

# MarÃ-a Luisa FernÃ;ndez-Gubieda Ruiz

## List of Publications by Year in descending order

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120  
papers

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236833

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docs citations

121  
times ranked

2741  
citing authors

#	ARTICLE	IF	CITATIONS
1	Towards the design of contrast-enhanced agents: systematic Ga <sup>3+</sup> doping on magnetite nanoparticles. Dalton Transactions, 2022, 51, 2517-2530.	1.6	4
2	Modifying the magnetic response of magnetotactic bacteria: incorporation of Gd and Tb ions into the magnetosome structure. Nanoscale Advances, 2022, 4, 2649-2659.	2.2	3
3	Magnetic Anisotropy of Individual Nanomagnets Embedded in Biological Systems Determined by Axi-symmetric X-ray Transmission Microscopy. ACS Nano, 2022, 16, 7398-7408.	7.3	4
4	Nanoflowers Versus Magnetosomes: Comparison Between Two Promising Candidates for Magnetic Hyperthermia Therapy. IEEE Access, 2021, 9, 99552-99561.	2.6	9
5	Shaping Up Zn-Doped Magnetite Nanoparticles from Mono- and Bimetallic Oleates: The Impact of Zn Content, Fe Vacancies, and Morphology on Magnetic Hyperthermia Performance. Chemistry of Materials, 2021, 33, 3139-3154.	3.2	19
6	A Milestone in the Chemical Synthesis of Fe <sub>3</sub> O <sub>4</sub> Nanoparticles: Unreported Bulklike Properties Lead to a Remarkable Magnetic Hyperthermia. Chemistry of Materials, 2021, 33, 8693-8704.	3.2	31
7	Study of the influence of sensor permeability in the detection of a single magnetotactic bacterium. Journal of Magnetism and Magnetic Materials, 2020, 500, 166346.	1.0	3
8	Controlled Magnetic Anisotropy in Single Domain Mn-doped Biosynthesized Nanoparticles. Journal of Physical Chemistry C, 2020, 124, 22827-22838.	1.5	9
9	Magnetosomes could be protective shields against metal stress in magnetotactic bacteria. Scientific Reports, 2020, 10, 11430.	1.6	18
10	Magnetotactic bacteria for cancer therapy. Journal of Applied Physics, 2020, 128, .	1.1	37
11	Highly Reproducible Hyperthermia Response in Water, Agar, and Cellular Environment by Discretely PEGylated Magnetite Nanoparticles. ACS Applied Materials & Interfaces, 2020, 12, 27917-27929.	4.0	27
12	Investigating the Size and Microstrain Influence in the Magnetic Order/Disorder State of GdCu <sub>2</sub> Nanoparticles. Nanomaterials, 2020, 10, 1117.	1.9	10
13	Probing the stability and magnetic properties of magnetosome chains in freeze-dried magnetotactic bacteria. Nanoscale Advances, 2020, 2, 1115-1121.	2.2	11
14	Elucidating the role of shape anisotropy in faceted magnetic nanoparticles using biogenic magnetosomes as a model. Nanoscale, 2020, 12, 16081-16090.	2.8	15
15	Disk-shaped magnetic particles for cancer therapy. Applied Physics Reviews, 2020, 7, .	5.5	32
16	Magnetic Hyperthermia: Unlocking the Potential of Magnetotactic Bacteria as Magnetic Hyperthermia Agents (Small 41/2019). Small, 2019, 15, 1970222.	5.2	2
17	Unlocking the Potential of Magnetotactic Bacteria as Magnetic Hyperthermia Agents. Small, 2019, 15, e1902626.	5.2	79
18	Mn-Doping level dependence on the magnetic response of Mn <sub>x</sub> Fe <sub>3-<math>\alpha</math></sub> O <sub>4</sub> ferrite nanoparticles. Dalton Transactions, 2019, 48, 11480-11491.	1.6	26

