Eudald Casals

List of Publications by Citations

65 papers	4,599 citations	31 h-index	67 g-index
79 ext. papers	5,210 ext. citations	6.8 avg, IF	5.35 L-index

#	Paper	IF	Citations
65	Time evolution of the nanoparticle protein corona. *ACS Nano*, **2010**, 4, 3623-32	16.7	885
64	Evaluation of the ecotoxicity of model nanoparticles. *Chemosphere*, **2009**, 75, 850-7	8.4	360
63	Shape matters: effects of silver nanospheres and wires on human alveolar epithelial cells. *Particle and Fibre Toxicology*, **2011**, 8, 36	8.4	180
62	Hardening of the nanoparticle-protein corona in metal (Au, Ag) and oxide (Fe3O4, CoO, and CeO2) nanoparticles. *Small*, **2011**, 7, 3479-86	11	174
61	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	12.8	173
60	Physicochemical characteristics of protein-NP bioconjugates: the role of particle curvature and solution conditions on human serum albumin conformation and fibrillogenesis inhibition. *Langmuir*, **2012**, 28, 9113-26	4	168
59	Acute toxicity of cerium oxide, titanium oxide and iron oxide nanoparticles using standardized tests. *Desalination*, **2011**, 269, 136-141	10.3	157
58	The oxidative potential of differently charged silver and gold nanoparticles on three human lung epithelial cell types. *Journal of Nanobiotechnology*, **2015**, 13, 1	9.4	148
57	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	8.4	142
56	Absence of Ce3+ sites in chemically active colloidal ceria nanoparticles. *ACS Nano*, **2013**, 7, 10726-32	16.7	128
55	Synthesis of platinum cubes, polypods, cuboctahedrons, and raspberries assisted by cobalt nanocrystals. *Nano Letters*, **2010**, 10, 964-73	11.5	126
54	Chromium VI adsorption on cerium oxide nanoparticles and morphology changes during the process. *Journal of Hazardous Materials*, **2010**, 184, 425-431	12.8	126
53	Formation of the Protein Corona: The Interface between Nanoparticles and the Immune System. *Seminars in Immunology*, **2017**, 34, 52-60	10.7	125
52	Cerium oxide nanoparticles reduce steatosis, portal hypertension and display anti-inflammatory properties in rats with liver fibrosis. *Journal of Hepatology*, **2016**, 64, 691-8	13.4	120
51	Programmed iron oxide nanoparticles disintegration in anaerobic digesters boosts biogas production. *Small*, **2014**, 10, 2801-8, 2741	11	114
50	Ecotoxicity of, and remediation with, engineered inorganic nanoparticles in the environment. *TrAC - Trends in Analytical Chemistry*, **2011**, 30, 507-516	14.6	104
49	Use of CeO2, TiO2 and Fe3O4 nanoparticles for the removal of lead from water: Toxicity of nanoparticles and derived compounds. *Desalination*, **2011**, 277, 213-220	10.3	102

48	Distribution and potential toxicity of engineered inorganic nanoparticles and carbon nanostructures in biological systems. *TrAC - Trends in Analytical Chemistry*, **2008**, 27, 672-683	14.6	96
47	The suitability of different cellular in vitro immunotoxicity and genotoxicity methods for the analysis of nanoparticle-induced events. *Nanotoxicology*, **2010**, 4, 52-72	5.3	88
46	Inorganic nanoparticle biomolecular corona: formation, evolution and biological impact. *Nanomedicine*, **2012**, 7, 1917-30	5.6	70
45	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	9.4	62
44	Reactivity of inorganic nanoparticles in biological environments: insights into nanotoxicity mechanisms. *Journal Physics D: Applied Physics*, **2012**, 45, 443001	3	60
43	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	5.3	55
42	Reactivity of engineered inorganic nanoparticles and carbon nanostructures in biological media. *Nanotoxicology*, **2008**, 2, 99-112	5.3	43
41	Engineered inorganic nanoparticles for drug delivery applications. *Current Drug Metabolism*, **2013**, 14, 518-30	3.5	43
40	Optimising the use of commercial LAL assays for the analysis of endotoxin contamination in metal colloids and metal oxide nanoparticles. *Nanotoxicology*, **2015**, 9, 462-73	5.3	42
39	Nanoparticle microinjection and Raman spectroscopy as tools for nanotoxicology studies. *Analyst, The*, **2011**, 136, 4402-8	5	41
38	Cerium Oxide Nanoparticles: Advances in Biodistribution, Toxicity, and Preclinical Exploration. *Small*, **2020**, 16, e1907322	11	38
37	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**, 11, 6591-6608	7.3	38
36	Intrinsic and Extrinsic Properties Affecting Innate Immune Responses to Nanoparticles: The Case of Cerium Oxide. *Frontiers in Immunology*, **2017**, 8, 970	8.4	31
35	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	9.5	31
34	Analyses in zebrafish embryos reveal that nanotoxicity profiles are dependent on surface-functionalization controlled penetrance of biological membranes. *Scientific Reports*, **2017**, 7, 8423	4.9	30
33	In vitro investigation of immunomodulatory effects caused by engineered inorganic nanoparticles the impact of experimental design and cell choice. *Nanotoxicology*, **2009**, 3, 46-59	5.3	30
32	Cancer resistance to treatment and antiresistance tools offered by multimodal multifunctional nanoparticles. *Cancer Nanotechnology*, **2017**, 8, 7	7.9	29
31	Toxicity of nickel in the marine calanoid copepod Acartia tonsa: Nickel chloride versus nanoparticles. *Aquatic Toxicology*, **2016**, 170, 1-12	5.1	28

