Jerome Rose

List of Publications by Citations

204 papers	11,644 citations	54 h-index	102 g-index
217 ext. papers	12,688 ext. citations	6.7 avg, IF	6 L-index

#	Paper	IF	Citations
204	Towards a definition of inorganic nanoparticles from an environmental, health and safety perspective. *Nature Nanotechnology*, **2009**, 4, 634-41	28.7	1306
203	Cytotoxicity of CeO2 nanoparticles for Escherichia coli. Physico-chemical insight of the cytotoxicity mechanism. *Environmental Science & Technology*, **2006**, 40, 6151-6	10.3	606
202	Potential scenarios for nanomaterial release and subsequent alteration in the environment. *Environmental Toxicology and Chemistry*, **2012**, 31, 50-9	3.8	457
201	Relation between the redox state of iron-based nanoparticles and their cytotoxicity toward Escherichia coli. *Environmental Science & Technology*, **2008**, 42, 6730-5	10.3	427
200	More than the ions: the effects of silver nanoparticles on Lolium multiflorum. *Environmental Science & Technology*, **2011**, 45, 2360-7	10.3	422
199	Chemical stability of metallic nanoparticles: a parameter controlling their potential cellular toxicity in vitro. *Environmental Pollution*, **2009**, 157, 1127-33	9.3	416
198	The effect of silica and natural organic matter on the Fe(II)-catalysed transformation and reactivity of Fe(III) minerals. *Geochimica Et Cosmochimica Acta*, **2009**, 73, 4409-4422	5.5	255
197	Decoupling of As and Fe release to Bangladesh groundwater under reducing conditions. Part II: Evidence from sediment incubations. *Geochimica Et Cosmochimica Acta*, **2004**, 68, 3475-3486	5.5	215
196	In vitro interactions between DMSA-coated maghemite nanoparticles and human fibroblasts: A physicochemical and cyto-genotoxical study. *Environmental Science & Technology*, **2006**, 40, 4367-73	10.3	180
195	Concurrent aggregation and deposition of TiO2 nanoparticles in a sandy porous media. *Environmental Science & Technology*, **2010**, 44, 4897-902	10.3	179
194	Aging of TiO(2) nanocomposites used in sunscreen. Dispersion and fate of the degradation products in aqueous environment. *Environmental Pollution*, **2010**, 158, 3482-9	9.3	172
193	Structural degradation at the surface of a TiO(2)-based nanomaterial used in cosmetics. *Environmental Science & Technology*, **2010**, 44, 2689-94	10.3	167
192	Enhanced adsorption of arsenic onto maghemites nanoparticles: As(III) as a probe of the surface structure and heterogeneity. *Langmuir*, **2008**, 24, 3215-22	4	167
191	CeO2 nanoparticles induce DNA damage towards human dermal fibroblasts in vitro. *Nanotoxicology* , **2009**, 3, 161-171	5.3	155
190	Environmental impacts of steel slag reused in road construction: a crystallographic and molecular (XANES) approach. *Journal of Hazardous Materials*, **2007**, 139, 537-42	12.8	155
189	Micro- and nano-X-ray computed-tomography: A step forward in the characterization of the pore network of a leached cement paste. *Cement and Concrete Research*, **2015**, 67, 138-147	10.3	153
188	TiO2-based nanoparticles released in water from commercialized sunscreens in a life-cycle perspective: structures and quantities. *Environmental Pollution*, **2011**, 159, 1543-50	9.3	142

187	Sorption of arsenite, arsenate, and thioarsenates to iron oxides and iron sulfides: a kinetic and spectroscopic investigation. *Environmental Science & Technology*, **2013**, 47, 5652-9	10.3	136
186	Direct and indirect CeO2 nanoparticles toxicity for Escherichia coli and Synechocystis. *Nanotoxicology*, **2009**, 3, 284-295	5.3	122
185	New methodological approach for the vanadium K-edge X-ray absorption near-edge structure interpretation: application to the speciation of vanadium in oxide phases from steel slag. *Journal of Physical Chemistry B*, **2007**, 111, 5101-10	3.4	122
184	Protein corona formation for nanomaterials and proteins of a similar size: hard or soft corona?. *Nanoscale*, **2013**, 5, 1658-68	7.7	110
183	Environmental impact of sunscreen nanomaterials: ecotoxicity and genotoxicity of altered TiO2 nanocomposites on Vicia faba. *Environmental Pollution*, **2011**, 159, 2515-22	9.3	107
182	Kinetics of steel slag leaching: Batch tests and modeling. *Waste Management*, **2011**, 31, 225-35	8.6	107
181	Nucleation and Growth Mechanisms of Fe Oxyhydroxide in the Presence of PO4 Ions. 1. Fe K-Edge EXAFS Study. *Langmuir*, **1996**, 12, 6701-6707	4	100