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19	Enhanced mass sensitivity in novel magnetoelastic resonators geometries for advanced detection systems. <i>Sensors and Actuators B: Chemical</i> , 2019, 296, 126612.	4.0	32
20	Configuration of the magnetosome chain: a natural magnetic nanoarchitecture. <i>Nanoscale</i> , 2018, 10, 7407-7419.	2.8	47
21	Magnetic Study of Co-Doped Magnetosome Chains. <i>Journal of Physical Chemistry C</i> , 2018, 122, 7541-7550.	1.5	24
22	Influence of the bacterial growth phase on the magnetic properties of magnetosomes synthesized by <i>Magnetospirillum gryphiswaldense</i> . <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2017, 1861, 1507-1514.	1.1	23
23	Magnetization reversal in circular vortex dots of small radius. <i>Nanoscale</i> , 2017, 9, 11269-11278.	2.8	29
24	Surfactant-assisted production of TbCu <sub>2</sub> nanoparticles. <i>Journal of Nanoparticle Research</i> , 2017, 19, 1.	0.8	4
25	Assemblies of magnetite nanoparticles extracted from magnetotactic bacteria: A magnetic study. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	18
26	Enhanced magnetic anisotropy and heating efficiency in multi-functional manganese ferrite/graphene oxide nanostructures. <i>Nanotechnology</i> , 2016, 27, 155707.	1.3	30
27	Optimal Parameters for Hyperthermia Treatment Using Biomineralized Magnetite Nanoparticles: Theoretical and Experimental Approach. <i>Journal of Physical Chemistry C</i> , 2016, 120, 24437-24448.	1.5	94
28	Studying nanoparticles' 3D shape by aspect maps: Determination of the morphology of bacterial magnetic nanoparticles. <i>Faraday Discussions</i> , 2016, 191, 177-188.	1.6	7
29	Magnetic nanoscopic correlations in the crossover between a superspin glass and a superferromagnet. <i>Journal of Applied Physics</i> , 2016, 119, .	1.1	10
30	On the mineral core of ferritin-like proteins: structural and magnetic characterization. <i>Nanoscale</i> , 2016, 8, 1088-1099.	2.8	25
31	Anisotropy effects in magnetic hyperthermia: A comparison between spherical and cubic exchange-coupled FeO/Fe <sub>3</sub> O <sub>4</sub> nanoparticles. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	103
32	On the exchange bias effect in NiO nanoparticles with a core(antiferromagnetic)/shell (spin glass) morphology. <i>Journal of Physics: Conference Series</i> , 2015, 663, 012001.	0.3	3
33	Magnetic phase diagram of superantiferromagnetic TbCu <sub>2</sub> nanoparticles. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 496002.	0.7	15
34	Search for Magnetite Nanoparticles in the Rats' Brain. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-3.	1.2	3
35	Magnetocaloric properties of rapidly solidified Dy <sub>3</sub> Co alloy ribbons. <i>Journal of Applied Physics</i> , 2015, 117, 17A706.	1.1	3
36	High-magnetic field characterization of magnetocaloric effect in FeZrB(Cu) amorphous ribbons. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	23

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37	Neutron and synchrotron studies of structure and magnetism of Shape Memory Alloys. Journal of Physics: Conference Series, 2015, 663, 012014.	0.3	7
38	Breakdown of magnetism in sub-nanometric Ni clusters embedded in Ag. Nanotechnology, 2015, 26, 455703.	1.3	11
39	Sodium Distribution and Reaction Mechanisms of a $\text{Na}_3\text{V}_2\text{O}_2(\text{PO}_4)_2\text{F}$ Electrode during Use in a Sodium-Ion Battery. Chemistry of Materials, 2014, 26, 3391-3402.	3.2	112
40	Interplay between microstructure and magnetism in NiO nanoparticles: breakdown of the antiferromagnetic order. Nanoscale, 2014, 6, 457-465.	2.8	90
41	Magnetic disorder in diluted $\text{Fe}_x\text{M}_{100-x}$ granular thin films (M=Au, Ag, Cu; $x \leq 10$ at.%). Journal of Physics Condensed Matter, 2013, 25, 276001.	0.7	13
42	Magnetostatic interactions in various magnetosome clusters. Journal of Applied Physics, 2013, 113, 023907.	1.1	17
43	Magnetite Biomineralization in <i>Magnetospirillum gryphiswaldense</i> : Time-Resolved Magnetic and Structural Studies. ACS Nano, 2013, 7, 3297-3305.	7.3	107
44	Size-induced superantiferromagnetism with reentrant spin-glass behavior in metallic nanoparticles of $\text{TbCu}_2$ . Physical Review B, 2013, 87, .	1.1	26
45	Properties of Dense Assemblies of Magnetic Nanoparticles Promising for Application in Biomedicine. Journal of Superconductivity and Novel Magnetism, 2013, 26, 1079-1083.	0.8	13
46	Electrochemical Na Extraction/Insertion of $\text{Na}_3\text{V}_2\text{O}_2(\text{PO}_4)_2\text{F}_3$ . Chemistry of Materials, 2013, 25, 4917-4925.		112
47	Ni Doped $\text{Fe}_3\text{O}_4$ Magnetic Nanoparticles. Journal of Nanoscience and Nanotechnology, 2012, 12, 2652-2660.	0.9	55
48	FeNi-based magnetoimpedance multilayers: Tailoring of the softness by magnetic spacers. Applied Physics Letters, 2012, 100, .	1.5	47
49	Poly(methyl methacrylate) Coating of Soft Magnetic Amorphous and Crystalline Fe,Co-B Nanoparticles by Chemical Reduction. Journal of Nanoscience and Nanotechnology, 2012, 12, 1843-1851.	0.9	1
50	Effects of thermal annealing on the magnetic interactions in nanogranular Fe-Ag thin films. Journal of Alloys and Compounds, 2012, 536, S271-S276.	2.8	3
51	Interfacial magnetic coupling between Fe nanoparticles in Fe-Ag granular alloys. Nanotechnology, 2012, 23, 025705.	1.3	24
52	Influence of the Interactions on the Magnetotransport Properties of Fe-Ag Granular Thin Films. Journal of Nanoscience and Nanotechnology, 2012, 12, 7473-7476.	0.9	1
53	Study of surface effects on CoCu nanogranular alloys by ferromagnetic resonance. Journal of Applied Physics, 2012, 111, 07C105.	1.1	0
54	Magnetic disorder in nanostructured $\text{Fe}_7\text{Au}_{93}$ films and $\text{Fe}_{14}\text{Au}_{86}$ powders. Journal of Physics: Conference Series, 2010, 200, 072028.	0.3	0

