Hirotoshi Fukunaga

List of Publications by Year
in descending order

110 papers	728 citations	687363 13 h-index	713466 21 g-index
111 all docs	111 docs citations	111 times ranked	392 citing authors

#	Article	IF	Citations
1	Preparation of Nd-Fe-B Thick-film Magnets Deposited on Si Substrates with Each Glass Buffer Layer and their Properties. IEEJ Transactions on Fundamentals and Materials, 2021, 141, 128-132.	0.2	0
2	Electroplated Fe-Co films prepared in citric-acid-based plating baths with saccharin and sodium lauryl sulfate. AIP Advances, 2020, 10, .	1.3	8
3	PLD-fabricated Pr-Fe-B thick film magnets applied to small motors. AIP Advances, 2020, 10, .	1.3	4
4	Preparation and Deposition of Prâ€“Feâ€“B Permanent-Magnet Powder Using Pulsed Laser. IEEE Transactions on Magnetics, 2020, 56, 1-3.	2.1	5
5	High-temperature properties of Fe-Pt film-magnets prepared by electroplating method. AIP Advances, 2020, 10, .	1.3	2
6	Effect of Na and Cl Ions on Coercivity of Electroplated Fe-Pt Film-Magnets. Journal of Electronic Materials, 2019, 48, 1412-1415.	2.2	2
7	Preparation of Nd-Fe-B/Î±-Fe nano-composite thick-film magnets on various substrates using PLD with high laser energy density above 10 J/cm2. AIP Advances, 2018, 8, 056223.	1.3	0
8	Effect of primary amines on magnetic properties of Fe-Ni films electroplated in a DES-based plating bath. AIP Advances, 2018, 8, 056106.	1.3	5
9	Improvement in surface conditions of electroplated Fe-Pt thick-film magnets. AIP Advances, 2018, 8, 056437.	1.3	3
10	Electroplated Fe-Co-Ni films prepared in ammonium-chloride-based plating baths. AIP Advances, 2018, 8, .	1.3	5
11	Effect of an annealing on magnetic properties of Fe-Ni films electroplated in citric-acid-based plating baths. AIP Advances, 2018, 8, 047706.	1.3	2
12	Increase in Nucleation Field of Nanocrystalline Nd(Fe,Co)B Magnets Due to Strengthening of Exchange Interactionâ€"Computer Simulation. IEEE Transactions on Magnetics, 2018, 54, 1-5.	2.1	0
13	Magnetic Properties of Exchange-Coupled Fe-Ni/Fe₂₂Ni₇₈ Double-Layered Thick Films. IEEE Transactions on Magnetics, 2018, 54, 1-3.	2.1	2
14	Investigation of coercivity for electroplated Fe-Ni thick films. AIP Advances, 2018, 8, 056123.	1.3	5
15	Preparation of Thick-Film Magnets and Their Applications. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2018, 69, 485-489.	0.2	0
16	Anisotropic Sm-Co/Î±-Fe Thick-Film Magnets Prepared by Two-Step Annealing. IEEE Magnetics Letters, 2017, 8, 1-4.	1.1	1
17	PLD-Fabricated Isotropic Prâ€“Feâ€“B Film Magnets Deposited on Glass Substrates. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	3
18	Uniaxial Magnetization Performance of Textured Fe Nanowire Arrays Electrodeposited by a Pulsed Potential Deposition Technique. Nanoscale Research Letters, 2017, 12, 598.	5.7	19

