

# Jerome Rose

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8651468/publications.pdf>

Version: 2024-02-01

209  
papers

13,861  
citations

22153

59  
h-index

22832

112  
g-index

217  
all docs

217  
docs citations

217  
times ranked

16359  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Towards a definition of inorganic nanoparticles from an environmental, health and safety perspective. <i>Nature Nanotechnology</i> , 2009, 4, 634-641.  | 31.5 | 1,586     |
| 2  | Cytotoxicity of CeO <sub>2</sub> Nanoparticles for <i>Escherichia coli</i> . Physico-Chemical Insight of the Cytotoxicity Mechanism. <i>Environmental Science &amp; Technology</i> , 2006, 40, 6151-6156. | 10.0 | 723       |
| 3  | Potential scenarios for nanomaterial release and subsequent alteration in the environment. <i>Environmental Toxicology and Chemistry</i> , 2012, 31, 50-59.   | 4.3  | 498       |
| 4  | More than the Ions: The Effects of Silver Nanoparticles on <i>Lolium multiflorum</i> . <i>Environmental Science &amp; Technology</i> , 2011, 45, 2360-2367.   | 10.0 | 494       |
| 5  | Relation between the Redox State of Iron-Based Nanoparticles and Their Cytotoxicity toward <i>Escherichia coli</i> . <i>Environmental Science &amp; Technology</i> , 2008, 42, 6730-6735.                 | 10.0 | 487       |
| 6  | Chemical stability of metallic nanoparticles: A parameter controlling their potential cellular toxicity in vitro. <i>Environmental Pollution</i> , 2009, 157, 1127-1133.                                  | 7.5  | 473       |
| 7  | The effect of silica and natural organic matter on the Fe(II)-catalysed transformation and reactivity of Fe(III) minerals. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 4409-4422.                  | 3.9  | 318       |
| 8  | Decoupling of As and Fe release to Bangladesh groundwater under reducing conditions. Part II: Evidence from sediment incubations. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 3475-3486.           | 3.9  | 231       |
| 9  | Micro- and nano-X-ray computed-tomography: A step forward in the characterization of the pore network of a leached cement paste. <i>Cement and Concrete Research</i> , 2015, 67, 138-147.                 | 11.0 | 204       |
| 10 | Aging of TiO <sub>2</sub> nanocomposites used in sunscreen. Dispersion and fate of the degradation products in aqueous environment. <i>Environmental Pollution</i> , 2010, 158, 3482-3489.                | 7.5  | 203       |
| 11 | Concurrent Aggregation and Deposition of TiO <sub>2</sub> Nanoparticles in a Sandy Porous Media. <i>Environmental Science &amp; Technology</i> , 2010, 44, 4897-4902.                                     | 10.0 | 197       |
| 12 | In Vitro Interactions between DMSA-Coated Maghemite Nanoparticles and Human Fibroblasts: A Physicochemical and Cyto-Genotoxic Study. <i>Environmental Science &amp; Technology</i> , 2006, 40, 4367-4373. | 10.0 | 195       |
| 13 | Structural Degradation at the Surface of a TiO <sub>2</sub> -Based Nanomaterial Used in Cosmetics. <i>Environmental Science &amp; Technology</i> , 2010, 44, 2689-2694.                                   | 10.0 | 193       |
| 14 | Enhanced Adsorption of Arsenic onto Maghemites Nanoparticles: As(III) as a Probe of the Surface Structure and Heterogeneity. <i>Langmuir</i> , 2008, 24, 3215-3222.                                       | 3.5  | 185       |
| 15 | Environmental impacts of steel slag reused in road construction: A crystallographic and molecular (XANES) approach. <i>Journal of Hazardous Materials</i> , 2007, 139, 537-542.                           | 12.4 | 184       |
| 16 | CeO <sub>2</sub> nanoparticles induce DNA damage towards human dermal fibroblasts in vitro. <i>Nanotoxicology</i> , 2009, 3, 161-171.   | 3.0  | 179       |
| 17 | Sorption of Arsenite, Arsenate, and Thioarsenates to Iron Oxides and Iron Sulfides: A Kinetic and Spectroscopic Investigation. <i>Environmental Science &amp; Technology</i> , 2013, 47, 5652-5659.       | 10.0 | 175       |
| 18 | TiO <sub>2</sub> -based nanoparticles released in water from commercialized sunscreens in a life-cycle perspective: Structures and quantities. <i>Environmental Pollution</i> , 2011, 159, 1543-1550.     | 7.5  | 166       |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Nanoparticle Uptake in Plants: Gold Nanomaterial Localized in Roots of <i>Arabidopsis thaliana</i> by X-ray Computed Nanotomography and Hyperspectral Imaging. <i>Environmental Science &amp; Technology</i> , 2017, 51, 8682-8691.                  | 10.0 | 152       |
| 20 | Direct and indirect CeO <sub>2</sub> nanoparticles toxicity for <i>Escherichia coli</i> and <i>Synechocystis</i> . <i>Nanotoxicology</i> , 2009, 3, 284-295.   | 3.0  | 146       |
| 21 | New Methodological Approach for the Vanadium K-Edge X-ray Absorption Near-Edge Structure Interpretation: A Application to the Speciation of Vanadium in Oxide Phases from Steel Slag. <i>Journal of Physical Chemistry B</i> , 2007, 111, 5101-5110. | 2.6  | 138       |
| 22 | Protein corona formation for nanomaterials and proteins of a similar size: hard or soft corona?. <i>Nanoscale</i> , 2013, 5, 1658.   | 5.6  | 134       |
