

# Alberto Guimaraes

## List of Publications by Year in descending order

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121  
papers

1,731  
citations

361413  
20  
h-index

315739  
38  
g-index

124  
all docs

124  
docs citations

124  
times ranked

1638  
citing authors

#	ARTICLE	IF	CITATIONS
1	Parallels between a system of coupled magnetic vortices and a ferromagnetic/nonmagnetic (FM/NM) multilayer system. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 497, 166009.	2.3	4
2	Creating skyrmions and skyrmioniums using oscillating perpendicular magnetic fields. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 507, 166848.	2.3	18
3	Switching of skyrmioniums induced by oscillating magnetic field pulses. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 509, 166895.	2.3	13
4	Influence of the dipolar interaction in the creation of skyrmions in coupled nanodisks. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 489, 165406.	2.3	3
5	Micromagnetic study of skyrmion stability in confined magnetic structures with perpendicular anisotropy. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 451, 749-760.	2.3	10
6	Single array of magnetic vortex disks uses in-plane anisotropy to create different logic gates. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 441, 14-20.	2.3	5
7	Magnetism of Small Particles. <i>Nanoscience and Technology</i> , 2017, , 71-124.	1.5	2
8	Magnetism of Nanodisks, Nanorings, Nanowires, and Nanotubes. <i>Nanoscience and Technology</i> , 2017, , 201-229.	1.5	1
9	Indirect switching of vortex polarity through magnetic dynamic coupling. <i>Journal of Applied Physics</i> , 2016, 119, 093906.	2.5	4
10	Controlling energy transfer time between two coupled magnetic vortex-state disks. <i>Journal of Applied Physics</i> , 2016, 120, 213901.	2.5	1
11	Thermally activated processes and superparamagnetism in Bi <sub>12</sub> MnO <sub>20</sub> nanoparticles: A comparative study. <i>Journal of Magnetism and Magnetic Materials</i> , 2016, 401, 890-896.	2.3	18
12	Interaction between magnetic vortex cores in a pair of nonidentical nanodisks. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	16
13	Effect of perpendicular uniaxial anisotropy on the annihilation fields of magnetic vortices. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	7
14	Magnetic vortex echoes. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	8
15	Properties of magnetic nanodots with perpendicular anisotropy. <i>Journal of Applied Physics</i> , 2011, 110, .	2.5	20
16	Multi-quantum echoes in GdAl <sub>2</sub> zero-field high-resolution NMR. <i>Journal of Magnetic Resonance</i> , 2011, 212, 265-273.	2.1	3
17	Model for the growth of electrodeposited ferromagnetic aggregates under an in-plane magnetic field. <i>Physical Review E</i> , 2010, 81, 021403.	2.1	6
18	Tailoring magnetic vortices in nanostructures. <i>Applied Physics Letters</i> , 2010, 97, 022501.	3.3	23

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19	Magnetism of Small Particles. Nanoscience and Technology, 2009, , 57-104.	1.5	1
20	Principles of Nanomagnetism. Nanoscience and Technology, 2009, , .	1.5	184
21	Magnetoresistance and magnetization reversal of single Co nanowires. Physical Review B, 2009, 79, .	3.2	19
22	Magnetism of Nanodisks, Nanorings, and Nanowires. Nanoscience and Technology, 2009, , 149-172.	1.5	0
23	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
24	Magnetic behavior of electrodeposited cobalt nanowires using different electrolytic bath acidities. Materials Chemistry and Physics, 2008, 107, 297-304.	4.0	21
25	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
26	Preparation of electrodeposited cobalt nanowires. Materials Research, 2006, 9, 205-208.	1.3	24
27	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
28	La(Fe <sub>1-x</sub> Cox)11.44Al1.56: A composite system for Ericsson-cycle-based magnetic refrigerators. Journal of Applied Physics, 2006, 99, 116107.	2.5	20
29	Magnetocaloric properties of Ni <sub>2</sub> Mn <sub>1-x</sub> CuxGa. Applied Physics Letters, 2006, 88, 192511.	3.3	230
30	NMR, magnetic and structural study of Fe <sub>x</sub> Si-X (X=Nb, Ta) alloys. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 612-614.	2.3	3
31	Magnetocaloric effect of the (Pr,Ca)MnO <sub>3</sub> manganite at low temperatures. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 694-696.	2.3	20
32	Quantum logical operations for spin 3/2 quadrupolar nuclei monitored by quantum state tomography. Journal of Magnetic Resonance, 2005, 175, 226-234.	2.1	21
33	Effect of the addition of Cr, Ta and Nb on structural and magnetic properties of Fe <sub>x</sub> Si alloys. Journal of Magnetism and Magnetic Materials, 2005, 294, e151-e154.	2.3	17
34	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
35	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
36	Quantum-state tomography for quadrupole nuclei and its application on a two-qubit system. Physical Review A, 2004, 69, .	2.5	31

