Fernando Jose Gomes Landgraf

List of Publications by Year
in descending order

86 papers	1,950 citations	218677 26 h-index	276875 41 g-index
88 all docs	88 docs citations	88 times ranked	1049 citing authors

#	Article	IF	Citations
1	Modeling the Effect of Compressive Stress on Hysteresis Loop of Grain-Oriented Electrical Steel. Energies, 2022, 15, 1128.	3.1	5
2	Model and Mechanism of Anode Effect of an Electrochemical Cell for Nd or (Nd, Pr) Reduction. Metals, 2022, 12, 498.	2.3	2
3	Chemical Characterization in the Production Chain of Permanent Magnets by Inductively Coupled Plasma Optical Emission Spectrometry (ICP OES) â€“ Precise Quantification of Nd, Pr, Fe and B in Super-Magnets Samples. Brazilian Journal of Analytical Chemistry, 2022, , .	0.5	2
4	Role of laser powder bed fusion process parameters in crystallographic texture of additive manufactured Nbâ€“48Ti alloy. Journal of Materials Research and Technology, 2021, 14, 484-495.	5.8	9
5	Archaeometallurgy of ferrous artefacts of the PatriÃ³tica Iron Factory (XIX century, Ouro Preto,) Tj ETQq1 1 0.784314 rgBT /Overlock	0.4	1
6	Microstructural and mechanical characterisation of the Simon Bolivar's iron bridge structure, 19th century, Arequipa, Peru. REM: International Engineering Journal, 2020, 73, 523-530.	0.4	0
7	Investigating the Provenance of Iron Artifacts of the Royal Iron Factory of SÃ£o JoÃ£o de Ipanema by Hierarchical Cluster Analysis of EDS Microanalyses of Slag Inclusions. Materials Research, 2017, 20, 119-129.	1.3	8
8	Soft Magnetic Materials Conference Chairâ€™s Foreword. IEEE Transactions on Magnetics, 2016, 52, 1-2.	2.1	0
9	Archaeometry of ferrous artefacts from Luso-Brazilian archaeological sites near Ipanema River, Brazil. Revista Escola De Minas, 2015, 68, 187-193.	0.1	3
10	Anomalous loss hysteresis loop. Materials Research, 2014, 17, 494-497.	1.3	8
11	Excess Loss Localization on the Hysteresis Curve. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	3
12	Barkhausen noise as a microstructure characterization tool. Physica B: Condensed Matter, 2014, 435, 109-112.	2.7	86
13	The Effect of Recovery Annealing on the Magnetic and Mechanical Properties of Nonoriented Electrical Steels. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	8
14	Evaluating the presence of titanium in XIX-century Brazilian steels by energy-dispersive X-ray fluorescence. Radiation Physics and Chemistry, 2014, 95, 368-372.	2.8	1
15	How Extrinsic Is the Coercivity in NdFeB Bonded Magnets?. IEEE Transactions on Magnetics, 2013, 49, 5043-5047.	2.1	4
16	Microstructural changes during the slow-cooling annealing of nanocrystalline SmCo 2:17 type magnets. Journal of Alloys and Compounds, 2013, 551, 312-317.	5.5	20
17	Thermal Aging of Reprocessed NdFeB Powders. Materials Science Forum, 2012, 727-728, 181-185.	0.3	0
18	Nonoriented Electrical Steels. Jom, 2012, 64, 764-771.	1.9	35

