Oliver Gutfleisch

List of Publications by Year
in descending order

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497	21,921	13099	15732
papers	citations	h-index	g-index

512	512	512	9760
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Phase-field modelling of paramagnetic austeniteâ€“ferromagnetic martensite transformation coupled with mechanics and micromagnetics. International Journal of Solids and Structures, 2022, 238, 111365.	2.7	9
2	Angular dependence of saturation magnetization in single crystals with uniaxial magnetic anisotropy. Journal of Magnetism and Magnetic Materials, 2022, 547, 168947.	2.3	0
3	Textured (Ce,La,Y)â€“Feâ€“B permanent magnets by hot deformation. Journal of Materials Research and Technology, 2022, 17, 1459-1468.	5.8	16
4	Simultaneous Multi-Property Probing During Magneto-Structural Phase Transitions: An Element-Specific and Macroscopic Hysteresis Characterization at ID12 of the ESRF. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-9.	4.7	1
5	Chemical long range ordering in all-d-metal Heusler alloys. Journal of Applied Physics, 2022, 131, .	2.5	3
6	Formation of pure $$au$$-phase in Mnâ€“Alâ€“C by fast annealing using spark plasma sintering. Journal of Materials Science, 2022, 57, 6056-6065.	3.7	10
7	On the Impact of Additive Manufacturing Processes on the Microstructure and Magnetic Properties of Coâ€“Niâ€“Ga Shape Memory Heusler Alloys. Advanced Engineering Materials, 2022, 24, .	3.5	9
8	On the ÎµÂâ†'ÂÏ„ phase transformation and twinning in L10â^'MnAl alloys. Acta Materialia, 2022, 232, 117892.	7.9	8
9	Effect of size and disorder on martensitic phase transition and thermal hysteresis in milled Ni-Mn-In-Co microparticles. Journal of Alloys and Compounds, 2022, 906, 164377.	5.5	3
10	Self-diffusion behaviour and microstructure of ultrafine-grained Nd₂Fe₁₄B with intergranular melting transition. International Journal of Materials Research, 2022, 95, 895-903.	0.3	0
11	Microstructure, coercivity and thermal stability of nanostructured (Nd,Ce)-(Fe,Co)-B hot-compacted permanent magnets. Acta Materialia, 2022, 235, 118062.	7.9	17
12	Exploring V-Fe-Co-Ni-Al and V-Fe-Co-Ni-Cu high entropy alloys for magnetocaloric applications. Journal of Alloys and Compounds, 2022, 921, 166040.	5.5	5
13	Synthesis and magnetic properties of bulk Î±â€³-Fe16N2/SrAl2Fe10O19 composite magnets. Journal of Magnetism and Magnetic Materials, 2021, 518, 167414.	2.3	7
14	A two-sublattice model for extracting rare-earth anisotropy constants from measurements on (Nd,Ce)2(Fe,Co)14B single crystals. Journal of Magnetism and Magnetic Materials, 2021, 520, 167470.	2.3	5
15	Permanent Magnet Materials. , 2021, , 1-65.		0
16	Combined kinetic and Beanâ€“Rodbell approach for describing field-induced transitions in LaFe_{11.6}Si_{1.4} alloys. Journal Physics D: Applied Physics, 2021, 54, 135003.	2.8	8
17	Intrinsically weak magnetic anisotropy of cerium in potential hard-magnetic intermetallics. Npj Quantum Materials, 2021, 6, .	5.2	12
18	An accelerating approach of designing ferromagnetic materials via machine learning modeling of magnetic ground state and Curie temperature. Materials Research Letters, 2021, 9, 169-174.	8.7	26

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19	Designing of magnetic MAB phases for energy applications. Journal of Materials Chemistry A, 2021, 9, 8805-8813.	10.3	26
20	Alloying effect on the orderâ€“disorder transformation in tetragonal FeNi. Scientific Reports, 2021, 11, 5253.	3.3	6
21	The impact of Pr and Nd substitution on structure, hysteresis and magnetocaloric properties of La_{1â^'x}(Pr,Nd)_xFe_{11.6}Si_{1.4}. Journal Physics D: Applied Physics, 2021, 54, 225001.	2.8	2
22	Neutron study of magnetic correlations in rare-earth-free Mn-Bi magnets. Physical Review Materials, 2021, 5, .	2.4	3
23	Constrained crystals deep convolutional generative adversarial network for the inverse design of crystal structures. Npj Computational Materials, 2021, 7, .	8.7	50
24	Correlating changes of the unit cell parameters and microstructure with magnetic properties in the CeFe11Ti compound. Journal of Alloys and Compounds, 2021, 867, 158805.	5.5	7
25	Magnetic properties and microstructure of Sm5Fe17-based composite magnets. Acta Materialia, 2021, 212, 116912.	7.9	5
26	Design and Qualification of Prâ€“Feâ€“Cuâ€“B Alloys for the Additive Manufacturing of Permanent Magnets. Advanced Functional Materials, 2021, 31, 2102148.	14.9	19
27	Magnetocaloric properties and specifics of the hysteresis at the first-order metamagnetic transition in Ni-doped FeRh. Physical Review Materials, 2021, 5, .	2.4	9
28	Multifunctional antiperovskites driven by strong magnetostructural coupling. Npj Computational Materials, 2021, 7, .	8.7	22
29	Large magnetic entropy change in Nd2In near the boiling temperature of natural gas. Applied Physics Letters, 2021, 119, .	3.3	10
30	Twins â€“ A weak link in the magnetic hardening of ThMn12-type permanent magnets. Acta Materialia, 2021, 214, 116968.	7.9	31
31	Upscaling the 2â€Powder Method for the Manufacturing of Heavy Rareâ€Earthâ€Lean Sintered didymiumâ€Based Magnets. Advanced Engineering Materials, 2021, 23, 2100459.	3.5	9
32	Multifunctional Ni-Mn-Ga and Ni-Mn-Cu-Ga Heusler particles towards the nanoscale by ball-milling technique. Journal of Alloys and Compounds, 2021, 872, 159747.	5.5	9
33	Ultrastrong and Ductile Soft Magnetic Highâ€Entropy Alloys via Coherent Ordered Nanoprecipitates. Advanced Materials, 2021, 33, e2102139.	21.0	69
34	Electric-field manipulation of the magnetocaloric effect in a Fe49Rh51/PZT composite. Journal Physics D: Applied Physics, 2021, 54, 505002.	2.8	2
35	Magnetocaloric effect in the Laves-phase<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>Ho</mml:mi></mml:mrow><mml:mrow> in high magnetic fields. Physical Review Materials, 2021, 5, .	2.4	10
36	Influence of microstructure on the application of Ni-Mn-In Heusler compounds for multicaloric cooling using magnetic field and uniaxial stress. Acta Materialia, 2021, 217, 117157.	7.9	18

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37	Influence of martensitic configuration on hysteretic properties of Heusler films studied by advanced imaging in magnetic field and temperature. Acta Materialia, 2021, 221, 117356.	7.9	3
38	Magnetoelectric Tuning of Pinningâ€Type Permanent Magnets through Atomicâ€Scale Engineering of Grain Boundaries. Advanced Materials, 2021, 33, 2006853.	21.0	13
39	Microstructure engineering of metamagnetic Ni-Mn-based Heusler compounds by Fe-doping: A roadmap towards excellent cyclic stability combined with large elastocaloric and magnetocaloric effects. Acta Materialia, 2021, 221, 117390.	7.9	30
40	Maximum performance of an active magnetic regenerator. Applied Physics Letters, 2021, 119, .	3.3	4
41	Permanent Magnet Materials and Applications. , 2021, , 1369-1433.		0
42	HDDR treatment of Ce-substituted Nd2Fe14B-based permanent magnetÂalloys - phase structure evolution, intergranular processes and magnetic property development. Journal of Alloys and Compounds, 2020, 814, 152215.	5.5	15
43	Designing rare-earth free permanent magnets in heusler alloys via interstitial doping. Acta Materialia, 2020, 186, 355-362.	7.9	20
44	Low-temperature synthesis of nanoscale ferromagnetic Î±â€²-MnB. Dalton Transactions, 2020, 49, 131-135.	3.3	9
45	Anisotropic exchange in Ndâ€“Feâ€“B permanent magnets. Materials Research Letters, 2020, 8, 89-96.	8.7	14
46	Calculating the magnetocaloric effect in second-order-type material by micromagnetic simulations: A case study on Co2B. Scripta Materialia, 2020, 177, 218-222.	5.2	0
47	Direct observation of paramagnetic spin fluctuations in LaFe_{13âˆ’x}Si_x. Journal of Physics Condensed Matter, 2020, 32, 115802.	1.8	5
48	Element-resolved study on the evolution of magnetic response in FexN compounds. Journal of Magnetism and Magnetic Materials, 2020, 498, 166219.	2.3	4
49	Tailoring magnetocaloric effect in all-d-metal Ni-Co-Mn-Ti Heusler alloys: a combined experimental and theoretical study. Acta Materialia, 2020, 201, 425-434.	7.9	65
50	Nanocrystalline Sm-based 1:12 magnets. Acta Materialia, 2020, 200, 652-658.	7.9	26
51	Multicaloric effects in metamagnetic Heusler Ni-Mn-In under uniaxial stress and magnetic field. Applied Physics Reviews, 2020, 7, .	11.3	29
52	Giant voltage-induced modification of magnetism in micron-scale ferromagnetic metals by hydrogen charging. Nature Communications, 2020, 11, 4849.	12.8	16
53	Production of Fe nanoparticles from Î³-Fe2O3 by high-pressure hydrogen reduction. Nanoscale Advances, 2020, 2, 4777-4784.	4.6	10
54	Determination of the crystal field parameters in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Sm</mml:mi><mml:msub><mml:mi>Fe</mml:mi><mml:n Physical Review B, 2020, 102, .	3.2	10