180	Hydration and dispersion of C60 in aqueous systems: the nature of water-fullerene interactions. *Langmuir*, **2009**, 25, 11232-5	4	98
179	Nanoparticle Uptake in Plants: Gold Nanomaterial Localized in Roots of Arabidopsis thaliana by X-ray Computed Nanotomography and Hyperspectral Imaging. *Environmental Science & Technology*, **2017**, 51, 8682-8691	10.3	92
178	Impact of irrigating rice paddies with groundwater containing arsenic in Bangladesh. *Science of the Total Environment*, **2006**, 367, 769-77	10.2	91
177	Chemistry and structure of aggregates formed with Fe-salts and natural organic matter. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **1999**, 147, 297-308	5.1	90
176	Speciation of Cd and Pb in dust emitted from sinter plant. *Chemosphere*, **2010**, 78, 445-50	8.4	85
175	Speciation and Crystal Chemistry of Iron(III) Chloride Hydrolyzed in the Presence of SiO4 Ligands. 1. An Fe K-Edge EXAFS Study. *Langmuir*, **2000**, 16, 4726-4731	4	85
174	Inhibition of sulfate reducing bacteria in aquifer sediment by iron nanoparticles. *Water Research*, **2014**, 51, 64-72	12.5	83
173	Solubility of Fe□ettringite (Ca6[Fe(OH)6]2(SO4)3□26H2O). *Geochimica Et Cosmochimica Acta*, **2008**, 72, 1-18	5.5	83
172	Coagulation-Flocculation of Natural Organic Matter with Al Salts: Speciation and Structure of the Aggregates. *Environmental Science & Technology*, **2000**, 34, 3242-3246	10.3	81
171	Heavy metal tolerance in Stenotrophomonas maltophilia. *PLoS ONE*, **2008**, 3, e1539	3.7	79
170	Transfer, transformation, and impacts of ceria nanomaterials in aquatic mesocosms simulating a pond ecosystem. *Environmental Science & Technology*, **2014**, 48, 9004-13	10.3	78

169	Nucleation and Growth Mechanisms of Fe Oxyhydroxide in the Presence of PO4 Ions. 2. P K-Edge EXAFS Study. *Langmuir*, **1997**, 13, 1827-1834	4	76
168	Ecotoxicological effects of an aged TiO2 nanocomposite measured as apoptosis in the anecic earthworm Lumbricus terrestris after exposure through water, food and soil. *Environment International*, **2011**, 37, 1105-10	12.9	75
167	Nanotechnologies: Tools for sustainability in a new wave of water treatment processes. *Integrated Environmental Assessment and Management*, **2006**, 2, 391-395	2.5	75
166	Molecular insights of oxidation process of iron nanoparticles: spectroscopic, magnetic, and microscopic evidence. *Environmental Science & Technology*, **2014**, 48, 13888-94	10.3	73
165	Temporal variations in arsenic uptake by rice plants in Bangladesh: the role of iron plaque in paddy fields irrigated with groundwater. *Science of the Total Environment*, **2010**, 408, 4185-93	10.2	70
164	Characterization of Iron-Oxides Formed by Oxidation of Ferrous Ions in the Presence of Various Bacterial Species and Inorganic Ligands. *Geomicrobiology Journal*, **2004**, 21, 99-112	2.5	68
163	Speciation and Crystal Chemistry of Fe(III) Chloride Hydrolyzed in the Presence of SiO4 Ligands. 2. Characterization of Si-Fe Aggregates by FTIR and 29Si Solid-State NMR. *Langmuir*, **2001**, 17, 1399-1405	4	68
162	Physico-chemical control over the single- or double-wall structure of aluminogermanate imogolite-like nanotubes. *Journal of the American Chemical Society*, **2012**, 134, 3780-6	16.4	65
161	Structure and distribution of allophanes, imogolite and proto-imogolite in volcanic soils. *Geoderma*, **2012**, 183-184, 100-108	6.7	65
160	Inorganic manufactured nanoparticles: how their physicochemical properties influence their biological effects in aqueous environments. *Nanomedicine*, **2010**, 5, 999-1007	5.6	65
159	Synthesis of large quantities of single-walled aluminogermanate nanotube. *Journal of the American Chemical Society*, **2008**, 130, 5862-3	16.4	65
158	XAS study of iron and arsenic speciation during Fe(II) oxidation in the presence of As(III). *Environmental Science & Technology*, **2005**, 39, 9478-85	10.3	64
157	Intestinal toxicity evaluation of TiO2 degraded surface-treated nanoparticles: a combined physico-chemical and toxicogenomics approach in caco-2 cells. *Particle and Fibre Toxicology*, **2012**, 9, 18	8.4	63
156	Ceramic membranes derived from ferroxane nanoparticles: a new route for the fabrication of iron oxide ultrafiltration membranes. *Journal of Membrane Science*, **2003**, 227, 207-217	9.6	62