30	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	7.7	25
29	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	8.4	24
28	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,	5.9	23
27	Potential use of CeO2, TiO2 and Fe3O4 nanoparticles for the removal of cadmium from water. *Desalination and Water Treatment*, **2012**, 41, 296-300		23
26	Preliminary study of phosphate adsorption onto cerium oxide nanoparticles for use in water purification; nanoparticles synthesis and characterization. *Water Science and Technology*, **2012**, 66, 503-9	2.2	22
25	Inorganic engineered nanoparticles and their impact on the immune response. *Current Drug Metabolism*, **2009**, 10, 895-904	3.5	22
24	Cerium oxide nanoparticles display antilipogenic effect in rats with non-alcoholic fatty liver disease. *Scientific Reports*, **2019**, 9, 12848	4.9	19
23	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, 157-69	4.4	19
22	Cerium oxide nanoparticles improve liver regeneration after acetaminophen-induced liver injury and partial hepatectomy in rats. *Journal of Nanobiotechnology*, **2019**, 17, 112	9.4	17
21	Bespoken Nanoceria: An Effective Treatment in Experimental Hepatocellular Carcinoma. *Hepatology*, **2020**, 72, 1267-1282	11.2	15
20	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	3.7	12
19	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,	6.3	12
18	Characterization of modified mesoporous silica nanoparticles as vectors for siRNA delivery. *Asian Journal of Pharmaceutical Sciences*, **2018**, 13, 592-599	9	11
17	Pharmacokinetics and Tissue Disposition of Nanosystem-Entrapped Betulin After Endotracheal Administration to Rats. *European Journal of Drug Metabolism and Pharmacokinetics*, **2017**, 42, 327-332	2.7	10
16	Cerium Oxide Nanoparticles: A New Therapeutic Tool in Liver Diseases. *Antioxidants*, **2021**, 10,	7.1	10
15	Mesoporous silica coated CeO 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	7.7	8
14	Biodistribution, Excretion, and Toxicity of Inorganic Nanoparticles **2019**, 3-26		7
13	The Interactions between Nanoparticles and the Innate Immune System from a Nanotechnologist Perspective. *Nanomaterials*, **2021**, 11,	5.4	7

List of Publications

12	A Co-Doped FeO 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	9.5	7
11	Simple spectroscopic determination of the hard protein corona composition in AuNPs: albumin at 75. *Nanoscale*, **2020**, 12, 15832-15844	7.7	5
10	Nano-immunosafety: issues in assay validation. *Journal of Physics: Conference Series*, **2011**, 304, 012077	0.3	5
9	Inorganic Nanoparticles and the Environment: Balancing Benefits and Risks. *Comprehensive Analytical Chemistry*, **2012**, 59, 265-290	1.9	4
8	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	7.2	4
7	The Reactivity of Colloidal Inorganic Nanoparticles **2012**,		3
6	Characterizing Nanoparticles Reactivity: Structure-Photocatalytic Activity Relationship. *Journal of Physics: Conference Series*, **2013**, 429, 012040	0.3	3
5	Preclinical studies conducted on nanozyme antioxidants: shortcomings and challenges based on US FDA regulations. *Nanomedicine*, **2021**, 16, 1133-1151	5.6	3
4	Cerium Oxide Nanoparticles: Cerium Oxide Nanoparticles: Advances in Biodistribution, Toxicity, and Preclinical Exploration (Small 20/2020). *Small*, **2020**, 16, 2070111	11	2
3	Validation of a Gas Chromatography-Mass Spectrometry Method for the Measurement of the Redox State Metabolic Ratios Lactate/Pyruvate and Hydroxybutyrate/Acetoacetate in Biological Samples. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	2
2	Circumventing Drug Treatment? Intrinsic Lethal Effects of Polyethyleneimine (PEI)-Functionalized Nanoparticles on Glioblastoma Cells Cultured in Stem Cell Conditions. *Cancers*, **2021**, 13,	6.6	2
1	Scalable synthesis of multicomponent multifunctional inorganic core@mesoporous silica shell nanocomposites. *Materials Science and Engineering C*, **2021**, 128, 112272	8.3	1