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55	Advanced characterization of multicaloric materials in pulsed magnetic fields. Journal of Applied Physics, 2020, 127, .	2.5	23
56	Accelerated crystallization and phase formation in Fe40Ni40B20 by electric current assisted annealing technique. Journal of Alloys and Compounds, 2020, 836, 155338.	5.5	12
57	Magnetocaloric effect in GdNi2 for cryogenic gas liquefaction studied in magnetic fields up to 50â€‰T. Journal of Applied Physics, 2020, 127, .	2.5	25
58	Pressure Dependence of Magnetic Properties in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mi>La</mml:mi><mml:mo>(</mml:mo><mml:mi>Fe</mml:mi><mml:mo>,</mml:mo> : Multistimulus Responsiveness of Caloric Effects by Modeling and Experiment. Physical Review Applied, 2020, 13, .	3.8	22
59	Exchange stiffness of ferromagnets. European Physical Journal Plus, 2020, 135, 1.	2.6	13
60	Dynamic unidirectional anisotropy in cubic FeGe with antisymmetric spin-spin-coupling. Scientific Reports, 2020, 10, 2861.	3.3	1
61	Influence of hydrogenation on the vibrational density of states of magnetocaloric <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>LaFe</mml:mi><mml:msub><mml:mrow /><mml:mrow><mml:mn>11.4</mml:mn></mml:mrow></mml:msub><mml:mi>Si</mml:mi><mml:msub><mml:mrow /><mml:mrow><mml:mn>1.6</mml:mn></mml:mrow></mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:msub><mml:mrow /><mml:mrow><mml:mn>1.6</mml:mn></mml:mrow></mml:msub></mml:math>. Physical Review B, 2020,	3.2	15
62	Magnetic Refrigeration with Recycled Permanent Magnets and Free Rareâ€Earth Magnetocaloric Laâ€“Feâ€“Si. Energy Technology, 2020, 8, 1901025.	3.8	17
63	Unveiling the mechanism of abnormal magnetic behavior of FeNiCoMnCu high-entropy alloys through a joint experimental-theoretical study. Physical Review Materials, 2020, 4, .	2.4	18
64	Grain boundary segregation, phase formation, and their influence on the coercivity of rapidly solidified SmFe11Ti hard magnetic alloys. Physical Review Materials, 2020, 4, .	2.4	6
65	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>L</mml:mi><mml:msub><mml:mn>1</mml:mn></mml:msub><mml:mn> rare-earth-free permanent magnets: The effects of twinning versus dislocations in Mn-Al magnets. Physical Review Materials, 2020, 4, .	2.4	21
66	Influence of the martensitic transformation kinetics on the magnetocaloric effect in Ni-Mn-In. Physical Review Materials, 2020, 4, .	2.4	6
67	Effect of N, C, and B interstitials on the structural and magnetic properties of alloys with Cu3Au structure. Physical Review Research, 2020, 2, .	3.6	10
68	The quaternary system Sm-Fe-Mo-Al and the effect of Al substitution on magnetic and structural properties of its ThMn12 phase. Journal of Alloys and Compounds, 2019, 770, 301-307.	5.5	11
69	Electronic entropy change in Ni-doped FeRh. Materials Today Physics, 2019, 9, 100129.	6.0	7
70	Calculating temperature-dependent properties of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Nd</mml:mi><mml:mn>2</mml:mn></mml:mrow><mml:mrow></mml: mathvariant="normal">B</mml:mi></mml:mrow></mml:math> permanent magnets by atomistic spin model simulations. Physical Review B, 2019, 99, .	3.2	37
71	Making a Cool Choice: The Materials Library of Magnetic Refrigeration. Advanced Energy Materials, 2019, 9, 1901322.	19.5	140
72	Experimental and computational analysis of binary Fe-Sn ferromagnetic compounds. Acta Materialia, 2019, 180, 126-140.	7.9	14

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73	Rapid solidification of Nd1+XFe11Ti compounds: Phase formation and magnetic properties. Acta Materialia, 2019, 180, 15-23.	7.9	24
74	Recyclable Phosphor Films: Three Water-Soluble Binder Systems Enabling the Recovery of Phosphor Powders in White LEDs. Journal of Electronic Materials, 2019, 48, 2294-2300.	2.2	7
75	Ce and La as substitutes for Nd in Nd2Fe14B-based melt-spun alloys and hot-deformed magnets: a comparison of structural and magnetic properties. Journal of Magnetism and Magnetic Materials, 2019, 478, 198-205.	2.3	17
76	Tuning the magnetocrystalline anisotropy ofFe3Snby alloying. Physical Review B, 2019, 99, .	3.2	17
77	Recyclable phosphor sheet based on polyvinyl alcohol for LED lighting using remote phosphor technology. Materials Technology, 2019, 34, 178-183.	3.0	3
78	Tunable first order transition in La(Fe,Cr,Si)13 compounds: Retaining magnetocaloric response despite a magnetic moment reduction. Acta Materialia, 2019, 175, 406-414.	7.9	45
79	Database of novel magnetic materials for high-performance permanent magnet development. Computational Materials Science, 2019, 168, 188-202.	3.0	41
80	Towards manufacturing of Nd-Fe-B magnets by continuous rotary swaging of cast alloy. Journal of Magnetism and Magnetic Materials, 2019, 490, 165405.	2.3	8
81	Development of high coercivity anisotropic Nd-Fe-B/Fe nanocomposite powder using hydrogenation disproportionation desorption recombination process. Acta Materialia, 2019, 175, 276-285.	7.9	27
82	Structural and magnetic properties of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ce</mml:mtext></mml:mrow><mml:mrow><mml:mn>1</mml:m Acta Materialia, 2019, 172, 131-138.	7.9	15
83	Magnetocaloric effect of gadolinium in high magnetic fields. Physical Review B, 2019, 99, .	3.2	60
84	Computational study on microstructure evolution and magnetic property of laser additively manufactured magnetic materials. Computational Mechanics, 2019, 64, 917-935.	4.0	14
85	Influence of severe plastic deformation on magnetocaloric effect of dysprosium. Journal of Magnetism and Magnetic Materials, 2019, 479, 307-311.	2.3	10
86	Anomalous Hall effect in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>La</mml:mi><mml:msub><mml:mrow></mml:mrow><mml:mrow><mml:mo>(</mml compounds. Physical Review B, 2019, 100, .	3.2	4
87	High-Throughput Screening of Rare-Earth-Lean Intermetallic 1-13-X Compounds for Good Hard-Magnetic Properties. Metals, 2019, 9, 1096.	2.3	7
88	Anisotropy control in magnetic nanostructures through field-assisted chemical vapor deposition. Nanoscale Advances, 2019, 1, 4290-4295.	4.6	5
89	Dynamics of the magnetoelastic phase transition and adiabatic temperature change in Mn1.3Fe0.7P0.5Si0.55. Journal of Magnetism and Magnetic Materials, 2019, 477, 287-291.	2.3	12
90	Magnetic and magnetocaloric properties of the Co2-xMn B system by experiment and density functional theory. Acta Materialia, 2019, 165, 270-277.	7.9	8

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91	Critical raw materials â€“ Advanced recycling technologies and processes: Recycling of rare earth metals out of end of life magnets by bioleaching with various bacteria as an example of an intelligent recycling strategy. Minerals Engineering, 2019, 134, 104-117.	4.3	53
92	Ab initio phase stabilities of Ce-based hard magnetic materials and comparison with experimental phase diagrams. Physical Review Materials, 2019, 3, .	2.4	18
93	Intrinsic magnetic properties of hydrided and non-hydrided Nd5Fe17 single crystals. Journal of Alloys and Compounds, 2018, 741, 1012-1020.	5.5	9
94	Manipulation of matter by electric and magnetic fields: Toward novel synthesis and processing routes of inorganic materials. Materials Today, 2018, 21, 527-536.	14.2	63
95	Magnetocaloric materials for refrigeration near room temperature. MRS Bulletin, 2018, 43, 269-273.	3.5	50
96	Anisotropic local hardening in hot-deformed Nd-Fe-B permanent magnets. Acta Materialia, 2018, 147, 176-183.	7.9	20
97	Heavy rare earth free, free rare earth and rare earth free magnets - Vision and reality. Scripta Materialia, 2018, 154, 289-294.	5.2	149
98	Origin of field-induced discontinuous phase transitions in Nd2Fe17. Physical Review B, 2018, 97, .	3.2	4
99	Probing Structural and Magnetic Instabilities and Hysteresis in Heuslers by Density Functional Theory Calculations (Phys. Status Solidi B 2/2018). Physica Status Solidi (B): Basic Research, 2018, 255, 1870108.	1.5	2
100	Microstructural origin of hysteresis in Ni-Mn-In based magnetocaloric compounds. Acta Materialia, 2018, 147, 342-349.	7.9	28
101	In-situ magnetic force microscopy analysis of magnetization and demagnetization behavior in Al3+ substituted Sr-hexaferrite. Acta Materialia, 2018, 146, 85-96.	7.9	9
102	Consolidation of cobalt nanorods: A new route for rare-earth free nanostructured permanent magnets. Acta Materialia, 2018, 145, 290-297.	7.9	30
103	Plastically deformed Gd-X (Xâ€“=â€“Y, In, Zr, Ga, B) solid solutions for magnetocaloric regenerator of parallel plate geometry. Journal of Alloys and Compounds, 2018, 754, 207-214.	5.5	19
104	Momentâ€Volume Coupling in La(Fe_{1â^'x}Si_x)₁₃. Physica Status Solidi (B): Basic Research, 2018, 255, 1700465.	1.5	14
105	Towards an Alloy Recycling of Ndâ€“Feâ€“B Permanent Magnets in a Circular Economy. Journal of Sustainable Metallurgy, 2018, 4, 163-175.	2.3	25
106	Probing Structural and Magnetic Instabilities and Hysteresis in Heuslers by Density Functional Theory Calculations. Physica Status Solidi (B): Basic Research, 2018, 255, 1700296.	1.5	11
107	Effects of severe plastic deformation on the magnetic properties of terbium. AIP Advances, 2018, 8, 048103.	1.3	12
108	Magnetocaloric effect in cold rolled foils of Gd100â^'In (xâ€“=â€“0, 1, 3). Journal of Magnetism and Magnetic Materials, 2018, 459, 46-48.	2.3	13

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109	A Comparative Study on the Magnetocaloric Properties of Niâ€Mnâ€X(â€Co) Heusler Alloys. Physica Status Solidi (B): Basic Research, 2018, 255, 1700331.	1.5	45
110	Advanced magnetic materials could drive next-generation energy technologies. MRS Bulletin, 2018, 43, 918-919.	3.5	3
111	Probing Glassiness in Heuslers via Density Functional Theory Calculations. Springer Series in Materials Science, 2018, , 153-182.	0.6	1
112	A multicaloric cooling cycle that exploits thermal hysteresis. Nature Materials, 2018, 17, 929-934.	27.5	158
113	The role of Ni in modifying the order of the phase transition of La(Fe,Ni,Si)13. Acta Materialia, 2018, 160, 137-146.	7.9	45
114	Determining the vibrational entropy change in the giant magnetocaloric material <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi mathvariant="normal">LaFe</mml:mi></mml:mrow><mml:mrow><mml:mn>11.6</mml:mn></mml:mrow></mml:msub><mml:msub><mml:r mathvariant="normal">Si</mml:mi></mml:mrow><mml:mrow><mml:mn>1.4</mml:mn></mml:mrow></mml:msub></mml:math> by nuclear resonant inelastic x-ray scattering. Physical Review B, 2018, 98, .	3.2	14
115	Millisecond Dynamics of the Magnetocaloric Effect in a Firstâ€•and Secondâ€Order Phase Transition Material. Energy Technology, 2018, 6, 1470-1477.	3.8	10
116	A quantitative criterion for determining the order of magnetic phase transitions using the magnetocaloric effect. Nature Communications, 2018, 9, 2680.	12.8	273
117	Hysteresis Design of Magnetocaloric Materialsâ€”From Basic Mechanisms to Applications. Energy Technology, 2018, 6, 1397-1428.	3.8	79
118	Infrared heating mediated synthesis and characterization of FeCo/C nanocomposites. Journal of Magnetism and Magnetic Materials, 2017, 429, 94-101.	2.3	12
119	Experimental and computational analysis of magnetization reversal in (Nd,Dy)-Fe-B core shell sintered magnets. Acta Materialia, 2017, 127, 498-504.	7.9	53
120	Production and properties of metal-bonded La(Fe,Mn,Si)13H composite material. Acta Materialia, 2017, 127, 389-399.	7.9	70
121	Viewpoint on the letter â€˜Self pumping magnetic coolingâ€™ by V Chaudhary et al (2017 J. Phys. D:) Tj ETQq1 1 0.784314	2.8	3
122	Temperature-dependent first-order reversal curve measurements on unusually hard magnetic low-temperature phase of MnBi. Physical Review B, 2017, 95, .	3.2	19
123	Room-temperature five-tesla coercivity of a rare-earth-free shell-ferromagnet. Applied Physics Letters, 2017, 110, .	3.3	13
124	Heat Exchangers From Metal-Bonded La(Fe,Mn,Si)₁₃H_xPowder. IEEE Transactions on Magnetics, 2017, 53, 1-7.	2.1	15
125	Microstructural and magnetic properties of Mn-Fe-P-Si (Fe2 P-type) magnetocaloric compounds. Acta Materialia, 2017, 132, 222-229.	7.9	92
126	Properties of magnetically semi-hard (FexCo1â€™x)3B compounds. Journal of Alloys and Compounds, 2017, 696, 543-547.	5.5	17

