

# Alberto Guimaraes

## List of Publications by Year in descending order

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121  
papers

1,731  
citations

361413

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124  
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124  
docs citations

124  
times ranked

1638  
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetocaloric properties of Ni <sub>2</sub> Mn <sub>1-x</sub> Cu <sub>x</sub> Ga. Applied Physics Letters, 2006, 88, 192511.	3.3	230
2	Principles of Nanomagnetism. Nanoscience and Technology, 2009, , .	1.5	184
3	Mössbauer studies of the cubic Laves iron-rare-earth intermetallic compounds. Journal of Physics C: Solid State Physics, 1968, 1, 1376-1387.	1.5	133
4	Fe <sup>57</sup> Mössbauer study of the superconductor YBa <sub>2</sub> (Fe <sub>x</sub> Cu <sub>1-x</sub> ) <sub>3</sub> O <sub>y</sub> . Physical Review B, 1988, 37, 7967-7970.	3.2	70
5	Mossbauer studies of R(FeCo) <sub>2</sub> Laves phases. Journal of Physics F: Metal Physics, 1973, 3, 885-892.	1.6	52
6	Switching processes and switching reproducibility in ferromagnetic ring structures. Applied Physics Letters, 2004, 84, 951-953.	3.3	52
7	Anomaly in the magnetocaloric effect in the intermetallic compound DyAl <sub>2</sub> . Physical Review B, 2000, 61, 447-450.	3.2	44
8	Field-tuned magnetocaloric effect in metamagnetic manganite system. Applied Physics Letters, 2004, 85, 4974-4976.	3.3	35
9	Quantum-state tomography for quadrupole nuclei and its application on a two-qubit system. Physical Review A, 2004, 69, .	2.5	31
10	Magnetocaloric properties of the Ni <sub>2</sub> Mn <sub>1-x</sub> (Cu,Co) <sub>x</sub> Ga Heusler alloys. Journal of Applied Physics, 2006, 99, 08Q106.	2.5	30
11	Physical properties of the Ce(Ru <sub>1-x</sub> Fe <sub>x</sub> ) <sub>2</sub> Ge <sub>2</sub> series. Physical Review B, 1996, 53, 11678-11684.	3.2	29
12	Anomalous magnetocaloric effect in YbAs associated with the giant quadrupolar interaction. Physical Review B, 2000, 63, .	3.2	28
13	Magnetic properties and electronic structure of rare earth-transition metal intermetallic compounds. Journal of Physics F: Metal Physics, 1974, 4, 1454-1465.	1.6	27
14	Preparation of electrodeposited cobalt nanowires. Materials Research, 2006, 9, 205-208.	1.3	24
15	Multistep switching phase diagram of ferromagnetic ring structures. Journal of Applied Physics, 2004, 95, 6639-6641.	2.5	23
16	Tailoring magnetic vortices in nanostructures. Applied Physics Letters, 2010, 97, 022501.	3.3	23
17	Magnetocaloric effect on the Pr <sub>0.43</sub> Gd <sub>0.25</sub> Ca <sub>0.32</sub> MnO <sub>3</sub> manganite. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 2385-2386.	2.3	22
18	Ferromagnetic resonance studies of cobalt-copper alloys. Physical Review B, 2001, 64, .	3.2	21