155	Chemistry and structure of colloids obtained by hydrolysis of Fe(III) in the presence of SiO4 ligands. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2003**, 217, 121-128	5.1	62
154	Aggregation and sedimentation of magnetite nanoparticle clusters. *Environmental Science: Nano*, **2016**, 3, 567-577	7.1	62
153	Exposure to cerium dioxide nanoparticles differently affect swimming performance and survival in two daphnid species. *PLoS ONE*, **2013**, 8, e71260	3.7	59
152	Filter-feeding bivalves store and biodeposit colloidally stable gold nanoparticles. *Environmental Science & Technology*, **2011**, 45, 6592-9	10.3	58

151	Synthesis of imogolite fibers from decimolar concentration at low temperature and ambient pressure: a promising route for inexpensive nanotubes. *Journal of the American Chemical Society*, **2009**, 131, 17080-1	16.4	57
150	Evidence of double-walled Al-Ge imogolite-like nanotubes. a cryo-TEM and SAXS investigation. *Journal of the American Chemical Society*, **2010**, 132, 1208-9	16.4	54
149	Formation and Growth Mechanisms of Imogolite-Like Aluminogermanate Nanotubes. *Chemistry of Materials*, **2010**, 22, 2466-2473	9.6	53
148	Structure and Mechanisms of Formation of FeOOH(NO3) Oligomers in the Early Stages of Hydrolysis. *Langmuir*, **1997**, 13, 3240-3246	4	53
147	Speciation of Cr and V within BOF steel slag reused in road constructions. *Journal of Geochemical Exploration*, **2006**, 88, 10-14	3.8	53
146	Iron speciation in natural organic matter colloids. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **1998**, 136, 11-19	5.1	52
145	Long-term aging of a CeO(2) based nanocomposite used for wood protection. *Environmental Pollution*, **2014**, 188, 1-7	9.3	51
144	Synergistic effects of sulfate reducing bacteria and zero valent iron on zinc removal and stability in aquifer sediment. *Chemical Engineering Journal*, **2015**, 260, 83-89	14.7	50
143	Single-step formation of micron long (OH)3Al2O3Ge(OH) imogolite-like nanotubes. *Chemical Communications*, **2013**, 49, 11284-6	5.8	50
142	Ecotoxicological assessment of TiO2 byproducts on the earthworm Eisenia fetida. *Environmental Pollution*, **2011**, 159, 2698-705	9.3	50
141	X-ray Absorption Spectroscopy Study of Immobilization Processes for Heavy Metals in Calcium Silicate Hydrates. 2. Zinc. *Langmuir*, **2001**, 17, 3658-3665	4	50
140	Meeting the Needs for Released Nanomaterials Required for Further Testing-The SUN Approach. *Environmental Science & Technology*, **2016**, 50, 2747-53	10.3	49
139	Reactivity at (nano)particle-water interfaces, redox processes, and arsenic transport in the environment. *Comptes Rendus - Geoscience*, **2011**, 343, 123-139	1.4	48
138	Regulatory relevant and reliable methods and data for determining the environmental fate of manufactured nanomaterials. *NanoImpact*, **2017**, 8, 1-10	5.6	47
137	Effects of aged TiO2 nanomaterial from sunscreen on Daphnia magna exposed by dietary route. *Environmental Pollution*, **2012**, 163, 55-61	9.3	46
136	Ultrastructural interactions and genotoxicity assay of cerium dioxide nanoparticles on mouse oocytes. *International Journal of Molecular Sciences*, **2013**, 14, 21613-28	6.3	46
135	DNA damage and oxidative stress induced by CeO2 nanoparticles in human dermal fibroblasts: Evidence of a clastogenic effect as a mechanism of genotoxicity. *Nanotoxicology*, **2015**, 9, 696-705	5.3	44
134	Investigation of copper speciation in pig slurry by a multitechnique approach. *Environmental Science & Technology*, **2010**, 44, 6926-32	10.3	44

133	High energy resolution five-crystal spectrometer for high quality fluorescence and absorption measurements on an x-ray absorption spectroscopy beamline. *Review of Scientific Instruments*, **2012**, 83, 063104	1.7	44
132	Microbial Sulfate Reduction Enhances Arsenic Mobility Downstream of Zerovalent-Iron-Based Permeable Reactive Barrier. *Environmental Science & Technology*, **2016**, 50, 7610-7	10.3	43
131	Growth kinetic of single and double-walled aluminogermanate imogolite-like nanotubes: an experimental and modeling approach. *Physical Chemistry Chemical Physics*, **2011**, 13, 2682-9	3.6	43
130	Determination of zinc speciation in basic oxygen furnace flying dust by chemical extractions and X-ray spectroscopy. *Chemosphere*, **2008**, 70, 1945-51	8.4	43
129	Characteristics of ultrafiltration ceramic membranes derived from alumoxane nanoparticles. *Journal of Membrane Science*, **2002**, 205, 33-43	9.6	43