| 23 | Environmental impact of sunscreen nanomaterials: Ecotoxicity and genotoxicity of altered TiO <sub>2</sub> nanocomposites on <i>Vicia faba</i> . <i>Environmental Pollution</i> , 2011, 159, 2515-2522.   | 7.5  | 123       |
| 24 | Kinetics of steel slag leaching: Batch tests and modeling. <i>Waste Management</i> , 2011, 31, 225-235.  | 7.4  | 120       |
| 25 | Heavy Metal Tolerance in <i>Stenotrophomonas maltophilia</i> . <i>PLoS ONE</i> , 2008, 3, e1539.   | 2.5  | 112       |
| 26 | Nucleation and Growth Mechanisms of Fe Oxyhydroxide in the Presence of PO <sub>4</sub> Ions. 1. Fe K-Edge EXAFS Study. <i>Langmuir</i> , 1996, 12, 6701-6707.  | 3.5  | 107       |
| 27 | Hydration and Dispersion of C <sub>60</sub> in Aqueous Systems: The Nature of Water <sup>+</sup> Fullerene Interactions. <i>Langmuir</i> , 2009, 25, 11232-11235.  | 3.5  | 103       |
| 28 | Impact of irrigating rice paddies with groundwater containing arsenic in Bangladesh. <i>Science of the Total Environment</i> , 2006, 367, 769-777.   | 8.0  | 102       |
| 29 | Solubility of Fe <sup>+</sup> ettringite (Ca <sub>6</sub> [Fe(OH) <sub>6</sub> ] <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> ·26H <sub>2</sub> O). <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 1-18.   | 3.9  | 101       |
| 30 | Chemistry and structure of aggregates formed with Fe-salts and natural organic matter. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1999, 147, 297-308.   | 4.7  | 99        |
| 31 | Speciation of Cd and Pb in dust emitted from sinter plant. <i>Chemosphere</i> , 2010, 78, 445-450.   | 8.2  | 99        |
| 32 | Molecular Insights of Oxidation Process of Iron Nanoparticles: Spectroscopic, Magnetic, and Microscopic Evidence. <i>Environmental Science &amp; Technology</i> , 2014, 48, 13888-13894.   | 10.0 | 97        |
| 33 | Inhibition of sulfate reducing bacteria in aquifer sediment by iron nanoparticles. <i>Water Research</i> , 2014, 51, 64-72.  | 11.3 | 96        |
| 34 | Coagulation-Flocculation of Natural Organic Matter with Al Salts: A Speciation and Structure of the Aggregates. <i>Environmental Science &amp; Technology</i> , 2000, 34, 3242-3246.   | 10.0 | 95        |
| 35 | Nucleation and Growth Mechanisms of Fe Oxyhydroxide in the Presence of PO <sub>4</sub> Ions. 2. P K-Edge EXAFS Study. <i>Langmuir</i> , 1997, 13, 1827-1834.   | 3.5  | 94        |
| 36 | Speciation and Crystal Chemistry of Iron(III) Chloride Hydrolyzed in the Presence of SiO <sub>4</sub> Ligands. 1. An Fe K-Edge EXAFS Study. <i>Langmuir</i> , 2000, 16, 4726-4731.   | 3.5  | 93        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 37 | Ecotoxicological effects of an aged TiO <sub>2</sub> nanocomposite measured as apoptosis in the anecic earthworm <i>Lumbricus terrestris</i> after exposure through water, food and soil. <i>Environment International</i> , 2011, 37, 1105-1110.       | 10.0 | 93        |
| 38 | Nanotechnologies: Tools for sustainability in a new wave of water treatment processes. <i>Integrated Environmental Assessment and Management</i> , 2006, 2, 391-395.  | 2.9  | 90        |
| 39 | Transfer, Transformation, and Impacts of Ceria Nanomaterials in Aquatic Mesocosms Simulating a Pond Ecosystem. <i>Environmental Science &amp; Technology</i> , 2014, 48, 9004-9013.   | 10.0 | 85        |
| 40 | Structure and distribution of allophanes, imogolite and proto-imogolite in volcanic soils. <i>Geoderma</i> , 2012, 183-184, 100-108.  | 5.1  | 83        |
| 41 | Aggregation and sedimentation of magnetite nanoparticle clusters. <i>Environmental Science: Nano</i> , 2016, 3, 567-577.  | 4.3  | 81        |
| 42 | Chemistry and structure of colloids obtained by hydrolysis of Fe(III) in the presence of SiO <sub>4</sub> ligands. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2003, 217, 121-128.  | 4.7  | 78        |
| 43 | Speciation and Crystal Chemistry of Fe(III) Chloride Hydrolyzed in the Presence of SiO <sub>4</sub> Ligands. 2. Characterization of Si <sup>IV</sup> Fe Aggregates by FTIR and <sup>29</sup> Si Solid-State NMR. <i>Langmuir</i> , 2001, 17, 1399-1405. | 3.5  | 77        |
| 44 | Ceramic membranes derived from ferroxane nanoparticles: a new route for the fabrication of iron oxide ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2003, 227, 207-217.   | 8.2  | 75        |
| 45 | Characterization of Iron-Oxides Formed by Oxidation of Ferrous Ions in the Presence of Various Bacterial Species and Inorganic Ligands. <i>Geomicrobiology Journal</i> , 2004, 21, 99-112.  | 2.0  | 74        |
| 46 | Synthesis of Large Quantities of Single-Walled Aluminogermanate Nanotube. <i>Journal of the American Chemical Society</i> , 2008, 130, 5862-5863.   | 13.7 | 72        |
| 47 | High-Resolution Energy Resolved Fluorescence Detected X-Ray Absorption Spectroscopy: A Powerful New Structural Tool in Environmental Biogeochemistry Sciences. <i>Journal of Environmental Quality</i> , 2017, 46, 1146-1157.                           | 2.0  | 72        |
| 48 | Temporal variations in arsenic uptake by rice plants in Bangladesh: The role of iron plaque in paddy fields irrigated with groundwater. <i>Science of the Total Environment</i> , 2010, 408, 4185-4193.   | 8.0  | 71        |
