

# Sabino Veintemillas-Verdaguer

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

114  
papers

6,332  
citations

38  
h-index

78  
g-index

118  
ext. papers

6,805  
ext. citations

4.5  
avg, IF

5.47  
L-index

#	Paper	IF	Citations
114	Nanoparticles for Neural Applications <b>2022</b> , 149-184		1
113	Unravelling an amine-regulated crystallization crossover to prove single/multicore effects on the biomedical and environmental catalytic activity of magnetic iron oxide colloids. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 608, 1585-1597	9.3	4
112	Engineering Iron Oxide Nanocatalysts by a Microwave-Assisted Polyol Method for the Magnetically Induced Degradation of Organic Pollutants. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	8
111	Temperature dependence of the magnetic interactions taking place in monodisperse magnetite nanoparticles having different morphologies. <i>AIP Advances</i> , <b>2021</b> , 11, 015025	1.5	1
110	Whither Magnetic Hyperthermia? A Tentative Roadmap. <i>Materials</i> , <b>2021</b> , 14,	3.5	39
109	Reproducibility and Scalability of Magnetic Nanoheater Synthesis. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	1
108	Selective Magnetic Nanoheating: Combining Iron Oxide Nanoparticles for Multi-Hot-Spot Induction and Sequential Regulation. <i>Nano Letters</i> , <b>2021</b> , 21, 7213-7220	11.5	6
107	Continuous production of magnetic iron oxide nanocrystals by oxidative precipitation. <i>Chemical Engineering Journal</i> , <b>2020</b> , 393, 124593	14.7	12
106	Cu-Doped Extremely Small Iron Oxide Nanoparticles with Large Longitudinal Relaxivity: One-Pot Synthesis and in Vivo Targeted Molecular Imaging. <i>ACS Omega</i> , <b>2019</b> , 4, 2719-2727	3.9	23
105	Doped-Iron Oxide Nanocrystals Synthesized by One-Step Aqueous Route for Multi-Imaging Purposes. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 7356-7365	3.8	6
104	Slow magnetic relaxation in well crystallized, monodispersed, octahedral and spherical magnetite nanoparticles. <i>AIP Advances</i> , <b>2019</b> , 9, 125143	1.5	2
103	Design strategies for shape-controlled magnetic iron oxide nanoparticles. <i>Advanced Drug Delivery Reviews</i> , <b>2019</b> , 138, 68-104	18.5	127
102	Improving the reliability of the iron concentration quantification for iron oxide nanoparticle suspensions: a two-institutions study. <i>Analytical and Bioanalytical Chemistry</i> , <b>2019</b> , 411, 1895-1903	4.4	12
101	Combined Influence of Reagent Concentrations and Agar Hydrogel Strength on the Formation of Biomimetic Hydrogel/Calcite Composites. <i>Crystal Growth and Design</i> , <b>2018</b> , 18, 1401-1414	3.5	18
100	PEG-copolymer-coated iron oxide nanoparticles that avoid the reticuloendothelial system and act as kidney MRI contrast agents. <i>Nanoscale</i> , <b>2018</b> , 10, 14153-14164	7.7	43
99	Effect of the Sodium Polyacrylate on the Magnetite Nanoparticles Produced by Green Chemistry Routes: Applicability in Forward Osmosis. <i>Nanomaterials</i> , <b>2018</b> , 8,	5.4	7
98	Hydrothermal alteration of aragonitic biocarbonates: assessment of micro- and nanostructural dissolution/precipitation and constraints of diagenetic overprint from quantitative statistical grain-area analysis. <i>Biogeosciences</i> , <b>2018</b> , 15, 7451-7484	4.6	8

