Sophie Cassaignon

List of Publications by Year
in descending order

70 papers	3,611 citations	159585 30 h-index	133252 59 g-index
74 all docs	74 docs citations	74 times ranked	5957 citing authors

#	Article	IF	Citations
1	Water-mediated structuring of bone apatite. Nature Materials, 2013, 12, 1144-1153.	27.5	250
2	Size tailoring of TiO2 anatase nanoparticles in aqueous medium and synthesis of nanocomposites. Characterization by Raman spectroscopy. Journal of Materials Chemistry, 2003, 13, 877-882.	6.7	207
3	Structural evolution during the reaction of Li with nano-sized rutile type TiO2 at room temperature. Electrochemistry Communications, 2007, 9, 337-342.	4.7	206
4	Comparison of optical and electrochemical properties of anatase and brookite TiO2 synthesized by the solâ€“gel method. Thin Solid Films, 2002, 403-404, 312-319.	1.8	186
5	Size tailoring of oxide nanoparticles by precipitation in aqueous medium. A semi-quantitative modelling. Journal of Materials Chemistry, 2004, 14, 3281-3288.	6.7	182
6	Morphology Control of Cryptomelane Type MnO₂ Nanowires by Soft Chemistry. Growth Mechanisms in Aqueous Medium. Chemistry of Materials, 2007, 19, 5410-5417.	6.7	174
7	Electrochemical comparative study of titania (anatase, brookite and rutile) nanoparticles synthesized in aqueous medium. Thin Solid Films, 2004, 451-452, 86-92.	1.8	149
8	Molecular Engineering of Functional Inorganic and Hybrid Materials. Chemistry of Materials, 2014, 26, 221-238.	6.7	147
9	In Vivo Inspired Conditions to Synthesize Biomimetic Hydroxyapatite. Chemistry of Materials, 2010, 22, 3653-3663.	6.7	113
10	Synthesis of Li-Rich NMC: A Comprehensive Study. Chemistry of Materials, 2017, 29, 9923-9936.	6.7	111
11	Hydrothermal synthesis of vanadium oxide nanotubes from V2O5 gels. Catalysis Today, 2003, 78, 85-89.	4.4	108
12	Selective synthesis of brookite, anatase and rutile nanoparticles: thermolysis of TiCl4 in aqueous nitric acid. Journal of Materials Science, 2007, 42, 6689-6695.	3.7	103
13	From TiCl3 to TiO2 nanoparticles (anatase, brookite and rutile): Thermohydrolysis and oxidation in aqueous medium. Journal of Physics and Chemistry of Solids, 2007, 68, 695-700.	4.0	97
14	Structure and electrochromism of two-dimensional octahedral molecular sieve hâ€™-WO3. Nature Communications, 2019, 10, 327.	12.8	88
15	Design of metal oxide nanoparticles: Control of size, shape, crystalline structure and functionalization by aqueous chemistry. Comptes Rendus Chimie, 2010, 13, 40-51.	0.5	86
16	A Coreâ€“Corona Hierarchical Manganese Oxide and its Formation by an Aqueous Soft Chemistry Mechanism. Angewandte Chemie - International Edition, 2008, 47, 6441-6444.	13.8	85
17	Structural and morphological control of manganese oxide nanoparticles upon soft aqueous precipitation through MnO4â¯/Mn2+ reaction. Journal of Materials Chemistry, 2009, 19, 2407.	6.7	84
18	Blockâ€Copolymerâ€Templated Synthesis of Electroactive RuO₂â€Based Mesoporous Thin Films. Advanced Functional Materials, 2009, 19, 1922-1929.	14.9	76