| 49 | Inorganic manufactured nanoparticles: how their physicochemical properties influence their biological effects in aqueous environments. <i>Nanomedicine</i> , 2010, 5, 999-1007.   | 3.3  | 69        |
| 50 | Physico-chemical Control over the Single- or Double-Wall Structure of Aluminogermanate Imogolite-like Nanotubes. <i>Journal of the American Chemical Society</i> , 2012, 134, 3780-3786.  | 13.7 | 69        |
| 51 | XAS Study of Iron and Arsenic Speciation during Fe(II) Oxidation in the Presence of As(III). <i>Environmental Science &amp; Technology</i> , 2005, 39, 9478-9485.   | 10.0 | 68        |
| 52 | Intestinal toxicity evaluation of TiO <sub>2</sub> degraded surface-treated nanoparticles: a combined physico-chemical and toxicogenomics approach in caco-2 cells. <i>Particle and Fibre Toxicology</i> , 2012, 9, 18.                                 | 6.2  | 67        |
| 53 | Exposure to Cerium Dioxide Nanoparticles Differently Affect Swimming Performance and Survival in Two Daphnid Species. <i>PLoS ONE</i> , 2013, 8, e71260.  | 2.5  | 67        |
| 54 | Synergistic effects of sulfate reducing bacteria and zero valent iron on zinc removal and stability in aquifer sediment. <i>Chemical Engineering Journal</i> , 2015, 260, 83-89.  | 12.7 | 67        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 55 | Filter-Feeding Bivalves Store and Biodeposit Colloidally Stable Gold Nanoparticles. <i>Environmental Science &amp; Technology</i> , 2011, 45, 6592-6599.   | 10.0 | 65        |
| 56 | Regulatory relevant and reliable methods and data for determining the environmental fate of manufactured nanomaterials. <i>NanoImpact</i> , 2017, 8, 1-10.   | 4.5  | 64        |
| 57 | Speciation of Cr and V within BOF steel slag reused in road constructions. <i>Journal of Geochemical Exploration</i> , 2006, 88, 10-14.  | 3.2  | 63        |
| 58 | Microbial Sulfate Reduction Enhances Arsenic Mobility Downstream of Zerovalent-Iron-Based Permeable Reactive Barrier. <i>Environmental Science &amp; Technology</i> , 2016, 50, 7610-7617.                                 | 10.0 | 63        |
| 59 | Ecotoxicological assessment of TiO <sub>2</sub> byproducts on the earthworm <i>Eisenia fetida</i> . <i>Environmental Pollution</i> , 2011, 159, 2698-2705.   | 7.5  | 61        |
| 60 | Formation and Growth Mechanisms of Imogolite-Like Aluminogermanate Nanotubes. <i>Chemistry of Materials</i> , 2010, 22, 2466-2473.   | 6.7  | 60        |
| 61 | Structure and Mechanisms of Formation of FeOOH(NO <sub>3</sub> ) Oligomers in the Early Stages of Hydrolysis. <i>Langmuir</i> , 1997, 13, 3240-3246.   | 3.5  | 59        |
| 62 | Long-term aging of a CeO <sub>2</sub> based nanocomposite used for wood protection. <i>Environmental Pollution</i> , 2014, 188, 1-7.   | 7.5  | 59        |
| 63 | DNA damage and oxidative stress induced by CeO <sub>2</sub> nanoparticles in human dermal fibroblasts: Evidence of a clastogenic effect as a mechanism of genotoxicity. <i>Nanotoxicology</i> , 2015, 9, 696-705.          | 3.0  | 59        |
| 64 | Synthesis of Imogolite Fibers from Decimolar Concentration at Low Temperature and Ambient Pressure: A Promising Route for Inexpensive Nanotubes. <i>Journal of the American Chemical Society</i> , 2009, 131, 17080-17081. | 13.7 | 58        |
| 65 | Reactivity at (nano)particle-water interfaces, redox processes, and arsenic transport in the environment. <i>Comptes Rendus - Geoscience</i> , 2011, 343, 123-139.   | 1.2  | 58        |
| 66 | Iron speciation in natural organic matter colloids. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1998, 136, 11-19.  | 4.7  | 57        |
| 67 | Single-step formation of micron long (OH) <sub>3</sub> Al <sub>2</sub> O <sub>3</sub> Ge(OH) imogolite-like nanotubes. <i>Chemical Communications</i> , 2013, 49, 11284.   | 4.1  | 57        |
| 68 | Evidence of Double-Walled Al <sup>III</sup> Ge Imogolite-Like Nanotubes. A Cryo-TEM and SAXS Investigation. <i>Journal of the American Chemical Society</i> , 2010, 132, 1208-1209.  | 13.7 | 56        |
| 69 | Ultrastructural Interactions and Genotoxicity Assay of Cerium Dioxide Nanoparticles on Mouse Oocytes. <i>International Journal of Molecular Sciences</i> , 2013, 14, 21613-21628.  | 4.1  | 56        |
| 70 | X-ray Absorption Spectroscopy Study of Immobilization Processes for Heavy Metals in Calcium Silicate Hydrates: 1. Case of Lead. <i>Langmuir</i> , 2000, 16, 9900-9906.   | 3.5  | 55        |
| 71 | X-ray Absorption Spectroscopy Study of Immobilization Processes for Heavy Metals in Calcium Silicate Hydrates: 2. Zinc. <i>Langmuir</i> , 2001, 17, 3658-3665.   | 3.5  | 55        |
| 72 | High energy resolution five-crystal spectrometer for high quality fluorescence and absorption measurements on an x-ray absorption spectroscopy beamline. <i>Review of Scientific Instruments</i> , 2012, 83, 063104.       | 1.3  | 55        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 73 | Meeting the Needs for Released Nanomaterials Required for Further Testingâ€”The SUN Approach. <i>Environmental Science &amp; Technology</i> , 2016, 50, 2747-2753.                             | 10.0 | 55        |
