Anna L Costa

List of Publications by Year
in descending order

114 papers	2,699 citations	172207 29 h-index	243296 44 g-index
115 all docs	115 docs citations	115 times ranked	3599 citing authors

#	Article	IF	Citations
1	Catalytic asymmetric synthesis of homoallylic alcohols. Journal of the American Chemical Society, 1993, 115, 7001-7002.	6.6	266
2	Organ burden and pulmonary toxicity of nano-sized copper (II) oxide particles after short-term inhalation exposure. Nanotoxicology, 2016, 10, 1084-1095.	1.6	112
3	Silver nanoparticles as a medical device in healthcare settings: a five-step approach for candidate screening of coating agents. Royal Society Open Science, 2018, 5, 171113.	1.1	110
4	Catalytic asymmetric synthesis promoted by a chiral zirconate: Highly enantioselective allylation of aldehydes. Tetrahedron Letters, 1995, 36, 7897-7900.	0.7	98
5	Solâ€“gel combustion synthesis of BNBT powders. Journal of Sol-Gel Science and Technology, 2008, 46, 39-45.	1.1	63
6	TiO2 based nano-photocatalysis immobilized on cellulose substrates. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 276, 58-64.	2.0	61
7	NanoTiO2@DNA complex: a novel eco, durable, fire retardant design strategy for cotton textiles. Journal of Colloid and Interface Science, 2019, 546, 174-183.	5.0	59
8	Coatings made of proteins adsorbed on TiO2 nanoparticles: a new flame retardant approach for cotton fabrics. Cellulose, 2018, 25, 2755-2765.	2.4	48
9	Shape-Related Toxicity of Titanium Dioxide Nanofibres. PLoS ONE, 2016, 11, e0151365.	1.1	47
10	Nano-Sized Ceramic Inks for Drop-on-Demand Ink-Jet Printing in Quadrichromy. Journal of Nanoscience and Nanotechnology, 2008, 8, 1979-1988.	0.9	46
11	Organicâ”Organometallic Crystal Synthesis. 1. Hosting Paramagnetic [(Î·6-Arene)2Cr]+(Arene = Benzene,) Tj ETQq1 1 0.784314 rgBT /C 2070-2079.	1.1	40
12	Toxicity of surface-modified copper oxide nanoparticles in a mouse macrophage cell line: Interplay of particles, surface coating and particle dissolution. Chemosphere, 2018, 196, 482-493.	4.2	40
13	TiO2 based photocatalytic coatings: From nanostructure to functional properties. Chemical Engineering Journal, 2013, 225, 880-886.	6.6	38
14	Multiple endpoints to evaluate pristine and remediated titanium dioxide nanoparticles genotoxicity in lung epithelial A549 cells. Toxicology Letters, 2017, 276, 48-61.	0.4	38
15	New Computational and Experimental Evidence for the Mechanism of the Sakurai Reaction. Journal of the American Chemical Society, 1997, 119, 12131-12135.	6.6	37
16	Green and easily scalable microwave synthesis of noble metal nanosols (Au, Ag, Cu, Pd) usable as catalysts. New Journal of Chemistry, 2014, 38, 1401-1409.	1.4	36
17	TiO2 Nanosols Applied Directly on Textiles Using Different Purification Treatments. Materials, 2015, 8, 7988-7996.	1.3	36
18	Environmental Impacts by Fragments Released from Nanoenabled Products: A Multiassay, Multimaterial Exploration by the SUN Approach. Environmental Science & Technology, 2018, 52, 1514-1524.	4.6	36