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19	Effects of TiO2 nanoparticle polymorphism on dye-sensitized solar cell photovoltaic properties. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 232, 22-31.	3.9	71
20	Morphological control of TiO2 anatase nanoparticles: What is the good surface property to obtain efficient photocatalysts?. Applied Catalysis B: Environmental, 2015, 174-175, 350-360.	20.2	66
21	Design of oxide nanoparticles by aqueous chemistry. Journal of Sol-Gel Science and Technology, 2008, 46, 299-305.	2.4	58
22	Brookite TiO₂ Nanoparticle Films for Dyeâ€Sensitized Solar Cells. ChemPhysChem, 2011, 12, 2461-2467.	2.1	55
23	Vanadium Oxide: From Gels to Nanotubes. Journal of Sol-Gel Science and Technology, 2003, 26, 593-596.	2.4	52
24	Thermal stability of TiO2-anatase: Impact of nanoparticles morphology on kinetic phase transformation. Solid State Sciences, 2010, 12, 989-995.	3.2	51
25	Mesoporous hydroxyapatites prepared in ethanolâ€“water media: Structure and surface properties. Materials Chemistry and Physics, 2007, 104, 448-453.	4.0	42
26	Basic concepts of the crystallization from aqueous solutions: The example of aluminum oxy(hydroxi)des and aluminosilicates. Comptes Rendus - Geoscience, 2011, 343, 113-122.	1.2	40
27	Anatase TiO₂ Nanorods as Cathode Materials for Aluminum-Ion Batteries. ACS Applied Nano Materials, 2019, 2, 6428-6435.	5.0	40
28	Charge Transport and Recombination in TiO₂ Brookite-Based Photoelectrodes. Journal of Physical Chemistry C, 2014, 118, 23459-23467.	3.1	38
29	A sustainable aqueous route to highly stable suspensions of monodispersed nano ruthenia. Green Chemistry, 2011, 13, 3230.	9.0	35
30	Selective heterogeneous oriented attachment of manganese oxide nanorods in water: toward 3D nanoarchitectures. Journal of Materials Chemistry, 2009, 19, 7947.	6.7	33
31	Do TiO₂ Nanoparticles Really Taste Better When Cooked in a Microwave Oven?. European Journal of Inorganic Chemistry, 2012, 2012, 2707-2715.	2.0	33
32	Copper diffusion in copper sulfide: a systematic study. Ionics, 1998, 4, 364-371.	2.4	28
33	Facile synthetic route towards nanostructured Feâ€“TiO2(B), used as negative electrode for Li-ion batteries. Journal of Power Sources, 2015, 278, 1-8.	7.8	28
34	Design of Hierarchical Coreâˆ’Corona Architectures of Layered Manganese Oxides by Aqueous Precipitation. Chemistry of Materials, 2008, 20, 6140-6147.	6.7	27
35	Nanocrystalline Brookite with Enhanced Stability and Photocatalytic Activity: Influence of Lanthanum(III) Doping. ACS Applied Materials & Interfaces, 2012, 4, 752-760.	8.0	26
36	Twinning Driven Growth of Manganese Oxide Hollow Cones through Self-Assembly of Nanorods in Water. Crystal Growth and Design, 2009, 9, 2562-2565.	3.0	25

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37	Evolution of Nanostructured Manganese (Oxyhydr)oxides in Water through MnO₄^{â˜'} Reduction. Crystal Growth and Design, 2010, 10, 2168-2173.	3.0	25
38	Size and shape effect on the photocatalytic efficiency of TiO2 brookite. Journal of Materials Science, 2019, 54, 1213-1225.	3.7	24
39	Ex Situ X-ray Diffraction, X-ray Absorption Near Edge Structure, Electron Spin Resonance, and Transmission Electron Microscopy Study of the Hydrothermal Crystallization of Vanadium Oxide Nanotubes: An Insight into the Mechanism of Formation. Journal of Physical Chemistry C, 2012, 116, 25126-25136.	3.1	22
40	Optimized Design of Ptâ€Doped Bi₂WO₆ Nanoparticle Synthesis for Enhanced Photocatalytic Properties. European Journal of Inorganic Chemistry, 2016, 2016, 2159-2165.	2.0	22
41	Nanoparticles of Low-Valence Vanadium Oxyhydroxides: Reaction Mechanisms and Polymorphism Control by Low-Temperature Aqueous Chemistry. Inorganic Chemistry, 2016, 55, 11502-11512.	4.0	21
42	Structure and Mechanical Properties of Mesostructured Functional Hybrid Coatings Based on Anisotropic Nanoparticles Dispersed in Poly(hydroxylethyl methacrylate). Chemistry of Materials, 2008, 20, 4602-4611.	6.7	20
43	Carbothermal synthesis of Sn-based composites as negative electrode for lithium-ion batteries. Journal of Power Sources, 2011, 196, 6863-6869.	7.8	20
44	A combined MÃ¶ssbauer spectroscopy and x-ray diffraction operando study of Sn-based composite anode materials for Li-ion accumulators. Journal of Solid State Electrochemistry, 2012, 16, 3837-3848.	2.5	20
45	Roomâ€Temperature Synthesis of High Surface Area Anatase TiO₂ Exhibiting a Complete Lithium Insertion Solid Solution. Particle and Particle Systems Characterization, 2013, 30, 1093-1104.	2.3	18
46	Bipyramidal anatase TiO2 nanoparticles, a highly efficient photocatalyst? Towards a better understanding of the reactivity. Applied Catalysis B: Environmental, 2017, 203, 324-334.	20.2	18
47	Copper diffusion in solid copper sulfide electrode. Electrochimica Acta, 1996, 41, 1331-1339.	5.2	17
48	Optical Properties of Nanostructured Silica Structures From Marine Organisms. Frontiers in Marine Science, 2018, 5, .	2.5	15
49	Sustainable one-pot aqueous route to hierarchical carbonâ€“MoO2 electrodes for Li-ion batteries. RSC Advances, 2014, 4, 21208.	3.6	14
50	Influence of the Composition on the Copper Diffusion in Copper Sulfides Study by Impedance Spectroscopy. Journal of the Electrochemical Society, 1999, 146, 4666-4671.	2.9	13
51	Effect of the Particles Morphology on the Electrochemical Performance of Na₃V₂(PO₄)₂F_{3â€y}O_y. Batteries and Supercaps, 2022, 5, .	4.7	13
52	Impact of the F^{â€“} for O^{2â€“} Substitution in Na₃V₂(PO₄)₂F_{3â€“y}O_y on Their Transport Properties and Electrochemical Performance. ACS Applied Energy Materials, 2022, 5, 1065-1075.	5.1	13
53	Synthesis of a manganese oxide nanocomposite through heteroepitaxy in aqueous medium. Chemical Communications, 2009, , 674-676.	4.1	11
54	Adsorption Isotherms of Cetylpyridinium Chloride with Iron III Salts at Air/Water and Silica/Water Interfaces. Journal of Colloid and Interface Science, 2000, 230, 298-305.	9.4	8