| 74 | Effects of aged TiO <sub>2</sub> nanomaterial from sunscreen on <i>Daphnia magna</i> exposed by dietary route. <i>Environmental Pollution</i> , 2012, 163, 55-61.                              | 7.5  | 54        |
| 75 | Soil organo-mineral associations formed by co-precipitation of Fe, Si and Al in presence of organic ligands. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 260, 15-28.                        | 3.9  | 51        |
| 76 | Investigation of Copper Speciation in Pig Slurry by a Multitechnique Approach. <i>Environmental Science &amp; Technology</i> , 2010, 44, 6926-6932.  | 10.0 | 50        |
| 77 | Are Interactions between Organic Compounds and Nanoscale Weathering Minerals the Key Drivers of Carbon Storage in Soils?. <i>Environmental Science &amp; Technology</i> , 2015, 49, 3997-3998. | 10.0 | 49        |
| 78 | Determination of zinc speciation in basic oxygen furnace flying dust by chemical extractions and X-ray spectroscopy. <i>Chemosphere</i> , 2008, 70, 1945-1951.                                 | 8.2  | 48        |
| 79 | Adsorption of Arsenic on Polyaluminum Granulate. <i>Environmental Science &amp; Technology</i> , 2012, 46, 7310-7317.  | 10.0 | 48        |
| 80 | Cerium dioxide nanoparticles affect in vitro fertilization in mice. <i>Nanotoxicology</i> , 2015, 10, 1-7.   | 3.0  | 48        |
| 81 | New Combination of EXAFS Spectroscopy and Density Fractionation for the Speciation of Chromium within an Andosol. <i>Environmental Science &amp; Technology</i> , 2006, 40, 7602-7608.         | 10.0 | 47        |
| 82 | Growth kinetic of single and double-walled aluminogermanate imogolite-like nanotubes: an experimental and modeling approach. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 2682-2689. | 2.8  | 47        |
| 83 | Characteristics of ultrafiltration ceramic membranes derived from alumoxane nanoparticles. <i>Journal of Membrane Science</i> , 2002, 205, 33-43.  | 8.2  | 46        |
| 84 | Affinity of C <sub>60</sub> Fullerenes with Water. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2006, 14, 307-314.  | 2.1  | 46        |
| 85 | Arsenic binding to organic and inorganic sulfur species during microbial sulfate reduction: a sediment flow-through reactor experiment. <i>Environmental Chemistry</i> , 2013, 10, 285.        | 1.5  | 45        |
| 86 | An adaptable mesocosm platform for performing integrated assessments of nanomaterial risk in complex environmental systems. <i>Scientific Reports</i> , 2014, 4, 5608.                         | 3.3  | 45        |
| 87 | Environmental exposure to TiO <sub>2</sub> nanomaterials incorporated in building material. <i>Environmental Pollution</i> , 2017, 220, 1160-1170.   | 7.5  | 44        |
| 88 | Synthesis and Characterization of CarboxylateâˆƒFeOOH Nanoparticles (Ferroxanes) and Ferroxane-Derived Ceramics. <i>Chemistry of Materials</i> , 2002, 14, 621-628.                            | 6.7  | 43        |
| 89 | Nickel speciation in <i>Sebertia acuminata</i> , a plant growing on a lateritic soil of New Caledonia. <i>Comptes Rendus - Geoscience</i> , 2004, 336, 567-577.                                | 1.2  | 43        |
| 90 | Rhizosphere pH Gradient Controls Copper Availability in a Strongly Acidic Soil. <i>Environmental Science &amp; Technology</i> , 2009, 43, 5686-5691.   | 10.0 | 43        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 91  | Manufactured metal and metal-oxide nanoparticles: Properties and perturbing mechanisms of their biological activity in ecosystems. <i>Comptes Rendus - Geoscience</i> , 2011, 343, 168-176.                                      | 1.2  | 43        |
| 92  | Preparation of amino-functionalized silica in aqueous conditions. <i>Applied Surface Science</i> , 2013, 266, 155-160.   | 6.1  | 42        |
| 93  | Chronic dosing of a simulated pond ecosystem in indoor aquatic mesocosms: fate and transport of CeO <sub>2</sub> nanoparticles. <i>Environmental Science: Nano</i> , 2015, 2, 653-663.   | 4.3  | 42        |
| 94  | Toward direct, micron-scale XRF elemental maps and quantitative profiles of wet marine sediments. <i>Geochemistry, Geophysics, Geosystems</i> , 2007, 8, n/a-n/a.  | 2.5  | 41        |
| 95  | Aged TiO <sub>2</sub> -Based Nanocomposite Used in Sunscreens Produces Singlet Oxygen under Long-Wave UV and Sensitizes <i>Escherichia coli</i> to Cadmium. <i>Environmental Science &amp; Technology</i> , 2014, 48, 5245-5253. | 10.0 | 40        |
| 96  | Pulmonary exposure to metallic nanomaterials during pregnancy irreversibly impairs lung development of the offspring. <i>Nanotoxicology</i> , 2017, 11, 484-495.   | 3.0  | 40        |
| 97  | Physico-chemical study of fouling mechanisms of ultrafiltration membrane on Biwa lake (Japan). <i>Journal of Membrane Science</i> , 1997, 130, 53-62.  | 8.2  | 38        |
| 98  | Exposure of juvenile <i>Danio rerio</i> to aged TiO <sub>2</sub> nanomaterial from sunscreen. <i>Environmental Science and Pollution Research</i> , 2013, 20, 3340-3350.   | 5.3  | 38        |
