2019, 17, 112.	4.2	38
36	Bespoken Nanoceria: An Effective Treatment in Experimental Hepatocellular Carcinoma. Hepatology, 2020, 72, 1267-1282.	3.6	37

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37	Toxicity of nickel in the marine calanoid copepod Acartia tonsa: Nickel chloride versus nanoparticles. Aquatic Toxicology, 2016, 170, 1-12.	1.9	36
38	Cerium oxide nanoparticles display antilipogenic effect in rats with non-alcoholic fatty liver disease. Scientific Reports, 2019, 9, 12848.	1.6	35
39	Beyond the Scavenging of Reactive Oxygen Species (ROS): Direct Effect of Cerium Oxide Nanoparticles in Reducing Fatty Acids Content in an In Vitro Model of Hepatocellular Steatosis. Biomolecules, 2019, 9, 425.	1.8	34
40	In vitro investigation of immunomodulatory effects caused by engineered inorganic nanoparticles â€“ the impact of experimental design and cell choice. Nanotoxicology, 2009, 3, 46-59.	1.6	33
41	Conserved effects and altered trafficking of Cetuximab antibodies conjugated to gold nanoparticles with precise control of their number and orientation. Nanoscale, 2017, 9, 6111-6121.	2.8	33
42	A Co-Doped Fe₃O₄ Nanozyme Shows Enhanced Reactive Oxygen and Nitrogen Species Scavenging Activity and Ameliorates the Deleterious Effects of Ischemic Stroke. ACS Applied Materials & Interfaces, 2021, 13, 46213-46224.	4.0	33
43	The Interactions between Nanoparticles and the Innate Immune System from a Nanotechnologist Perspective. Nanomaterials, 2021, 11, 2991.	1.9	30
44	Assessment of a panel of interleukin-8 reporter lung epithelial cell lines to monitor the pro-inflammatory response following zinc oxide nanoparticle exposure under different cell culture conditions. Particle and Fibre Toxicology, 2015, 12, 29.	2.8	29
45	Cerium Oxide Nanoparticles Protect against Oxidant Injury and Interfere with Oxidative Mediated Kinase Signaling in Human-Derived Hepatocytes. International Journal of Molecular Sciences, 2019, 20, 5959.	1.8	28
46	Potential use of CeO₂, TiO₂and<sub />Fe₃O₄nanoparticles for the removal of cadmium from water. Desalination and Water Treatment, 2012, 41, 296-300.	1.0	27
47	Preliminary study of phosphate adsorption onto cerium oxide nanoparticles for use in water purification; nanoparticles synthesis and characterization. Water Science and Technology, 2012, 66, 503-509.	1.2	26
48	Inorganic Engineered Nanoparticles and Their Impact on the Immune Response. Current Drug Metabolism, 2009, 10, 895-904.	0.7	25
49	Characterization of modified mesoporous silica nanoparticles as vectors for siRNA delivery. Asian Journal of Pharmaceutical Sciences, 2018, 13, 592-599.	4.3	23
50	Gene expression profiles reveal distinct immunological responses of cobalt and cerium dioxide nanoparticles in two in vitro lung epithelial cell models. Toxicology Letters, 2014, 228, 157-169.	0.4	22
51	Pharmacokinetics and Tissue Disposition of Nanosystem-Entrapped Betulin After Endotracheal Administration to Rats. European Journal of Drug Metabolism and Pharmacokinetics, 2017, 42, 327-332.	0.6	18
52	Simple spectroscopic determination of the hard protein corona composition in AuNPs: albumin at 75%. Nanoscale, 2020, 12, 15832-15844.	2.8	14
53	Functionalized cerium oxide nanoparticles mitigate the oxidative stress and pro-inflammatory activity associated to the portal vein endothelium of cirrhotic rats. PLoS ONE, 2019, 14, e0218716.	1.1	13
54	Mesoporous silica coated CeO2 nanozymes with combined lipid-lowering and antioxidant activity induce long-term improvement of the metabolic profile in obese Zucker rats. Nanoscale, 2021, 13, 8452-8466.	2.8	12

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55	Preclinical studies conducted on nanozyme antioxidants: shortcomings and challenges based on USÂFDA regulations. Nanomedicine, 2021, 16, 1133-1151.	1.7	11
56	Phase separation of a nonionic surfactant aqueous solution in a standing surface acoustic wave for submicron particle manipulation. Lab on A Chip, 2021, 21, 660-667.	3.1	9
57	Circumventing Drug Treatment? Intrinsic Lethal Effects of Polyethyleneimine (PEI)-Functionalized Nanoparticles on Glioblastoma Cells Cultured in Stem Cell Conditions. Cancers, 2021, 13, 2631.	1.7	9
58	Scalable synthesis of multicomponent multifunctional inorganic core@mesoporous silica shell nanocomposites. Materials Science and Engineering C, 2021, 128, 112272.	3.8	9
59	The Reactivity of Colloidal Inorganic Nanoparticles. , 0, , .		7
60	Biodistribution, Excretion, and Toxicity of Inorganic Nanoparticles. , 2019, , 3-26.		7
61	Validation of a Gas Chromatography-Mass Spectrometry Method for the Measurement of the Redox State Metabolic Ratios Lactate/Pyruvate and Î²-Hydroxybutyrate/Acetoacetate in Biological Samples. International Journal of Molecular Sciences, 2021, 22, 4752.	1.8	7
62	Cerium Oxide Nanoparticles: Cerium Oxide Nanoparticles: Advances in Biodistribution, Toxicity, and Preclinical Exploration (Small 20/2020). Small, 2020, 16, 2070111.	5.2	6
63	Nano-immunosafety: issues in assay validation. Journal of Physics: Conference Series, 2011, 304, 012077.	0.3	5
64	Inorganic Nanoparticles and the Environment: Balancing Benefits and Risks. Comprehensive Analytical Chemistry, 2012, 59, 265-290.	0.7	5
65	Characterizing Nanoparticles Reactivity: Structure-Photocatalytic Activity Relationship. Journal of Physics: Conference Series, 2013, 429, 012040.	0.3	4
66	Historical Perspective of the Addition of Magnetic Nanoparticles Into Anaerobic Digesters (2014-2021). Frontiers in Chemical Engineering, 2021, 3, .	1.3	2
67	Cerium oxide nanoparticles protect against oxidant mediated injury and recover kinase activity of multiple pathways in human-derived hepatocellular carcinoma cells. Journal of Hepatology, 2018, 68, S136.	1.8	1
68	CeO2NPs are similarly effective as sorafenib in increasing survival in rats with HCC. Journal of Hepatology, 2018, 68, S662-S663.	1.8	1
69	FRI-334-Cerium oxide nanoparticles present antilipogenic and antiinflammatory effects in rats with diet-induced non-alcoholic fatty liver disease. Journal of Hepatology, 2019, 70, e543.	1.8	1
70	Catalytic Cerium Oxide Nanoparticles in Nanomedicine and Their Use in Liver Diseases. , 2019, , .		1
71	Impact of engineered nanoparticles on immune-related genes and processes in human alveolar epithelial cells. Toxicology Letters, 2009, 189, S186.	0.4	0
72	P33 HEPATOPROTECTIVE EFFECT OF CeO2 NANOPARTICLES IN RATS TREATED WITH CCl4. Journal of Hepatology, 2014, 60, S77.	1.8	0

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73	Validation of a Microwave-Assisted Derivatization Gas Chromatography-Mass Spectrometry Method for the Quantification of 2-Hydroxybutyrate in Human Serum as an Early Marker of Diabetes Mellitus. Molecules, 2022, 27, 1889.	1.7	0