Perrine Chaurand

List of Publications by Year
in descending order

60 papers	3,648 citations	126907 33 h-index	138484 58 g-index
60 all docs	60 docs citations	60 times ranked	5581 citing authors

#	Article	IF	Citations
1	Effect of silicon on wheat seedlings (Triticum turgidum L.) grown in hydroponics and exposed to 0 to 30ÂÂµM Cu. Planta, 2015, 241, 847-860.	3.2	295
2	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.	11.0	204
3	Concurrent Aggregation and Deposition of TiO₂ Nanoparticles in a Sandy Porous Media. Environmental Science & Technology, 2010, 44, 4897-4902.	10.0	197
4	Structural Degradation at the Surface of a TiO₂-Based Nanomaterial Used in Cosmetics. Environmental Science & Technology, 2010, 44, 2689-2694.	10.0	193
5	Enhanced Adsorption of Arsenic onto Maghemites Nanoparticles:â€‰ As(III) as a Probe of the Surface Structure and Heterogeneity. Langmuir, 2008, 24, 3215-3222.	3.5	185
6	Environmental impacts of steel slag reused in road construction: A crystallographic and molecular (XANES) approach. Journal of Hazardous Materials, 2007, 139, 537-542.	12.4	184
7	CeO₂nanoparticles induce DNA damage towards human dermal fibroblastsin vitro. Nanotoxicology, 2009, 3, 161-171.	3.0	179
8	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.	10.0	152
9	New Methodological Approach for the Vanadium K-Edge X-ray Absorption Near-Edge Structure Interpretation:Â Application to the Speciation of Vanadium in Oxide Phases from Steel Slag. Journal of Physical Chemistry B, 2007, 111, 5101-5110.	2.6	138
10	Environmental impact of sunscreen nanomaterials: Ecotoxicity and genotoxicity of altered TiO2 nanocomposites on Vicia faba. Environmental Pollution, 2011, 159, 2515-2522.	7.5	123
11	Kinetics of steel slag leaching: Batch tests and modeling. Waste Management, 2011, 31, 225-235.	7.4	120
12	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, 1105-1110.	10.0	93
13	Silver Nanoparticles and Wheat Roots: A Complex Interplay. Environmental Science & Technology, 2017, 51, 5774-5782.	10.0	93
14	Evidence of sulfur-bound reduced copper in bamboo exposed to high silicon and copper concentrations. Environmental Pollution, 2014, 187, 22-30.	7.5	78
15	Effect of phytoliths for mitigating water stress in durum wheat. New Phytologist, 2017, 215, 229-239.	7.3	77
16	Physico-chemical Control over the Single- or Double-Wall Structure of Aluminogermanate Imogolite-like Nanotubes. Journal of the American Chemical Society, 2012, 134, 3780-3786.	13.7	69
17	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.	12.7	67
18	Filter-Feeding Bivalves Store and Biodeposit Colloidally Stable Gold Nanoparticles. Environmental Science & Technology, 2011, 45, 6592-6599.	10.0	65

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19	Speciation of Cr and V within BOF steel slag reused in road constructions. Journal of Geochemical Exploration, 2006, 88, 10-14.	3.2	63
20	Long-term aging of a CeO2 based nanocomposite used for wood protection. Environmental Pollution, 2014, 188, 1-7.	7.5	59
21	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.	1.3	55
22	Effects of aged TiO2 nanomaterial from sunscreen on Daphnia magna exposed by dietary route. Environmental Pollution, 2012, 163, 55-61.	7.5	54
23	Increased zinc and copper availability in organic waste amended soil potentially involving distinct release mechanisms. Environmental Pollution, 2016, 212, 299-306.	7.5	54
24	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.	3.9	51
25	Investigation of Copper Speciation in Pig Slurry by a Multitechnique Approach. Environmental Science & Technology, 2010, 44, 6926-6932.	10.0	50
26	Mineralogy and leachability of gasified sewage sludge solid residues. Journal of Hazardous Materials, 2011, 191, 219-227.	12.4	49
27	Adsorption of Arsenic on Polyaluminum Granulate. Environmental Science & Technology, 2012, 46, 7310-7317.	10.0	48
28	Environmental exposure to TiO2 nanomaterials incorporated in building material. Environmental Pollution, 2017, 220, 1160-1170.	7.5	44
29	Effect of pH and Pressure on Uranium Removal from Drinking Water Using NF/RO Membranes. Environmental Science & Technology, 2016, 50, 5817-5824.	10.0	41
30	Exposure of juvenile Danio rerio to aged TiO2 nanomaterial from sunscreen. Environmental Science and Pollution Research, 2013, 20, 3340-3350.	5.3	38
31	Role of molting on the biodistribution of CeO2 nanoparticles within Daphnia pulex. Water Research, 2013, 47, 3921-3930.	11.3	36
32	Structural incorporation of iron into Geâ€“imogolite nanotubes: a promising step for innovative nanomaterials. RSC Advances, 2014, 4, 49827-49830.	3.6	36
33	Screening of Native Plants Growing on a Pb/Zn Mining Area in Eastern Morocco: Perspectives for Phytoremediation. Plants, 2020, 9, 1458.	3.5	36
34	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.	10.0	35
35	Synthesis of Ge-imogolite: influence of the hydrolysis ratio on the structure of the nanotubes. Physical Chemistry Chemical Physics, 2011, 13, 14516.	2.8	29
36	Drastic Change in Zinc Speciation during Anaerobic Digestion and Composting: Instability of Nanosized Zinc Sulfide. Environmental Science & Technology, 2018, 52, 12987-12996.	10.0	28