97	Biomaterial Reactivity: The Kinetics of the Replacement Reaction of Biological Aragonite to Apatite. <i>Minerals (Basel, Switzerland)</i> , <b>2018</b> , 8, 315	2.4	2
96	Conversion of biogenic aragonite into hydroxyapatite scaffolds in boiling solutions. <i>CrystEngComm</i> , <b>2017</b> , 19, 110-116	3.3	11
95	SAXS analysis of single- and multi-core iron oxide magnetic nanoparticles. <i>Journal of Applied Crystallography</i> , <b>2017</b> , 50, 481-488	3.8	24
94	Formation Mechanism of Maghemite Nanoflowers Synthesized by a Polyol-Mediated Process. <i>ACS Omega</i> , <b>2017</b> , 2, 7172-7184	3.9	56
93	Key Parameters on the Microwave Assisted Synthesis of Magnetic Nanoparticles for MRI Contrast Agents. <i>Contrast Media and Molecular Imaging</i> , <b>2017</b> , 2017, 8902424	3.2	14
92	Colloidal Flower-Shaped Iron Oxide Nanoparticles: Synthesis Strategies and Coatings. <i>Particle and Particle Systems Characterization</i> , <b>2017</b> , 34, 1700094	3.1	49
91	Detailed magnetic monitoring of the enhanced magnetism of ferrihydrite along its progressive transformation into hematite. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2016</b> , 121, 4118-4129	3.6	5
90	Counterion and solvent effects on the size of magnetite nanocrystals obtained by oxidative precipitation. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 9482-9488	7.1	15
89	Particle Interactions in Liquid Magnetic Colloids by Zero Field Cooled Measurements: Effects on Heating Efficiency. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 11022-11030	3.8	42
88	Bismuth labeling for the CT assessment of local administration of magnetic nanoparticles. <i>Nanotechnology</i> , <b>2015</b> , 26, 135101	3.4	14
87	Effects of phase transfer ligands on monodisperse iron oxide magnetic nanoparticles. <i>Journal of Colloid and Interface Science</i> , <b>2015</b> , 437, 147-155	9.3	57
86	SolGel Magnetic Materials <b>2015</b> , 813-840		
85	Degradation of magnetic nanoparticles mimicking lysosomal conditions followed by AC susceptibility. <i>Biomedizinische Technik</i> , <b>2015</b> , 60, 417-25	1.3	29
84	Improving magnetic properties of ultrasmall magnetic nanoparticles by biocompatible coatings. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 064311	2.5	13
83	Synthesis methods to prepare single- and multi-core iron oxide nanoparticles for biomedical applications. <i>Dalton Transactions</i> , <b>2015</b> , 44, 2943-52	4.3	84
82	Magnetic nanocrystals for biomedical applications. <i>Progress in Crystal Growth and Characterization of Materials</i> , <b>2014</b> , 60, 80-86	3.5	11
81	Structural determination of Bi-doped magnetite multifunctional nanoparticles for contrast imaging. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 18301-10	3.6	13
80	Enantioselective Crystallization of Sodium Chlorate in the Presence of Racemic Hydrophobic Amino Acids and Static Magnetic Fields. <i>Challenges</i> , <b>2014</b> , 5, 175-192	3.4	1

79	Size sorting of ultrasmall magnetic nanoparticles and their aggregates behaviour. <i>Materials Research Bulletin</i> , <b>2013</b> , 48, 4294-4300	5.1	8
78	Relationship between physico-chemical properties of magnetic fluids and their heating capacity. <i>International Journal of Hyperthermia</i> , <b>2013</b> , 29, 768-76	3.7	46
77	Biodistribution and pharmacokinetics of uniform magnetite nanoparticles chemically modified with polyethylene glycol. <i>Nanoscale</i> , <b>2013</b> , 5, 11400-8	7.7	84
76	Large scale production of biocompatible magnetite nanocrystals with high saturation magnetization values through green aqueous synthesis. <i>Journal of Materials Chemistry B</i> , <b>2013</b> , 1, 5995-6004	7.3	44
75	Short-chain PEG molecules strongly bound to magnetic nanoparticle for MRI long circulating agents. <i>Acta Biomaterialia</i> , <b>2013</b> , 9, 6421-30	10.8	70
74	Bulk metastable cobalt in fcc crystal structure. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 580, 187-190	5.7	27
73	Achiral-to-chiral transition in benzil solidification: analogies with racemic conglomerates systems showing deracemization. <i>Chirality</i> , <b>2013</b> , 25, 393-9	2.1	9
72	On the effect of carbonate on barite growth at elevated temperatures. <i>American Mineralogist</i> , <b>2013</b> , 98, 1235-1240	2.9	5
71	The Viedma deracemization of racemic conglomerate mixtures as a paradigm of spontaneous mirror symmetry breaking in aggregation and polymerization. <i>ChemPhysChem</i> , <b>2013</b> , 14, 3982-93	3.2	22
70	Ultrasmall iron oxide nanoparticles for biomedical applications: improving the colloidal and magnetic properties. <i>Langmuir</i> , <b>2012</b> , 28, 178-85	4	76
69	Core/Shell Magnetite/Bismuth Oxide Nanocrystals with Tunable Size, Colloidal, and Magnetic Properties. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 319-324	9.6	22
68	Fighting cancer with magnetic nanoparticles and immunotherapy <b>2012</b> ,		2
67	Magnetic Capsules for NMR Imaging: Effect of Magnetic Nanoparticles Spatial Distribution and Aggregation. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 6257-6264	3.8	72
66	Ac magnetic susceptibility study of iron nanoparticle biodistribution. <i>Journal Physics D: Applied Physics</i> , <b>2011</b> , 44, 255002	3	36
65	One step production of magnetic nanoparticle films by laser pyrolysis inside a chemical vapour deposition reactor. <i>Thin Solid Films</i> , <b>2011</b> , 519, 7677-7682	2.2	5
64	Metastability in Supersaturated Solution and Transition towards Chirality in the Crystallization of NaClO <sub>3</sub> . <i>Angewandte Chemie</i> , <b>2011</b> , 123, 2407-2411	3.6	17
63	Metastability in supersaturated solution and transition towards chirality in the crystallization of NaClO <sub>3</sub> . <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 2359-63	16.4	46
62	Modeling of the laser pyrolysis process by means of the aerosol theory: Case of iron nanoparticles. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 014906	2.5	11