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127	Reversibility of minor hysteresis loops in magnetocaloric Heusler alloys. Applied Physics Letters, 2017, 110, .	3.3	42
128	Magnetic properties of Mo-stabilized bulk Fe3B magnet. Scripta Materialia, 2017, 130, 234-237.	5.2	11
129	Correlation of microchemistry of cell boundary phase and interface structure to the coercivity of Sm(Co0.784Fe0.100Cu0.088Zr0.028)7.19 sintered magnets. Acta Materialia, 2017, 126, 1-10.	7.9	129
130	High-performance solid-state cooling materials: Balancing magnetocaloric and non-magnetic properties in dual phase La-Fe-Si. Acta Materialia, 2017, 125, 506-512.	7.9	71
131	Influence of magnetic field, chemical pressure and hydrostatic pressure on the structural and magnetocaloric properties of the Mnâ€“Niâ€“Ge system. Journal Physics D: Applied Physics, 2017, 50, 464005.	2.8	30
132	Predicting the tricritical point composition of a series of LaFeSi magnetocaloric alloys via universal scaling. Journal Physics D: Applied Physics, 2017, 50, 414004.	2.8	38
133	The 2017 Magnetism Roadmap. Journal Physics D: Applied Physics, 2017, 50, 363001.	2.8	279
134	Bulk combinatorial analysis for searching new rare-earth free permanent magnets: Reactive crucible melting applied to the Fe-Sn binary system. Acta Materialia, 2017, 141, 434-443.	7.9	21
135	Multiscale Examination of Strain Effects in Nd-Fe-B Permanent Magnets. Physical Review Applied, 2017, 8, .	3.8	15
136	A Matter of Size and Stress: Understanding the Firstâ€Order Transition in Materials for Solidâ€State Refrigeration. Advanced Functional Materials, 2017, 27, 1606735.	14.9	55
137	Identification and recovery of rare-earth permanent magnets from waste electrical and electronic equipment. Waste Management, 2017, 68, 482-489.	7.4	80
138	Direct Measurement of the Magnetocaloric Effect in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>La</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mi>Fe</mml:mi><mml:mo>,</mml:mo><mml:mi>Si</mml:mi><mml:mo>,</mml:mo><mml:mi>Co</	3.8	28
139	in Pulsed Magnetic Fields. Physical Review Applied, 2017, 8, . A systematic study of HDDR processing conditions for the recycling of end-of-life Nd-Fe-B magnets. Journal of Alloys and Compounds, 2017, 724, 51-61.	5.5	33
140	Atomic structure and domain wall pinning in samarium-cobalt-based permanent magnets. Nature Communications, 2017, 8, 54.	12.8	112
141	The effect of plastic deformation on magnetic and magnetocaloric properties of Gd-B alloys. Journal of Magnetism and Magnetic Materials, 2017, 442, 360-363.	2.3	16
142	Synthesis, morphology, thermal stability and magnetic properties of Î±â€³-Fe16N2 nanoparticles obtained by hydrogen reduction of Î³-Fe2O3 and subsequent nitrogenation. Acta Materialia, 2017, 123, 214-222.	7.9	38
143	Normal and abnormal grain growth in fine-grained Nd-Fe-B sintered magnets prepared from He jet milled powders. Journal of Magnetism and Magnetic Materials, 2017, 426, 698-707.	2.3	21
144	Enhancement of coercivity and saturation magnetization of Al3+ substituted M-type Sr-hexaferrites. Journal of Alloys and Compounds, 2017, 690, 979-985.	5.5	47

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145	REE Recovery from End-of-Life NdFeB Permanent Magnet Scrap: A Critical Review. Journal of Sustainable Metallurgy, 2017, 3, 122-149.	2.3	365
146	The Resource Basis of Magnetic Refrigeration. Journal of Industrial Ecology, 2017, 21, 1291-1300.	5.5	39
147	Grain boundary diffusion of different rare earth elements in Nd-Fe-B sintered magnets by experiment and FEM simulation. Acta Materialia, 2017, 124, 421-429.	7.9	111
148	Behaviour of the Young's modulus at the magnetocaloric transition in La(Fe,Co,Si)13. Journal of Alloys and Compounds, 2017, 697, 427-433.	5.5	10
149	High energy proton induced radiation damage of rare earth permanent magnet quadrupoles. Review of Scientific Instruments, 2017, 88, 125103.	1.3	1
150	Microwave synthesis and magnetic properties of Lavesâ€type Ti ₂ M ₃ Si (Mâ€‰=â€‰Mn) Tj ETQq0 0 0 rgB	0.8	2
151	Co@CoSb Coreâ€“Shell Nanorods: From Chemical Coating at the Nanoscale to Macroscopic Consolidation. Chemistry of Materials, 2016, 28, 4982-4990.	6.7	11
152	Multiferroic Clusters: A New Perspective for Relaxorâ€Type Roomâ€Temperature Multiferroics. Advanced Functional Materials, 2016, 26, 2111-2121.	14.9	42
153	On the synthesis and microstructure analysis of high performance MnBi. AIP Advances, 2016, 6, .	1.3	24
154	Micromagnetic simulations on the grain shape effect in Nd-Fe-B magnets. Journal of Applied Physics, 2016, 120, .	2.5	31
155	A unified approach to describe the thermal and magnetic hysteresis in Heusler alloys. Applied Physics Letters, 2016, 109, .	3.3	14
156	Engineering perpendicular magnetic anisotropy in Fe via interstitial nitrogenation: N choose K. APL Materials, 2016, 4, .	5.1	13
157	The influence of magnetocrystalline anisotropy on the magnetocaloric effect: A case study on Co2B. Applied Physics Letters, 2016, 109, .	3.3	27
158	Direct measurement of the magnetocaloric effect in cementite. Journal of Magnetism and Magnetic Materials, 2016, 410, 105-108.	2.3	16
159	First-Order Reversal Curve (FORC) Analysis of Magnetocaloric Heusler-Type Alloys. IEEE Magnetics Letters, 2016, 7, 1-4.	1.1	30
160	The search for room temperature tetragonal phases of Fe-Mn-Ga: A reactive crucible melting approach. Journal of Alloys and Compounds, 2016, 683, 198-204.	5.5	17
161	Impact of lattice dynamics on the phase stability of metamagnetic FeRh: Bulk and thin films. Physical Review B, 2016, 94, .	3.2	44
162	Dynamical Effects of the Martensitic Transition in Magnetocaloric Heusler Alloys from Direct<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi mathvariant="normal">Î”</mml:mi><mml:msub><mml:mi>T</mml:mi><mml:mi>ad</mml:mi></mml:msub></mml:math>Measurements under Different Magnetic-Field-Sweep Rates. Physical Review Applied, 2016, 5, .	3.8	68

#	Article	IF	Citations
163	Mastering hysteresis in magnetocaloric materials. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150308.	3.4	210
164	Contradictory role of the magnetic contribution in inverse magnetocaloric Heusler materials. Physical Review B, 2016, 93, .	3.2	112
165	Magnetic anisotropy of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">S</mml:mi><mml:msub><mml:mi mathvariant="normal">m</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">F</mml:mi><mml:msub><mml:mi mathvariant="normal">e</mml:mi><mml:mn>17</mml:mn></mml:msub></mml:mrow></mml:math>single	3.2	11
166	Multiferroics: Multiferroic Clusters: A New Perspective for Relaxor-Type Room-Temperature Multiferroics (Adv. Funct. Mater. 13/2016). Advanced Functional Materials, 2016, 26, 2110-2110.	14.9	0
167	Magnetic, magnetocaloric and structural properties of manganese based monoborides doped with iron and cobalt â€“ A candidate for thermomagnetic generators. Acta Materialia, 2016, 113, 213-220.	7.9	23
168	Grain boundary diffusion in nanocrystalline Nd-Fe-B permanent magnets with low-melting eutectics. Acta Materialia, 2016, 115, 354-363.	7.9	73
169	Assessment of the magnetocaloric effect in La,Pr(Fe,Si) under cycling. Journal of Magnetism and Magnetic Materials, 2016, 406, 259-265.	2.3	62
170	Magnetic Properties of Nd and Sm Rare-Earth Metals After Severe Plastic Deformation. IEEE Magnetics Letters, 2016, 7, 1-4.	1.1	4
171	Rotational Magnetocaloric Effect in the Er₂Fe₁₄B Single Crystal. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	13
172	Adiabatic temperature change of micro- and nanocrystalline Y2Fe17 heat-exchangers for magnetic cooling. Journal of Alloys and Compounds, 2016, 668, 40-45.	5.5	7
173	On the S(T) diagram of magnetocaloric materials with first-order transition: Kinetic and cyclic effects of Heusler alloys. Acta Materialia, 2016, 107, 1-8.	7.9	82
174	Microstructure and magnetic properties of melt-spun Alnico-5 alloys. Journal of Magnetism and Magnetic Materials, 2016, 407, 230-234.	2.3	13
175	Giant adiabatic temperature change in FeRh alloys evidenced by direct measurements under cyclic conditions. Acta Materialia, 2016, 106, 15-21.	7.9	145
176	Magnetische Materialien â€” SchlÃ¼sselkomponenten fÃ¼r neue Energietechnologien. , 2016, , 99-118.		8
177	Magnetic ordering in magnetic shape memory alloy Ni-Mn-In-Co. Physical Review B, 2015, 92, .	3.2	14
178	Dependence of the inverse magnetocaloric effect on the field-change rate in Mn3GaC and its relationship to the kinetics of the phase transition. Journal of Applied Physics, 2015, 117, 233902.	2.5	24
179	Sorption properties and reversibility of Ti(IV) and Nb(V)-fluoride doped-Ca(BH4)2â€“MgH2 system. Journal of Alloys and Compounds, 2015, 622, 989-994.	5.5	18
180	Magnetocaloric and hysteretic properties of Ni-Mn based Heusler alloys. , 2015, , .		0