128	X-ray Absorption Spectroscopy Study of Immobilization Processes for Heavy Metals in Calcium Silicate Hydrates: 1. Case of Lead. *Langmuir*, **2000**, 16, 9900-9906	4	42
127	Synthesis and Characterization of Carboxylate-FeOOH Nanoparticles (Ferroxanes) and Ferroxane-Derived Ceramics. *Chemistry of Materials*, **2002**, 14, 621-628	9.6	41
126	Nickel speciation in Sebertia acuminata, a plant growing on a lateritic soil of New Caledonia. *Comptes Rendus - Geoscience*, **2004**, 336, 567-577	1.4	40
125	Are interactions between organic compounds and nanoscale weathering minerals the key drivers of carbon storage in soils?. *Environmental Science & Technology*, **2015**, 49, 3997-8	10.3	39
124	Affinity of C60 Fullerenes with Water. *Fullerenes Nanotubes and Carbon Nanostructures*, **2006**, 14, 307-314	1.8	39
123	Chronic dosing of a simulated pond ecosystem in indoor aquatic mesocosms: fate and transport of CeO2 nanoparticles. *Environmental Science: Nano*, **2015**, 2, 653-663	7.1	38
122	Adsorption of arsenic on polyaluminum granulate. *Environmental Science & Technology*, **2012**, 46, 7310-7	10.3	38
121	Manufactured metal and metal-oxide nanoparticles: Properties and perturbing mechanisms of their biological activity in ecosystems. *Comptes Rendus - Geoscience*, **2011**, 343, 168-176	1.4	38
120	Rhizosphere pH gradient controls copper availability in a strongly acidic soil. *Environmental Science & Technology*, **2009**, 43, 5686-91	10.3	38
119	New combination of EXAFS spectroscopy and density fractionation for the speciation of chromium within an andosol. *Environmental Science & Technology*, **2006**, 40, 7602-8	10.3	38
118	Cerium dioxide nanoparticles affect in vitro fertilization in mice. *Nanotoxicology*, **2016**, 10, 111-7	5.3	37
117	Environmental exposure to TiO nanomaterials incorporated in building material. *Environmental Pollution*, **2017**, 220, 1160-1170	9.3	36
116	Toward direct, micron-scale XRF elemental maps and quantitative profiles of wet marine sediments. *Geochemistry, Geophysics, Geosystems*, **2007**, 8, n/a-n/a	3.6	36

115	Aged TiO2-based nanocomposite used in sunscreens produces singlet oxygen under long-wave UV and sensitizes Escherichia coli to cadmium. *Environmental Science & Technology*, **2014**, 48, 5245-53	10.3	35
114	High-Energy Resolution Fluorescence Detected X-Ray Absorption Spectroscopy: A Powerful New Structural Tool in Environmental Biogeochemistry Sciences. *Journal of Environmental Quality*, **2017**, 46, 1146-1157	3.4	35
113	Arsenic binding to organic and inorganic sulfur species during microbial sulfate reduction: a sediment flow-through reactor experiment. *Environmental Chemistry*, **2013**, 10, 285	3.2	35
112	An adaptable mesocosm platform for performing integrated assessments of nanomaterial risk in complex environmental systems. *Scientific Reports*, **2014**, 4, 5608	4.9	34
111	Structural incorporation of iron into Ge-imogolite nanotubes: a promising step for innovative nanomaterials. *RSC Advances*, **2014**, 4, 49827-49830	3.7	33
110	Exposure of juvenile Danio rerio to aged TiO2 nanomaterial from sunscreen. *Environmental Science and Pollution Research*, **2013**, 20, 3340-50	5.1	33
109	Role of molting on the biodistribution of CeO2 nanoparticles within Daphnia pulex. *Water Research*, **2013**, 47, 3921-30	12.5	32
108	Physico-chemical study of fouling mechanisms of ultrafiltration membrane on Biwa lake (Japan). *Journal of Membrane Science*, **1997**, 130, 53-62	9.6	32
107	Toxicity evaluation of manufactured CeO2 nanoparticles before and after alteration: combined physicochemical and whole-genome expression analysis in Caco-2 cells. *BMC Genomics*, **2014**, 15, 700	4.5	31
106	Pulmonary exposure to metallic nanomaterials during pregnancy irreversibly impairs lung development of the offspring. *Nanotoxicology*, **2017**, 11, 484-495	5.3	29
105	Soil organo-mineral associations formed by co-precipitation of Fe, Si and Al in presence of organic ligands. *Geochimica Et Cosmochimica Acta*, **2019**, 260, 15-28	5.5	29
104	Preparation of amino-functionalized silica in aqueous conditions. *Applied Surface Science*, **2013**, 266, 155-160	6.7	29
103	Synthesis of Ge-imogolite: influence of the hydrolysis ratio on the structure of the nanotubes. *Physical Chemistry Chemical Physics*, **2011**, 13, 14516-22	3.6	28