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19	Quantum logical operations for spin 3/2 quadrupolar nuclei monitored by quantum state tomography. <i>Journal of Magnetic Resonance</i> , 2005, 175, 226-234.	2.1	21
20	Magnetic behavior of electrodeposited cobalt nanowires using different electrolytic bath acidities. <i>Materials Chemistry and Physics</i> , 2008, 107, 297-304.	4.0	21
21	Magnetocaloric effect in (Er,Tb)Co <sub>2</sub> . <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 242-245, 870-872.	2.3	20
22	Magnetocaloric effect of the (Pr,Ca)MnO <sub>3</sub> manganite at low temperatures. <i>Journal of Magnetism and Magnetic Materials</i> , 2005, 290-291, 694-696.	2.3	20
23	La(Fe <sub>1-x</sub> Co <sub>x</sub> ) <sub>11.44</sub> Al <sub>1.56</sub> : A composite system for Ericsson-cycle-based magnetic refrigerators. <i>Journal of Applied Physics</i> , 2006, 99, 116107.	2.5	20
24	Properties of magnetic nanodots with perpendicular anisotropy. <i>Journal of Applied Physics</i> , 2011, 110, .	2.5	20
25	Magneto-resistance and magnetization reversal of single Co nanowires. <i>Physical Review B</i> , 2009, 79, .	3.2	19
26	Magnetic properties of the pseudo-binary intermetallic compounds (Ce <sub>x</sub> Y <sub>1-x</sub> ) Fe <sub>2</sub> . <i>Journal of Physics and Chemistry of Solids</i> , 1980, 41, 761-763.	4.0	18
27	The low temperature contributions to <sup>238</sup> U-uranium hydride specific heat. <i>Solid State Communications</i> , 1985, 55, 1011-1015.	1.9	18
28	Relaxation of coherent states in a two-qubit NMR quadrupole system. <i>Physical Review A</i> , 2003, 68, .	2.5	18
29	A field-programmable gate-array-based high-resolution pulse programmer. <i>Measurement Science and Technology</i> , 2003, 14, N1-N4.	2.6	18
30	Thermally activated processes and superparamagnetism in Bi <sub>2</sub> MnO <sub>2</sub> nanoparticles: A comparative study. <i>Journal of Magnetism and Magnetic Materials</i> , 2016, 401, 890-896.	2.3	18
31	Creating skyrmions and skyrmioniums using oscillating perpendicular magnetic fields. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 507, 166848.	2.3	18
32	Effect of the addition of Cr, Ta and Nb on structural and magnetic properties of Fe-Si alloys. <i>Journal of Magnetism and Magnetic Materials</i> , 2005, 294, e151-e154.	2.3	17
33	Magnetic response of s-d hybridized systems: microscopic and phenomenological approaches. <i>Journal of Physics F: Metal Physics</i> , 1975, 5, 160-168.	1.6	16
34	The effects of high-energy milling on the structural and hyperfine properties of YFe <sub>2</sub> . <i>Journal of Magnetism and Magnetic Materials</i> , 1995, 145, 306-312.	2.3	16
35	Interaction between magnetic vortex cores in a pair of nonidentical nanodisks. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	16
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37	X-ray magnetic circular dichroism in Fe/NiO thin films. Journal of Magnetism and Magnetic Materials, 2001, 233, 74-77.	2.3	14
38	NMR study of Gd-Ni intermetallic compounds. Journal of Magnetism and Magnetic Materials, 2000, 212, 125-137.	2.3	13
39	Switching of skyrmioniums induced by oscillating magnetic field pulses. Journal of Magnetism and Magnetic Materials, 2020, 509, 166895.	2.3	13
40	Graphical programming for pulse automated NMR experiments. Measurement Science and Technology, 1998, 9, 1951-1955.	2.6	12
41	A model for domain and domain wall NMR signals in magnetic materials. Journal of Magnetism and Magnetic Materials, 1997, 170, 277-284.	2.3	11
42	Low temperature magnetocaloric properties of HoNi <sub>2</sub> . Journal of Applied Physics, 2003, 93, 6939-6941.	2.5	11
43	NMR study of the crystallization kinetics in FINEMET-type materials. Journal of Alloys and Compounds, 2004, 369, 136-140.	5.5	11
44	<sup>89</sup> Y NMR study of transferred hyperfine interactions in YFe <sub>2</sub> . Journal of Magnetism and Magnetic Materials, 1986, 54-57, 501-502.	2.3	10
45	Micromagnetic study of skyrmion stability in confined magnetic structures with perpendicular anisotropy. Journal of Magnetism and Magnetic Materials, 2018, 451, 749-760.	2.3	10
46	Mössbauer Studies of Iron-Rare Earth Intermetallics. Journal of Applied Physics, 1968, 39, 1323-1323.	2.5	9
47	Mossbauer studies of the pseudobinary intermetallic compounds Gd(Al <sub>x</sub> Fe <sub>1-x</sub> ) <sub>2</sub> . Journal of Physics F: Metal Physics, 1980, 10, 1313-1321.	1.6	9
48	<sup>89</sup> Y nuclear magnetic resonance measurements in (Dy <sub>x</sub> Y <sub>1-x</sub> )Fe <sub>2</sub> compounds. Journal of Applied Physics, 1990, 67, 5867-5869.	2.5	9
49	The effects of high-energy milling on GdFe <sub>2</sub> . Journal of Magnetism and Magnetic Materials, 1997, 176, 272-278.	2.3	9
50	FMR evidence of finite-size effects in CoCu granular alloys. Physical Review B, 2003, 67, .	3.2	9
51	Enhanced magnetic anisotropy in granular cobalt-copper alloys. Journal of Applied Physics, 2003, 93, 7217-7219.	2.5	9
52	NMR study of the change in the direction of magnetization of HoCo <sub>2</sub> . Journal of Applied Physics, 1987, 61, 3985-3986.	2.5	8
53	Electric and magnetic properties of Cu-doped La-Sr manganites. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 668-671.	2.3	8
54	Magnetic properties of Fe <sub>90</sub> Zr <sub>7</sub> B <sub>3</sub> ribbons studied by FMR and magnetization. Journal of Magnetism and Magnetic Materials, 2008, 320, e358-e361.	2.3	8