| 99  | Toxicity evaluation of manufactured CeO <sub>2</sub> nanoparticles before and after alteration: combined physicochemical and whole-genome expression analysis in Caco-2 cells. <i>BMC Genomics</i> , 2014, 15, 700.              | 2.8  | 37        |
| 100 | Evolution of iron speciation during hydration of C4AF. <i>Waste Management</i> , 2006, 26, 720-724.  | 7.4  | 36        |
| 101 | Role of molting on the biodistribution of CeO <sub>2</sub> nanoparticles within <i>Daphnia pulex</i> . <i>Water Research</i> , 2013, 47, 3921-3930.  | 11.3 | 36        |
| 102 | Structural incorporation of iron into Ge <sup>4+</sup> -imogolite nanotubes: a promising step for innovative nanomaterials. <i>RSC Advances</i> , 2014, 4, 49827-49830.  | 3.6  | 36        |
| 103 | Arsenate uptake by Al nanoclusters and other Al-based sorbents during water treatment. <i>Water Research</i> , 2016, 88, 844-851.  | 11.3 | 35        |
| 104 | Nanoscale Coloristic Pigments: Upper Limits on Releases from Pigmented Plastic during Environmental Aging, In Food Contact, and by Leaching. <i>Environmental Science &amp; Technology</i> , 2017, 51, 11669-11680.              | 10.0 | 35        |
| 105 | Transformations of Nanoenabled Copper Formulations Govern Release, Antifungal Effectiveness, and Sustainability throughout the Wood Protection Lifecycle. <i>Environmental Science &amp; Technology</i> , 2018, 52, 1128-1138.   | 10.0 | 34        |
| 106 | Very low concentration of cerium dioxide nanoparticles induce DNA damage, but no loss of vitality, in human spermatozoa. <i>Toxicology in Vitro</i> , 2018, 50, 236-241.   | 2.4  | 32        |
| 107 | Harmonizing across environmental nanomaterial testing media for increased comparability of nanomaterial datasets. <i>Environmental Science: Nano</i> , 2020, 7, 13-36.   | 4.3  | 32        |
| 108 | Design Defines the Effects of Nanoceria at a Low Dose on Soil Microbiota and the Potentiation of Impacts by the Canola Plant. <i>Environmental Science &amp; Technology</i> , 2016, 50, 6892-6901.                               | 10.0 | 30        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 109 | Aqueous Zirconium Complexes for Gelling Polymers. A Combined X-ray Absorption Spectroscopy and Quantum Mechanical Study. <i>Journal of Physical Chemistry B</i> , 2003, 107, 2910-2920.   | 2.6  | 29        |
| 110 | Synthesis of Ge-imogolite: influence of the hydrolysis ratio on the structure of the nanotubes. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 14516.   | 2.8  | 29        |
| 111 | The accurate crystal chemistry of ferric smectites from the lateritic nickel ore of Murrin Murrin (Western Australia). II. Spectroscopic (IR and EXAFS) approaches. <i>Clay Minerals</i> , 2004, 39, 453-467.                     | 0.6  | 28        |
| 112 | Role of natural nanoparticles on the speciation of Ni in andosols of la Reunion. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 4750-4760.  | 3.9  | 28        |
| 113 | Drastic Change in Zinc Speciation during Anaerobic Digestion and Composting: Instability of Nanosized Zinc Sulfide. <i>Environmental Science &amp; Technology</i> , 2018, 52, 12987-12996.  | 10.0 | 28        |
| 114 | Combining Size Fractionation, Scanning Electron Microscopy, and X-ray Absorption Spectroscopy to Probe Zinc Speciation in Pig Slurry. <i>Journal of Environmental Quality</i> , 2010, 39, 531-540.                                | 2.0  | 27        |
| 115 | Salinity-dependent silver nanoparticle uptake and transformation by Atlantic killifish ( <i>Fundulus heteroclitus</i> ). <i>Environmental Science and Pollution Research</i> , 2016, 23, 5960-5968.                               | 3.0  | 26        |
| 116 | Microbial and mineral evolution in zero valent iron-based permeable reactive barriers during long-term operations. <i>Environmental Science and Pollution Research</i> , 2016, 23, 5960-5968.                                     | 5.3  | 26        |
| 117 | Contribution of mesocosm testing to a single-step and exposure-driven environmental risk assessment of engineered nanomaterials. <i>NanoImpact</i> , 2019, 13, 66-69.   | 4.5  | 26        |
| 118 | Nanometer-long Ge-imogolite nanotubes cause sustained lung inflammation and fibrosis in rats. <i>Particle and Fibre Toxicology</i> , 2014, 11, 67.  | 6.2  | 25        |
| 119 | Nucleation and Growth Mechanisms of Iron Oxyhydroxides in the Presence of PO <sub>4</sub> Ions. 3. Speciation of Fe by Small Angle X-ray Scattering. <i>Langmuir</i> , 1997, 13, 3882-3885.                                       | 3.5  | 24        |
| 120 | Arsenic speciation in cemented paste backfills and synthetic calcium silicate hydrates. <i>Minerals Engineering</i> , 2012, 39, 51-61.  | 4.3  | 24        |
| 121 | Anthropogenic Release and Distribution of Titanium Dioxide Particles in a River Downstream of a Nanomaterial Manufacturer Industrial Site. <i>Frontiers in Environmental Science</i> , 2020, 8, .                                 | 3.3  | 23        |
| 122 | Goethite, a tailor-made host for the critical metal scandium: The Fe <sub>x</sub> Sc <sub>(1-x)</sub> OOH solid solution. <i>Geochemical Perspectives Letters</i> , 0, , 16-20.   | 5.0  | 23        |