61	Liver and brain imaging through dimercaptosuccinic acid-coated iron oxide nanoparticles. <i>Nanomedicine</i> , <b>2010</b> , 5, 397-408	5.6	57
60	Iron Oxide Materials Produced by Laser Pyrolysis <b>2010</b> ,		3
59	Reproducibility of the Synthesis of Iron Oxide Nanoparticles Produced by Laser Pyrolysis <b>2010</b> ,		2
58	The endocytic penetration mechanism of iron oxide magnetic nanoparticles with positively charged cover: a morphological approach. <i>International Journal of Molecular Medicine</i> , <b>2010</b> , 26, 533-9	4.4	17
57	Synthesis of pyrimidines and triazines in ice: implications for the prebiotic chemistry of nucleobases. <i>Chemistry - A European Journal</i> , <b>2009</b> , 15, 4411-8	4.8	68
56	Thermal wet decomposition of Prussian Blue: implications for prebiotic chemistry. <i>Chemistry and Biodiversity</i> , <b>2009</b> , 6, 1309-22	2.5	23
55	CH <sub>4</sub> /N <sub>2</sub> /H <sub>2</sub> -spark hydrophobic tholins: A systematic approach to the characterisation of tholins. Part II. <i>Icarus</i> , <b>2009</b> , 204, 672-680	3.8	27
54	Progress in the preparation of magnetic nanoparticles for applications in biomedicine. <i>Journal Physics D: Applied Physics</i> , <b>2009</b> , 42, 224002	3	295
53	The influence of surface functionalization on the enhanced internalization of magnetic nanoparticles in cancer cells. <i>Nanotechnology</i> , <b>2009</b> , 20, 115103	3.4	267
52	Spontaneous Transition toward Chirality in the NaClO <sub>3</sub> Crystallization in Boiling Solutions. <i>Crystal Growth and Design</i> , <b>2009</b> , 9, 4802-4806	3.5	38
51	Effect of nanoparticle and aggregate size on the relaxometric properties of MR contrast agents based on high quality magnetite nanoparticles. <i>Journal of Physical Chemistry B</i> , <b>2009</b> , 113, 7033-9	3.4	124
50	Size dependent allotropic transition of Co fine particles. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2009</b> , 9, 4472-7	1.3	5
49	Cytokine adsorption/release on uniform magnetic nanoparticles for localized drug delivery. <i>Journal of Controlled Release</i> , <b>2008</b> , 130, 168-74	11.7	36
48	Calorimetric Study of Maghemite Nanoparticles Synthesized by Laser-Induced Pyrolysis. <i>Chemistry of Materials</i> , <b>2008</b> , 20, 591-598	9.6	83
47	Asymmetric chiral growth of micron-size NaClO <sub>3</sub> crystals in water aerosols. <i>Physical Review Letters</i> , <b>2008</b> , 100, 146102	7.4	17
46	Functionalisation of glass with iron oxide nanoparticles produced by laser pyrolysis. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2008</b> , 8, 2458-62	1.3	1
45	Total-reflection X-ray fluorescence: An alternative tool for the analysis of magnetic ferrofluids. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , <b>2008</b> , 63, 1387-1394	3.1	19
44	Synthesis of polycyclic aromatic hydrocarbons and acetylene polymers in ice: a prebiotic scenario. <i>Chemistry and Biodiversity</i> , <b>2008</b> , 5, 2729-39	2.5	14