#	Article	IF	Citations
181	Effect of DyF₃ on the corrosion behavior of hotâ€pressed Ndâ€“Feâ€“B permanent magnets. Materials and Corrosion - Werkstoffe Und Korrosion, 2015, 66, 152-157.	1.5	8
182	Verfahren zum Recycling von seltenerdhaltigen Permanentmagneten. Chemie-Ingenieur-Technik, 2015, 87, 1477-1485.	0.8	6
183	Increased magnetic moment induced by lattice expansion from Î±-Fe to Î±-Fe₈N. , 2015, , .		1
184	Magnet properties of Mn70Ga30 prepared by cold rolling and magnetic field annealing. Journal of Magnetism and Magnetic Materials, 2015, 382, 265-270.	2.3	22
185	Calculation of remanence and degree of texture from EBSD orientation histograms and XRD rocking curves in Ndâ€“Feâ€“B sintered magnets. Journal of Magnetism and Magnetic Materials, 2015, 382, 219-224.	2.3	20
186	Temperature dependent low-field measurements of the magnetocaloric Î”T with sub-mK resolution in small volume and thin film samples. Applied Physics Letters, 2015, 106, .	3.3	18
187	Large reversible magnetocaloric effect in Ni-Mn-In-Co. Applied Physics Letters, 2015, 106, .	3.3	181
188	Polymer-Bonded La(Fe,Mn,Si)₁₃H_x Plates for Heat Exchangers. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	28
189	Element-Resolved Thermodynamics of Magnetocaloric<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>LaFe</mml:mi><mml:mrow><mml:mn>13</mml:mn><mml:mo>â^’</mml:mo><mml:mi>x</mml:mi> Physical Review Letters, 2015, 114, 057202.	7.8	78
190	Replacement and Original Magnet Engineering Options (ROMEOs): A European Seventh Framework Project to Develop Advanced Permanent Magnets Without, or with Reduced Use of, Critical Raw Materials. Jom, 2015, 67, 1306-1317.	1.9	31
191	Increased magnetic moment induced by lattice expansion from Î±-Fe to Î±â€²-Fe8N. Journal of Applied Physics, 2015, 117, .	2.5	33
192	Asymmetric first-order transition and interlocked particle state in magnetocaloric La(Fe,Si)₁₃. Physica Status Solidi - Rapid Research Letters, 2015, 9, 136-140.	2.4	54
193	Preparation, Characterization, and Modeling of Ultrahigh Coercivity Smâ€“Co Thin Films. Advanced Electronic Materials, 2015, 1, 1500009.	5.1	27
194	Effect of severe plastic deformation on the specific heat and magnetic properties of cold rolled Gd sheets. Journal of Applied Physics, 2015, 117, .	2.5	23
195	Local electronic and magnetic properties of pure and Mn-containing magnetocaloric LaFe_{13â^’x}Si_xcompounds inferred from MÃ¶ssbauer spectroscopy and magnetometry. Journal Physics D: Applied Physics, 2015, 48, 305006.	2.8	13
196	Magnetic anisotropy of La2Co7. Journal of Applied Physics, 2015, 118, .	2.5	14
197	Polymer-bonded La(Fe, Mn, Si)<inf>13</inf>H<inf>x</inf> heat exchangers with optimized magnetocaloric properties. , 2015, , .		0
198	On the preparation of La(Fe,Mn,Si)13H polymer-composites with optimized magnetocaloric properties. Journal of Magnetism and Magnetic Materials, 2015, 396, 228-236.	2.3	73

#	Article	IF	Citations
199	Magnetic properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mo>(</mml:mo><mml:msub><mml:mi>Fe</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi	3.2	62
200	Growth, structure, and magnetic properties of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0011.gif" overflow="scroll"><mml:msup><mml:mrow><mml:mi mathvariant="bold-italic">Î³</mml:mi></mml:mrow><mml:mrow><mml:mo>â€²</mml:mo></mml:mrow></mml:msup><mml:msub><mml:mi mathvariant="normal">-Fe</mml:mi></mml:mrow><mml:mrow><mml:mn mathvariant="bold">4</mml:mn></mml:mrow></mml:msub><mml:mi mathvariant="normal">N</mml:mi>	2.8	33
201	Mechanism of the texture development in hydrogen-disproportionationâ€“desorption-recombination (HDDR) processed Ndâ€“Feâ€“B powders. Acta Materialia, 2015, 85, 42-52.	7.9	49
202	Microstructure and magnetic properties of Mnâ€“Alâ€“C alloy powders prepared by ball milling. Journal of Alloys and Compounds, 2015, 622, 524-528.	5.5	65
203	A new type of La(Fe,Si)13-based magnetocaloric composite with amorphous metallic matrix. Scripta Materialia, 2015, 95, 50-53.	5.2	57
204	Large entropy change, adiabatic temperature change, and small hysteresis in La(Fe,Mn)11.6Si1.4 strip-cast flakes. Journal of Magnetism and Magnetic Materials, 2015, 377, 90-94.	2.3	46
205	Temperature-dependent Dy diffusion processes in Ndâ€“Feâ€“B permanent magnets. Acta Materialia, 2015, 83, 248-255.	7.9	139
206	The effect of surface grain reversal on the AC losses of sintered Ndâ€“Feâ€“B permanent magnets. Journal of Magnetism and Magnetic Materials, 2015, 375, 43-48.	2.3	6
207	Epoxy-bonded Laâ€“Feâ€“Coâ€“Si magnetocaloric plates. Journal of Magnetism and Magnetic Materials, 2015, 375, 65-73.	2.3	82
208	High energy product in Battenberg structured magnets. Applied Physics Letters, 2014, 105, .	3.3	26
209	Coercivity enhancement in hot-pressed Nd-Fe-B permanent magnets with low melting eutectics. Journal of Applied Physics, 2014, 115, 17A705.	2.5	22
210	Scanning Hall Probe Imaging of LaFe_{13-x}Si_x. Advances in Science and Technology, 2014, 93, 219-224.	0.2	3
211	The dynamics of spontaneous hydrogen segregation in LaFe13â^'xSixHy. Journal of Applied Physics, 2014, 115, .	2.5	19
212	Pathways for novel magnetocaloric materials: A processing prospect. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 1039-1042.	0.8	9
213	Influence of defect thickness on the angular dependence of coercivity in rare-earth permanent magnets. Applied Physics Letters, 2014, 104, .	3.3	62
214	Impact of magnetization state on the corrosion of sintered Nd-Fe-B magnets for e-motor applications. Materials and Corrosion - Werkstoffe Und Korrosion, 2014, 65, 891-896.	1.5	8
215	Magnetic Properties of (Fe,Co)₂B Alloys With Easy-Axis Anisotropy. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	16
216	Net-shape and crack-free production of Ndâ€“Feâ€“B magnets by hot deformation. Journal of Alloys and Compounds, 2014, 589, 301-306.	5.5	37

#	Article	IF	Citations
217	Diffusion processes in hot-deformed Ndâ€“Feâ€“B magnets with DyF3 additions. Journal of Magnetism and Magnetic Materials, 2014, 358-359, 163-169.	2.3	30
218	Impact of different Nd-rich crystal-phases on the coercivity of Ndâ€“Feâ€“B grain ensembles. Scripta Materialia, 2014, 70, 35-38.	5.2	79
219	Systematic investigation of Mn substituted La(Fe,Si)13 alloys and their hydrides for room-temperature magnetocaloric application. Journal of Alloys and Compounds, 2014, 598, 27-32.	5.5	107
220	Towards high-performance permanent magnets without rare earths. Journal of Physics Condensed Matter, 2014, 26, 064205.	1.8	91
221	On the reversible and fully repeatable increase in coercive field of sintered Ndâ€“Feâ€“B magnets following post sinter annealing. Journal of Magnetism and Magnetic Materials, 2014, 360, 157-164.	2.3	18
222	Heat exchangers made of polymer-bonded La(Fe,Si)13. Journal of Applied Physics, 2014, 115, .	2.5	66
223	Structural and magnetic properties of heat-treated ultrafine single crystalline Nd2Fe14B particles obtained by ball-milling of dynamic hydrogenation disproportionation desorption and recombination powder. Scripta Materialia, 2014, 78-79, 33-36.	5.2	6
224	Atomic-scale features of phase boundaries in hot deformed Ndâ€“Feâ€“Coâ€“Bâ€“Ga magnets infiltrated with a Ndâ€“Cu eutectic liquid. Acta Materialia, 2014, 77, 111-124.	7.9	65
225	B1â€Mobilstor: Materials for Sustainable Energy Storage Techniques â€“ Lithium Containing Compounds for Hydrogen and Electrochemical Energy Storage. Advanced Engineering Materials, 2014, 16, 1189-1195.	3.5	17
226	First-principles calculation of the instability leading to giant inverse magnetocaloric effects. Physical Review B, 2014, 89, .	3.2	73
227	Modeling of Nd-Oxide Grain Boundary Phases in Nd-Fe-B Sintered Magnets. Jom, 2014, 66, 1138-1143.	1.9	15
228	Interface effects in NaAlH4â€“carbon nanocomposites for hydrogen storage. International Journal of Hydrogen Energy, 2014, 39, 10175-10183.	7.1	16
229	Unusual oxidation behavior of light metal hydride by tetrahydrofuran solvent molecules confined in ordered mesoporous carbon. Journal of Materials Research, 2014, 29, 55-63.	2.6	2
230	Influence of thermal hysteresis and field cycling on the magnetocaloric effect in LaFe11.6Si1.4. Journal of Alloys and Compounds, 2013, 552, 310-317.	5.5	70
231	Magnetocaloric and magnetic properties of Ni2Mn1â^'xCuxGa Heusler alloys: An insight from the direct measurements and ab initio and Monte Carlo calculations. Journal of Applied Physics, 2013, 114, .	2.5	30
232	Properties of isolated single crystalline and textured polycrystalline nano/sub-micrometre Nd2Fe14B particles obtained from milling of HDDR powder. Journal Physics D: Applied Physics, 2013, 46, 375004.	2.8	15
233	Selective laser melting of La(Fe,Co,Si)13 geometries for magnetic refrigeration. Journal of Applied Physics, 2013, 114, .	2.5	111
234	High-Field Transitions in ErFe11Ti and HoFe11Ti Single Crystals. Journal of Low Temperature Physics, 2013, 170, 307-312.	1.4	5

#	Article	IF	Citations
235	Giant induced anisotropy ruins the magnetocaloric effect in gadolinium. Journal of Magnetism and Magnetic Materials, 2013, 331, 33-36.	2.3	34
236	Mechanochemical synthesis of NaBH4 starting from NaHâ€“MgB2 reactive hydride composite system. International Journal of Hydrogen Energy, 2013, 38, 2363-2369.	7.1	19
237	NaAlH4 confined in ordered mesoporous carbon. International Journal of Hydrogen Energy, 2013, 38, 8829-8837.	7.1	21
238	Insight into the decomposition pathway of the complex hydride Al3Li4(BH4)13. International Journal of Hydrogen Energy, 2013, 38, 2790-2795.	7.1	15
239	Influence of thermal treatment on magnetocaloric properties of Gd cold rolled ribbons. Journal of Applied Physics, 2013, 113, 17A933.	2.5	22
240	High hydrogen content super-lightweight intermetallics fromÂthe Liâ€“Mgâ€“Si system. International Journal of Hydrogen Energy, 2013, 38, 5724-5737.	7.1	17
241	High-coercivity Ndâ€“Feâ€“B thick films without heavy rare earth additions. Acta Materialia, 2013, 61, 4920-4927.	7.9	42
242	Chemical State, Distribution, and Role of Ti- and Nb-Based Additives on the Ca(BH₄)₂ System. Journal of Physical Chemistry C, 2013, 117, 4394-4403.	3.1	25
243	Dependence of coercivity on length ratios in sub-micron Nd2Fe14B particles with rectangular prism shape. Journal of Applied Physics, 2013, 114, .	2.5	24
244	Ca(BH₄)₂ + MgH₂: Desorption Reaction and Role of Mg on Its Reversibility. Journal of Physical Chemistry C, 2013, 117, 3846-3852.	3.1	35
245	Recycling Used Ndâ€Feâ€B Sintered Magnets via a Hydrogenâ€Based Route to Produce Anisotropic, Resin Bonded Magnets. Advanced Energy Materials, 2013, 3, 151-155.	19.5	63
246	The maximal cooling power of magnetic and thermoelectric refrigerators with La(FeCoSi)13 alloys. Journal of Applied Physics, 2013, 113, .	2.5	29
247	Effect of milling parameters on SmCo5 nanoflakes prepared by surfactant-assisted high energy ball milling. Journal of Applied Physics, 2013, 113, .	2.5	42
248	Electrical and magnetic properties of hot-deformed Nd-Fe-B magnets with different DyF3 additions. Journal of Applied Physics, 2013, 114, .	2.5	39
249	Numerical Simulation of Magnetic Cooling Cycles. Solid State Phenomena, 2012, 190, 319-322.	0.3	0
250	Effect of carbon on magnetocaloric effect of LaFe11.6Si1.4 compounds and on the thermal stability of its hydrides. Journal of Applied Physics, 2012, 111, .	2.5	41
251	Reversible solid-state hydrogen-pump driven by magnetostructural transformation in the prototype system La(Fe,Si)13Hy. Journal of Applied Physics, 2012, 112, .	2.5	44
252	Magnetic refrigeration: phase transitions, itinerant magnetism and spin fluctuations. Philosophical Magazine, 2012, 92, 292-303.	1.6	21