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37	Applying the zipping method to Barkhausen noise in order to estimate the degree of (dis)order. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, E551-E552.		2.3	2
38	Magnetocaloric effect on the Pr <sub>0.43</sub> Gd <sub>0.25</sub> Ca <sub>0.32</sub> MnO <sub>3</sub> manganite. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, 2385-2386.		2.3	22
39	Switching processes and switching reproducibility in ferromagnetic ring structures. <i>Applied Physics Letters</i> , 2004, 84, 951-953.		3.3	52
40	Multistep switching phase diagram of ferromagnetic ring structures. <i>Journal of Applied Physics</i> , 2004, 95, 6639-6641.		2.5	23
41	Field-tuned magnetocaloric effect in metamagnetic manganite system. <i>Applied Physics Letters</i> , 2004, 85, 4974-4976.		3.3	35
42	NMR study of the crystallization kinetics in FINEMET-type materials. <i>Journal of Alloys and Compounds</i> , 2004, 369, 136-140.		5.5	11
43	FMR evidence of finite-size effects in CoCu granular alloys. <i>Physical Review B</i> , 2003, 67, .		3.2	9
44	Enhanced magnetic anisotropy in granular cobalt-copper alloys. <i>Journal of Applied Physics</i> , 2003, 93, 7217-7219.		2.5	9
45	Relaxation of coherent states in a two-qubit NMR quadrupole system. <i>Physical Review A</i> , 2003, 68, .		2.5	18
46	Low temperature magnetocaloric properties of HoNi <sub>2</sub> . <i>Journal of Applied Physics</i> , 2003, 93, 6939-6941.		2.5	11
47	A field-programmable gate-array-based high-resolution pulse programmer. <i>Measurement Science and Technology</i> , 2003, 14, N1-N4.		2.6	18
48	Nuclear magnetic resonance study of the crystallization kinetics in soft magnetic nanocrystalline materials. <i>Journal of Applied Physics</i> , 2002, 91, 8432.		2.5	2
49	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> . <i>Journal of Alloys and Compounds</i> , 2002, 344, 375-378.		5.5	2
50	Nuclear magnetic resonance spectrometer based on a DC superconducting quantum interference device (SQUID). <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 242-245, 1139-1141.		2.3	2
51	Electric and magnetic properties of Cu-doped La-Sr manganites. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 242-245, 668-671.		2.3	8
52	A depth profile XMCD study of Au/CoO/Co. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 242-245, 958-960.		2.3	6
53	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
54	The localized-itinerant magnetic system gd <sub>1-x</sub> y <sub>x</sub> co <sub>3</sub> described by a statistical distribution mean-field model. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 242-245, 817-819.		2.3	1

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55	Magnetic behaviour of granular CuCo alloys. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 242-245, 624-626.	2.3	1
56	NMR studies of 93Nb in FeNbB nanocrystalline alloy. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 242-245, 235-237.	2.3	2
57	Ferromagnetic resonance studies of cobalt-copper alloys. <i>Physical Review B</i> , 2001, 64, .	3.2	21
58	A Review of NMR Studies in RCo <sub>3</sub> Systems Presenting d-Moment Instability. <i>Hyperfine Interactions</i> , 2001, 133, 143-150.	0.5	2
59	Itinerant electron magnetism NMR and magnetization studies in Y(Co <sub>1-x</sub> Al <sub>x</sub> ) <sub>3</sub> . <i>Journal of Magnetism and Magnetic Materials</i> , 2001, 226-230, 1184-1185.	2.3	0
60	NMR in granular Cu <sup>62</sup> Co alloys. <i>Journal of Magnetism and Magnetic Materials</i> , 2001, 226-230, 1859-1860.	2.3	0
61	X-ray magnetic circular dichroism in Fe/NiO thin films. <i>Journal of Magnetism and Magnetic Materials</i> , 2001, 233, 74-77.	2.3	14
62	<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> . <i>Journal of Magnetism and Magnetic Materials</i> , 2000, 217, 49-54.	2.3	3
63	NMR study of Gd <sup>62</sup> Ni intermetallic compounds. <i>Journal of Magnetism and Magnetic Materials</i> , 2000, 212, 125-137.	2.3	13
64	Anomalous magnetocaloric effect in YbAs associated with the giant quadrupolar interaction. <i>Physical Review B</i> , 2000, 63, .	3.2	28
65	Anomaly in the magnetocaloric effect in the intermetallic compound DyAl <sub>2</sub> . <i>Physical Review B</i> , 2000, 61, 447-450.	3.2	44
66	<sup>59</sup> Co nuclear magnetic resonance in the metamagnetic system Y <sub>1-x</sub> Gd <sub>x</sub> Co <sub>3</sub> . <i>Journal of Applied Physics</i> , 2000, 87, 4891-4893.	2.5	4
67	Classical and quantum mechanics of a charged particle in oscillating electric and magnetic fields. <i>Brazilian Journal of Physics</i> , 1999, 29, 541.	1.4	5
68	Magnetic Properties, Hyperfine Interactions and Thermal Stability of Perovskite-Type Fe-Ni Nitrides $\tilde{\beta}$ -(Fe <sub>1-x</sub> Ni <sub>x</sub> ) <sub>4</sub> N (0.00x0.9). <i>Materials Science Forum</i> , 1999, 302-303, 484-488.	0.3	0
69	Magnetization studies of the Y <sub>1-x</sub> Er <sub>x</sub> Co <sub>3</sub> intermetallics: (Tc <sup>~</sup> x) phase diagram. <i>Journal of Magnetism and Magnetic Materials</i> , 1999, 196-197, 674-676.	2.3	1
70	NMR measurements in milled GdCo <sub>2</sub> and GdFe <sub>2</sub> intermetallic compounds. <i>Journal of Magnetism and Magnetic Materials</i> , 1999, 195, 49-56.	2.3	5
71	NMR study of Gd-Ni intermetallic compounds. <i>Journal of Magnetism and Magnetic Materials</i> , 1998, 177-181, 1125-1127.	2.3	5
72	A nuclear magnetic resonance study of SmCo <sub>2</sub> . <i>Journal of Magnetism and Magnetic Materials</i> , 1998, 177-181, 1121-1122.	2.3	2