| 123 | Apatite and Portland/apatite composite cements obtained using a hydrothermal method for retaining heavy metals. <i>Journal of Hazardous Materials</i> , 2008, 150, 99-108.  | 12.4 | 22        |
| 124 | Influence of the Length of Imogolite-Like Nanotubes on Their Cytotoxicity and Genotoxicity toward Human Dermal Cells. <i>Chemical Research in Toxicology</i> , 2012, 25, 2513-2522.   | 3.3  | 22        |
| 125 | Enhanced transportability of zero valent iron nanoparticles in aquifer sediments: surface modifications, reactivity, and particle traveling distances. <i>Environmental Science and Pollution Research</i> , 2017, 24, 9269-9277. | 5.3  | 22        |
| 126 | Safe(r) by design implementation in the nanotechnology industry. <i>NanoImpact</i> , 2020, 20, 100267.  | 4.5  | 22        |



| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 127 | Speciation and Crystal Chemistry of Iron(III) Chloride Hydrolyzed in the Presence of SiO <sub>4</sub> Ligands. 3. Semilocal Scale Structure of the Aggregates. <i>Langmuir</i> , 2001, 17, 4753-4757.   | 3.5  | 21        |
| 128 | Zinc speciation in steel plant atmospheric emissions: A multi-technical approach. <i>Journal of Geochemical Exploration</i> , 2006, 88, 239-242.  | 3.2  | 21        |
| 129 | Nanotechnology, global development in the frame of environmental risk forecasting. A necessity of interdisciplinary researches. <i>Comptes Rendus - Geoscience</i> , 2015, 347, 35-42.  | 1.2  | 21        |
| 130 | SERENADE: safer and ecodesign research and education applied to nanomaterial development, the new generation of materials safer by design. <i>Environmental Science: Nano</i> , 2017, 4, 526-538.   | 4.3  | 21        |
| 131 | Respiratory hazard of Li-ion battery components: elective toxicity of lithium cobalt oxide (LiCoO <sub>2</sub> ) particles in a mouse bioassay. <i>Archives of Toxicology</i> , 2018, 92, 1673-1684.  | 4.2  | 21        |
| 132 | First Insights of Cr Speciation in Leached Portland Cement Using X-ray Spectromicroscopy. <i>Environmental Science &amp; Technology</i> , 2003, 37, 4864-4870.  | 10.0 | 20        |
| 133 | Influence of arsenate species on the formation of Fe(III) oxyhydroxides and Fe(II) hydroxide. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2009, 332, 26-35.   | 4.7  | 20        |
| 134 | An overview of solid/liquid separation methods and size fractionation techniques for engineered nanomaterials in aquatic environment. <i>Environmental Technology Reviews</i> , 2013, 2, 55-70.   | 4.3  | 20        |
| 135 | The effect of surface modification of microfibrillated cellulose (MFC) by acid chlorides on the structural and thermomechanical properties of biopolyamide 4.10 nanocomposites. <i>Industrial Crops and Products</i> , 2018, 116, 97-108.                       | 5.2  | 20        |
| 136 | Hydrolysis of Iron(II) Chloride under Anoxic Conditions and Influence of SiO <sub>4</sub> Ligands. <i>Langmuir</i> , 2002, 18, 4292-4299.   | 3.5  | 19        |
| 137 | Comparison of Methods for Fullerene Detection and Measurements of Reactive Oxygen Production in Cosmetic Products. <i>Environmental Engineering Science</i> , 2010, 27, 797-804.  | 1.6  | 19        |
| 138 | Environmental exposure of a simulated pond ecosystem to a CuO nanoparticle-based wood stain throughout its life cycle. <i>Environmental Science: Nano</i> , 2018, 5, 2579-2589.   | 4.3  | 19        |
| 139 | Non-linear release dynamics for a CeO <sub>2</sub> nanomaterial embedded in a protective wood stain, due to matrix photo-degradation. <i>Environmental Pollution</i> , 2018, 241, 182-193.  | 7.5  | 19        |
| 140 | Electroweak studies in e <sup>+</sup> e <sup>-</sup> collisions: 12 <math>\sqrt{s}</math> <math>< 46.78</math> GeV. <i>Physical Review D</i> , 1988, 38, 2665-2678.   | 4.7  | 18        |
| 141 | Nucleation and Growth Mechanisms of Iron Oxyhydroxides in the Presence of PO <sub>4</sub> Ions. 4. Structure of the Aggregates. <i>Langmuir</i> , 1997, 13, 3886-3889.  | 3.5  | 18        |
| 142 | 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?. <i>Fuel</i> , 2012, 102, 423-430. | 6.4  | 18        |
| 143 | Sulfur and oxygen isotope tracing in zero valent iron based In situ remediation system for metal contaminants. <i>Chemosphere</i> , 2013, 90, 1366-1371.  | 8.2  | 18        |
| 144 | Multi-scale X-ray computed tomography to detect and localize metal-based nanomaterials in lung tissues of in vivo exposed mice. <i>Scientific Reports</i> , 2018, 8, 4408.  | 3.3  | 17        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 145 | 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. <i>Applied Geochemistry</i> , 2011, 26, 1665-1672. | 3.0  | 16        |
| 146 | Structural and physical-chemical behavior of a CeO <sub>2</sub> nanoparticle based diesel additive during combustion and environmental release. <i>Environmental Science: Nano</i> , 2017, 4, 1974-1980.                                      | 4.3  | 16        |
| 147 | A role for adsorption in lead leachability from MSWI bottom ASH. <i>Waste Management</i> , 2008, 28, 1324-1330.   | 7.4  | 15        |