#	Article	IF	Citations
253	Evaluation of the reliability of the measurement of key magnetocaloric properties: A round robin study of La(Fe,Si,Mn)HÎ´ conducted by the SSEEC consortium of European laboratories. International Journal of Refrigeration, 2012, 35, 1528-1536.	3.4	54
254	Enhanced reversibility of H2 sorption in nanoconfined complex metal hydrides by alkali metal addition. Journal of Materials Chemistry, 2012, 22, 13209.	6.7	32
255	Magnetocaloric materials with first-order phase transition: thermal and magnetic hysteresis in LaFe11.8Si1.2 and Ni2.21Mn0.77Ga1.02 (invited). Journal of Applied Physics, 2012, 111, .	2.5	50
256	Contributions to the entropy change in melt-spun LaFe_{11.6}Si_{1.4}. Journal Physics D: Applied Physics, 2012, 45, 179501.	2.8	2
257	Reproducibility of martensitic transformation and phase constitution in Niâ€“Coâ€“Al. Intermetallics, 2012, 20, 55-62.	3.9	15
258	Magnetic Materials for Energy Applications. Jom, 2012, 64, 750-751.	1.9	6
259	Hysteresis and magnetocaloric effect at the magnetostructural phase transition of Ni-Mn-Ga and Ni-Mn-Co-Sn Heusler alloys. Physical Review B, 2012, 85, .	3.2	119
260	Understanding the microstructure and coercivity of high performance NdFeB-based magnets. Scripta Materialia, 2012, 67, 536-541.	5.2	192
261	Exploring La(Fe,Si)13-based magnetic refrigerants towards application. Scripta Materialia, 2012, 67, 584-589.	5.2	157
262	Magnetocaloric effect of an Fe-based metallic glass compared to benchmark gadolinium. Journal of Applied Physics, 2012, 112, .	2.5	23
263	In situ magnetic force microscope studies of magnetization reversal of interaction domains in hot deformed Nd-Fe-B magnets. Journal of Applied Physics, 2012, 111, .	2.5	41
264	Procedure for numerical integration of the magnetocaloric effect. Journal of Applied Physics, 2012, 112, 063920.	2.5	8
265	Giant magnetocaloric effect driven by structural transitions. Nature Materials, 2012, 11, 620-626.	27.5	1,266
266	Wireless and passive temperature indicator utilizing the large hysteresis of magnetic shape memory alloys. Applied Physics Letters, 2012, 101, 042412.	3.3	3
267	NiMnâ€Based Alloys and Composites for Magnetically Controlled Dampers and Actuators. Advanced Engineering Materials, 2012, 14, 653-667.	3.5	38
268	The effect of the thermal decomposition reaction on the mechanical and magnetocaloric properties of La(Fe,Si,Co)13. Acta Materialia, 2012, 60, 4268-4276.	7.9	76
269	Magnetostructural transition and adiabatic temperature change in Mnâ€“Coâ€“Ge magnetic refrigerants. Scripta Materialia, 2012, 66, 642-645.	5.2	53
270	Ultra-fine grained Ndâ€“Feâ€“B by high pressure reactive milling and desorption. Journal of Magnetism and Magnetic Materials, 2012, 324, 2731-2735.	2.3	11

#	Article	IF	Citations
271	Reversible Magnetic Field Induced Strain in Ni₂MnGaâ€Polymerâ€Composites. Advanced Engineering Materials, 2012, 14, 20-27.	3.5	25
272	Synthesis of LiNH2 + LiH by reactive milling of Li3N. Faraday Discussions, 2011, 151, 253.	3.2	13
273	Magnetic field dependence of the maximum magnetic entropy change. Physical Review B, 2011, 83, .	3.2	81
274	In Situ Raman Cell for High Pressure and Temperature Studies of Metal and Complex Hydrides. Analytical Chemistry, 2011, 83, 3199-3204.	6.5	9
275	Effect of Transition Metal Fluorides on the Sorption Properties and Reversible Formation of Ca(BH₄)₂. Journal of Physical Chemistry C, 2011, 115, 2497-2504.	3.1	58
276	An Experimental Investigation of Unimodal and Bimodal Magnetorheological Fluids with an Application in Prosthetic Devices. Journal of Intelligent Material Systems and Structures, 2011, 22, 539-549.	2.5	22
277	Experimental Evidence of Ca[B12H12] Formation During Decomposition of a Ca(BH4)2 + MgH2 Based Reactive Hydride Composite. Journal of Physical Chemistry C, 2011, 115, 18010-18014.	3.1	43
278	Structure and Magnetic Properties of L10-Ordered Feâ€“Pt Alloys and Nanoparticles. Handbook of Magnetic Materials, 2011, , 291-407.	0.6	27
279	Magnetic field dependence of the maximum adiabatic temperature change. Applied Physics Letters, 2011, 99, .	3.3	39
280	Local orientation analysis by electron backscatter diffraction in highly textured sintered, die-upset, and hydrogenation disproportionation desorption and recombination Ndâ€“Feâ€“B magnets. Journal of Applied Physics, 2011, 109, 07A764.	2.5	7
281	The texture of Nd oxide grains in Nd-Fe-B sintered magnets studied by synchrotron radiation. Journal of Applied Physics, 2011, 110, 026103.	2.5	6
282	Hydrogen and Zr-based metallic glasses: Gas/solid absorption process and structure evolution. Journal of Alloys and Compounds, 2011, 509, 1636-1643.	5.5	3
283	The influence of Er substitution on magnetic and magnetocaloric properties of Dy1â^'xErxCo2 solid solutions. Intermetallics, 2011, 19, 1656-1660.	3.9	18
284	Novel sodium aluminium borohydride containing the complex anion [Al(BH4,Cl)4]â^'. Faraday Discussions, 2011, 151, 231.	3.2	24
285	Multi-phase EBSD mapping and local texture analysis in NdFeB sintered magnets. Acta Materialia, 2011, 59, 1026-1036.	7.9	67
286	Comparison of local and global texture in HDDR processed Ndâ€“Feâ€“B magnets. Acta Materialia, 2011, 59, 2029-2034.	7.9	45
287	Systematic study of the microstructure, entropy change and adiabatic temperature change in optimized Laâ€“Feâ€“Si alloys. Acta Materialia, 2011, 59, 3602-3611.	7.9	177
288	Magnetic Materials and Devices for the 21st Century: Stronger, Lighter, and More Energy Efficient. Advanced Materials, 2011, 23, 821-842.	21.0	2,546

#	Article	IF	Citations
289	Catalysis of H2 sorption in NaAlH4: General description and new insights. Acta Materialia, 2011, 59, 1725-1733.	7.9	25
290	Effect of the presence of chlorides on the synthesis and decomposition of Ca(BH4)2. International Journal of Hydrogen Energy, 2011, 36, 247-253.	7.1	19
291	Influence of sample geometry on determination of magnetocaloric effect for Gd60Co30Al10 glassy ribbons using direct and indirect methods. Journal of Magnetism and Magnetic Materials, 2011, 323, 1782-1786.	2.3	25
292	Sequence of structural and magnetic transitions in Ni48Co2Mn39Sn11 shape memory alloy. Journal of Magnetism and Magnetic Materials, 2011, 323, 2519-2523.	2.3	14
293	Er2Fe14B single crystal as magnetic refrigerant at the spin reorientation transition. Journal of Applied Physics, 2011, 109, .	2.5	17
294	An Experimental Investigation into the Off-State Viscosity of MR Fluids. Journal of Intelligent Material Systems and Structures, 2011, 22, 1763-1767.	2.5	6
295	MODELING PERFLUORINATED POLYETHER BASED MR FLUIDS. , 2011, , .		0
296	A SIMPLE SHEAR ANALYSIS OF MR FLUIDS. , 2011, , .		1
297	Contributions to the entropy change in melt-spun LaFe_{11.6}Si_{1.4}. Journal Physics D: Applied Physics, 2010, 43, 132001.	2.8	28
298	The role of local anisotropy profiles at grain boundaries on the coercivity of Nd2Fe14B magnets. Applied Physics Letters, 2010, 97, .	3.3	108
299	Peculiarities of the magnetocaloric properties in Ni-Mn-Sn ferromagnetic shape memory alloys. Physical Review B, 2010, 81, .	3.2	96
300	Novel Design of La(Fe,Si)₁₃ Alloys Towards High Magnetic Refrigeration Performance. Advanced Materials, 2010, 22, 3735-3739.	21.0	264
301	Al₃Li₄(BH₄)₁₃: A Complex Doubleâ€Cation Borohydride with a New Structure. Chemistry - A European Journal, 2010, 16, 8707-8712.	3.3	66
302	Magnetization reversal in textured NdFeBâ€“Fe composites observed by domain imaging. Journal of Magnetism and Magnetic Materials, 2010, 322, 3208-3213.	2.3	17
303	Constraint-dependent twin variant distribution in Ni2MnGa single crystal, polycrystals and thin film: An EBSD study. Acta Materialia, 2010, 58, 4629-4638.	7.9	47
304	Rheology of Perfluorinated Polyether-based MR Fluids with Nanoparticles. Journal of Intelligent Material Systems and Structures, 2010, 21, 1051-1060.	2.5	27
305	Large negative magnetoresistance in nickel-rich Niâ€“Mnâ€“Ga Heusler alloys. Journal of Applied Physics, 2010, 107, .	2.5	23
306	Comprehensive Study of Melt Infiltration for the Synthesis of NaAlH4/C Nanocomposites. Chemistry of Materials, 2010, 22, 2233-2238.	6.7	78