102	Aqueous Zirconium Complexes for Gelling Polymers. A Combined X-ray Absorption Spectroscopy and Quantum Mechanical Study. *Journal of Physical Chemistry B*, **2003**, 107, 2910-2920	3.4	27
101	Role of natural nanoparticles on the speciation of Ni in andosols of la Reunion. *Geochimica Et Cosmochimica Acta*, **2009**, 73, 4750-4760	5.5	26
100	Nanoscale Coloristic Pigments: Upper Limits on Releases from Pigmented Plastic during Environmental Aging, In Food Contact, and by Leaching. *Environmental Science & Technology*, **2017**, 51, 11669-11680	10.3	25
99	Arsenate uptake by Al nanoclusters and other Al-based sorbents during water treatment. *Water Research*, **2016**, 88, 844-851	12.5	25
98	Salinity-dependent silver nanoparticle uptake and transformation by Atlantic killifish (Fundulus heteroclitus) embryos. *Nanotoxicology*, **2014**, 8 Suppl 1, 167-76	5.3	24

97	Combining size fractionation, scanning electron microscopy, and X-ray absorption spectroscopy to probe zinc speciation in pig slurry. *Journal of Environmental Quality*, **2010**, 39, 531-40	3.4	24
96	Evolution of iron speciation during hydration of C4AF. *Waste Management*, **2006**, 26, 720-4	8.6	23
95	The accurate crystal chemistry of ferric smectites from the lateritic nickel ore of Murrin Murrin (Western Australia). II. Spectroscopic (IR and EXAFS) approaches. *Clay Minerals*, **2004**, 39, 453-467	1.3	23
94	Harmonizing across environmental nanomaterial testing media for increased comparability of nanomaterial datasets. *Environmental Science: Nano*, **2020**, 7, 13-36	7.1	23
93	Transformations of Nanoenabled Copper Formulations Govern Release, Antifungal Effectiveness, and Sustainability throughout the Wood Protection Lifecycle. *Environmental Science & Technology*, **2018**, 52, 1128-1138	10.3	22
92	Nucleation and Growth Mechanisms of Iron Oxyhydroxides in the Presence of PO4 Ions. 3. Speciation of Fe by Small Angle X-ray Scattering. *Langmuir*, **1997**, 13, 3882-3885	4	22
91	Very low concentration of cerium dioxide nanoparticles induce DNA damage, but no loss of vitality, in human spermatozoa. *Toxicology in Vitro*, **2018**, 50, 236-241	3.6	21
90	Nanometer-long Ge-imogolite nanotubes cause sustained lung inflammation and fibrosis in rats. *Particle and Fibre Toxicology*, **2014**, 11, 67	8.4	21
89	Influence of the length of imogolite-like nanotubes on their cytotoxicity and genotoxicity toward human dermal cells. *Chemical Research in Toxicology*, **2012**, 25, 2513-22	4	21
88	Apatite and Portland/apatite composite cements obtained using a hydrothermal method for retaining heavy metals. *Journal of Hazardous Materials*, **2008**, 150, 99-108	12.8	21
87	Enhanced transportability of zero valent iron nanoparticles in aquifer sediments: surface modifications, reactivity, and particle traveling distances. *Environmental Science and Pollution Research*, **2017**, 24, 9269-9277	5.1	20
86	Microbial and mineral evolution in zero valent iron-based permeable reactive barriers during long-term operations. *Environmental Science and Pollution Research*, **2016**, 23, 5960-8	5.1	20
85	First insights of Cr speciation in leached Portland cement using X-ray spectromicroscopy. *Environmental Science & Technology*, **2003**, 37, 4864-70	10.3	20
84	Contribution of mesocosm testing to a single-step and exposure-driven environmental risk assessment of engineered nanomaterials. *NanoImpact*, **2019**, 13, 66-69	5.6	20
83	SERENADE: safer and ecodesign research and education applied to nanomaterial development, the new generation of materials safer by design. *Environmental Science: Nano*, **2017**, 4, 526-538	7.1	19
82	Arsenic speciation in cemented paste backfills and synthetic calcium silicate hydrates. *Minerals Engineering*, **2012**, 39, 51-61	4.9	19
81	Comparison of Methods for Fullerene Detection and Measurements of Reactive Oxygen Production in Cosmetic Products. *Environmental Engineering Science*, **2010**, 27, 797-804	2	19
80	Drastic Change in Zinc Speciation during Anaerobic Digestion and Composting: Instability of Nanosized Zinc Sulfide. *Environmental Science & Technology*, **2018**, 52, 12987-12996	10.3	19

79	Nanotechnology, global development in the frame of environmental risk forecasting. A necessity of interdisciplinary researches. *Comptes Rendus - Geoscience*, **2015**, 347, 35-42	1.4	18
