Guillaume Viau

List of Publications by Year
in descending order

66 papers	3,139 citations	136950 32 h-index	155660 55 g-index
66 all docs	66 docs citations	66 times ranked	4483 citing authors

#	Article	IF	Citations
1	Epsilon Cobalt Nanoparticles as Highly Performant Catalysts in Cinnamaldehyde Selective Hydrogenation. ACS Applied Nano Materials, 2022, 5, 5498-5507.	5.0	5
2	Ruthenium Icosahedra and Ultrathin Platelets: The Role of Surface Chemistry on the Nanoparticle Structure. Chemistry of Materials, 2022, 34, 2931-2944.	6.7	5
3	Magnetophoresis-Assisted Capillary Assembly: A Versatile Approach for Fabricating Tailored 3D Magnetic Supercrystals. ACS Nano, 2021, 15, 5096-5108.	14.6	4
4	Influence of Capping Ligands on the Catalytic Performances of Cobalt Nanoparticles Prepared with the Organometallic Route. Journal of Physical Chemistry C, 2021, 125, 7711-7720.	3.1	9
5	Magnetophoresis Assisted Capillary Assembly of Cobalt Nanorods: A New Source of Permanent Magnets for MEMS. , 2020, , .		0
6	The role of pre-nucleation clusters in the crystallization of gold nanoparticles. Nanoscale, 2020, 12, 16173-16188.	5.6	26
7	Enhanced Magnetic Behavior of Cobalt Nano-Rods Elaborated by the Polyol Process Assisted with an External Magnetic Field. Nanomaterials, 2020, 10, 334.	4.1	6
8	Importance of the decoration in shaped cobalt nanoparticles in the acceptor-less secondary alcohol dehydrogenation. Catalysis Science and Technology, 2020, 10, 4923-4937.	4.1	14
9	From soft chemistry to 2D and 3D nanowire arrays with hard magnetic properties and permanent magnet applications. , 2020, , 185-219.		4
10	Impact of noble-metals on the catalytic stability of cobalt nanoparticles for the acceptorless dehydrogenation of alcohols. Catalysis Today, 2019, 333, 97-104.	4.4	9
11	One-Pot Seed-Mediated Growth of Co Nanoparticles by the Polyol Process: Unraveling the Heterogeneous Nucleation. Nano Letters, 2019, 19, 9160-9169.	9.1	25
12	Chemical Ordering in Bimetallic FeCo Nanoparticles: From a Direct Chemical Synthesis to Application As Efficient High-Frequency Magnetic Material. Nano Letters, 2019, 19, 1379-1386.	9.1	42
13	Influence of the RE2O3 (RE = Y, Gd) and CaO nanoadditives on the electromagnetic properties of nanocrystalline Co0.2Ni0.3Zn0.5Fe2O4. Arabian Journal of Chemistry, 2019, 12, 489-502.	4.9	13
14	Consolidation of cobalt nanorods: A new route for rare-earth free nanostructured permanent magnets. Acta Materialia, 2018, 145, 290-297.	7.9	30
15	Microwave-assisted synthesis and magnetic properties of M-SrFe12O19 nanoparticles. Journal of Magnetism and Magnetic Materials, 2018, 449, 119-126.	2.3	38
16	Ultrathin Gold Nanowires with the Polytetrahedral Structure of Bulk Manganese. ACS Nano, 2018, 12, 9521-9531.	14.6	21
17	M-SrFe 12 O 19 and ferrihydrite-like ultrathin nanoplatelets as building blocks for permanent magnets: HAADF-STEM study and magnetic properties. Journal of Solid State Chemistry, 2018, 264, 124-133.	2.9	13
18	Surface-Engineering of Ultrathin Gold Nanowires: Tailored Self-Assembly and Enhanced Stability. Langmuir, 2017, 33, 5456-5463.	3.5	22