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19	Microstructures of Ta-Inserted SmCo₅/Fe Nanocomposite Thick Film Magnets. Materials Transactions, 2017, 58, 1351-1355.	1.2	0
20	Rare Earth Thick Film Magnets Deposited on Glass Substrates for MEMS Application. , 2016, , .		0
21	PLD-Made Nd-Fe-B Thick Film Magnets Deposited on Si Substrates and Their Micromachining. , 2016, , .		0
22	Various Properties of Fe-Co Magnetic Films Prepared by PLD Method. , 2016, , .		0
23	Anisotropic Sm-Co/Î±-Fe Thick Film-Magnets Prepared by Two-Step Annealing. , 2016, , .		0
24	Optimization of Target Composition in Nd-Fe-B Film Magnets Prepared by High Laser Energy Density. , 2016, , .		0
25	Electroplated Fe-Pt thick films prepared in plating baths with various pH values. AIP Advances, 2016, 6, .	1.3	5
26	Electroplated Fe-Co-Ni films prepared from deep-eutectic-solvent-based plating baths. AIP Advances, 2016, 6, .	1.3	17
27	Uniaxial magnetization performance of Co-Al2O3 nano-composite films electrochemically synthesized from acidic aqueous solution. Journal of Solid State Electrochemistry, 2016, 20, 1665-1672.	2.5	4
28	Prediction of Flux Loss in a Ndâ€“Feâ€“B-Bonded Magnet Under an External Magnetic Field. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	0
29	Improvement in Magnetic Properties of Fe-Pt Thick-film Magnets by Reducing Droplets. IEEJ Transactions on Fundamentals and Materials, 2016, 136, 499-502.	0.2	0
30	Ndâ€“Feâ€“B Film Magnets With Thickness Above 100 ${mu }ext{m}$ Deposited on Si Substrates. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	13
31	Ndâ€“Feâ€“B Thick-Film Magnets Prepared by High Laser Energy Density. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	2
32	Temperature Characteristics of a Fluxgate Current Sensor With Feâ€“Niâ€“Co Ring Core. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	12
33	Computer simulation of coercivity improvement due to microstructural refinement. Journal of Applied Physics, 2015, 117, 17A729.	2.5	9
34	Fe-Pt thick-film magnets prepared by electroplating method. Journal of Applied Physics, 2015, 117, .	2.5	13
35	Electrochemical fabrication of nanocomposite films containing magnetic metal nanoparticles. Japanese Journal of Applied Physics, 2015, 54, 075201.	1.5	17
36	Reduction in Flux Loss of an Nd-Fe-B Bonded Ring Magnet for an SPM Motor. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	4

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37	Magnetic properties of isotropic and anisotropic SmCo5/Î±-Fe nanocomposite magnets with a layered structure simulated by micromagnetic theory. Journal of Applied Physics, 2014, 115, .	2.5	9
38	Effect of current density on magnetic properties of electrodeposited Fe-Ni films prepared in a citric-acid-based-bath. Journal of Applied Physics, 2014, 115, 17A325.	2.5	10
39	Magnetic properties and microstructure of Sm-Co/Î±-Fe nanocomposite thick film-magnets composed of multi-layers over 700 layers. Journal of Applied Physics, 2014, 115, 17A748.	2.5	4
40	Electroplated Feâ€“Ni Films Prepared From Deep Eutectic Solvents. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	10
41	Nanocomposite Nd-Fe-B/<inline-formula> <tex-math notation="TeX">(oldsymbol {alpha }) </tex-math></inline-formula>-Fe Thick-Film Magnets Prepared by Vacuum Arc Deposition. IEEE Transactions on Magnetics, 2014, 50, 1-3.	2.1	2
42	Magnetic properties of pulsed laser deposition-fabricated isotropic Pr-Fe-B thick-films magnets for magnetic micro-machines. Journal of Applied Physics, 2014, 115, 17A741.	2.5	11
43	Nanocomposite Thick-Film Magnets with ${{hbox{Nd}}hbox{-}{hbox{Fe}}hbox{-}{hbox{B}}+alphahbox{-}{hbox{Fe}}}$ Phases Prepared under High Laser Energy Density. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	5
44	Electroplated Fe films prepared from a deep eutectic solvent. Journal of Applied Physics, 2014, 115, 17A344.	2.5	13
45	Electrodeposited Fe-Ni films prepared from a tartaric-acid-based bath. Journal of the Korean Physical Society, 2013, 62, 1963-1965.	0.7	5
46	Electrodeposited Fe-Co films prepared from a citric-acid-based plating bath. Journal of the Korean Physical Society, 2013, 62, 1966-1968.	0.7	8
47	Reduction in eddy current loss for a power coupler in an electrodeless discharged lamp. Journal of the Magnetics Society of Japan, 2013, 37, 151-154.	0.9	0
48	Magnetic properties of Dy-diffused Nd-Fe-B powder prepared by crystallization from amorphous state. Journal of Applied Physics, 2012, 111, 07A733.	2.5	5
49	Enhancement in coercivity of Pulsed Laser Deposition-fabricated Fe-Pt thick film magnets by reducing droplets. Journal of Applied Physics, 2012, 111, 07A737.	2.5	4
50	Effect of Magnetostatic Interaction on Magnetization Reversal Process in Nd-Fe-B Magnets â€”Computer Simulationâ€". Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2012, 76, 43-47.	0.4	4
51	Numerical Study of Enhanced Coercivity of a Magnetically Hard Grain With Thin Surface Layers Due to Antiferromagnetic Coupling. IEEE Transactions on Magnetics, 2012, 48, 3162-3165.	2.1	1
52	Soft Magnetic Properties of Electrodeposited Fe-Ni Films Prepared in Citric Acid Based Bath. IEEE Transactions on Magnetics, 2012, 48, 2907-2909.	2.1	28
53	Magnetic Design for an Electrodeless Discharged Lamp. IEEE Transactions on Magnetics, 2012, 48, 1505-1507.	2.1	1
54	Coercivity enhancement of Dy-coated Nd-Fe-B flakes by crystallization. Journal of Applied Physics, 2011, 109, 07A701.	2.5	7