78	The effect of surface modification of microfibrillated cellulose (MFC) by acid chlorides on the structural and thermomechanical properties of biopolyamide 4.10 nanocomposites. *Industrial Crops and Products*, **2018**, 116, 97-108	5.9	18
77	Design Defines the Effects of Nanoceria at a Low Dose on Soil Microbiota and the Potentiation of Impacts by the Canola Plant. *Environmental Science & Technology*, **2016**, 50, 6892-901	10.3	18
76	Location and evolution of the speciation of vanadium in bitumen and model of reclaimed bituminous mixes during ageing: Can vanadium serve as a tracer of the aged and fresh parts of the reclaimed asphalt pavement mixture?. *Fuel*, **2012**, 102, 423-430	7.1	18
75	Zinc speciation in steel plant atmospheric emissions: A multi-technical approach. *Journal of Geochemical Exploration*, **2006**, 88, 239-242	3.8	18
74	Goethite, a tailor-made host for the critical metal scandium: The FexSc(1-x)OOH solid solution. *Geochemical Perspectives Letters*,16-20	3	18
73	Sulfur and oxygen isotope tracing in zero valent iron based In situ remediation system for metal contaminants. *Chemosphere*, **2013**, 90, 1366-71	8.4	17
72	Influence of arsenate species on the formation of Fe(III) oxyhydroxides and Fe(II□I) hydroxychloride. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2009**, 332, 26-35	5.1	17
71	Hydrolysis of Iron(II) Chloride under Anoxic Conditions and Influence of SiO4Ligands. *Langmuir*, **2002**, 18, 4292-4299	4	17
70	Speciation and Crystal Chemistry of Iron(III) Chloride Hydrolyzed in the Presence of SiO4 Ligands. 3. Semilocal Scale Structure of the Aggregates. *Langmuir*, **2001**, 17, 4753-4757	4	17
69	Nucleation and Growth Mechanisms of Iron Oxyhydroxides in the Presence of PO4Ions. 4. Structure of the Aggregates. *Langmuir*, **1997**, 13, 3886-3889	4	16
68	Safe(r) by design implementation in the nanotechnology industry. *NanoImpact*, **2020**, 20, 100267	5.6	16
67	An overview of solid/liquid separation methods and size fractionation techniques for engineered nanomaterials in aquatic environment. *Environmental Technology Reviews*, **2013**, 2, 55-70	7.7	15
66	Electroweak studies in e+e- collisions: 12Physical Review D, **1988**, 38, 2665-2678	4.9	15
65	Anthropogenic Release and Distribution of Titanium Dioxide Particles in a River Downstream of a Nanomaterial Manufacturer Industrial Site. *Frontiers in Environmental Science*, **2020**, 8,	4.8	14
64	Strong chemical evidence for high Fe(II)-colloids and low As-bearing colloids (200nm□10kDa) contents in groundwater and flooded paddy fields in Bangladesh: A size fractionation approach. *Applied Geochemistry*, **2011**, 26, 1665-1672	3.5	14
63	Environmental exposure of a simulated pond ecosystem to a CuO nanoparticle-based wood stain throughout its life cycle. *Environmental Science: Nano*, **2018**, 5, 2579-2589	7.1	14
62	Elaboration of Cellulose Nanocrystal/Ge-Imogolite Nanotube Multilayered Thin Films. *Langmuir*, **2018**, 34, 3386-3394	4	13

61	Is there a Trojan-horse effect during magnetic nanoparticles and metalloid cocontamination of human dermal fibroblasts?. *Environmental Science & Technology*, **2012**, 46, 10789-96	10.3	13
60	Chemical element imaging for speleothem geochemistry: Application to a uranium-bearing corallite with aragonite diagenesis to opal (Eastern Siberia, Russia). *Chemical Geology*, **2012**, 294-295, 190-202	4.2	13
59	Detection of environmental clastogens and aneugens in human fibroblasts by cytokinesis-blocked micronucleus assay associated with immunofluorescent staining of CENP-A in micronuclei. *Chemosphere*, **2011**, 84, 676-80	8.4	13
58	A role for adsorption in lead leachability from MSWI bottom ASH. *Waste Management*, **2008**, 28, 1324-30	8.6	13
57	Structural and physicalchemical behavior of a CeO2 nanoparticle based diesel additive during combustion and environmental release. *Environmental Science: Nano*, **2017**, 4, 1974-1980	7.1	12
56	Non-linear release dynamics for a CeO nanomaterial embedded in a protective wood stain, due to matrix photo-degradation. *Environmental Pollution*, **2018**, 241, 182-193	9.3	12
55	Respiratory hazard of Li-ion battery components: elective toxicity of lithium cobalt oxide (LiCoO) particles in a mouse bioassay. *Archives of Toxicology*, **2018**, 92, 1673-1684	5.8	11