#	Article	IF	Citations
19	Platinum tripods as nanometric frequency multiplexing devices. Nanoscale, 2017, 9, 14635-14640.	5.6	4
20	Co@CoSb Coreâ€“Shell Nanorods: From Chemical Coating at the Nanoscale to Macroscopic Consolidation. Chemistry of Materials, 2016, 28, 4982-4990.	6.7	11
21	A 3D array of Co(II) cubanes with very strong magnetic anisotropy. Journal of Alloys and Compounds, 2016, 686, 447-452.	5.5	5
22	Influence of the Humidity on Nanoparticle-Based Resistive Strain Gauges. Journal of Physical Chemistry C, 2016, 120, 5848-5854.	3.1	10
23	Ultrathin Gold Nanowires: Soft-Templating versus Liquid Phase Synthesis, a Quantitative Study. Journal of Physical Chemistry C, 2015, 119, 4422-4430.	3.1	40
24	Effect of sintering conditions on the structural, electrical, and magnetic properties of nanosized Co0.2Ni0.3Zn0.5Fe2O4. Ceramics International, 2015, 41, 6212-6225.	4.8	22
25	[H2amtaz]+ iron fluorides: Synthesis, crystal structures, magnetic and MÃ¶ssbauer studies. Journal of Fluorine Chemistry, 2015, 173, 23-28.	1.7	11
26	Localized magnetization reversal processes in cobalt nanorods with different aspect ratios. Nano Research, 2015, 8, 2231-2241.	10.4	48
27	Directed Assembly of Single Colloidal Gold Nanowires by AFM Nanoxerography. Langmuir, 2015, 31, 4106-4112.	3.5	15
28	Optimization of the magnetic properties of aligned Co nanowires/polymer composites for the fabrication of permanent magnets. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	31
29	Small angle X-ray scattering coupled with in situ electromechanical probing of nanoparticle-based resistive strain gauges. Nanoscale, 2014, 6, 15107-15116.	5.6	19
30	Control of the anisotropic shape of cobalt nanorods in the liquid phase: from experiment to theoryâ€¦ and back. Nanoscale, 2014, 6, 2682.	5.6	39
31	Effect of cobalt substitution on the structure, electrical, and magnetic properties of nanorcrystalline Ni 0.5 Zn 0.5 Fe 2 O 4 prepared by the polyol process. Ceramics International, 2014, 40, 16235-16244.	4.8	24
32	Dynamic HAADF-STEM Observation of a Single-Atom Chain as the Transient State of Gold Ultrathin Nanowire Breakdown. Journal of the American Chemical Society, 2014, 136, 13075-13077.	13.7	39
33	Growth and Self-Assembly of Ultrathin Au Nanowires into Expanded Hexagonal Superlattice Studied by in Situ SAXS. Langmuir, 2014, 30, 4005-4012.	3.5	56
34	Vibrational and electronic excitations in gold nanocrystals. Nanoscale, 2014, 6, 9157-9165.	5.6	37
35	Cotunneling transport in ultra-narrow gold nanowire bundles. Nano Research, 2013, 6, 644-651.	10.4	12
36	3D assembly of upconverting NaYF4 nanocrystals by AFM nanoxerography: creation of anti-counterfeiting microtags. Nanoscale, 2013, 5, 9587.	5.6	84