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55	Ndâ€“Feâ€“B thick film magnets with Nb additive prepared by vacuum arc deposition method. Journal of Applied Physics, 2011, 109, 07A755.	2.5	6
56	Effect of laser beam parameters on magnetic properties of Ndâ€“Feâ€“B thick-film magnets fabricated by pulsed laser deposition. Journal of Applied Physics, 2011, 109, 07A758.	2.5	18
57	A Method for Predicting Flux Loss of Multipole Magnet and Its Evaluation. IEEE Transactions on Magnetics, 2011, 47, 4108-4111.	2.1	5
58	Magnetic properties of pulsed laser deposition-fabricated isotropic Feâ€“Pt film magnets. Journal of Applied Physics, 2011, 109, 07A723.	2.5	12
59	Prediction method of flux loss in anisotropic NdFeB/SmFeN hybrid magnets. Journal of Applied Physics, 2010, 107, 09A736.	2.5	13
60	Composite Bonded Magnets With Self-Recoverability for Miniaturized Anisotropic Magnet Rotor. IEEE Transactions on Magnetics, 2010, 46, 1978-1981.	2.1	1
61	Investigation on Magnetic Torque of Multi-Polarly Micro Rotor Using Shape-Magnetic-Anisotropy. IEEE Transactions on Magnetics, 2010, 46, 2012-2015.	2.1	11
62	Change in the direction of anisotropy in PLD-fabricated Sm-Co thick film magnets. Journal of Applied Physics, 2009, 105, 07A729.	2.5	3
63	Magnetic properties of Fe-based ribbons with controlled permeability prepared by continuous pulse annealing under tensile stress. Journal of Applied Physics, 2009, 105, 07A331.	2.5	4
64	Fe-Pt Thick Film Magnets Prepared by High-Speed PLD Method. IEEE Transactions on Magnetics, 2008, 44, 4229-4231.	2.1	7
65	Review of Fabrication and Characterization of Ndâ€“Feâ€“B Thick Films for Magnetic Micromachines. IEEE Transactions on Magnetics, 2007, 43, 2672-2676.	2.1	35
66	Magnetic Properties of Fe-Based Ribbons and Toroidal Cores Prepared by Continuous Joule Heating Under Tensile Stress. IEEE Transactions on Magnetics, 2006, 42, 2781-2783.	2.1	9
67	Magnetic Properties of Fe-Based Ribbons and Toroidal Cores Prepared by Continuous Stress-Annealing by Joule Heating. , 2006, , .		0
68	Anisotropic thin composite bonded magnets prepared by compaction using the slip-flow phenomenon. IEEE Transactions on Magnetics, 2005, 41, 3775-3777.	2.1	5
69	Anisotropic thin bonded magnets prepared by compaction using slip-flow phenomenon. , 2005, , .		0
70	High Temperature Magnetic Properties of Feâ€“Cuâ€“Nbâ€“Siâ€“B Cores With Creep-Induced Anisotropy. IEEE Transactions on Magnetics, 2004, 40, 2721-2723.	2.1	6
71	Preparation of Coâ€“Pt alloy film magnets by electrodeposition. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1895-E1897.	2.3	22
72	Crystallization and magnetic behaviour of (Fe1-xCox)85.4 Zr5.8Nb1B6.8Cu1 (x = 0, 0.1, 0.3, 0.5) alloys. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 3463-3467.	0.8	1