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19	Hollow-fiber flow field-flow fractionation and multi-angle light scattering investigation of the size, shape and metal-release of silver nanoparticles in aqueous medium for nano-risk assessment. Journal of Pharmaceutical and Biomedical Analysis, 2015, 106, 92-99.	1.4	34
20	Dispersing Behavior of Hydroxyapatite Powders Produced by Wetâ€Chemical Synthesis. Journal of the American Ceramic Society, 2003, 86, 1534-1539.	1.9	33
21	Bimetallic Nanoparticles as Efficient Catalysts: Facile and Green Microwave Synthesis. Materials, 2016, 9, 550.	1.3	33
22	Polyvinyl alcohol/silver electrospun nanofibers: Biocidal filter media capturing virusâ€size particles. Journal of Applied Polymer Science, 2021, 138, 51380.	1.3	33
23	Improvements in the production of Yb:YAG transparent ceramic materials: Spray drying optimisation. Optical Materials, 2012, 34, 995-1001.	1.7	32
24	OHâ^'O and CHâ^'O Hydrogen Bonding in Hydrated Crystals of Paramagnetic [(Î·6-C6H6)2Cr]+. Organometallics, 1996, 15, 1084-1086.	1.1	30
25	Pyrochlore phase and microstructure development in lead magnesium niobate materials. Journal of the European Ceramic Society, 2001, 21, 1165-1170.	2.8	30
26	Synthesis of Nd-YAG material by citrate-nitrate sol-gel combustion route. Advanced Engineering Materials, 2007, 9, 307-312.	1.6	30
27	Solâ€“gel combustion synthesis of chromium doped yttrium aluminum perovskites. Journal of Sol-Gel Science and Technology, 2009, 50, 449-455.	1.1	30
28	Experimental features affecting the transparency of YAG ceramics. Optical Materials, 2011, 33, 713-721.	1.7	30
29	Colloidal characterization of CuO nanoparticles in biological and environmental media. Environmental Science: Nano, 2017, 4, 1264-1272.	2.2	30
30	Easily scalable synthesis of Ni nanosols suitable for the hydrogenation of 4-nitrophenol to p-aminophenol under mild condition. Chemical Engineering Journal, 2013, 215-216, 616-625.	6.6	29
31	A Tractable Method for Measuring Nanomaterial Risk Using Bayesian Networks. Nanoscale Research Letters, 2016, 11, 503.	3.1	28
32	Elasticity and yielding of a calcite paste: scaling laws in a dense colloidal suspension. Soft Matter, 2017, 13, 2014-2023.	1.2	28
33	Nb-Doped PZT Material by Sol-Gel Combustion. Journal of Sol-Gel Science and Technology, 2005, 36, 203-211.	1.1	27
34	A panel ofin vitrotests to evaluate genotoxic and morphological neoplastic transformation potential onBalb/3T3cells by pristine and remediated titania and zirconia nanoparticles. Mutagenesis, 2016, 31, 511-529.	1.0	27
35	Lipopolysaccharide Adsorbed to the Bio-Corona of TiO2 Nanoparticles Powerfully Activates Selected Pro-inflammatory Transduction Pathways. Frontiers in Immunology, 2017, 8, 866.	2.2	27
36	Reactive sintering of YAG-based materials using micrometer-sized powders. Journal of the European Ceramic Society, 2008, 28, 1065-1071.	2.8	26