| 148 | Composition and molecular scale structure of nanophases formed by precipitation of biotite weathering products. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 229, 53-64.  | 3.9  | 15        |
| 149 | Detection of environmental clastogens and aneugens in human fibroblasts by cytokinesis-blocked micronucleus assay associated with immunofluorescent staining of CENP-A in micronuclei. <i>Chemosphere</i> , 2011, 84, 676-680.                | 8.2  | 14        |
| 150 | Chemical element imaging for speleothem geochemistry: Application to a uranium-bearing corallite with aragonite diagenesis to opal (Eastern Siberia, Russia). <i>Chemical Geology</i> , 2012, 294-295, 190-202.                               | 3.3  | 14        |
| 151 | Is There a Trojan-Horse Effect during Magnetic Nanoparticles and Metalloid Cocontamination of Human Dermal Fibroblasts?. <i>Environmental Science &amp; Technology</i> , 2012, 46, 10789-10796.   | 10.0 | 13        |
| 152 | Elaboration of Cellulose Nanocrystal/Ge-Imogolite Nanotube Multilayered Thin Films. <i>Langmuir</i> , 2018, 34, 3386-3394.  | 3.5  | 13        |
| 153 | X-ray absorption spectroscopy evidence of sulfur-bound cadmium in the Cd-hyperaccumulator <i>Solanum nigrum</i> and the non-accumulator <i>Solanum melongena</i> . <i>Environmental Pollution</i> , 2021, 279, 116897.                        | 7.5  | 13        |
| 154 | Zirconium speciation in lactate solutions and polyacrylate gels. <i>Journal of Synchrotron Radiation</i> , 2001, 8, 686-688.  | 2.4  | 12        |
| 155 | Calcium coordination environment in precursor species to calcium carbonate mineral formation. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 259, 344-357.  | 3.9  | 12        |
| 156 | In Vitro Analysis of the Effects of ITER-Like Tungsten Nanoparticles: Cytotoxicity and Epigenotoxicity in BEAS-2B Cells. <i>Nanomaterials</i> , 2019, 9, 1233.  | 4.1  | 11        |
| 157 | Lead, zinc and chromium (III) and (VI) speciation in hydrated cement phases. <i>Waste Management Series</i> , 2000, 1, 269-280.   | 0.0  | 10        |
| 158 | Effects of metallic and metal oxide nanoparticles in aquatic and terrestrial food chains. Biomarkers responses in invertebrates and bacteria. <i>International Journal of Nanotechnology</i> , 2012, 9, 181.                                  | 0.2  | 10        |
| 159 | Monitoring the Environmental Aging of Nanomaterials: An Opportunity for Mesocosm Testing?. <i>Materials</i> , 2019, 12, 2447.   | 2.9  | 10        |
| 160 | Ontology-based NLP information extraction to enrich nanomaterial environmental exposure database. <i>Procedia Computer Science</i> , 2020, 176, 360-369.  | 2.0  | 10        |
| 161 | Aquatic Mesocosm Strategies for the Environmental Fate and Risk Assessment of Engineered Nanomaterials. <i>Environmental Science &amp; Technology</i> , 2021, 55, 16270-16282.  | 10.0 | 10        |
| 162 | Modelling of Pb release during Portland cement alteration. <i>Advances in Cement Research</i> , 2009, 21, 1-10.   | 1.6  | 9         |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 163 | Ecotoxicology: Nanoparticle Reactivity and Living Organisms. , 2011, , 325-357.   |      | 9         |
| 164 | Accelerated microwave assisted synthesis of alumino-germanate imogolite nanotubes. RSC Advances, 2016, 6, 108146-108150.  | 3.6  | 9         |
| 165 | The shape and speciation of Ag nanoparticles drive their impacts on organisms in a lotic ecosystem. Environmental Science: Nano, 2020, 7, 3167-3177.  | 4.3  | 9         |
| 166 | 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.  | 3.9  | 9         |
| 167 | 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.  | 6.7  | 9         |
| 168 | Remote Biodegradation of Ge-Imogolite Nanotubes Controlled by the Iron Homeostasis of <i>Pseudomonas brassicacearum</i> . Environmental Science & Technology, 2016, 50, 7791-7798.  | 10.0 | 8         |
| 169 | MESOCOSM: A mesocosm database management system for environmental nanosafety. NanoImpact, 2021, 21, 100288.   | 4.5  | 8         |
| 170 | Influence of structural defects of Ge-imogolite nanotubes on their toxicity towards <i>Pseudomonas brassicacearum</i> . Environmental Science: Nano, 2016, 3, 839-846.  | 4.3  | 7         |
| 171 | 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.  | 11.9 | 7         |
| 172 | Nanotechnologies: tools for sustainability in a new wave of water treatment processes. Integrated Environmental Assessment and Management, 2006, 2, 391-5.  | 2.9  | 7         |
| 173 | Reply to comment on Fisichella et al. (2012), "Intestinal toxicity evaluation of TiO <sub>2</sub> 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. | 6.2  | 6         |
| 174 | Alignment of Ge-imogolite nanotubes in isomalt with tunable inter-tube distances. RSC Advances, 2017, 7, 21323-21327.   | 3.6  | 6         |
| 175 | Design of model tokamak particles for future toxicity studies: Morphology and physical characterization. Fusion Engineering and Design, 2019, 145, 60-65.   | 1.9  | 6         |
| 176 | CeO <sub>2</sub> Nanomaterials from Diesel Engine Exhaust Induce DNA Damage and Oxidative Stress in Human and Rat Sperm In Vitro. Nanomaterials, 2020, 10, 2327.  | 4.1  | 6         |