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73	Radially Anisotropic Ring/Arc-Shaped Rare-Earth Bonded Magnets Using a Self-Organization Technique. IEEE Transactions on Magnetics, 2004, 40, 2059-2061.	2.1	8
74	Magnetic Properties of PLD-made Nd-Fe-B Film Magnets and their Applications to Milli-size Motors. IEEJ Transactions on Fundamentals and Materials, 2004, 124, 892-896.	0.2	4
75	Electrodeposited Co-Pt Thin Films with High Coercivity. IEEJ Transactions on Fundamentals and Materials, 2004, 124, 897-901.	0.2	0
76	Recent Trend of Permanent Magnets and their Applications. IEEJ Transactions on Fundamentals and Materials, 2004, 124, 847-850.	0.2	1
77	Radially-Anisotropic Rare-Earth Bonded-Magnets Prepared by Molecular Chain Alignment of Self-Organized Binder. IEEJ Transactions on Fundamentals and Materials, 2004, 124, 857-862.	0.2	1
78	New preparation method of anisotropic and isotropic Nd-Fe-B-bonded magnet for small DC motors. IEEE Transactions on Magnetics, 2003, 39, 2896-2898.	2.1	10
79	Fabrication of Nb-Fe-B thick-film magnets by high-speed PLD method. IEEE Transactions on Magnetics, 2003, 39, 2863-2865.	2.1	40
80	Highly dense anisotropic Sm-Fe-N-based bonded magnets including unsaturated polyester prepared by powder compacting press. IEEE Transactions on Magnetics, 2003, 39, 2980-2982.	2.1	8
81	Improvement in coercivity by high-speed crystallization for PrFeB-Based nanocomposite magnets. IEEE Transactions on Magnetics, 2002, 38, 2970-2972.	2.1	30
82	Nanostructured metallic cores with extremely low loss and controlled permeability. IEEE Transactions on Magnetics, 2002, 38, 3138-3140.	2.1	19
83	MÃ–ssbauer Studies and Soft Magnetic Properties of Fe85.4-xCoxZr5.8Nb1B6.8Cu1 (x = 0 or 42.7) Alloys. Transactions of the Magnetics Society of Japan, 2002, 2, 82-85.	0.5	1
84	Microstructure and magnetic properties of amorphous and nanocrystalline Fe83-xCoxNb3B13Cu1 (x=0) Tj ETQq0 0 0 rgBT /Overlock 10	0.5	0
85	Microstructure and magnetic properties of Fe/sub 86-x/Co/sub x/Zr/sub 6/B/sub 8/ alloys. IEEE Transactions on Magnetics, 2001, 37, 2271-2274.	2.1	4
86	Zero-emission Process for Nd-Fe-B Melt-Spun Powder Used in Epoxy Resin Bonded Magnets.. Journal of the Magnetics Society of Japan, 2001, 25, 687-690.	0.4	1
87	Phase formation and magnetic properties of SmFe7Nx+Î±Fe composite thin films. Journal of Applied Physics, 2000, 87, 6585-6587.	2.5	3
88	Nanostructured soft magnetic material with low loss and low permeability. Journal of Applied Physics, 2000, 87, 7103-7105.	2.5	31
89	Effect of strength of intergrain exchange interaction on magnetic properties of nanocomposite magnets. , 1999, , .		2
90	Flux loss in nanocomposite magnets. , 1999, , .		0