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55	Structure and Magnetic Properties of Thin Permalloy Films Near the "Transcritical" State. IEEE Transactions on Magnetics, 2010, 46, 333-336.	1.2	114
56	Microstructure and magnetic properties of colloidal cobalt nano-clusters. Journal of Magnetism and Magnetic Materials, 2010, 322, 3565-3571.	1.0	11
57	Crossover from superspin glass to superferromagnet in Fe <sub>50</sub> Ag <sub>50</sub> nanostructured thin films (20% x 50%). Physical Review B, 2010, 82, .	1.1	68
58	Magnetic properties of colloidal cobalt nanoclusters. Journal of Physics: Conference Series, 2010, 200, 072100.	0.3	0
59	Influence of the interface on the electronic channel switching of a Fe/Ag thin film on a Si substrate. Applied Physics Letters, 2009, 95, .	1.5	3
60	Correction to "Influence of the Si Substrate on the Transport and Magnetotransport Properties of Nanostructured Fe-Ag Thin Films" [Nov 09 2784-2787]. IEEE Transactions on Magnetics, 2009, 45, 3365-3365.	1.2	0
61	XAS and XMCD study of the influence of annealing on the atomic ordering and magnetism in an NiMnGa alloy. Journal of Physics Condensed Matter, 2009, 21, 016002.	0.7	18
62	Collective magnetic behaviors of Fe/Ag nanostructured thin films above the percolation limit. Journal of Applied Physics, 2009, 105, 07B513.	1.1	3
63	Influence of the Si Substrate on the Transport and Magnetotransport Properties of Nanostructured Fe-Ag Thin Films. IEEE Transactions on Magnetics, 2008, 44, 2784-2787.	1.2	3
64	Magnetostrictive and mechanical properties of Terfenol-D composites based on polymer. Proceedings of SPIE, 2007, , .	0.8	0
65	Magnetic and magnetotransport behavior of granular Fe <sub>50</sub> Ag <sub>50</sub> thin films. Journal of Non-Crystalline Solids, 2007, 353, 944-946.	1.5	2
66	X-ray absorption analysis of core/shell magnetic (Fe,Co)/B nanoparticles of amorphous and crystalline structure obtained by chemical reduction. Journal of Non-Crystalline Solids, 2007, 353, 733-737.	1.5	6
67	Magnetic relaxation in melt-spun amorphous and nanocrystalline Mn-doped nanocrystalline alloy. Journal of Magnetism and Magnetic Materials, 2007, 310, 2466-2468.	1.0	3
68	The role of the interface on the magnetic behaviour of granular Fe <sub>50</sub> Ag <sub>50</sub> film. Journal of Magnetism and Magnetic Materials, 2007, 310, 2510-2512.	1.0	1
69	Ferromagnetic resonance study of granular film. Journal of Magnetism and Magnetic Materials, 2007, 316, e59-e62.	1.0	1
70	Annealing influence on the atomic ordering and magnetic moment in a Ni/Mn/Ga alloy. Journal of Magnetism and Magnetic Materials, 2007, 316, e610-e613.	1.0	20
71	Magnetostrictive Properties of Polymer-Bonded Terfenol-D Composites. Sensor Letters, 2007, 5, 23-25.	0.4	1
72	Magnetic and magnetotransport properties of Fe nanoparticles embedded in Ag matrix. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 1071-1074.	1.0	6