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37	Salinity-dependent silver nanoparticle uptake and transformation by Atlantic killifish (<i>Fundulus) Tj ETQq1 1 0.784314 rgBT /Overlo	3.0	26
38	Microbial and mineral evolution in zero valent iron-based permeable reactive barriers during long-term operations. Environmental Science and Pollution Research, 2016, 23, 5960-5968.	5.3	26
39	Nanometer-long Ge-imogolite nanotubes cause sustained lung inflammation and fibrosis in rats. Particle and Fibre Toxicology, 2014, 11, 67.	6.2	25
40	Siâ€“C/G based anode swelling and porosity evolution in 18650 casing and in pouch cell. Journal of Power Sources, 2021, 514, 230552.	7.8	24
41	Influence of the Length of Imogolite-Like Nanotubes on Their Cytotoxicity and Genotoxicity toward Human Dermal Cells. Chemical Research in Toxicology, 2012, 25, 2513-2522.	3.3	22
42	Nanotechnology, global development in the frame of environmental risk forecasting. A necessity of interdisciplinary researches. Comptes Rendus - Geoscience, 2015, 347, 35-42.	1.2	21
43	Respiratory hazard of Li-ion battery components: elective toxicity of lithium cobalt oxide (LiCoO2) particles in a mouse bioassay. Archives of Toxicology, 2018, 92, 1673-1684.	4.2	21
44	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.	4.3	19
45	Non-linear release dynamics for a CeO2 nanomaterial embedded in a protective wood stain, due to matrix photo-degradation. Environmental Pollution, 2018, 241, 182-193.	7.5	19
46	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.	6.4	18
47	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.	3.3	17
48	Accumulation, speciation and localization of silver nanoparticles in the earthworm Eisenia fetida. Environmental Science and Pollution Research, 2021, 28, 3756-3765.	5.3	16
49	Composition and molecular scale structure of nanophases formed by precipitation of biotite weathering products. Geochimica Et Cosmochimica Acta, 2018, 229, 53-64.	3.9	15
50	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.	7.5	13
51	Medium-term effects of Ag supplied directly or via sewage sludge to an agricultural soil on Eisenia fetida earthworm and soil microbial communities. Chemosphere, 2021, 269, 128761.	8.2	12
52	How to assess trace elements bioavailability for benthic organisms in lowly to moderately contaminated coastal sediments?. Marine Pollution Bulletin, 2019, 140, 86-100.	5.0	11
53	Uptake patterns of critical metals in alpine plant species growing in an unimpaired natural site. Chemosphere, 2022, 287, 132315.	8.2	6
54	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.	4.5	5

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55	Thermal cracking of CH3Cl leads to auto-catalysis of deposited coke. Catalysis Science and Technology, 2021, 11, 469-473.	4.1	4
56	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
57	Study of a set of micrometeorites from Antarctica using magnetic and ESR methods coupled with micro-XRF. Journal of Magnetism and Magnetic Materials, 2008, 320, 1687-1695.	2.3	3
58	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.	4.3	3
59	Colocalization analysis to understand Yttrium uptake in Saxifraga paniculata using complementary imaging technics. , 2021, , .		0
60	Exploring the Link between Cd Isotopes and Speciation in Plants: A Case Study in Solanum Species. , 2020, , .		0