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73	Normal modes and resonant confinement of charged particles in oscillating electric and magnetic fields. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1998, 31, 2457-2467.	1.5	0
74	Graphical programming for pulse automated NMR experiments. <i>Measurement Science and Technology</i> , 1998, 9, 1951-1955.	2.6	12
75	Quantum dynamics of an electric charge in an oscillating pulsed magnetic field. <i>Physical Review E</i> , 1997, 55, 2063-2066.	2.1	3
76	A model for domain and domain wall NMR signals in magnetic materials. <i>Journal of Magnetism and Magnetic Materials</i> , 1997, 170, 277-284.	2.3	11
77	The effects of high-energy milling on GdFe2. <i>Journal of Magnetism and Magnetic Materials</i> , 1997, 176, 272-278.	2.3	9
78	57Fe NMR study of nitrided Ce2Fe17. <i>Journal of Magnetism and Magnetic Materials</i> , 1996, 157-158, 186-188.	2.3	0
79	Physical properties of the Ce(Ru <sub>1-x</sub> Fe <sub>x</sub> ) <sub>2</sub> Ge <sub>2</sub> series. <i>Physical Review B</i> , 1996, 53, 11678-11684.	3.2	29
80	Low-temperature properties of Ce(Ru <sub>1-x</sub> M <sub>x</sub> ) <sub>2</sub> Ge <sub>2</sub> , M → Fe, Au. <i>Physica B: Condensed Matter</i> , 1995, 205, 393-396.	2.7	2
81	NMR study of the nanocrystalline alloy Fe73.5Cu1Nb3Si13.5B9. <i>Journal of Magnetism and Magnetic Materials</i> , 1995, 140-144, 435-436.	2.3	2
82	NMR study of Gd <sub>2</sub> Fe <sub>17</sub> N intermetallic compounds. <i>Journal of Magnetism and Magnetic Materials</i> , 1995, 140-144, 1003-1004.	2.3	2
83	The effects of high-energy milling on the structural and hyperfine properties of YFe2. <i>Journal of Magnetism and Magnetic Materials</i> , 1995, 145, 306-312.	2.3	16
84	Transferred hyperfine fields in rare-earth-substituted YFe <sub>2</sub> and YNi <sub>2</sub> . <i>Journal of Physics Condensed Matter</i> , 1994, 6, 2385-2394.	1.8	2
85	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). <i>Journal of Magnetism and Magnetic Materials</i> , 1994, 137, 186-190.	2.3	2
86			