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55	Magnetic vortex echoes. Journal of Applied Physics, 2012, 112, .	2.5	8
56	Remarks on Gd g shifts. Journal of Physics C: Solid State Physics, 1972, 5, L99-L101.	1.5	7
57	EPR of GdAg <sub>1-x</sub> In <sub>x</sub> intermetallic compounds. Physica Status Solidi (B): Basic Research, 1976, 77, K11.	1.5	7
58	A simple model approach to localized itinerant magnetism application to rare earth intermetallics. Physica Status Solidi (B): Basic Research, 1982, 114, 255-263.	1.5	7
59	Effect of perpendicular uniaxial anisotropy on the annihilation fields of magnetic vortices. Journal of Applied Physics, 2013, 114, .	2.5	7
60	<sup>59</sup> Co NMR and Nuclear Magnetic Relaxation Study of the Magnetic Superconductor Y <sub>9</sub> Co <sub>7</sub> . Physica Status Solidi (B): Basic Research, 1987, 139, 311-314.	1.5	6
61	A depth profile XMCD study of Au/CoO/Co. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 958-960.	2.3	6
62	Model for the growth of electrodeposited ferromagnetic aggregates under an in-plane magnetic field. Physical Review E, 2010, 81, 021403.	2.1	6
63	NMR study of Gd-Ni intermetallic compounds. Journal of Magnetism and Magnetic Materials, 1998, 177-181, 1125-1127.	2.3	5
64	Classical and quantum mechanics of a charged particle in oscillating electric and magnetic fields. Brazilian Journal of Physics, 1999, 29, 541.	1.4	5
65	NMR measurements in milled GdCo <sub>2</sub> and GdFe <sub>2</sub> intermetallic compounds. Journal of Magnetism and Magnetic Materials, 1999, 195, 49-56.	2.3	5
66	Single array of magnetic vortex disks uses in-plane anisotropy to create different logic gates. Journal of Magnetism and Magnetic Materials, 2017, 441, 14-20.	2.3	5
67	Hyperfine Fields in Ferromagnetic Rare Earth Alloys. Physica Status Solidi (B): Basic Research, 1973, 55, 361-369.	1.5	4
68	NMR study of electric quadrupole interactions in GdCo <sub>2</sub> . Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1985, 130, 484-487.	0.9	4
69	<sup>59</sup> Co nuclear magnetic resonance in the metamagnetic system Y <sub>1-x</sub> Gd <sub>x</sub> Co <sub>3</sub> . Journal of Applied Physics, 2000, 87, 4891-4893.	2.5	4
70	Indirect switching of vortex polarity through magnetic dynamic coupling. Journal of Applied Physics, 2016, 119, 093906.	2.5	4
71	Parallels between a system of coupled magnetic vortices and a ferromagnetic/nonmagnetic (FM/NM) multilayer system. Journal of Magnetism and Magnetic Materials, 2020, 497, 166009.	2.3	4
72	Electric field gradient at the <sup>59</sup> Co nucleus of ferromagnetic YCo <sub>3</sub> . Journal of Magnetism and Magnetic Materials, 1992, 104-107, 1315-1316.	2.3	3

