

Guillaume Viau

List of Publications by Year in descending order

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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	Monodisperse Ferromagnetic Particles for Microwave Applications. <i>Advanced Materials</i> , 1998, 10, 1032-1035.	21.0	318
2	Acetate- and Thiol-Capped Monodisperse Ruthenium Nanoparticles: XPS, XAS, and HRTEM Studies. <i>Langmuir</i> , 2005, 21, 6788-6796.	3.5	164
3	Generation of Al nanoparticles via ablation of bulk Al in liquids with short laser pulses. <i>Optics Express</i> , 2009, 17, 12650.	3.4	157
4	FTIR and XPS Study of Pt Nanoparticle Functionalization and Interaction with Alumina. <i>Langmuir</i> , 2008, 24, 5832-5841.	3.5	152
5	Kinetically Controlled Synthesis of Hexagonally Close-Packed Cobalt Nanorods with High Magnetic Coercivity. <i>Advanced Functional Materials</i> , 2009, 19, 1971-1977.	14.9	141
6	Monodisperse iron-based particles: precipitation in liquid polyols. <i>Journal of Materials Chemistry</i> , 1996, 6, 1047-1053.	6.7	136
7	Silicon Nanoparticles Produced by Femtosecond Laser Ablation in Ethanol: Size Control, Structural Characterization, and Optical Properties. <i>Journal of Physical Chemistry C</i> , 2010, 114, 15266-15273.	3.1	123
8	Azido and 2,2'-Bipyrimidine Ligands as Useful Tools in Designing Two- and Three-Dimensional Manganese(II) Networks. <i>Angewandte Chemie International Edition in English</i> , 1996, 35, 1807-1810.	4.4	122
9	Cobalt-based anisotropic particles prepared by the polyol process. <i>Journal of Materials Chemistry</i> , 2003, 13, 312-318.	6.7	113
10	Synthesis, characterization and magnetic properties of disk-shaped particles of a cobalt alkoxide: $\text{Co}(\text{C}_2\text{H}_4\text{O}_2)_2$. <i>New Journal of Chemistry</i> , 2005, 29, 355-361.	2.8	98
11	Nanoparticle-Based Strain Gauges Fabricated by Convective Self Assembly: Strain Sensitivity and Hysteresis with Respect to Nanoparticle Sizes. <i>Journal of Physical Chemistry C</i> , 2013, 117, 1935-1940.	3.1	90
12	3D assembly of upconverting NaYF_4 nanocrystals by AFM nanoxerography: creation of anti-counterfeiting microtags. <i>Nanoscale</i> , 2013, 5, 9587.	5.6	84
13	Tuning Complex Shapes in Platinum Nanoparticles: From Cubic Dendrites to Fivefold Stars. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 4690-4694.	13.8	78
14	Growth and Self-Assembly of Ultrathin Au Nanowires into Expanded Hexagonal Superlattice Studied by in Situ SAXS. <i>Langmuir</i> , 2014, 30, 4005-4012.	3.5	56
15	One-step construction of silver nanowires in hexagonal mesoporous silica using the polyol process. <i>Materials Research Bulletin</i> , 2003, 38, 389-394.	5.2	55
16	Exchange bias in Co/CoO core-shell nanowires: Role of antiferromagnetic superparamagnetic fluctuations. <i>Physical Review B</i> , 2009, 80, .	3.2	55
17	Coulomb Force Directed Single and Binary Assembly of Nanoparticles from Aqueous Dispersions by AFM Nanoxerography. <i>ACS Nano</i> , 2011, 5, 4228-4235.	14.6	50
18	Localized magnetization reversal processes in cobalt nanorods with different aspect ratios. <i>Nano Research</i> , 2015, 8, 2231-2241.	10.4	48