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19	Properties of hydrogenation-disproportionation-desorption-recombination NdFeB powders prepared from recycled sintered magnets. Journal of Applied Physics, 2012, 111, .	2.5	31
20	Properties of nanoparticles prepared from NdFeB-based compound for magnetic hyperthermia application. Nanotechnology, 2012, 23, 175704.	2.6	14
21	The effects of the pressing step on the microstructure and aging of NdFeB bonded magnets. Powder Technology, 2012, 224, 291-296.	4.2	18
22	Subdivision of Hysteresis Loss in Mn-Zn Ferrite Toroidal Cores. IEEE Transactions on Magnetics, 2012, 48, 1570-1572.	2.1	3
23	Effects of the Compaction Pressure on the Magnetic Properties of a Sintered Fe-Based Alloy. IEEE Transactions on Magnetics, 2012, 48, 1385-1388.	2.1	2
24	Effect of Plastic Deformation on the Excess Loss of Electrical Steel. IEEE Transactions on Magnetics, 2012, 48, 1425-1428.	2.1	24
25	Estimate of the anisotropy field in isotropic SmCo 2:17 magnets with the Stoner-Wohlfarth CLC model. Journal of Physics: Conference Series, 2011, 303, 012049.	0.4	22
26	Anisotropy study of grain oriented steels with Magnetic Barkhausen Noise. Journal of Physics: Conference Series, 2011, 303, 012020.	0.4	13
27	Evolution of magnetic properties and crystallographic texture in electrical steel with large plastic deformation. Journal of Applied Physics, 2011, 109, 07A325.	2.5	5
28	Combining Mager and Steinmetz: The Effect of Grain Size and Maximum Induction on Hysteresis Energy Loss. IEEE Transactions on Magnetics, 2011, 47, 2179-2183.	2.1	5
29	Determining the effect of grain size and maximum induction upon coercive field of electrical steels. Journal of Magnetism and Magnetic Materials, 2011, 323, 2335-2339.	2.3	53
30	Modeling of Plastic Deformation Effects in Ferromagnetic Thin Films. IEEE Transactions on Magnetics, 2010, 46, 491-494.	2.1	20
31	Embrittlement of electrical steel laminations by nitrogen pick-up during heat treatment. Engineering Failure Analysis, 2010, 17, 961-970.	4.0	3
32	Design of single-phase induction motors with fully processed steel. , 2010, , .		3
33	Impact of plastic deformation on magnetoacoustic properties of Feâ€“2%Si alloy. NDT and E International, 2009, 42, 92-96.	3.7	14
34	Thermomechanical Processing for Recovery of Desired $$ {leftlangle {001} ightangle } $$ Fiber Texture in Electric Motor Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 1738-1746.	2.2	42
35	The influence of different voltage waveforms and grain sizes in electrical steels losses. Journal of Magnetism and Magnetic Materials, 2008, 320, e381-e384.	2.3	2
36	Effect of rolling on the residual stresses and magnetic properties of a 0.5% Si electrical steel. Journal of Magnetism and Magnetic Materials, 2008, 320, e377-e380.	2.3	30

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37	Magnetic properties of 6.5% silicon content non-oriented electrical steel under sine and PWM excitation. Journal of Magnetism and Magnetic Materials, 2008, 320, e385-e388.	2.3	8
38	Hysteresis loss subdivision. Journal of Magnetism and Magnetic Materials, 2008, 320, 2494-2498.	2.3	38
39	On the Steinmetz hysteresis law. Journal of Magnetism and Magnetic Materials, 2008, 320, e531-e534.	2.3	39
40	Magnetic losses evolution of a semi-processed steel during forced aging treatments. Journal of Magnetism and Magnetic Materials, 2008, 320, e631-e634.	2.3	4
41	Geometry effect on the magnetic properties of manganese zinc ferrite. Journal of Magnetism and Magnetic Materials, 2008, 320, e857-e859.	2.3	1
42	Lack of magnetoacoustic emission in iron with 6.5% silicon. Journal of Magnetism and Magnetic Materials, 2008, 320, 2530-2533.	2.3	15
43	Magnetic loss, permeability dispersion, and role of eddy currents in Mnâ€“Zn sintered ferrites. Journal of Magnetism and Magnetic Materials, 2008, 320, e865-e868.	2.3	8
44	Modeling of Effect of Plastic Deformation on Barkhausen Noise and Magnetoacoustic Emission in Iron With 2% Silicon. IEEE Transactions on Magnetics, 2008, 44, 3221-3224.	2.1	7
45	An In-Depth Study of the Barkhausen Emission Signal Properties of the Plastically Deformed Fe-2%Si Alloy. IEEE Transactions on Magnetics, 2008, 44, 3828-3831.	2.1	6
46	Silicon Steel Wire With Low Magnetic Losses. IEEE Transactions on Magnetics, 2008, 44, 3954-3957.	2.1	2
47	Electron backscattered diffraction texture analysis of SmCo5 magnets. Journal of Applied Physics, 2007, 101, 09K516.	2.5	12
48	Magnetostriction, Barkhausen noise and magnetization processes in E110 grade non-oriented electrical steels. Journal of Magnetism and Magnetic Materials, 2007, 317, 20-28.	2.3	20
49	Orientation dependence of stored energy of cold work in semi-processed electrical steels after temper rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 427, 301-305.	5.6	22
50	Fitting the flow curve of a plastically deformed silicon steel for the prediction of magnetic properties. Journal of Magnetism and Magnetic Materials, 2006, 304, 155-158.	2.3	22
51	Should Epstein strip arrangement be changed?. Journal of Magnetism and Magnetic Materials, 2006, 304, e571-e573.	2.3	4
52	Consequences of magnetic aging for iron losses in electrical steels. Journal of Magnetism and Magnetic Materials, 2006, 304, e593-e595.	2.3	26
53	Effect of hot-band grain size and intermediate annealing on magnetic properties and texture of non-oriented silicon steels. Journal of Magnetism and Magnetic Materials, 2006, 304, e608-e610.	2.3	20
54	Magnetostriction in non-oriented electrical steels. Physica B: Condensed Matter, 2006, 384, 294-296.	2.7	7