54	Multi-scale X-ray computed tomography to detect and localize metal-based nanomaterials in lung tissues of in vivo exposed mice. *Scientific Reports*, **2018**, 8, 4408	4.9	11
53	Zirconium speciation in lactate solutions and polyacrylate gels. *Journal of Synchrotron Radiation*, **2001**, 8, 686-8	2.4	11
52	Composition and molecular scale structure of nanophases formed by precipitation of biotite weathering products. *Geochimica Et Cosmochimica Acta*, **2018**, 229, 53-64	5.5	10
51	Effects of metallic and metal oxide nanoparticles in aquatic and terrestrial food chains. Biomarkers responses in invertebrates and bacteria. *International Journal of Nanotechnology*, **2012**, 9, 181	1.5	10
50	Accelerated microwave assisted synthesis of alumino-germanate imogolite nanotubes. *RSC Advances*, **2016**, 6, 108146-108150	3.7	9
49	Monitoring the Environmental Aging of Nanomaterials: An Opportunity for Mesocosm Testing?. *Materials*, **2019**, 12,	3.5	7
48	Calcium coordination environment in precursor species to calcium carbonate mineral formation. *Geochimica Et Cosmochimica Acta*, **2019**, 259, 344-357	5.5	7
47	Remote Biodegradation of Ge-Imogolite Nanotubes Controlled by the Iron Homeostasis of Pseudomonas brassicacearum. *Environmental Science & Technology*, **2016**, 50, 7791-8	10.3	7
46	Influence of structural defects of Ge-imogolite nanotubes on their toxicity towards Pseudomonas brassicacearum. *Environmental Science: Nano*, **2016**, 3, 839-846	7.1	7
45	Reply to comment on Fisichella et al. (2012), "Intestinal toxicity evaluation of TiO2 degraded surface-treated nanoparticles: a combined physico-chemical and toxicogenomics approach in Caco-2 cells" by Faust et al. *Particle and Fibre Toxicology*, **2012**, 9, 39	8.4	6
44	Ecotoxicology: Nanoparticle Reactivity and Living Organisms **2011**, 325-357		6

43	Modelling of Pb release during Portland cement alteration. *Advances in Cement Research*, **2009**, 21, 1-10	1.8	6
42	Lead, zinc and chromium (III) and (VI) speciation in hydrated cement phases. *Waste Management Series*, **2000**, 1, 269-280		6
41	The shape and speciation of Ag nanoparticles drive their impacts on organisms in a lotic ecosystem. *Environmental Science: Nano*, **2020**, 7, 3167-3177	7.1	6
40	Nanotechnologies: tools for sustainability in a new wave of water treatment processes. *Integrated Environmental Assessment and Management*, **2006**, 2, 391-5	2.5	6
39	Alignment of Ge-imogolite nanotubes in isomalt with tunable inter-tube distances. *RSC Advances*, **2017**, 7, 21323-21327	3.7	5
38	In Vitro Analysis of the Effects of ITER-Like Tungsten Nanoparticles: Cytotoxicity and Epigenotoxicity in BEAS-2B Cells. *Nanomaterials*, **2019**, 9,	5.4	5
37	DISTRIBUTION OF MAJOR AND TRACE ELEMENTS AT THE AGGREGATE SCALE IN A SOIL NATURALLY RICH IN TRACE ELEMENTS. *Soil Science*, **2005**, 170, 516-529	0.9	4
36	Colonisation of finfish substrate inhabited by black soldier fly larvae by blow flies, bacteria, and fungi. *Journal of Insects As Food and Feed*, **2020**, 6, 291-304	4.4	4
35	Surface Reactivity of Manufactured Nanoparticles **2011**, 269-290		4
34	CeO Nanomaterials from Diesel Engine Exhaust Induce DNA Damage and Oxidative Stress in Human and Rat Sperm In Vitro. *Nanomaterials*, **2020**, 10,	5.4	4
33	The SERENADE project; a step forward in the safe by design process of nanomaterials: The benefits of a diverse and interdisciplinary approach. *Nano Today*, **2021**, 37, 101065	17.9	4
32	Mechanisms limiting the release of TiO2 nanomaterials during photocatalytic cement alteration: the role of surface charge and porous network morphology. *Environmental Science: Nano*, **2019**, 6, 624-634	7.1	3
31	Design of model tokamak particles for future toxicity studies: Morphology and physical characterization. *Fusion Engineering and Design*, **2019**, 145, 60-65	1.7	3
30	Multivariate analysis of the exposure and hazard of ceria nanomaterials in indoor aquatic mesocosms. *Environmental Science: Nano*, **2020**, 7, 1661-1669	7.1	3
29	Environmental Impact of Steel Slag Reused as Aggregates in Road Manufacturing: Molecular Mechanisms of Chromium and Vanadium Release. *AIP Conference Proceedings*, **2007**,	0	3
28	The necessity of investigating a freshwater-marine continuum using a mesocosm approach in nanosafety: The case study of TiO2 MNM-based photocatalytic cement. *NanoImpact*, **2020**, 20, 100254	5.6	3