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19	Synthesis, crystal structure and magnetic properties of the cobalt(II) chain [Co(bipym)(H ₂ O) ₂](NO ₃) ₂ and the dinuclear compounds [Co ₂ (bipym) ₃ (H ₂ O) ₄](NO ₃) ₄ ·2H ₂ O and [Co ₂ (bipym) ₃ (H ₂ O) ₂ (SO ₄) ₂]·12H ₂ O. <i>New Journal of Chemistry</i> , 1998, 22, 299-305.	2.8	47
20	Internal structure of Al hollow nanoparticles generated by laser ablation in liquid ethanol. <i>Chemical Physics Letters</i> , 2011, 501, 419-422.	2.6	46
21	Modeling and Development of a Biosensor Based on Optical Relaxation Measurements of Hybrid Nanoparticles. <i>ACS Nano</i> , 2012, 6, 791-801.	14.6	44
22	High temperature structural and magnetic properties of cobalt nanorods. <i>Journal of Solid State Chemistry</i> , 2013, 197, 297-303.	2.9	44
23	Structural Characterization and Magnetic Properties of the First 2,2'-Bipyrimidine-Containing Iron(III) Complexes. <i>Inorganic Chemistry</i> , 1998, 37, 1458-1464.	4.0	43
24	Nanoparticles of metal and metal oxides: some peculiar synthesis methods, size and shape control, application to catalysts preparation. <i>Brazilian Journal of Physics</i> , 2009, 39, 134-140.	1.4	43
25	Chemical Ordering in Bimetallic FeCo Nanoparticles: From a Direct Chemical Synthesis to Application As Efficient High-Frequency Magnetic Material. <i>Nano Letters</i> , 2019, 19, 1379-1386.	9.1	42
26	Carbon Coating, Carburization, and High-Temperature Stability Improvement of Cobalt Nanorods. <i>Journal of Physical Chemistry C</i> , 2013, 117, 15808-15816.	3.1	41
27	Ultrathin Gold Nanowires: Soft-Templating versus Liquid Phase Synthesis, a Quantitative Study. <i>Journal of Physical Chemistry C</i> , 2015, 119, 4422-4430.	3.1	40
28	Control of the anisotropic shape of cobalt nanorods in the liquid phase: from experiment to theory and back. <i>Nanoscale</i> , 2014, 6, 2682.	5.6	39
29	Dynamic HAADF-STEM Observation of a Single-Atom Chain as the Transient State of Gold Ultrathin Nanowire Breakdown. <i>Journal of the American Chemical Society</i> , 2014, 136, 13075-13077.	13.7	39
30	Microwave-assisted synthesis and magnetic properties of M-SrFe ₁₂ O ₁₉ nanoparticles. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 449, 119-126.	2.3	38
31	Vibrational and electronic excitations in gold nanocrystals. <i>Nanoscale</i> , 2014, 6, 9157-9165.	5.6	37
32	Synthesis, crystal structure and magnetic properties of the dinuclear manganese(II) complexes [Mn ₂ (bpym) ₃ (NCX) ₄] (bpym = 2,2'-bipyrimidine; X = S, Se). <i>Inorganica Chimica Acta</i> , 1997, 257, 121-129.	2.4	35
33	Optimization of the magnetic properties of aligned Co nanowires/polymer composites for the fabrication of permanent magnets. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	1.9	31
34	Consolidation of cobalt nanorods: A new route for rare-earth free nanostructured permanent magnets. <i>Acta Materialia</i> , 2018, 145, 290-297.	7.9	30
35	Dipolar interactions in magnetic nanowire aggregates. <i>Journal of Applied Physics</i> , 2011, 110, .	2.5	28
36	The role of pre-nucleation clusters in the crystallization of gold nanoparticles. <i>Nanoscale</i> , 2020, 12, 16173-16188.	5.6	26