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55	Modelling magnetic polarisation J50 by different methods. Journal of Magnetism and Magnetic Materials, 2006, 304, e589-e592.	2.3	9
56	Effect of deformation and annealing on the microstructure and magnetic properties of grain-oriented electrical steels. Journal of Magnetism and Magnetic Materials, 2006, 304, e617-e619.	2.3	11
57	The optimum grain size for minimizing energy losses in iron. Journal of Magnetism and Magnetic Materials, 2006, 301, 94-99.	2.3	99
58	Modeling of sharp change in magnetic hysteresis behavior of electrical steel at small plastic deformation. Journal of Applied Physics, 2005, 97, 10E518.	2.5	40
59	Modeling Plastic Deformation Effects in Steel on Hysteresis Loops With the Same Maximum Flux Density. IEEE Transactions on Magnetics, 2004, 40, 3219-3226.	2.1	52
60	Barkhausen noise and high induction losses in non-oriented electrical steel. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E561-E562.	2.3	6
61	Correlation between magnetic properties and crystallographic texture of silicon steel. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E565-E566.	2.3	35
62	Effect of several heat treatments on the microstructure and coercivity of SmCo5 magnets. Journal of Alloys and Compounds, 2004, 368, 304-307.	5.5	20
63	Modelling the angular dependence of magnetic properties of a fully processed non-oriented electrical steel. Journal of Magnetism and Magnetic Materials, 2003, 254-255, 328-330.	2.3	28
64	The influence of cutting technique on the magnetic properties of electrical steels. Journal of Magnetism and Magnetic Materials, 2003, 254-255, 358-360.	2.3	117
65	Magnetic properties of silicon steel with as-cast columnar structure. Journal of Magnetism and Magnetic Materials, 2003, 254-255, 364-366.	2.3	36
66	Modeling microstructural effects on hysteresis loops with the same maximum flux density. IEEE Transactions on Magnetics, 2003, 39, 2528-2530.	2.1	25
67	The effects of synthesis variables on the magnetic properties of coprecipitated barium ferrite powders. Journal of Magnetism and Magnetic Materials, 2002, 238, 168-172.	2.3	118
68	Losses and permeability improvement by stress relieving fully processed electrical steels with previous small deformations. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 152-156.	2.3	54
69	Properties of Iron Powder for AC Magnetic Application. Key Engineering Materials, 2001, 189-191, 649-654.	0.4	1
70	Magnetic Properties of Barium Ferrite Powders Obtained by Coprecipitation. Key Engineering Materials, 2001, 189-191, 661-666.	0.4	2
71	Effect of plastic deformation on the magnetic properties of non-oriented electrical steels. Journal of Magnetism and Magnetic Materials, 2000, 215-216, 94-96.	2.3	36
72	Effect of grain size, deformation, aging and anisotropy on hysteresis loss of electrical steels. Journal of Magnetism and Magnetic Materials, 2000, 215-216, 97-99.	2.3	34

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73	Remarks on the Co-rich region of the Co-Sm diagram. Journal of Phase Equilibria and Diffusion, 2000, 21, 443-446.	0.3	29
74	Magnetic properties of coprecipitated barium ferrite powders as a function of synthesis conditions. IEEE Transactions on Magnetics, 2000, 36, 3327-3329.	2.1	60
75	Anisotropy of the magnetic losses components in semi-processed electrical steels. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 380-381.	2.3	25
76	Ferromagnetic phases in Prâ€"Ndâ€"Fe. Journal of Alloys and Compounds, 1992, 190, 69-72.	5.5	5
77	Comparison of metastable Ndî—¸Fe phases and the Ndî—¸Feî—¸Al Î¼ phase. Materials Letters, 1992, 14, 21-26.	2.6	12
78	Binary Feâ€“Nd metastable phases in the solidification of Feâ€“Ndâ€“B alloys. Journal of Applied Physics, 1991, 70, 6107-6109.	2.5	30
79	Magnetic and structural characterization of Nd5Fe17. Journal of Applied Physics, 1991, 70, 6125-6127.	2.5	43
80	Solidification and solid state transformations in Feî—¸Nd: A revised phase diagram. Journal of the Less Common Metals, 1990, 163, 209-218.	0.8	87
81	Effect of annealing on magnetic properties of Fe-47.5%Ni alloy. Journal of Materials Engineering, 1989, 11, 45-49.	0.3	9
82	New stable phase in the binary Feî—¸Nd system. Materials Letters, 1989, 8, 472-476.	2.6	48
83	Additional ferromagnetic phases in the Feî—¸Ndî—¸B system and the effect of a 600Â°C annealing. Journal of the Less Common Metals, 1989, 153, 169-180.	0.8	101
84	Magnetic viscosity and texture in sintered NdFeB and NdDyFeB magnets. Journal of Magnetism and Magnetic Materials, 1988, 73, 267-272.	2.3	18
85	Modeling microstructural effects on hysteresis loops with the same maximum magnetic flux density. , 0, , .		0
86	Os canhÃµes de Ipanema: tecnologia, indÃºstria, logÃstica e polÃtica em 1840. Anais Do Museu Paulista: HistÃ³ria E Cultura Material, 0, 29, .	0.1	0