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91	Direct joule heating of Nd-Fe-B based melt-spun powder and zinc binder. IEEE Transactions on Magnetics, 1999, 35, 3304-3306.	2.1	4
92	Effect of film thickness and substrates on magnetic properties in SmFeN films prepared by laser ablation technique. , 1999, , .		0
93	Direct Joule heating of melt-spun powder and zinc binder. , 1999, , .		0
94	Improvement in magnetic properties of Sm-Fe-N flakes by annealing under Zn vapor. IEEE Transactions on Magnetics, 1999, 35, 3298-3300.	2.1	0
95	Flux loss in nanocomposite magnets. IEEE Transactions on Magnetics, 1999, 35, 3292-3294.	2.1	14
96	Preannealing effect and soft magnetic properties of the nanocrystalline Fe74CulNb3Si12B10 alloy. Journal of the Magnetics Society of Japan, 1999, 23, 225-227.	0.4	2
97	Magnetic Relaxations in Amorphous and Nanocrystalline Fe-based Alloys. Journal of the Magnetics Society of Japan, 1999, 23, 222-224.	0.4	0
98	Maximum energy product of isotropic Nd-Fe-B-based nanocomposite magnets. Journal of Applied Physics, 1998, 83, 6623-6625.	2.5	37
99	New production method of 100-Î¼m-thick grain-oriented 3% silicon steel sheets. Journal of Applied Physics, 1997, 81, 4098-4100.	2.5	6
100	Reduction of iron loss in thin grain-oriented silicon steel sheets. IEEE Transactions on Magnetics, 1997, 33, 3754-3756.	2.1	9
101	New soft magnetic material with constant and adjustable permeability. IEEE Transactions on Magnetics, 1997, 33, 3787-3789.	2.1	10
102	Longâ€term aging effect on led circuit with feâ€based amorphous current transformer. Electronics and Communications in Japan, 1993, 76, 68-76.	0.2	0
103	Effect of Magnetic Inhomogeneity on Magnetization Reversal in Sintered Nd-Fe-B Magnet â€“Numerical Approachâ€". Japanese Journal of Applied Physics, 1990, 29, 1711-1716.	1.5	9
104	Effect of Non-Sinusoidal Local Flux Changes on Eddy Current Loss in Fe-Based Amorphous Ribbons. IEEJ Transactions on Fundamentals and Materials, 1988, 108, 465-465.	0.2	0
105	Magnetic and Mechanical Properties of TM-ME Based Semi-Amorphous Ribbons. IEEE Translation Journal on Magnetics in Japan, 1985, 1, 217-219.	0.1	0
106	Magnetic and mechanical properties in crystallized amorphous Fe-Co-Ni-Al based ribbons. IEEE Transactions on Magnetics, 1984, 20, 1622-1624.	2.1	2
107	Reduction Of Iron Loss In Thin Grain-oriented Stltcon Steel Sheets. , 0, , .		0
108	Effect of dimension on characteristics of Rosen-type piezoelectric transformer. , 0, , .		22

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109	Thermal stability of magnetic properties of amorphous and nanocrystalline Fe/sub 85.4-x/Co/sub x/Zr/sub 5.8/Nb/sub 1/B/sub 6.8/Cu/sub 1/ (x=0 or 42.7) alloys. , 0, , .		0
110	Nanocrystallization and soft magnetic properties of Fe/sub 85.4/Zr/sub 6.8-x/Nb/sub x/B/sub 6.8/Cu/sub 1/ (x=0, 1) alloys. , 0, , .		0