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37	Synthesis of nanostructured magnetic photocatalyst by colloidal approach and sprayâ€“drying technique. Journal of Colloid and Interface Science, 2012, 388, 31-39.	5.0	26
38	Dip coating of air purifier ceramic honeycombs with photocatalytic TiO2 nanoparticles: A case study for occupational exposure. Science of the Total Environment, 2018, 630, 1283-1291.	3.9	26
39	Risk Management Framework for Nano-Biomaterials Used in Medical Devices and Advanced Therapy Medicinal Products. Materials, 2020, 13, 4532.	1.3	26
40	Hollow-fiber flow field-flow fractionation and multi-angle light scattering as a new analytical solution for quality control in pharmaceutical nanotechnology. Microchemical Journal, 2018, 136, 149-156.	2.3	24
41	Ceramic pigments with sphene structure obtained by both spray- and freeze-drying techniques. Powder Technology, 2009, 193, 1-5.	2.1	23
42	Impact and effectiveness of risk mitigation strategies on the insurability of nanomaterial production: evidences from industrial case studies. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2015, 7, 839-855.	3.3	23
43	Silica matrix encapsulation as a strategy to control ROS production while preserving photoreactivity in nano-TiO₂. Environmental Science: Nano, 2016, 3, 602-610.	2.2	23
44	Titanium dioxide nanoparticles enhance macrophage activation by LPS through a TLR4-dependent intracellular pathway. Toxicology Research, 2015, 4, 385-398.	0.9	22
45	Bentonites functionalized by impregnation with TiO 2 , Ag, Pd and Au nanoparticles. Applied Clay Science, 2017, 146, 1-6.	2.6	22
46	Î±-Aluminaâ€“H2O Interface Analysis by Electroacoustic Measurements. Journal of Colloid and Interface Science, 1999, 212, 350-356.	5.0	21
47	Synthesis of La and Nb doped PZT powder by the gel-combustion method. Nanotechnology, 2006, 17, 1731-1735.	1.3	21
48	Characterization of Yb:YAG ceramics as laser media. Optical Materials, 2010, 33, 205-210.	1.7	21
49	Nanoencapsulation techniques as a â€œsafer by (molecular) designâ€•tool. Nano Structures Nano Objects, 2018, 13, 155-162.	1.9	21
50	In Vitro Toxicity of TiO2:SiO2 Nanocomposites with Different Photocatalytic Properties. Nanomaterials, 2019, 9, 1041.	1.9	21
51	Direct synthesis of PMN samples by spray-drying. Journal of the European Ceramic Society, 2002, 22, 2093-2100.	2.8	20
52	Addition of Dialkylzinc to Ketones in the Presence of Silylating Agents:Â Synthesis of Functionalized Tertiary Silyl Ethers. Journal of Organic Chemistry, 1998, 63, 1330-1333.	1.7	19
53	PZT prepared by spray drying: From powder synthesis to electromechanical properties. Journal of the European Ceramic Society, 2005, 25, 3323-3334.	2.8	19
54	Malayaite ceramic pigments: A combined optical spectroscopy and neutron/X-ray diffraction study. Materials Research Bulletin, 2009, 44, 1778-1785.	2.7	19

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55	Multifunctional Hybrid Nanocomposite Nanofibers Produced by Colloid Electrospinning from Water Solutions. Current Nanoscience, 2014, 11, 41-48.	0.7	19
56	Chlorinated organics total oxidation over V2O5/TiO2 catalysts prepared by polyol-mediated synthesis. Applied Catalysis A: General, 2007, 325, 309-315.	2.2	18
57	Synthesis of nanosized zirconium diboride powder via oxide-borohydride solid-state reaction. Scripta Materialia, 2015, 109, 100-103.	2.6	18
58	Hazard Screening Methods for Nanomaterials: A Comparative Study. International Journal of Molecular Sciences, 2018, 19, 649.	1.8	18
59	CuO nanoparticle penetration through intact and damaged human skin. New Journal of Chemistry, 2019, 43, 17033-17039.	1.4	18
60	Microwave-assisted polyol synthesis of sub-micrometer Y2O3 and Yb-Y2O3 particles for laser source application. Ceramics International, 2010, 36, 103-106.	2.3	17
61	Methylation of Ir(<scp>iii</scp>)-tetrazolato complexes: an effective route to modulate the emission outputs and to switch to antimicrobial properties. Dalton Transactions, 2017, 46, 12328-12338.	1.6	16
62	Innovative synthesis of nanostructured composite materials by a spray-freeze drying process: Efficient catalysts and photocatalysts preparation. Catalysis Today, 2019, 334, 193-202.	2.2	16
63	Synthesis of Cr-doped CaTiSiO5 ceramic pigments by spray drying. Materials Research Bulletin, 2009, 44, 918-924.	2.7	15
64	Assessment of cytotoxicity of metal oxide nanoparticles on the basis of fundamental physicalâ€“chemical parameters: a robust approach to grouping. Environmental Science: Nano, 2019, 6, 3102-3112.	2.2	15
65	Understanding the impact of more realistic low-dose, prolonged engineered nanomaterial exposure on genotoxicity using 3D models of the human liver. Journal of Nanobiotechnology, 2021, 19, 193.	4.2	15
66	ASINA Project: Towards a Methodological Data-Driven Sustainable and Safe-by-Design Approach for the Development of Nanomaterials. Frontiers in Bioengineering and Biotechnology, 2021, 9, 805096.	2.0	15
67	Versailles project on advanced materials and standards (VAMAS) interlaboratory study on measuring the number concentration of colloidal gold nanoparticles. Nanoscale, 2022, 14, 4690-4704.	2.8	15
68	Comparative effects of metal oxide nanoparticles on human airway epithelial cells and macrophages. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	14
69	Assessing occupational risk in designs of production processes of nano-materials. NanoImpact, 2019, 14, 100149.	2.4	14
70	Tailored SiO2-based coatings for dye doped superparamagnetic nanocomposites. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 410, 111-118.	2.3	13
71	Multiple approach to test nano TiO2 photo-activity. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 292, 26-33.	2.0	13
72	Evaluation of existing control measures in reducing health and safety risks of engineered nanomaterials. Environmental Science: Nano, 2016, 3, 869-882.	2.2	13