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73	The magnetism of rare-earth intermetallics using computer algebra: application to PrAl <sub>2</sub> and NdAl <sub>2</sub> . Journal of Physics Condensed Matter, 1993, 5, L671-L676.	1.8	3
74	Quantum dynamics of an electric charge in an oscillating pulsed magnetic field. Physical Review E, 1997, 55, 2063-2066.	2.1	3
75	<sup>59</sup> Co NMR spectroscopy and relaxation in the metamagnetic system Y <sub>1-x</sub> Gd <sub>x</sub> Co <sub>3</sub> . Journal of Magnetism and Magnetic Materials, 2000, 217, 49-54.	2.3	3
76	NMR, magnetic and structural study of FeSi <sub>1-x</sub> (X=Nb, Ta) alloys. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 612-614.	2.3	3
77	MODELING OF ELECTRICAL BEHAVIOR OF La <sub>0.7</sub> Ca <sub>0.3</sub> MnO <sub>3</sub> CERAMIC USING IMPEDANCE SPECTROSCOPY. Modern Physics Letters B, 2005, 19, 697-706.	1.9	3
78	Multi-quantum echoes in GdAl <sub>2</sub> zero-field high-resolution NMR. Journal of Magnetic Resonance, 2011, 212, 265-273.	2.1	3
79	Influence of the dipolar interaction in the creation of skyrmions in coupled nanodisks. Journal of Magnetism and Magnetic Materials, 2019, 489, 165406.	2.3	3
80	Temperature dependence of induced h.f. - fields at Cd in Ni. Physics Letters, 1966, 21, 245-247.	2.1	2
81	A simple model for localized-itinerant magnetic systems: Crystal field effects. Journal of Magnetism and Magnetic Materials, 1989, 81, 313-317.	2.3	2
82	Transferred hyperfine fields in rare-earth-substituted YFe <sub>2</sub> and YNi <sub>2</sub> . Journal of Physics Condensed Matter, 1994, 6, 2385-2394.	1.8	2
83	Analytical results for crystalline electric field eigenvalues of trivalent rare-earth ions using computer algebra: application to the magnetism of PrX <sub>2</sub> (X = Mg, Al, Ru, Rh, Pt). Journal of Magnetism and Magnetic Materials, 1994, 137, 186-190.	2.3	2
84	Low-temperature properties of Ce(Ru <sub>1-x</sub> M <sub>x</sub> ) <sub>2</sub> Ge <sub>2</sub> , M → Fe, Au. Physica B: Condensed Matter, 1995, 205, 393-396.	2.7	2
85	NMR study of the nanocrystalline alloy Fe <sub>73.5</sub> Cu <sub>1</sub> Nb <sub>3</sub> Si <sub>13.5</sub> B <sub>9</sub> . Journal of Magnetism and Magnetic Materials, 1995, 140-144, 435-436.	2.3	2
86	NMR study of Gd <sub>2</sub> Fe <sub>17</sub> N intermetallic compounds. Journal of Magnetism and Magnetic Materials, 1995, 140-144, 1003-1004.	2.3	2
87	A nuclear magnetic resonance study of SmCo <sub>2</sub> . Journal of Magnetism and Magnetic Materials, 1998, 177-181, 1121-1122.	2.3	2
88	A Review of NMR Studies in RCo <sub>3</sub> Systems Presenting d-Moment Instability. Hyperfine Interactions, 2001, 133, 143-150.	0.5	2
89	Nuclear magnetic resonance study of the crystallization kinetics in soft magnetic nanocrystalline materials. Journal of Applied Physics, 2002, 91, 8432.	2.5	2
90	A mean-field model applied to the localized-itinerant magnetic system Gd <sub>1-x</sub> Y <sub>x</sub> Co <sub>3</sub> and to the ferromagnetic system HoNi <sub>2</sub> . Journal of Alloys and Compounds, 2002, 344, 375-378.	5.5	2