#	Article	IF	Citations
307	Confinement of NaAlH₄in Nanoporous Carbon: Impact on H₂Release, Reversibility, and Thermodynamics. Journal of Physical Chemistry C, 2010, 114, 4675-4682.	3.1	156
308	Effect of additives on the synthesis and reversibility of Ca(BH4)2. Journal of Alloys and Compounds, 2010, 493, 281-287.	5.5	41
309	Magnetic properties and magnetocaloric effect in Dy1â^'xScxNi2 solid solutions. Journal of Alloys and Compounds, 2010, 506, 626-630.	5.5	13
310	Reversibility and irreversibility of magnetocaloric effect in a metamagnetic shape memory alloy under cyclic action of a magnetic field. Applied Physics Letters, 2010, 97, 052503.	3.3	71
311	Magnetic Properties and Specific Heat of Laves Phase Tb1-xScxNi2(x = 0.1, 0.2) Solid Solutions. Acta Physica Polonica A, 2010, 118, 877-878.	0.5	2
312	Niâ€“Mnâ€“Inâ€“Co single-crystalline particles for magnetic shape memory composites. Applied Physics Letters, 2009, 95, 152503.	3.3	25
313	Magnetic and magnetocaloric effect in melt spun La1â^'xRxFe13â^'yAlyCz(R= Pr and Nd) compounds. Journal Physics D: Applied Physics, 2009, 42, 205003.	2.8	6
314	Phase transformations and magnetic structure of nanocrystalline Feâ€“Pd and Coâ€“Pt alloys studied by in situ neutron powder diffraction. Journal of Applied Physics, 2009, 105, 07A717.	2.5	21
315	Direct evidence for Cu concentration variation and its correlation to coercivity in Sm(Co0.74Fe0.1Cu0.12Zr.04)7.4 ribbons. Scripta Materialia, 2009, 60, 764-767.	5.2	75
316	Interaction domains in high-performance NdFeB thick films. Scripta Materialia, 2009, 60, 826-829.	5.2	43
317	Hydride formation in ball-milled and cryomilled Mgâ€“Fe powder mixtures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 158, 19-25.	3.5	32
318	La(Fe,Si)13-based magnetic refrigerants obtained by novel processing routes. Journal of Magnetism and Magnetic Materials, 2009, 321, 3571-3577.	2.3	55
319	Magnetic properties and specific heat of Dy1â^'xLaxNi2 compounds. Journal of Magnetism and Magnetic Materials, 2009, 321, 2821-2826.	2.3	12
320	Influence of annealing on magnetic field-induced structural transformation and magnetocaloric effect in Niâ€“Mnâ€“Inâ€“Co ribbons. Acta Materialia, 2009, 57, 4911-4920.	7.9	146
321	Mechanochemical synthesis and XPS analysis of sodium alanate with different additives. Acta Materialia, 2009, 57, 5563-5570.	7.9	33
322	Bidisperse Perfluorinated Polyether (PFPE)-Based Magneto-Rheological Fluids in a Prosthetic Knee. , 2009, , .		3
323	Effect of pressure on the magnetocaloric properties of nickel-rich Niâ€“Mnâ€“Ga Heusler alloys. Journal of Applied Physics, 2009, 105, .	2.5	30
324	Large magnetostrain in polycrystalline Niâ€“Mnâ€“Inâ€“Co. Applied Physics Letters, 2009, 95, .	3.3	74

#	Article	IF	Citations
325	Influence of the dopant during the one step mechano-chemical synthesis of sodium alanate. Journal of Physics: Conference Series, 2009, 144, 012022.	0.4	1
326	High-Temperature Samarium Cobalt Permanent Magnets. , 2009, , 337-372.		12
327	Magnetic Shape Memory Phenomena. , 2009, , 399-439.		51
328	La(Fe,Si)13-based magnetic refrigerants obtained by novel processing routes. Journal of Magnetism and Magnetic Materials, 2008, 320, 2252-2258.	2.3	84
329	Martensitic transformation and magnetic properties in Niâ€“Feâ€“Gaâ€“Co magnetic shape memory alloys. Acta Materialia, 2008, 56, 3177-3186.	7.9	59
330	A high-temperature coupling of martensitic and magnetic transformations and magnetic entropy change in Niâ€“Feâ€“Gaâ€“Co alloys. Scripta Materialia, 2008, 59, 1063-1066.	5.2	19
331	Structural, magnetic, and mechanical properties of 5Î¼m thick SmCo films suitable for use in microelectromechanical systems. Journal of Applied Physics, 2008, 103, .	2.5	44
332	Effects of hydrostatic pressure on the magnetism and martensitic transition of Niâ€“Mnâ€“In magnetic superelastic alloys. Applied Physics Letters, 2008, 92, .	3.3	126
333	Magnetostructural transformation in Niâ€“Mnâ€“Inâ€“Co ribbons. Applied Physics Letters, 2008, 92, 162509.	3.3	52
334	Magnetocaloric effect in LaFe11.8â^'xCoxSi1.2 melt-spun ribbons. Journal of Alloys and Compounds, 2008, 450, 18-21.	5.5	103
335	High Performance Î¼-Magnets for Microelectromechanical Systems (MEMS). , 2008, , 167-194.		8
336	Large reversible magnetocaloric effect in RNi compounds. Journal Physics D: Applied Physics, 2008, 41, 245006.	2.8	44
337	Reversibility of magnetostructural transition and associated magnetocaloric effect in Niâ€“Mnâ€“Inâ€“Co. Applied Physics Letters, 2008, 93, .	3.3	99
338	Magnetocaloric Effect in Niâ€“Mnâ€“Ga Alloys. IEEE Transactions on Magnetics, 2008, 44, 2993-2996.	2.1	15
339	Comparative Study of Structural and Magnetic Properties of Bulk and Powder Ni$_{52}$Fe$_{17}$Ga$_{27}$Co$_{4}$ Magnetic Shape Memory Alloy. IEEE Transactions on Magnetics, 2008, 44, 3025-3027.	2.1	7
340	Magnetic field-induced twin boundary motion in polycrystalline Niâ€“Mnâ€“Ga fibres. New Journal of Physics, 2008, 10, 073002.	2.9	67
341	Multiple Metamagnetic Transitions in the Magnetic Refrigerant <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>La</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mi>Fe</mml:mi><mml:mo>,</mml:mo><mml:mi>Si</mml:mi><mml:msub><mml:mo) Tj ETQq1 1 0.	7.8	155
342	mathvariant="normal">H</mml:mi><mml:mi>x</mml:mi></mml:msub></mml:math>. Physical Review Determining anisotropy constants from a first-order magnetization process in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Tb</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Fe</mml:mi><mml:mn>17</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2008, 77, .	3.2	17

#	Article	IF	Citations
343	Characterisation of complex hydrides synthesised or modified by ball milling. International Journal of Materials Research, 2008, 99, 553-556.	0.3	2
344	In situ pressure and temperature monitoring during the conversion of Mg into MgH2 by high-pressure reactive ball milling. Journal of Alloys and Compounds, 2007, 427, 204-208.	5.5	93
345	High performance hard magnetic NdFeB thick films for integration into micro-electro-mechanical systems. Applied Physics Letters, 2007, 90, 092509.	3.3	145
346	Compression-induced texture change in NiMnGa-polymer composites observed by synchrotron radiation. Journal of Applied Physics, 2007, 101, 09C501.	2.5	22
347	Absence of magnetic domain wall motion during magnetic field induced twin boundary motion in bulk magnetic shape memory alloys. Applied Physics Letters, 2007, 90, 192504.	3.3	68
348	Magnetocaloric effect in reactively-milled LaFe11.57Si1.43Hy intermetallic compounds. Journal of Applied Physics, 2007, 102, 053906.	2.5	45
349	Determination of the Heat of Hydride Formation/Decomposition by High-Pressure Differential Scanning Calorimetry (HP-DSC). Journal of Physical Chemistry B, 2007, 111, 13301-13306.	2.6	54
350	Evolution of interaction domains in textured fine-grained Nd2Fe14B magnets. Journal of Applied Physics, 2007, 102, .	2.5	80
351	Textured polymer bonded composites with Niâ€“Mnâ€“Ga magnetic shape memory particles. Acta Materialia, 2007, 55, 2707-2713.	7.9	114
352	Hydrogen sorption properties of MgH2â€“LiBH4 composites. Acta Materialia, 2007, 55, 3951-3958.	7.9	350
353	Polyester-bonded textured composites with single-crystalline shape memory Niâ€“Mnâ€“Ga particles. Journal of Magnetism and Magnetic Materials, 2007, 310, 2785-2787.	2.3	13
354	Hydrogen storage in magnesium-based hydrides and hydride composites. Scripta Materialia, 2007, 56, 841-846.	5.2	430
355	Evolution of magnetic and microstructural properties of thick sputtered NdFeB films with processing temperature. Journal of Magnetism and Magnetic Materials, 2007, 316, 174-176.	2.3	13
356	INFLUENCE OF HYDROGEN ON MAGNETOCRYSTALLINE ANISOTROPY OF TbFe6Co5Ti SINGLE CRYSTAL. , 2007, , 485-492.		0
357	Magnetic Domains and Coercivity in SmCo 2:17 Type Magnets. Journal of Iron and Steel Research International, 2006, 13, 48-59.	2.8	8
358	Corrosion studies on highly textured Ndâ€“Feâ€“B sintered magnets. Journal of Alloys and Compounds, 2006, 415, 111-120.	5.5	49
359	Ordering of nanocrystalline Feâ€“Pt alloys studied byin situneutron powder diffraction. Journal of Applied Physics, 2006, 100, 094308.	2.5	26
360	Evolution of magnetic domain structures and coercivity in high-performance SmCo 2:17-type permanent magnets. Acta Materialia, 2006, 54, 997-1008.	7.9	200

#	Article	IF	Citations
361	Relation Between High-Field Magnetization and Microstructure in Bulk SmCo$_2.5$Cu$_2.5$. IEEE Transactions on Magnetics, 2006, 42, 2903-2905.	2.1	0
362	Spin-reorientation transitions in Nd2(Fe,Co)14B compounds and their hydrides. Journal of Magnetism and Magnetic Materials, 2006, 300, e465-e468.	2.3	5
363	Intergrain interactions in nanocomposite Feâ€“Pt powders. Journal of Applied Physics, 2006, 99, 08E903.	2.5	14
364	Magnetic entropy change in melt-spun MnFePGe (invited). Journal of Applied Physics, 2006, 99, 08K903.	2.5	105
365	Influence of composition and order on the magnetism of Feâ€“Pt alloys: Neutron powder diffraction and theory. Applied Physics Letters, 2006, 89, 032506.	3.3	44
366	Self-Diffusion of 147Nd in Nanocrystalline Nd2Fe14B. , 2005, , 767-772.		1
367	Effect of reactive milling in hydrogen on the magnetic and magnetocaloric properties of LaFe11.57Si1.43. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 673-675.	2.3	33
368	Coercivity mechanism of Sm2(Co,Cu,Fe,Zr)17-based magnets prepared by melt-spinning. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 1206-1209.	2.3	12
369	Prediction of the oxidation behaviour of Smâ€“Co-based magnets. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 1226-1229.	2.3	29
370	Corrosion behavior of Ndâ€“Feâ€“B/Î±â€“Fe nanocomposite magnets. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 1251-1254.	2.3	10
371	Texture memory effect of Ndâ€“Feâ€“B during hydrogen treatment. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 1282-1285.	2.3	44
372	High-field magnetisation of SmCo5â^'xCux (xâ‰^2.5) determined in pulse fields up to 48T. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 420-423.	2.3	6
373	Phase transformations and thermodynamic properties of nanocrystalline FePt powders. Scripta Materialia, 2005, 53, 469-474.	5.2	23
374	FePt Hard Magnets. Advanced Engineering Materials, 2005, 7, 208-212.	3.5	120
375	Structure and hysteresis properties of nanocrystalline FePt powders. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 547-550.	2.3	22
376	Corrosion Behavior of NdFeB-Based Nanocrystalline Permanent Magnets. Journal of Metastable and Nanocrystalline Materials, 2005, 24-25, 631-634.	0.1	3
377	Large magnetocaloric effect in melt-spun LaFe13â^'xSix. Journal of Applied Physics, 2005, 97, 10M305.	2.5	170
378	Structure and magnetic entropy change of melt-spun LaFe11.57Si1.43 ribbons. Journal of Applied Physics, 2005, 97, 036102.	2.5	75