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73	Influence of the interface on the magnetic moment of Co clusters in CoCu granular alloys. IEEE Transactions on Magnetism, 2005, 41, 3421-3423.	1.2	1
74	-Interface effects on the magnetic moment of Co and Cu in CoCu granular alloys. Physical Review B, 2005, 72, .	1.1	22
75	Microstructure studies through the analysis of the hysteresis loop in granular alloys. Physica B: Condensed Matter, 2004, 343, 364-368.	1.3	2
76	Magnetotransport properties and local atomic order around Fe in Fe <sub>30</sub> Ag <sub>70</sub> thin films. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1397-E1398.	1.0	0
77	Influence of the interface on the magnetic anisotropy of CoCu granular alloys. Physica B: Condensed Matter, 2004, 354, 92-97.	1.3	10
78	In situ observation of the structural changes induced by thermal annealing on melt-spun Co <sub>15</sub> Cu <sub>85</sub> granular alloys. Journal of Magnetism and Magnetic Materials, 2003, 254-255, 82-84.	1.0	0
79	Synthesis and characterisation of electrodeposited Cu <sub>90</sub> Co <sub>10</sub> thin film. Journal of Magnetism and Magnetic Materials, 2003, 254-255, 85-87.	1.0	4
80	The properties of Co-Cu melt-spun ribbons and thin films: similarity and difference. Journal of Magnetism and Magnetic Materials, 2003, 254-255, 115-117.	1.0	2
81	Time-resolved X-ray diffraction experiments during annealing of Co <sub>15</sub> Cu <sub>85</sub> granular alloy. Journal of Magnetism and Magnetic Materials, 2003, 262, 92-96.	1.0	2
82	Relationship between the nanostructure of Co <sub>15</sub> Cu <sub>85</sub> melt-spun alloys and the AC-susceptibility behaviour. Journal of Magnetism and Magnetic Materials, 2003, 262, 97-101.	1.0	2
83	Structure and magnetic properties in CoCu granular alloys. Nuclear Instruments & Methods in Physics Research B, 2003, 200, 215-219.	0.6	3
84	The effect of the deposition parameters on the magnetic and magnetotransport properties of laser ablated Cu-Cu thin films. Sensors and Actuators A: Physical, 2003, 106, 203-207.	2.0	6
85	Microstructural and magnetic evolution upon annealing of giant magnetoresistance melt-spun Co-Cu granular alloys. Physical Review B, 2003, 67, .	1.1	35
86	Direct experimental evidence of an anomalous Co segregation in Co-Cu granular alloys and its influence on magnetoresistance. Europhysics Letters, 2002, 59, 855-861.	0.7	14
87	Correlation among the structural and magnetic properties of CoCu granular alloys. Journal of Applied Physics, 2002, 91, 8596.	1.1	5
88	Preparation and characterisation of Cu-Cu heterogeneous alloys by potentiostatic electrodeposition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 335, 94-100.	2.6	36
89	Title is missing!. Russian Physics Journal, 2002, 45, 1181-1189.	0.2	0
90	Influence of the preparation method on the properties of Cu-Cu heterogeneous alloys. Journal of Non-Crystalline Solids, 2001, 287, 26-30.	1.5	7