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91	Nuclear magnetic resonance spectrometer based on a DC superconducting quantum interference device (SQUID). Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1139-1141.	2.3	2
92	NMR studies of $^{93}\text{Nb}$ in FeNbB nanocrystalline alloy. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 235-237.	2.3	2
93	Applying the zipping method to Barkhausen noise in order to estimate the degree of (dis)order. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E551-E552.	2.3	2
94	Magnetism of Small Particles. Nanoscience and Technology, 2017, , 71-124.	1.5	2
95	The finite channel width and the analysis of experimental data. Nuclear Instruments & Methods, 1975, 126, 125-127.	1.2	1
96	The EPR of europium metal. Journal of Magnetic Resonance, 1977, 25, 507-510.	0.5	1
97	Effects of electric quadrupole interactions on spin-echo amplitude in pulsed NMR. Journal of Magnetic Resonance, 1987, 75, 26-38.	0.5	1
98	Mössbauer investigation of the superconductor $\text{YBa}_2(\text{Cu}_{1-x}\text{Fe}_x)\text{O}_y$ . Hyperfine Interactions, 1988, 42, 1251-1251.	0.5	1
99	Power dependence of NMR in $\text{GdAl}_2$ . Hyperfine Interactions, 1989, 51, 959-959.	0.5	1
100	Magnetic response of localized spins coupled to itinerant electrons in an inhomogeneous crystal field. Journal of Applied Physics, 1990, 67, 4582-4584.	2.5	1
101	$^{89}\text{Y}$ nuclear magnetic resonance study of hyperfine interactions in $(\text{R}_x\text{Y}_{1-x})\text{Fe}_2$ . Journal of Applied Physics, 1991, 70, 7632-7634.	2.5	1
102	Magnetization studies of the $\text{Y}_{1-x}\text{Er}_x\text{Co}_3$ intermetallics: $(\text{Tc}_x)$ phase diagram. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 674-676.	2.3	1
103	The localized-itinerant magnetic system $\text{Gd}_{1-x}\text{Y}_x\text{Co}_3$ described by a statistical distribution mean-field model. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 817-819.	2.3	1
104	Magnetic behaviour of granular CuCo alloys. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 624-626.	2.3	1
105	Magnetism of Small Particles. Nanoscience and Technology, 2009, , 57-104.	1.5	1
106	Controlling energy transfer time between two coupled magnetic vortex-state disks. Journal of Applied Physics, 2016, 120, 213901.	2.5	1
107	Magnetism of Nanodisks, Nanorings, Nanowires, and Nanotubes. Nanoscience and Technology, 2017, , 201-229.	1.5	1
108	RF POWER AND NUCLEAR MAGNETIC RELAXATION IN $\text{GdAl}_2$ . Journal De Physique Colloque, 1988, 49, C8-371-C8-372.	0.2	1

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109	Direction of magnetization and domain wall mobility in (Dy, Y)Fe <sub>2</sub> . Hyperfine Interactions, 1991, 66, 413-416.	0.5	0
110	Effect of a distribution of exchange parameters within a simple localized-itinerant model. Journal of Magnetism and Magnetic Materials, 1991, 102, 87-90.	2.3	0
111	Effect of a distribution of exchange parameters within a simple localized-itinerant model (abstract). Journal of Applied Physics, 1991, 69, 5467-5467.	2.5	0
112	High field magnetization of (R Y <sub>1-x</sub> )Fe <sub>2</sub> compounds. Journal of Magnetism and Magnetic Materials, 1992, 104-107, 1460-1462.	2.3	0
113	<sup>57</sup> Fe NMR study of nitrated Ce <sub>2</sub> Fe <sub>17</sub> . Journal of Magnetism and Magnetic Materials, 1996, 157-158, 186-188.	2.3	0
114	Normal modes and resonant confinement of charged particles in oscillating electric and magnetic fields. Journal of Physics B: Atomic, Molecular and Optical Physics, 1998, 31, 2457-2467.	1.5	0
115	Magnetic Properties, Hyperfine Interactions and Thermal Stability of Perovskite-Type Fe-Ni Nitrides $\text{Fe}_{1-x}\text{Ni}_x\text{N}$ (0.9). Materials Science Forum, 1999, 302-303, 484-488.	0.3	0
116	Itinerant electron magnetism NMR and magnetization studies in Y(Co <sub>1-x</sub> Al <sub>x</sub> ) <sub>3</sub> . Journal of Magnetism and Magnetic Materials, 2001, 226-230, 1184-1185.	2.3	0
117	NMR in granular Cu-Co alloys. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 1859-1860.	2.3	0
118	Effect of stress on the entropy calculated by applying the zipping method to Barkhausen noise. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 1165-1167.	2.3	0
119	Zipping method applied to Barkhausen noise: A new tool to investigate the micromagnetic disorder in amorphous magnetic materials. Journal of Alloys and Compounds, 2007, 434-435, 604-607.	5.5	0
120	Magnetism of Nanodisks, Nanorings, and Nanowires. Nanoscience and Technology, 2009, , 149-172.	1.5	0
121	Synthesis and Characterization of Electrodeposited Nickel Nanowires. Ceramic Engineering and Science Proceedings, 0, , 195-201.	0.1	0