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55	Titanium Dioxide in Photocatalysis. , 2013, , 153-188.		8
56	Synthesis of nanometric TiO₂ in aqueous solution by soft chemistry: obtaining of anatase, brookite and rutile with controlled shapes. Materials Research Society Symposia Proceedings, 2004, 822, S5.3.1.	0.1	7
57	From Living Light to Living Materials. Materials Today: Proceedings, 2014, 1, 209-215.	1.8	7
58	Particle nanosizing and coating with an ionic liquid: two routes to improve the transport properties of Na₃V₂(PO₄)₂FO₂. Nanoscale, 2022, 14, 8663-8676.	5.6	7
59	Ethylxanthate Adsorption on Copper Sulfide Influence of the Copper Sulfide Composition. Journal of the Electrochemical Society, 2000, 147, 4536.	2.9	6
60	One-pot synthesis of tin-borophosphate-carbon composites as anode materials for Li-ion batteries. Journal of Solid State Chemistry, 2016, 233, 52-57.	2.9	5
61	Influence of Structure and Organicâ€inorganic Phase Interactions on Coating Mechanical Properties in the Ternary Goethite:Poly(HEMA):Silica System. European Journal of Inorganic Chemistry, 2012, 2012, 2675-2683.	2.0	4
62	Nonclassical Crystallization and Size Control of Ultra-Small MoO₂Nanoparticles in Water. Particle and Particle Systems Characterization, 2015, 32, 251-257.	2.3	2
63	Analysis of diatoms by holotomography. Surfaces and Interfaces, 2019, 17, 100358.	3.0	2
64	Mechanical Behavior of Functional Hybrid Coating Based on Anisotropic Iron Oxide Nanoparticles. Materials Research Society Symposia Proceedings, 2007, 1007, 1.	0.1	0
65	Carbothermal Synthesis of Sn-Based Composites as Negative Electrode for Lithium-Ion Batteries. ECS Meeting Abstracts, 2010, , .	0.0	0
66	Influence of Structure and Organicâ€inorganic Phase Interactions on Coating Mechanical Properties in the Ternary Goethite:Poly(HEMA):Silica System (Eur. J. Inorg. Chem. 16/2012). European Journal of Inorganic Chemistry, 2012, 2012, .	2.0	0
67	Electrochemical Reactivity of Nano-Sized Oxides: from the Synthesis to New Reactivities. ECS Meeting Abstracts, 2007, , .	0.0	0
68	Controlled Synthesis of Nanotextured Manganese Oxides for Lithium Battery Electrodes. ECS Meeting Abstracts, 2009, , .	0.0	0
69	Nano-size Effect on the Insertion Process into Rutile-type Structure Materials. ECS Meeting Abstracts, 2009, , .	0.0	0
70	Influence of the Nature of Nanometric TiO2 Particles on Photovoltaic Devices. ECS Meeting Abstracts, 2009, , .	0.0	0