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37	High temperature structural and magnetic properties of cobalt nanorods. Journal of Solid State Chemistry, 2013, 197, 297-303.	2.9	44
38	Nanoparticle-Based Strain Gauges Fabricated by Convective Self Assembly: Strain Sensitivity and Hysteresis with Respect to Nanoparticle Sizes. Journal of Physical Chemistry C, 2013, 117, 1935-1940.	3.1	90
39	Carbon Coating, Carburization, and High-Temperature Stability Improvement of Cobalt Nanorods. Journal of Physical Chemistry C, 2013, 117, 15808-15816.	3.1	41
40	Packing fraction dependence of the coercivity and the energy product in nanowire based permanent magnets. Journal of Applied Physics, 2013, 114, .	2.5	22
41	Modeling and Development of a Biosensor Based on Optical Relaxation Measurements of Hybrid Nanoparticles. ACS Nano, 2012, 6, 791-801.	14.6	44
42	Tuning Complex Shapes in Platinum Nanoparticles: From Cubic Dendrites to Fivefold Stars. Angewandte Chemie - International Edition, 2012, 51, 4690-4694.	13.8	78
43	Coulomb Force Directed Single and Binary Assembly of Nanoparticles from Aqueous Dispersions by AFM Nanoxerography. ACS Nano, 2011, 5, 4228-4235.	14.6	50
44	Synthesis of thiolate-protected silver nanocrystal superlattices from an organometallic precursor and formation of molecular di-n-alkyldisulfide lamellar phases. Journal of Nanoparticle Research, 2011, 13, 791-801.	1.9	20
45	Internal structure of Al hollow nanoparticles generated by laser ablation in liquid ethanol. Chemical Physics Letters, 2011, 501, 419-422.	2.6	46
46	Dipolar interactions in magnetic nanowire aggregates. Journal of Applied Physics, 2011, 110, .	2.5	28
47	Silicon Nanoparticles Produced by Femtosecond Laser Ablation in Ethanol: Size Control, Structural Characterization, and Optical Properties. Journal of Physical Chemistry C, 2010, 114, 15266-15273.	3.1	123
48	Nanoparticles of metal and metal oxides: some peculiar synthesis methods, size and shape control, application to catalysts preparation. Brazilian Journal of Physics, 2009, 39, 134-140.	1.4	43
49	Exchange bias in Co/CoO core-shell nanowires: Role of antiferromagnetic superparamagnetic fluctuations. Physical Review B, 2009, 80, .	3.2	55
50	Kinetically Controlled Synthesis of Hexagonally Closeâ€Packed Cobalt Nanorods with High Magnetic Coercivity. Advanced Functional Materials, 2009, 19, 1971-1977.	14.9	141
51	Generation of Al nanoparticles via ablation of bulk Al in liquids with short laser pulses. Optics Express, 2009, 17, 12650.	3.4	157
52	How to Control AFM Nanoxerography for the Templated Monolayered Assembly of 2 nm Colloidal Gold Nanoparticles. IEEE Nanotechnology Magazine, 2009, 8, 487-491.	2.0	22
53	FTIR and XPS Study of Pt Nanoparticle Functionalization and Interaction with Alumina. Langmuir, 2008, 24, 5832-5841.	3.5	152
54	Strategies for the immobilization of nanoparticles using electron beam induced deposition. Nanotechnology, 2008, 19, 445302.	2.6	12

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55	Synthesis, characterization and magnetic properties of disk-shaped particles of a cobalt alkoxide: Coii(C2H4O2). New Journal of Chemistry, 2005, 29, 355-361.	2.8	98
56	Magnetic nanoparticles with hybrid shape. Progress in Solid State Chemistry, 2005, 33, 137-145.	7.2	23
57	Acetate- and Thiol-Capped Monodisperse Ruthenium Nanoparticles:Â XPS, XAS, and HRTEM Studies. Langmuir, 2005, 21, 6788-6796.	3.5	164
58	One-step construction of silver nanowires in hexagonal mesoporous silica using the polyol process. Materials Research Bulletin, 2003, 38, 389-394.	5.2	55
59	Cobalt-based anisotropic particles prepared by the polyol process. Journal of Materials Chemistry, 2003, 13, 312-318.	6.7	113
60	Preparation, characterization and reactivity of Pd/Nb2O5 catalysts in hexa-1,5-diene hydrogenation. Catalysis Today, 2000, 57, 187-192.	4.4	24
61	Monodisperse Ferromagnetic Particles for Microwave Applications. Advanced Materials, 1998, 10, 1032-1035.	21.0	318
62	Synthesis, crystal structure and magnetic properties of the cobalt(II) chain [Co(bipym)(H2O)2](NO3)2 and the dinuclear compounds [Co2(bipym)3(H2O)4](NO3)4Â·2H2O and [Co2(bipym)3(H2O)2(SO4)2]Â·12H2O. New Journal of Chemistry, 1998, 22, 299-305.	2.8	47
63	Structural Characterization and Magnetic Properties of the First 2,2â€˜-Bipyrimidine-Containing Iron(III) Complexes. Inorganic Chemistry, 1998, 37, 1458-1464.	4.0	43
64	Synthesis, crystal structure and magnetic properties of the dinuclear manganese(II) complexes [Mn2(bpym)3(NCX)4] (bpym = 2,2â€²-bipyrimidine; X = S, Se). Inorganica Chimica Acta, 1997, 257, 121-129.	2.4	35
65	Monodisperse iron-based particles: precipitation in liquid polyols. Journal of Materials Chemistry, 1996, 6, 1047-1053.	6.7	136
66	Azido and 2,2â€²-Bipyrimidine Ligands as Useful Tools in Designing Two- and Three-Dimensional Manganese(II) Networks. Angewandte Chemie International Edition in English, 1996, 35, 1807-1810.	4.4	122