27	Ontology-based NLP information extraction to enrich nanomaterial environmental exposure database. *Procedia Computer Science*, **2020**, 176, 360-369	1.6	3
26	In Vitro Co-Exposure to CeO Nanomaterials from Diesel Engine Exhaust and Benzo()Pyrene Induces Additive DNA Damage in Sperm and Cumulus Cells but Not in Oocytes. *Nanomaterials*, **2021**, 11,	5.4	3

25	3D Microanalysis of Porous Copper Using FIB-Tomography in Combination with X-ray Computed Tomography. *Microscopy and Microanalysis*, **2017**, 23, 254-255	0.5	2
24	Surface Properties (Physical and Chemical) and Related Reactions: Characterization via a Multi-Technique Approach. *Frontiers of Nanoscience*, **2015**, 8, 217-243	0.7	2
23	Environmental fate of nanoparticles: physical chemical and biological aspects ? a few snapshots. *International Journal of Nanotechnology*, **2012**, 9, 167	1.5	2
22	Rhenium migration at the Maqarin natural analogue site (Jordan). *Radiochimica Acta*, **2006**, 94, 755-761	1.9	2
21	Evolution of Pb speciation in Portland cement during leaching. *European Physical Journal Special Topics*, **2003**, 107, 143-146		2
20	Nanotechnologies: Tools for sustainability in a new wave of water treatment processes **2006**, 2, 391		2
19	Effect of leaching on the crystallographic sites of trace metals associated with natural cements (site of Maqarin, Jordan): Case of Cr. *European Physical Journal Special Topics*, **2003**, 104, 447-450		2
18	MESOCOSM: A mesocosm database management system for environmental nanosafety.. *NanoImpact*, **2021**, 21, 100288	5.6	2
17	Isotopically exchangeable Al in coastal lowland acid sulfate soils. *Science of the Total Environment*, **2016**, 542, 129-35	10.2	1
16	3D Characterization of Silicon Based Electrode Material for Advanced Lithium-Ion Storage Technologies. *Microscopy and Microanalysis*, **2017**, 23, 2026-2027	0.5	1
15	Application of membrane processes in fractionation of elements in river water. *Water Science and Technology*, **2015**, 72, 2277-90	2.2	1
14	Zirconium speciation in microgels: kinetics aspects. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2003**, 217, 159-164	5.1	1
13	Synthesis and characterization of Manganese doped ferroxane nanoparticles. *Materials Research Society Symposia Proceedings*, **2003**, 800, 27		1
12	Aquatic Mesocosm Strategies for the Environmental Fate and Risk Assessment of Engineered Nanomaterials. *Environmental Science & Technology*, **2021**,	10.3	1
11	In situ determination of engineered nanomaterial aggregation state in a cosmetic emulsion toward safer-by-design products. *Environmental Science: Nano*, **2021**, 8, 3546-3559	7.1	1
10	Robustness of Indoor Aquatic Mesocosm Experimentations and Data Reusability to Assess the Environmental Risks of Nanomaterials. *Frontiers in Environmental Science*, **2021**, 9,	4.8	1
9	The SERENADE project A step forward in the Safe by Design process of nanomaterials: Moving towards a product-oriented approach. *Nano Today*, **2021**, 39, 101238	17.9	1
8	Oxidative transformation of Tungsten (W) nanoparticles potentially released in aqueous and biological media in case of Tokamak (nuclear fusion) Lost of Vacuum Accident (LOVA). *Comptes Rendus - Geoscience*, **2020**, 352, 539-558	1.4	1

7	X-ray absorption spectroscopy evidence of sulfur-bound cadmium in the Cd-hyperaccumulator Solanum nigrum and the non-accumulator Solanum melongena. *Environmental Pollution*, **2021**, 279, 116897	8.3	0
6	Potential of Ligand-Promoted Dissolution at Mild pH for the Selective Recovery of Rare Earth Elements in Bauxite Residues. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 6942-6951	8.3	0
5	Size fractionation of elements and nanoparticles in natural water by both dead-end and tangential flow filtration. *Desalination and Water Treatment*, **2016**, 57, 8194-8203		
4	Life cycle assessment of the application of nanoclays in wire coating. *IOP Conference Series: Materials Science and Engineering*, **2012**, 40, 012014	0.4	
3	Fractal Mechanisms in Coagulation/Flocculation Processes in Environmental Systems **2008**, 149-178		
2	Crystal Chemistry of Colloids Obtained by Hydrolysis of Fe(III) in the Presence of SiO4 Ligands. *Materials Research Society Symposia Proceedings*, **2000**, 658, 3361		
1	Nucleation and Growth of Fe(III)/PO4 Clusters. *Materials Research Society Symposia Proceedings*, **1996**, 432, 151		