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91	Effect of a distribution of exchange parameters within a simple localized-itinerant model. <i>Journal of Magnetism and Magnetic Materials</i> , 1991, 102, 87-90.	2.3	0
92	<sup>89</sup> Y nuclear magnetic resonance study of hyperfine interactions in (RxY <sub>1-x</sub> )Fe <sub>2</sub> . <i>Journal of Applied Physics</i> , 1991, 70, 7632-7634.	2.5	1
93	Effect of a distribution of exchange parameters within a simple localized-itinerant model (abstract). <i>Journal of Applied Physics</i> , 1991, 69, 5467-5467.	2.5	0
94	<sup>89</sup> Y nuclear-magnetic-resonance measurements in (DyxY <sub>1-x</sub> )Fe <sub>2</sub> compounds. <i>Journal of Applied Physics</i> , 1990, 67, 5867-5869.	2.5	9
95	Magnetic response of localized spins coupled to itinerant electrons in an inhomogeneous crystal field. <i>Journal of Applied Physics</i> , 1990, 67, 4582-4584.	2.5	1
96	Power dependence of NMR in GdAl <sub>2</sub> . <i>Hyperfine Interactions</i> , 1989, 51, 959-959.	0.5	1
97	A simple model for localized-itinerant magnetic systems: Crystal field effects. <i>Journal of Magnetism and Magnetic Materials</i> , 1989, 81, 313-317.	2.3	2
98	Mössbauer investigation of the superconductor YBa <sub>2</sub> (Cu <sub>1-x</sub> Fe <sub>x</sub> ) <sub>3</sub> O <sub>y</sub> . <i>Hyperfine Interactions</i> , 1988, 42, 1251-1251.	0.5	1
99	Fe <sub>57</sub> 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> . <i>Physical Review B</i> , 1988, 37, 7967-7970.	3.2	70
100	RF POWER AND NUCLEAR MAGNETIC RELAXATION IN GdAl <sub>2</sub> . <i>Journal De Physique Colloque</i> , 1988, 49, C8-371-C8-372.	0.2	1
101	NMR study of the change in the direction of magnetization of HoCo <sub>2</sub> . <i>Journal of Applied Physics</i> , 1987, 61, 3985-3986.	2.5	8
102	<sup>59</sup> Co NMR and Nuclear Magnetic Relaxation Study of the Magnetic Superconductor Y <sub>9</sub> Co <sub>7</sub> . <i>Physica Status Solidi (B): Basic Research</i> , 1987, 139, 311-314.	1.5	6
103	Effects of electric quadrupole interactions on spin-echo amplitude in pulsed NMR. <i>Journal of Magnetic Resonance</i> , 1987, 75, 26-38.	0.5	1
104	<sup>89</sup> Y NMR study of transferred hyperfine interactions in YFe <sub>2</sub> . <i>Journal of Magnetism and Magnetic Materials</i> , 1986, 54-57, 501-502.	2.3	10
105	NMR study of electric quadrupole interactions in GdCo <sub>2</sub> . <i>Physica B: Physics of Condensed Matter &amp; C: Atomic, Molecular and Plasma Physics, Optics</i> , 1985, 130, 484-487.	0.9	4
106	The low temperature contributions to <sup>12</sup> -uranium hydride specific heat. <i>Solid State Communications</i> , 1985, 55, 1011-1015.	1.9	18
107	A simple model approach to localized-itinerant magnetism application to rare-earth intermetallics. <i>Physica Status Solidi (B): Basic Research</i> , 1982, 114, 255-263.	1.5	7
108	Magnetic properties of the pseudo-binary intermetallic compounds (Ce <sub>x</sub> Y <sub>1-x</sub> ) <sub>2</sub> Fe <sub>2</sub> . <i>Journal of Physics and Chemistry of Solids</i> , 1980, 41, 761-763.	4.0	18

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109	Mossbauer studies of the pseudobinary intermetallic compounds $Gd(Al_xFe_{1-x})_2$ . Journal of Physics F: Metal Physics, 1980, 10, 1313-1321.	1.6	9
110	The EPR of europium metal. Journal of Magnetic Resonance, 1977, 25, 507-510.	0.5	1
111	EPR of $GdAg_{1-x}In_x$ intermetallic compounds. Physica Status Solidi (B): Basic Research, 1976, 77, K11.	1.5	7
112	The finite channel width and the analysis of experimental data. Nuclear Instruments & Methods, 1975, 126, 125-127.	1.2	1
113	Magnetic response of s-d hybridized systems: microscopic and phenomenological approaches. Journal of Physics F: Metal Physics, 1975, 5, 160-168.	1.6	16
114	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
115	Hyperfine Fields in Ferromagnetic Rare-Earth Alloys. Physica Status Solidi (B): Basic Research, 1973, 55, 361-369.	1.5	4
116	Mossbauer studies of $R(FeCo)_2Laves$ phases. Journal of Physics F: Metal Physics, 1973, 3, 885-892.	1.6	52
117	Remarks on Gd g shifts. Journal of Physics C: Solid State Physics, 1972, 5, L99-L101.	1.5	7
118	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
119	Mössbauer Studies of Iron-Rare Earth Intermetallics. Journal of Applied Physics, 1968, 39, 1323-1323.	2.5	9
120	Temperature dependence of induced h.f. - fields at Cd in Ni. Physics Letters, 1966, 21, 245-247.	2.1	2
121	Synthesis and Characterization of Electrodeposited Nickel Nanowires. Ceramic Engineering and Science Proceedings, 0, , 195-201.	0.1	0