| 177 | The necessity of investigating a freshwater-marine continuum using a mesocosm approach in nanosafety: The case study of TiO <sub>2</sub> MNM-based photocatalytic cement. NanoImpact, 2020, 20, 100254.   | 4.5  | 5         |
| 178 | In Vitro Co-Exposure to CeO <sub>2</sub> Nanomaterials from Diesel Engine Exhaust and Benzo(a)Pyrene Induces Additive DNA Damage in Sperm and Cumulus Cells but Not in Oocytes. Nanomaterials, 2021, 11, 478.   | 4.1  | 5         |
| 179 | Surface Reactivity of Manufactured Nanoparticles. , 2011, , 269-290.  |      | 5         |
| 180 | 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         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 181 | Environmental Impact of Steel Slag Reused as Aggregates in Road Manufacturing: Molecular Mechanisms of Chromium and Vanadium Release. AIP Conference Proceedings, 2007, , .  | 0.4 | 4         |
| 182 | Multivariate analysis of the exposure and hazard of ceria nanomaterials in indoor aquatic mesocosms. Environmental Science: Nano, 2020, 7, 1661-1669.  | 4.3 | 4         |
| 183 | Robustness of Indoor Aquatic Mesocosm Experimentations and Data Reusability to Assess the Environmental Risks of Nanomaterials. Frontiers in Environmental Science, 2021, 9, .   | 3.3 | 4         |
| 184 | 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. | 1.2 | 4         |
| 185 | Evolution of Pb speciation in Portland cement during leaching. European Physical Journal Special Topics, 2003, 107, 143-146.   | 0.2 | 3         |
| 186 | Mechanisms limiting the release of TiO <sub>2</sub> nanomaterials during photocatalytic cement alteration: the role of surface charge and porous network morphology. Environmental Science: Nano, 2019, 6, 624-634.              | 4.3 | 3         |
| 187 | In situ determination of engineered nanomaterial aggregation state in a cosmetic emulsion "toward safer-by-design products. Environmental Science: Nano, 2021, 8, 3546-3559.   | 4.3 | 3         |
| 188 | Rhenium migration at the Maqarin natural analogue site (Jordan). Radiochimica Acta, 2006, 94, 755-761.   | 1.2 | 2         |
| 189 | Environmental fate of nanoparticles: physical chemical and biological aspects – a few snapshots. International Journal of Nanotechnology, 2012, 9, 167.  | 0.2 | 2         |
| 190 | Electrospinning. , 2012, , 769-775.  |     | 2         |
| 191 | Surface Properties (Physical and Chemical) and Related Reactions. Frontiers of Nanoscience, 2015, 8, 217-243.  | 0.6 | 2         |
| 192 | 3D Microanalysis of Porous Copper Using FIB-Tomography in Combination with X-ray Computed Tomography. Microscopy and Microanalysis, 2017, 23, 254-255.   | 0.4 | 2         |
| 193 | Ecotoxicity of Inorganic Nanoparticles: From Unicellular Organisms to Invertebrates. , 2012, , 623-636.  |     | 2         |
| 194 | Effect of leaching on the crystallographic sites of trace metals associated with natural cements (site Tj ETQq0 0 0 rgBT /Overlock 10 Tf   | 0.2 | 2         |
| 195 | Nanotechnologies: Tools for Sustainability in a New Wave of Water Treatment Processes. Integrated Environmental Assessment and Management, 2006, 2, 391.   | 2.9 | 2         |
| 196 | Crystal Chemistry of Colloids Obtained by Hydrolysis of Fe(III) in the Presence of SiO <sub>4</sub> Ligands. Materials Research Society Symposia Proceedings, 2000, 658, 3361.   | 0.1 | 1         |
| 197 | Zirconium speciation in microgels: kinetics aspects. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2003, 217, 159-164.   | 4.7 | 1         |
| 198 | Synthesis and characterization of Manganese doped ferroxane nanoparticles. Materials Research Society Symposia Proceedings, 2003, 800, 27.   | 0.1 | 1         |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 199 | Application of membrane processes in fractionation of elements in river water. Water Science and Technology, 2015, 72, 2277-2290.   | 2.5  | 1         |
| 200 | Isotopically exchangeable Al in coastal lowland acid sulfate soils. Science of the Total Environment, 2016, 542, 129-135.   | 8.0  | 1         |
| 201 | 3D Characterization of Silicon Based Electrode Material for Advanced Lithium-Ion Storage Technologies. Microscopy and Microanalysis, 2017, 23, 2026-2027.                 | 0.4  | 1         |
| 202 | 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.            | 11.9 | 1         |
| 203 | Nucleation and Growth of Fe(III)/PO4 Clusters. Materials Research Society Symposia Proceedings, 1996, 432, 151.   | 0.1  | 0         |
| 204 | Electrostatic RF MEMS Switches. , 2012, , 783-783.  |      | 0         |
| 205 | Electrowetting-on-Dielectric (EWOD). , 2012, , 789-789.   |      | 0         |
| 206 | Life cycle assessment of the application of nanoclays in wire coating. IOP Conference Series: Materials Science and Engineering, 2012, 40, 012014.                        | 0.6  | 0         |
| 207 | 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. | 1.0  | 0         |
| 208 | Physicochemical Properties of Nanoparticles in Relation with Toxicity. , 2016, , 3183-3195.   |      | 0         |
| 209 | Ecotoxicity of Inorganic Nanoparticles: From Unicellular Organisms to Invertebrates. , 2016, , 901-916.   |      | 0         |