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73	Pulmonary toxicity and gene expression changes after short-term inhalation exposure to surface-modified copper oxide nanoparticles. NanoImpact, 2021, 22, 100313.	2.4	13
74	Pilot- plant study for the photocatalytic/electrochemical degradation of Rhodamine B. Journal of Environmental Chemical Engineering, 2018, 6, 1794-1804.	3.3	12
75	Silica modification of titania nanoparticles enhances photocatalytic production of reactive oxygen species without increasing toxicity potential in vitro. RSC Advances, 2018, 8, 40369-40377.	1.7	12
76	Innovative and Sustainable Production of Biopolymers. , 2019, , 131-148.		12
77	Photocatalytic Oxidation of HMF under Solar Irradiation: Coupling of Microemulsion and Lyophilization to Obtain Innovative TiO2-Based Materials. Molecules, 2020, 25, 5225.	1.7	12
78	Effects of powder processing on colloidal and microstructural characteristics of Î²-SiC powders. Materials Chemistry and Physics, 2007, 103, 70-77.	2.0	11
79	Length-dependent toxicity of TiO₂ nanofibers: mitigation via shortening. Nanotoxicology, 2020, 14, 433-452.	1.6	11
80	Influence of Ionic Environment and pH on the Electrokinetic Properties of Ball Clays. Clays and Clay Minerals, 2001, 49, 263-269.	0.6	10
81	Ferroelectric Relaxor Thin Films Grown by Pulsed Laser Deposition. Ferroelectrics, 2003, 293, 189-199.	0.3	10
82	Heterocoagulation-spray drying process for the inclusion of ceramic pigments. Journal of the European Ceramic Society, 2008, 28, 169-176.	2.8	10
83	Processing of a multilayer bender type actuator. Journal of the European Ceramic Society, 2001, 21, 2011-2014.	2.8	9
84	Simple ions control the elasticity of calcite gels via interparticle forces. Journal of Colloid and Interface Science, 2019, 553, 280-288.	5.0	9
85	Dosimetry inÂvitro â€“ exploring the sensitivity of deposited dose predictions vs. affinity, polydispersity, freeze-thawing, and analytical methods. Nanotoxicology, 2021, 15, 21-34.	1.6	9
86	Insulating Thermal and Water-Resistant Hybrid Coating for Fabrics. Coatings, 2020, 10, 72.	1.2	9
87	Nanosilver: An innovative paradigm to promote its safe and active use. NanoImpact, 2018, 11, 128-135.	2.4	8
88	Influence of spray-coating process parameters on the release of TiO2 particles for the production of antibacterial textile. NanoImpact, 2020, 19, 100245.	2.4	8
89	Data Shepherding in Nanotechnology. The Initiation. Nanomaterials, 2021, 11, 1520.	1.9	8
90	TiO2@BSA nano-composites investigated through orthogonal multi-techniques characterization platform. Colloids and Surfaces B: Biointerfaces, 2021, 207, 112037.	2.5	8