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37	One-Pot Seed-Mediated Growth of Co Nanoparticles by the Polyol Process: Unraveling the Heterogeneous Nucleation. <i>Nano Letters</i> , 2019, 19, 9160-9169.	9.1	25
38	Preparation, characterization and reactivity of Pd/Nb ₂ O ₅ catalysts in hexa-1,5-diene hydrogenation. <i>Catalysis Today</i> , 2000, 57, 187-192.	4.4	24
39	Effect of cobalt substitution on the structure, electrical, and magnetic properties of nanocrystalline Ni _{0.5} Zn _{0.5} Fe ₂ O ₄ prepared by the polyol process. <i>Ceramics International</i> , 2014, 40, 16235-16244.	4.8	24
40	Magnetic nanoparticles with hybrid shape. <i>Progress in Solid State Chemistry</i> , 2005, 33, 137-145.	7.2	23
41	How to Control AFM Nanoxerography for the Templated Monolayered Assembly of 2 nm Colloidal Gold Nanoparticles. <i>IEEE Nanotechnology Magazine</i> , 2009, 8, 487-491.	2.0	22
42	Packing fraction dependence of the coercivity and the energy product in nanowire based permanent magnets. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	22
43	Effect of sintering conditions on the structural, electrical, and magnetic properties of nanosized Co _{0.2} Ni _{0.3} Zn _{0.5} Fe ₂ O ₄ . <i>Ceramics International</i> , 2015, 41, 6212-6225.	4.8	22
44	Surface-Engineering of Ultrathin Gold Nanowires: Tailored Self-Assembly and Enhanced Stability. <i>Langmuir</i> , 2017, 33, 5456-5463.	3.5	22
45	Ultrathin Gold Nanowires with the Polytetrahedral Structure of Bulk Manganese. <i>ACS Nano</i> , 2018, 12, 9521-9531.	14.6	21
46	Synthesis of thiolate-protected silver nanocrystal superlattices from an organometallic precursor and formation of molecular di-n-alkyldisulfide lamellar phases. <i>Journal of Nanoparticle Research</i> , 2011, 13, 791-801.	1.9	20
47	Small angle X-ray scattering coupled with in situ electromechanical probing of nanoparticle-based resistive strain gauges. <i>Nanoscale</i> , 2014, 6, 15107-15116.	5.6	19
48	Directed Assembly of Single Colloidal Gold Nanowires by AFM Nanoxerography. <i>Langmuir</i> , 2015, 31, 4106-4112.	3.5	15
49	Importance of the decoration in shaped cobalt nanoparticles in the acceptor-less secondary alcohol dehydrogenation. <i>Catalysis Science and Technology</i> , 2020, 10, 4923-4937.	4.1	14
50	M-SrFe ₁₂ O ₁₉ and ferrihydrite-like ultrathin nanoplatelets as building blocks for permanent magnets: HAADF-STEM study and magnetic properties. <i>Journal of Solid State Chemistry</i> , 2018, 264, 124-133.	2.9	13
51	Influence of the RE ₂ O ₃ (RE = Y, Gd) and CaO nanoadditives on the electromagnetic properties of nanocrystalline Co _{0.2} Ni _{0.3} Zn _{0.5} Fe ₂ O ₄ . <i>Arabian Journal of Chemistry</i> , 2019, 12, 489-502.	4.9	13
52	Strategies for the immobilization of nanoparticles using electron beam induced deposition. <i>Nanotechnology</i> , 2008, 19, 445302.	2.6	12
53	Cotunneling transport in ultra-narrow gold nanowire bundles. <i>Nano Research</i> , 2013, 6, 644-651.	10.4	12
54	[H ₂ amtaz] ⁺ iron fluorides: Synthesis, crystal structures, magnetic and Mössbauer studies. <i>Journal of Fluorine Chemistry</i> , 2015, 173, 23-28.	1.7	11

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55	Co@CoSb Core-Shell Nanorods: From Chemical Coating at the Nanoscale to Macroscopic Consolidation. <i>Chemistry of Materials</i> , 2016, 28, 4982-4990.	6.7	11
56	Influence of the Humidity on Nanoparticle-Based Resistive Strain Gauges. <i>Journal of Physical Chemistry C</i> , 2016, 120, 5848-5854.	3.1	10
57	Impact of noble-metals on the catalytic stability of cobalt nanoparticles for the acceptorless dehydrogenation of alcohols. <i>Catalysis Today</i> , 2019, 333, 97-104.	4.4	9
58	Influence of Capping Ligands on the Catalytic Performances of Cobalt Nanoparticles Prepared with the Organometallic Route. <i>Journal of Physical Chemistry C</i> , 2021, 125, 7711-7720.	3.1	9
59	Enhanced Magnetic Behavior of Cobalt Nano-Rods Elaborated by the Polyol Process Assisted with an External Magnetic Field. <i>Nanomaterials</i> , 2020, 10, 334.	4.1	6
60	A 3D array of Co(II) cubanes with very strong magnetic anisotropy. <i>Journal of Alloys and Compounds</i> , 2016, 686, 447-452.	5.5	5
61	Epsilon Cobalt Nanoparticles as Highly Performant Catalysts in Cinnamaldehyde Selective Hydrogenation. <i>ACS Applied Nano Materials</i> , 2022, 5, 5498-5507.	5.0	5
62	Ruthenium Icosahedra and Ultrathin Platelets: The Role of Surface Chemistry on the Nanoparticle Structure. <i>Chemistry of Materials</i> , 2022, 34, 2931-2944.	6.7	5
63	Platinum tripods as nanometric frequency multiplexing devices. <i>Nanoscale</i> , 2017, 9, 14635-14640.	5.6	4
64	From soft chemistry to 2D and 3D nanowire arrays with hard magnetic properties and permanent magnet applications. , 2020, , 185-219.		4
65	Magnetophoresis-Assisted Capillary Assembly: A Versatile Approach for Fabricating Tailored 3D Magnetic Supercrystals. <i>ACS Nano</i> , 2021, 15, 5096-5108.	14.6	4
66	Magnetophoresis Assisted Capillary Assembly of Cobalt Nanorods: A New Source of Permanent Magnets for MEMS. , 2020, , .		0