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91	Influence of metalloids on the XANES spectra of metallic glasses. Journal of Non-Crystalline Solids, 2001, 287, 60-64.	1.5	2
92	The local structure from two experimental atomic probes: EXAFS and Mössbauer spectroscopies. Journal of Non-Crystalline Solids, 2001, 287, 75-80.	1.5	2
93	Magnetization evolution during thermal treatments of CoCu metastable alloys. Journal of Non-Crystalline Solids, 2001, 287, 282-285.	1.5	0
94	Nitrogen incorporation effects in Fe(001) thin films. Journal of Applied Physics, 2001, 89, 6314-6319.	1.1	7
95	X-ray magnetic circular dichroism in FeZrB amorphous alloys: the influence of the tensile stress. Journal of Synchrotron Radiation, 2001, 8, 443-445.	1.0	1
96	Observation of the segregation and the dissolution of the Co and the Cu in CoCu metastable alloys. Journal of Synchrotron Radiation, 2001, 8, 883-885.	1.0	2
97	Structural evolution of Co clusters in Co <sub>15</sub> Cu <sub>85</sub> granular alloys by EXAFS spectroscopy. Journal of Magnetism and Magnetic Materials, 2000, 221, 80-86.	1.0	18
98	Comparative study of the structure and magnetic properties of Co-P and Fe-P amorphous alloys. Physical Review B, 2000, 61, 6238-6245.	1.1	13
99	Local structure and ferromagnetic character of Fe-B and Fe-P amorphous alloys. Physical Review B, 2000, 62, 5746-5750.	1.1	36
100	Differential anomalous scattering on Fe-Co-based metallic glasses. Journal of Physics Condensed Matter, 1999, 11, 10199-10210.	0.7	1
101	Magnetic study of electrodeposited Cu <sub>1-x</sub> Co <sub>x</sub> heterogeneous alloys. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 53-55.	1.0	3
102	Structure and magnetic properties of Fe <sub>1-x</sub> Co <sub>x</sub> -P amorphous alloys. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 164-165.	1.0	7
103	Different ferromagnetic character of Fe in FeB and FeP amorphous alloys. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 204-206.	1.0	3
104	Influence of the short-range order on the magnetic properties of metallic glasses. Journal of Physics Condensed Matter, 1998, 10, 3807-3822.	0.7	14
105	Medium-range order as an intrinsic property of Co-rich amorphous alloys. Europhysics Letters, 1997, 40, 43-48.	0.7	12
106	Magnetic and transport properties of Fe - Zr - B - (Cu) amorphous alloys. Journal of Physics Condensed Matter, 1997, 9, 5671-5685.	0.7	31
107	Observation of a Strong Short Range Order in Co Rich Amorphous Alloys Prepared by Different Methods. European Physical Journal Special Topics, 1997, 7, C2-995-C2-996.	0.2	1
108	EXAFS and Mössbauer Study of the Crystallization of Fe <sub>91</sub> Zr <sub>9</sub> Metallic Glass. European Physical Journal Special Topics, 1997, 7, C2-1125-C2-1126.	0.2	0

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109	Influence of the Structure in Magnetic Properties in Co-P Electrodeposited Amorphous Alloys. European Physical Journal Special Topics, 1997, 7, C2-997-C2-998.	0.2	0
110	Stress and annealing induced changes in the Curie temperature of amorphous and nanocrystalline FeZr and FeNb based alloys. Journal of Magnetism and Magnetic Materials, 1996, 157-158, 203-204.	1.0	9
111	Evidence of strong short-range order in (Fe <sub>0.2</sub> Co <sub>0.8</sub> ) <sub>75</sub> Si <sub>15</sub> B <sub>10</sub> amorphous alloys from EXAFS spectroscopy. Physical Review B, 1996, 53, 620-628.	1.1	22
112	Tensile stress dependence of the Curie temperature and hyperfine field in Fe-Zr-B-(Cu) amorphous alloys. Physical Review B, 1996, 54, 3026-3029.	1.1	50
113	<sup>57</sup> Fe Mössbauer study of the (FeCo) <sub>75</sub> SiB metallic alloy series. Journal of Applied Physics, 1995, 77, 3338-3342.	1.1	6
114	Correlation between structure and magnetic behavior of Fe-P amorphous alloys. Physical Review B, 1995, 52, 12805-12812.	1.1	25
115	Mossbauer study of amorphous (FeTM) <sub>80</sub> B <sub>20</sub> . IEEE Transactions on Magnetics, 1994, 30, 536-538.	1.2	1
116	Temperature dependence of the Mössbauer spectra of amorphous and nanocrystallized Fe <sub>86</sub> Zr <sub>7</sub> Cu <sub>1</sub> B <sub>6</sub> . Hyperfine Interactions, 1994, 94, 2199-2205.	0.2	24
117	Magnetic and Mossbauer study of amorphous and nanocrystalline Fe <sub>86</sub> Zr <sub>7</sub> Cu <sub>1</sub> B <sub>6</sub> alloys. IEEE Transactions on Magnetics, 1993, 29, 2682-2684.	1.2	30
118	MOSSBAUER SPECTROSCOPY IN Fe RICH AMORPHOUS ALLOYS. Journal De Physique Colloque, 1988, 49, C8-1367-C8-1368.	0.2	0
119	Simultaneous observation of viscoelastic deformation and induced magnetic anisotropy in [Co <sub>1-x</sub> (FeNi) <sub>x</sub> ] <sub>75</sub> Si <sub>15</sub> B <sub>10</sub> metallic glasses. Journal of Applied Physics, 1987, 62, 2579-2582.	1.1	10
120	Correction to "Magnetic Study of Co-Doped Magnetosome Chains". Journal of Physical Chemistry C, 0, ,.	1.5	0