#	Article	IF	Citations
379	Grain-boundary diffusion of Nd147 in nanocrystalline Nd2Fe14B. Journal of Applied Physics, 2005, 98, 074314.	2.5	11
380	Hydrogen sorption properties of Mgâ€“1 wt.% Niâ€“0.2 wt.% Pd prepared by reactive milling. Journal of Alloys and Compounds, 2005, 404-406, 413-416.	5.5	39
381	Effect of hydrogen insertion on the magnetic properties of Er(Fe,Co)11Ti single crystals. Journal of Alloys and Compounds, 2005, 404-406, 181-184.	5.5	7
382	Magnetocrystalline anisotropy in L10FePt and exchange coupling in FePt/Fe3Pt nanocomposites. Journal of Physics Condensed Matter, 2005, 17, 4157-4170.	1.8	74
383	Effect of composition and cooling rate on the structure and magnetic entropy change in Gd5SixGe4â^'x. Journal of Applied Physics, 2004, 95, 7064-7066.	2.5	25
384	Nanocrystalline hard magnetic FePt powders. Journal of Applied Physics, 2004, 95, 7474-7476.	2.5	27
385	Corrosion Behavior of Polymer-Bonded NdFeB-Based Nanocrystalline Magnets. IEEE Transactions on Magnetics, 2004, 40, 2864-2866.	2.1	7
386	Self-Diffusion in Liquid Interfaces. Physical Review Letters, 2004, 92, 095901.	7.8	9
387	Corrosion Behavior of Smâ€“Co-Based Permanent Magnets in Oxidizing Environments. IEEE Transactions on Magnetics, 2004, 40, 2931-2933.	2.1	28
388	Hot deformed (Nd,Pr)(Fe,Co)B magnets for low-temperature applications. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E321-E322.	2.3	5
389	Synthesis and decomposition of Mg2FeH6 prepared by reactive milling. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 108, 28-32.	3.5	87
390	Hydrogen-Induced Effects in Alloys of Type Nd2(Fe/Co)14B Studied by X-Ray Photoelectron Spectroscopy.. ChemInform, 2004, 35, no.	0.0	0
391	Coercivity analysis of melt-spun Sm2(Co,Fe,Cu,Zr)17. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 647-649.	2.3	10
392	Interaction domains in die-upset NdFeB magnets in dependence on the degree of deformation. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1937-E1939.	2.3	29
393	Melt-spun precipitation hardened Sm(Co, Fe, Cu, Zr) magnets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 375-377, 1169-1172.	5.6	10
394	Hydrogen-Induced Effects in Alloys of Type Nd2(Fe/Co)14B Studied by X-ray Photoelectron Spectroscopy. Chemistry of Materials, 2004, 16, 3098-3105.	6.7	3
395	The study of magnetocaloric effect in R2Fe17(R = Y, Pr) alloys. Journal Physics D: Applied Physics, 2004, 37, 2628-2631.	2.8	78
396	Local texture in Ndâ€“Feâ€“B sintered magnets with maximised energy density. Journal of Alloys and Compounds, 2004, 365, 259-265.	5.5	46

#	Article	IF	Citations
397	HRTEM studies of grain boundaries in die-upset Ndâ€“Feâ€“Coâ€“Gaâ€“B magnets. Journal of Alloys and Compounds, 2004, 365, 286-290.	5.5	65
398	Self-diffusion behaviour and microstructure of ultrafine-grained Nd2Fe14B with intergranular melting transition. International Journal of Materials Research, 2004, 95, 895-903.	0.8	3
399	Phase Formation and Crystal Structure of Sm2Fe17-yGay Compounds During Hydrogen Disproportionation and Desorption Recombination (HDDR-Process).. ChemInform, 2003, 34, no.	0.0	0
400	Thermodynamics of Feâ€”Sm, Feâ€”H, and Hâ€”Sm Systems and Its Application to the Hydrogenâ€”Disproportionationâ€”Desorptionâ€”Recombination (HDDR) Process for the System Fe17Sm2â€”H2.. ChemInform, 2003, 34, no.	0.0	0
401	Influence of Zr Addition on Phase Formation and Magnetic Properties of the Fe17Gd2 Phase.. ChemInform, 2003, 34, no.	0.0	0
402	Near net shape production of radially oriented NdFeB ring magnets by backward extrusion. Journal of Materials Processing Technology, 2003, 135, 358-365.	6.3	50
403	Anisotropy Mechanism in HDDR Processed NdFeB. , 2003, , 37-44.		3
404	Memory of texture during HDDR processing of NdFeB. IEEE Transactions on Magnetics, 2003, 39, 2926-2931.	2.1	70
405	Intergrain interactions in nanocrystalline isotropic prfeb-based magnets. IEEE Transactions on Magnetics, 2003, 39, 2944-2946.	2.1	20
406	Hydrogenation properties of nanocrystalline Mg- and Mg2Ni-based compounds modified with platinum group metals (PGMs). Journal of Alloys and Compounds, 2003, 356-357, 598-602.	5.5	37
407	Influence of Zr addition on phase formation and magnetic properties of the Fe17Gd2 phase. Journal of Alloys and Compounds, 2003, 358, 1-6.	5.5	9
408	A secondary ion mass spectrometry study of hydrogen interaction with Nd2(Fe/Co)14B. Journal of Alloys and Compounds, 2003, 356-357, 679-682.	5.5	3
409	Peg legs andbionic limbs: the development of lower extremity prosthetics. Interdisciplinary Science Reviews, 2003, 28, 139-148.	1.4	15
410	Stability of magnetic properties of Sm/sub 2/Co/sub 17/-type magnets at operating temperatures higher than 400 Â°C. IEEE Transactions on Magnetics, 2003, 39, 2923-2925.	2.1	23
411	Microchemistry and magnetization reversal mechanism in melt-spun 2:17-type Sm-Co magnets. Applied Physics Letters, 2003, 83, 2208-2210.	3.3	60
412	Microstructure, microchemistry, and magnetic properties of melt-spun Sm(Co,Fe,Cu,Zr)z magnets. Journal of Applied Physics, 2003, 93, 7975-7977.	2.5	60
413	High-performance nanocrystalline PrFeB-based magnets produced by intensive milling. Journal of Applied Physics, 2002, 91, 8159.	2.5	42
414	Texture inducement during HDDR processing of NdFeB. IEEE Transactions on Magnetics, 2002, 38, 2958-2960.	2.1	38

#	Article	IF	Citations
415	Microstructure and magnetic properties of two-phase exchange-coupled SmCo5/Sm2(Co, M)17 (M = Fe,) Tj ETQq1 1 0.784314 rgBT	2.8	10
416	Highly coercive melt-spun Sm(Co,Fe,Cu,Zr)/sub z/ magnets prepared by simple processing. IEEE Transactions on Magnetics, 2002, 38, 2937-2939.	2.1	9
417	Corrosion behavior of textured and isotropic nanocrystalline NdFeB-based magnets. IEEE Transactions on Magnetics, 2002, 38, 2979-2981.	2.1	30
418	Influence of Fe, Zr, and Cu on the microstructure and crystallographic texture of melt-spun 2:17 Smâ€“Co ribbons. Journal of Applied Physics, 2002, 91, 8825.	2.5	24
419	Fast development of high coercivity in melt-spun Sm(Co,Fe,Cu,Zr)z magnets. Applied Physics Letters, 2002, 80, 1243-1245.	3.3	72
420	Hydrogen storage in different carbon nanostructures. Applied Physics Letters, 2002, 80, 2985-2987.	3.3	171
421	Microstructure and magnetization reversal in nanocomposite SmCo5/Sm2Co17 magnets. Journal of Applied Physics, 2002, 91, 2192-2196.	2.5	27
422	Grain growth effects on the corrosion behavior of nanocrystalline NdFeB magnets. Corrosion Science, 2002, 44, 1097-1112.	6.6	41
423	The influence of Co and Ga additions on the corrosion behavior of nanocrystalline NdFeB magnets. Corrosion Science, 2002, 44, 1857-1874.	6.6	75
424	Thermodynamics of Feâ€“Sm, Feâ€“H, and Hâ€“Sm systems and its application to the hydrogenâ€“disproportionationâ€“desorptionâ€“recombination (HDDR) process for the system Fe17Sm2â€“H2. Journal of Alloys and Compounds, 2002, 339, 118-139.	5.5	45
425	Phase formation and crystal structure of Sm2Fe17â^'Ga compounds during hydrogen disproportionation and desorption recombination (HDDR-process). Journal of Alloys and Compounds, 2002, 346, 235-243.	5.5	9
426	Nanocrystalline high performance permanent magnets. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1277-1283.	2.3	69
427	High temperature magnetic properties of 2:17 Smâ€“Co magnets. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1347-1349.	2.3	26
428	Observation of hydrogen induced intermediate borides in PrFeB based alloys by MÃ¶ssbauer effect spectroscopy. Physica B: Condensed Matter, 2002, 320, 312-315.	2.7	11
429	Observation of texture for fully dense MgB2 superconductor processed by hot deformation. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1248-1250.	1.2	3
430	Corrosion behaviour of hot-pressed and die-upset nanocrystalline NdFeB-based magnets. Journal of Magnetism and Magnetic Materials, 2002, 248, 121-133.	2.3	32
431	Comparative Study of Dense Bulk MgB2 Materials Prepared by Different Methods. Journal of Superconductivity and Novel Magnetism, 2002, 15, 599-601.	0.5	9
432	NdDyFeBZr high-coercivity powders prepared by intensive milling and the HDDR process. Journal of Alloys and Compounds, 2001, 315, 243-250.	5.5	9