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91	Use of single particle ICP-MS to estimate silver nanoparticle penetration through baby porcine mucosa. Nanotoxicology, 2021, 15, 1005-1015.	1.6	8
92	Quantifying Emission Factors and Setting Conditions of Use According to ECHA Chapter R.14 for a Spray Process Designed for Nanocoatingsâ€"A Case Study. Nanomaterials, 2022, 12, 596.	1.9	7
93	Synthesis of Nb Doped Lead Zirconate Titanate by Chemical Methods. Advanced Engineering Materials, 2006, 8, 572-576.	1.6	6
94	Silica-coating as protective shell for the risk management of nanoparticles. Journal of Physics: Conference Series, 2013, 429, 012052.	0.3	6
95	Crystallization behaviour of Yb-doped and undoped YAG nanoceramics synthesized by microwave-assisted urea precipitation. Ceramics International, 2014, 40, 11837-11844.	2.3	6
96	Encapsulation of cationic iridium(iii) tetrazole complexes into a silica matrix: synthesis, characterization and optical properties. New Journal of Chemistry, 2018, 42, 9635-9644.	1.4	6
97	Monitoring and Optimisation of Ag Nanoparticle Spray-Coating on Textiles. Nanomaterials, 2021, 11, 3165.	1.9	6
98	Particles Emission from an Industrial Spray Coating Process Using Nano-Materials. Nanomaterials, 2022, 12, 313.	1.9	6
99	Microwave Assisted Synthesis of Yb:Y2O3 Based Materials for Laser Source Application. Advanced Engineering Materials, 2010, 12, 205-209.	1.6	5
100	Ceramized Fabrics and Their Integration in a Semi-Pilot Plant for the Photodegradation of Water Pollutants. Catalysts, 2021, 11, 1418.	1.6	5
101	Electrochemical detection of copper ions leached from CuO nanoparticles in saline buffers and biological media using a gold wire working electrode. Journal of Nanoparticle Research, 2016, 18, 1.	0.8	4
102	Growth of piezoelectric thin films with fine grain microstructure by high energy pulsed laser deposition. Sensors and Actuators A: Physical, 1999, 74, 35-40.	2.0	3
103	New process for the preparation of pigment-coated phosphors on the base of electroacoustic characterization. Journal of the European Ceramic Society, 2002, 22, 1667-1672.	2.8	3
104	Applying Safety by Molecular Design Concepts to Nanomaterials Risk Management. Innovation, Technology and Knowledge Management, 2016, , 171-195.	0.4	3
105	Monitoring Systems of an Electrospinning Plant for the Production of Composite Nanofibers. , 2019, , 315-337.		3
106	Interparticle attraction controls flow heterogeneity in calcite gels. Soft Matter, 2020, 16, 9217-9229.	1.2	3
107	Use of Cotton Textiles Coated by Ir(III) Tetrazole Complexes within Ceramic Silica Nanophases for Photo-Induced Self-Marker and Antibacterial Application. Nanomaterials, 2020, 10, 1020.	1.9	3
108	Digital Twins applied to the implementation of Safe-by-Design strategies in nano-processes for the reduction of airborne emission and occupational exposure to nano-forms. Journal of Physics: Conference Series, 2021, 1953, 012010.	0.3	3

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109	Spray-Drying Derived Lead Magnesium Niobate Perovskite Ceramics. Key Engineering Materials, 2001, 206-213, 171-174.	0.4	1
110	Quantifying uncertainty in doseâ€“response screenings of nanoparticles: a Bayesian data analysis. Nanotoxicology, 2022, 16, 135-151.	1.6	1
111	Improvement of Piezoelectric Properties through Post Hipping. Key Engineering Materials, 2004, 264-268, 1365-1368.	0.4	0
112	Industrial Ink-Jet Application of Nano-Sized Ceramic Inks. Advances in Science and Technology, 0, , 174-180.	0.2	0
113	Synthesis of Cr-Doped Sphene Ceramic Pigments by Spray Drying. Advances in Science and Technology, 0, , 272-275.	0.2	0
114	SUN: Paving Sustainable Nanoinnovation. , 0, , .		0