43	CH4/N2/H2 spark hydrophilic tholins: A systematic approach to the characterization of tholins. <i>Icarus</i> , <b>2008</b> , 198, 232-241	3.8	26
42	Comments on a possible transition to solid-phase homochirality. <i>Chemistry - A European Journal</i> , <b>2007</b> , 13, 10303-5; author reply 10306-11	4.8	14
41	Comparative analysis of the 1H NMR relaxation enhancement produced by iron oxide and core-shell iron-iron oxide nanoparticles. <i>Magnetic Resonance Imaging</i> , <b>2007</b> , 25, 1437-41	3.3	30
40	Continuous production of water dispersible carbon-iron nanocomposites by laser pyrolysis: application as MRI contrasts. <i>Journal of Colloid and Interface Science</i> , <b>2007</b> , 313, 511-8	9.3	30
39	The effect of stirring on sodium chlorate crystallization under symmetry breaking conditions. <i>Journal of Crystal Growth</i> , <b>2007</b> , 303, 562-567	1.6	24
38	Prebiotic microreactors: a synthesis of purines and dihydroxy compounds in aqueous aerosol. <i>Origins of Life and Evolution of Biospheres</i> , <b>2007</b> , 37, 123-42	1.5	35
37	The effects of ferrous and other ions on the abiotic formation of biomolecules using aqueous aerosols and spark discharges. <i>Origins of Life and Evolution of Biospheres</i> , <b>2007</b> , 37, 507-21	1.5	23
36	Continuous production of inorganic magnetic nanocomposites for biomedical applications by laser pyrolysis. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2007</b> , 311, 120-124	2.8	29
35	Homochirality as a consequence of thermodynamic equilibrium?. <i>Chemistry - A European Journal</i> , <b>2006</b> , 12, 7776-81	4.8	78
34	Contributions to the application of the transferability principle and the multipolar modeling of H atoms: electron-density study of L-histidinium dihydrogen orthophosphate orthophosphoric acid. I. <i>Acta Crystallographica Section A: Foundations and Advances</i> , <b>2006</b> , 62, 365-78		16
33	Core-shell iron-iron oxide nanoparticles synthesized by laser-induced pyrolysis. <i>Small</i> , <b>2006</b> , 2, 1476-83	11	58
32	chapter 5 Synthesis, Properties and Biomedical Applications of Magnetic Nanoparticles. <i>Handbook of Magnetic Materials</i> , <b>2006</b> , 16, 403-482	1.3	53
31	Surface characterisation of dextran-coated iron oxide nanoparticles prepared by laser pyrolysis and coprecipitation. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2005</b> , 293, 20-27	2.8	142
30	Advances in magnetic nanoparticles for biotechnology applications. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2005</b> , 290-291, 28-34	2.8	190
29	Laser pyrolysis preparation of SiO2-coated magnetic nanoparticles for biomedical applications. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2005</b> , 290-291, 272-275	2.8	22
28	Fe-based nanoparticulate metallic alloys as contrast agents for magnetic resonance imaging. <i>Biomaterials</i> , <b>2005</b> , 26, 5695-703	15.6	106
27	Thermal history dependence of the crystal structure of Co fine particles. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	53
26	Comparative study of ferrofluids based on dextran-coated iron oxide and metal nanoparticles for contrast agents in magnetic resonance imaging. <i>Nanotechnology</i> , <b>2004</b> , 15, S154-S159	3.4	82