#	Article	IF	Citations
433	Magnetic properties of melt-spun (Nd,Dy)2Fe14(B,C). Journal of Alloys and Compounds, 2001, 316, 290-295.	5.5	3
434	Fully dense MgB2 superconductor textured by hot deformation. Journal of Alloys and Compounds, 2001, 329, 285-289.	5.5	39
435	Intergranular Melting of Ultrafine Grained Nd2Fe14B Studied by Means of Radiotracer Diffusion. Journal of Materials Science, 2001, 9, 337-341.	1.2	11
436	Determination of the fraction of t-Fe3B in hydrogen disproportionated Hf-doped Ndâ€“Feâ€“B alloy by MÃ¶ssbauer spectroscopy. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 1461-1463.	2.3	2
437	Hard magnetic properties of melt-spun Râ€“Fe carbides. Journal of Magnetism and Magnetic Materials, 2001, 231, 4-8.	2.3	2
438	Coercivity variations with Pr- and Zr-substituted NdDyFeB-based HDDR powders. Journal of Magnetism and Magnetic Materials, 2001, 237, 267-275.	2.3	10
439	Metastable borides and the inducement of texture in Pr/sub 2/Fe/sub 14/B-type magnets produced by HDDR. IEEE Transactions on Magnetics, 2001, 37, 2471-2473.	2.1	16
440	Highly coercive milled and melt-spun (Pr,Nd)FeB-type magnets and their hot workability. IEEE Transactions on Magnetics, 2001, 37, 2483-2485.	2.1	4
441	Hydrogen disproportionation by reactive milling and recombination of Nd2(Fe1â^'xCox)14B alloys. Acta Materialia, 2000, 48, 4929-4934.	7.9	18
442	Solid-state amorphization of SmFe3 by hydrogenation. Scripta Materialia, 2000, 42, 1013-1016.	5.2	4
443	Temperature dependence of magnetic properties for nanocomposite Nd2(Fe,Co,M)14B/Î±-Fe magnets. Journal of Magnetism and Magnetic Materials, 2000, 208, 163-168.	2.3	12
444	Texture in a ternary Nd16.2Fe78.2B5.6 powder using a modified hydrogenationâ€“disproportionationâ€“desorptionâ€“recombination process. Journal of Magnetism and Magnetic Materials, 2000, 210, 5-9.	2.3	54
445	Improved hot workability and magnetic properties in NdFeCoGaB hot deformed magnets. IEEE Transactions on Magnetics, 2000, 36, 3288-3290.	2.1	45
446	High coercivity of Ndâ€“Dyâ€“Feâ€“(C,â€ŠB) ribbons prepared by melt spinning. Applied Physics Letters, 2000, 76, 3627-3629.	3.3	24
447	Effect of small Zr additions on the microstructure of Sm/sub 2/Fe/sub 17/. IEEE Transactions on Magnetics, 2000, 36, 3303-3305.	2.1	4
448	Hydrogen-Induced Amorphization of SmFe₃. Journal of Metastable and Nanocrystalline Materials, 2000, 8, 557-561.	0.1	0
449	Hydrogen-Induced Amorphization of SmFe₃. Materials Science Forum, 2000, 343-346, 557-561.	0.3	0
450	Magnetization processes in two different types of anisotropic, fully dense NdFeB hydrogenation, disproportionation, desorption, and recombination magnets. Journal of Applied Physics, 2000, 87, 6119-6121.	2.5	23

#	Article	IF	Citations
451	Controlling the properties of high energy density permanent magnetic materials by different processing routes. Journal Physics D: Applied Physics, 2000, 33, R157-R172.	2.8	264
452	Thermodynamics of the (Sm2Fe17â^'xGax+H2) system. Journal of Alloys and Compounds, 2000, 308, 275-279.	5.5	3
453	Investigations of the corrosion behaviour of nanocrystalline Ndâ€"Feâ€"B hot pressed magnets. Journal of Alloys and Compounds, 2000, 311, 299-304.	5.5	31
454	High pressure gas-solid interstitial modification with H and N atoms and HDDR processing of Nd(Fe,M)/sub 12/ (M=Ti,V,Mo). IEEE Transactions on Magnetics, 1999, 35, 3247-3249.	2.1	4
455	Highly coercive SmCo5 magnets prepared by a modified hydrogenation-disproportionation-desorption-recombination process. Journal of Applied Physics, 1999, 85, 5666-5668.	2.5	25
456	Studies of hydrogen absorption-desorptionproperties and HDDR behaviour of a Nd5Co2B6 Ï•boride. International Journal of Hydrogen Energy, 1999, 24, 189-194.	7.1	7
457	HDDR of Smâ€"Co alloys using high hydrogen pressures. Journal of Magnetism and Magnetic Materials, 1999, 192, 73-76.	2.3	32
458	Microstructure and HDDR-processing of as-cast Sm10.5Fe88.5Zr1.0. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 297-298.	2.3	5
459	A comparison of the micromagnetic and microstructural properties of four NdFeB-type materials processed by the HDDR route. Journal of Magnetism and Magnetic Materials, 1999, 202, 53-61.	2.3	15
460	Modified HDDR procedures applied to NdFeB alloys. IEEE Transactions on Magnetics, 1999, 35, 3250-3252.	2.1	15
461	Modified HDDR procedures applied to NdFeB alloys. , 1999, , .		0
462	Influence of M=Al, Ga and Si on microstructure and HDDR-processing of Sm2(Fe,M)17 and magnetic properties of their nitrides and carbides. Journal of Alloys and Compounds, 1999, 283, 296-303.	5.5	10
463	Nd2(Fe,Co,M)14B-type magnet powders produced by the HDDR process. Journal of Alloys and Compounds, 1999, 292, 296-300.	5.5	5
464	Hydrogenation Disproportionation Desorption Recombination Processes Applied to NdFeB-, SmFe- and SmCo-Type Alloys. Materials Research Society Symposia Proceedings, 1999, 577, 3.	0.1	3
465	Microstructural and Magnetic Studies of Hddr Magnets from High Boron NdFeB(Zr) Alloys. Materials Research Society Symposia Proceedings, 1999, 577, 47.	0.1	1
466	Domain studies in thin sections of HDDR-processed Nd-Fe-B-type magnets by TEM. Journal of Magnetism and Magnetic Materials, 1998, 177-181, 978-979.	2.3	4
467	Backward extruded NdFeB HDDR ring magnets. Journal of Magnetism and Magnetic Materials, 1998, 183, 359-364.	2.3	20
468	A magnetic and compositional study of the disproportionated stage of the solid-HDDR process in NdFeB-type materials. Journal of Alloys and Compounds, 1998, 281, 12-16.	5.5	5

#	Article	IF	Citations
469	A comparison of the magnetic properties and deformation behaviour of Nd-Fe-B magnets made from melt-spun, mechanically alloyed and HDDR powders. Journal Physics D: Applied Physics, 1998, 31, 1660-1666.	2.8	39
470	Textured NdFeB HDDR magnets produced by die-upsetting and backward extrusion. Journal Physics D: Applied Physics, 1998, 31, 807-811.	2.8	26
471	Hydrogenation disproportionation desorption recombination in Smâ€“Co alloys by means of reactive milling. Applied Physics Letters, 1998, 73, 3001-3003.	3.3	44
472	Hydrogenation and disproportionation of Sm2Fe17â^'xGax at high hydrogen pressures. Journal of Applied Physics, 1998, 83, 6905-6907.	2.5	20
473	The relation between the micromagnetic and microstructural properties of HDDR-processed Nd - Fe - B-type materials. Journal Physics D: Applied Physics, 1997, 30, 1854-1860.	2.8	13
474	Further studies of hydrogenation, disproportionation, desorption and recombination processes in a Nd5Fe2B6 boride. Journal of Alloys and Compounds, 1997, 253-254, 134-139.	5.5	15
475	Desorption characteristics of rare earth (R) hydrides (R=Y, Ce, Pr, Nd, Sm, Gd and Tb) in relation to the HDDR behaviour of Râ€“Fe-based-compounds. Journal of Alloys and Compounds, 1997, 253-254, 128-133.	5.5	92
476	Resistivity measurements on hydrogenation disproportionation desorption recombination phenomena in Ndî—¸Feî—¸B alloys with Co, Ga and Zr additions. Journal of Alloys and Compounds, 1997, 260, 284-291.	5.5	52
477	The disproportionated structure of Sm2Fe17 observed by high resolution scanning electron microscopy. Journal of Alloys and Compounds, 1996, 232, L12-L15.	5.5	5
478	Studies of HDDR processes in Sm2Fe17, Sm10.2Fe85.8Nb4 and Sm9.5Fe80.5Nb10 alloys. Journal of Alloys and Compounds, 1996, 233, 216-224.	5.5	8
479	S-HDDR induced cavitation in NdFeB. Journal of Alloys and Compounds, 1996, 232, L22-L26.	5.5	16
480	Fundamental and practical aspects of the hydrogenation, disproportionation, desorption and recombination process. Journal Physics D: Applied Physics, 1996, 29, 2255-2265.	2.8	86
481	Hydrogen-induced phase and magnetic transformations in Nd1.1Fe4B4. Journal of Magnetism and Magnetic Materials, 1996, 157-158, 119-120.	2.3	11
482	HDDR processes in Nd/sub 16/Fe/sub 76-x/Zr/sub x/B/sub 8/ alloys and the production of anisotropic magnets. IEEE Transactions on Magnetics, 1996, 32, 4368-4370.	2.1	11
483	In-situ electrical resistivity measurements: study of magnetic and phase transitions and solid-HDDR processes in Nd-Fe-B-type alloys. Journal of Materials Science, 1995, 30, 1397-1404.	3.7	24
484	Characterisation of solid-HDDR processed Nd16Fe76B8 alloys by means of electron microscopy. Journal of Magnetism and Magnetic Materials, 1995, 147, 320-330.	2.3	67
485	Detailed TEM analysis of solid-HDDR Nd/sub 16/Fe/sub 76/B/sub 8/ magnetic materials. IEEE Transactions on Magnetics, 1995, 31, 3635-3637.	2.1	11
486	The effect of hydrogen pressure on the kinetics of the HDDR-process of bulk Nd-Fe-B-type alloys. IEEE Transactions on Magnetics, 1994, 30, 642-644.	2.1	7

#	Article	IF	Citations
487	Evolution of recombination in a solid HDDR processed Nd14Fe79B7alloy. Journal of Applied Physics, 1994, 76, 6825-6827.	2.5	7
488	Phase transformations during the disproportionation stage in the solid HDDR process in a Nd16Fe76B8 alloy. Journal of Alloys and Compounds, 1994, 215, 227-233.	5.5	49
489	Development of microstructure of the disproportionated material during HDDR processes in a Nd16Fe76B8 alloy. Journal of Alloys and Compounds, 1994, 204, L21-L23.	5.5	23
490	Homogenisation behaviour of Nd/sub 2/(Fe/sub 0.98/Nb/sub 0.02/)/sub 14/B alloy. IEEE Transactions on Magnetics, 1994, 30, 616-618.	2.1	7
491	Kinetic studies on solidâ€HDDR processes in Ndâ€Feâ€Bâ€type alloys. Journal of Applied Physics, 1994, 76, 6256-6258.	2.5	10
492	Characterisation of rare earth-transition metal alloys with resistivity measurements. IEEE Transactions on Magnetics, 1993, 29, 2872-2874.	2.1	21
493	Magnetic and phase transitions and HDDR processes in NdFeB-type alloys monitored by electrical resistivity measurements. Journal of Alloys and Compounds, 1993, 196, L19-L21.	5.5	19
494	Characterisation Of Rare Earth-transition Metal Alloys With Resistivity Measurements. , 1993, , .		1
495	Magnetocaloric Effect in Ho-Er-Gd-Co Multicomponent Compounds. Solid State Phenomena, 0, 190, 303-306.	0.3	0
496	Adiabatic Temperature Change in Metamagnetic Ni(Co)-Mn-Al Heusler Alloys. Materials Science Forum, 0, 738-739, 446-450.	0.3	7
497	Efficient Process for Li-Ion Battery Recycling via Electrohydraulic Fragmentation. Materials Science Forum, 0, 959, 74-78.	0.3	13