25	Colloidal dispersions of maghemite nanoparticles produced by laser pyrolysis with application as NMR contrast agents. <i>Journal Physics D: Applied Physics</i> , <b>2004</b> , 37, 2054-2059	3	47
24	The preparation of magnetic nanoparticles for applications in biomedicine. <i>Journal Physics D: Applied Physics</i> , <b>2003</b> , 36, R182-R197	3	1490
23	Contrast agents for MRI based on iron oxide nanoparticles prepared by laser pyrolysis. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2003</b> , 266, 102-109	2.8	93
22	Effect of the process conditions on the structural and magnetic properties of $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> nanoparticles produced by laser pyrolysis. <i>Scripta Materialia</i> , <b>2002</b> , 47, 589-593	5.6	44
21	Synthesis of Fe <sub>3</sub> O <sub>4</sub> nanoparticles by cw CO <sub>2</sub> laser assisted pyrolysis from gaseous precursors. <i>Applied Surface Science</i> , <b>2002</b> , 186, 562-567	6.7	12
20	Magnetic nanoparticles prepared by laser pyrolysis. <i>IEEE Transactions on Magnetics</i> , <b>2002</b> , 38, 2616-2618		19
19	Spin frustration in maghemite nanoparticles. <i>Solid State Communications</i> , <b>2001</b> , 118, 437-440	1.6	60
18	Effect of the oxidation conditions on the maghemites produced by laser pyrolysis. <i>Applied Organometallic Chemistry</i> , <b>2001</b> , 15, 365-372	3.1	29
17	Metastability in drowning-out crystallisation: precipitation of highly soluble sulphates. <i>Journal of Crystal Growth</i> , <b>2001</b> , 222, 317-327	1.6	20
16	Surface and Internal Spin Canting in $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> Nanoparticles. <i>Chemistry of Materials</i> , <b>1999</b> , 11, 3058-3064	9.6	553
15	Continuous production of $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> ultrafine powders by laser pyrolysis. <i>Materials Letters</i> , <b>1998</b> , 35, 227-231	3.1	117
14	Chemical aspects of the effect of impurities in crystal growth. <i>Progress in Crystal Growth and Characterization of Materials</i> , <b>1996</b> , 32, 75-109	3.5	42
13	On the formation of dislocation etch pits on L-arginine phosphate monohydrate single crystals. <i>Journal of Crystal Growth</i> , <b>1995</b> , 154, 364-369	1.6	14
12	Growth habit and surface morphology of L-arginine phosphate monohydrate single crystals. <i>Journal of Crystal Growth</i> , <b>1995</b> , 155, 135-143	1.6	28
11	Some observations of growth hillocks and growth layers on potassium hydrogen tartrate crystals. <i>Crystal Research and Technology</i> , <b>1994</b> , 29, 639-645	1.3	11
10	Decoration of growth and dissolution steps on the surfaces of L-arginine phosphate monohydrate crystals. <i>Journal of Crystal Growth</i> , <b>1994</b> , 140, 447-450	1.6	6
9	Solubility and activity coefficients of lead chloride in potassium nitrate solutions at 25 °C and at boiling. Calculation of the supersaturation. <i>Canadian Journal of Chemistry</i> , <b>1993</b> , 71, 1259-1264	0.9	4
8	Lead chloride crystal growth from boiling solutions. <i>Journal of Crystal Growth</i> , <b>1993</b> , 128, 1282-1287	1.6	2



7	A thermodynamical approach to tetramethylsilane (TMS) pyrolysis; application to SiC coatings obtained by MOCVD. <i>Journal of Crystal Growth</i> , <b>1993</b> , 128, 349-353	1.6	18
6	Dipyramidal habit of flux-grown cobalt-tin doped barium ferrite. <i>Journal of Crystal Growth</i> , <b>1992</b> , 121, 247-249	1.6	2
5	Crystal growth of potassium hydrogen tartrate from aqueous solution. <i>Journal of Crystal Growth</i> , <b>1990</b> , 99, 211-216	1.6	7
4	Crystal growth from boiling solutions. <i>Progress in Crystal Growth and Characterization</i> , <b>1988</b> , 17, 1-40		12
3	Criteria for growing crystals from boiling solutions. <i>Journal of Crystal Growth</i> , <b>1987</b> , 83, 367-375	1.6	10
2	Surface microtopographic study of KDP crystals grown at the boiling point. <i>Journal of Crystal Growth</i> , <b>1986</b> , 78, 144-154	1.6	22
1	KDP (KH <sub>2</sub> PO <sub>4</sub> ) growth from boiling solutions. <i>Ferroelectrics</i> , <b>1984</b> , 56, 41-44	0.6	10