

Konstantin P Skokov

List of Publications by Year in descending order

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papers

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57719

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235
all docs

235
docs citations

235
times ranked

3613
citing authors

#	ARTICLE	IF	CITATIONS
1	Giant magnetocaloric effect driven by structural transitions. Nature Materials, 2012, 11, 620-626.	13.3	1,266
2	A quantitative criterion for determining the order of magnetic phase transitions using the magnetocaloric effect. Nature Communications, 2018, 9, 2680.	5.8	273
3	Mastering hysteresis in magnetocaloric materials. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150308.	1.6	210
4	Large reversible magnetocaloric effect in Ni-Mn-In-Co. Applied Physics Letters, 2015, 106, .	1.5	181
5	Systematic study of the microstructure, entropy change and adiabatic temperature change in optimized LaFeSi alloys. Acta Materialia, 2011, 59, 3602-3611.	3.8	177
6	A multicaloric cooling cycle that exploits thermal hysteresis. Nature Materials, 2018, 17, 929-934.	13.3	158
7	Exploring La(Fe,Si) ₁₃ -based magnetic refrigerants towards application. Scripta Materialia, 2012, 67, 584-589.	2.6	157
8	Heavy rare earth free, free rare earth and rare earth free magnets - Vision and reality. Scripta Materialia, 2018, 154, 289-294.	2.6	149
9	Giant adiabatic temperature change in FeRh alloys evidenced by direct measurements under cyclic conditions. Acta Materialia, 2016, 106, 15-21.	3.8	145
10	Making a Cool Choice: The Materials Library of Magnetic Refrigeration. Advanced Energy Materials, 2019, 9, 1901322.	10.2	140
11	High field magnetization of Ho ₂ Fe ₁₇ . Physical Review B, 2010, 81, 104407.	1.1	127
12	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, .	1.1	119
13	Contradictory role of the magnetic contribution in inverse magnetocaloric Heusler materials. Physical Review B, 2016, 93, .	1.1	112
14	Giant Rotating Magnetocaloric Effect in the Region of Spin-Reorientation Transition in the NdCo ₅ Single Crystal. Physical Review Letters, 2010, 105, 137205.	2.9	111
15	Selective laser melting of La(Fe,Co,Si) ₁₃ geometries for magnetic refrigeration. Journal of Applied Physics, 2013, 114, .	1.1	111
16	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.	3.8	111
17	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.	2.8	107
18	Peculiarities of the magnetocaloric properties in Ni-Mn-Sn ferromagnetic shape memory alloys. Physical Review B, 2010, 81, .	1.1	96

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19	Microstructural and magnetic properties of Mn-Fe-P-Si (Fe ₂ P-type) magnetocaloric compounds. Acta Materialia, 2017, 132, 222-229.	3.8	92
20	Towards high-performance permanent magnets without rare earths. Journal of Physics Condensed Matter, 2014, 26, 064205.	0.7	91
21	Epoxy-bonded La-Fe-Co-Si magnetocaloric plates. Journal of Magnetism and Magnetic Materials, 2015, 375, 65-73.	1.0	82
22	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.	3.8	82
23	Hysteresis Design of Magnetocaloric Materials—From Basic Mechanisms to Applications. Energy Technology, 2018, 6, 1397-1428.	1.8	79
24	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.	3.8	76
25	On the preparation of La(Fe,Mn,Si) ₁₃ H polymer-composites with optimized magnetocaloric properties. Journal of Magnetism and Magnetic Materials, 2015, 396, 228-236.	1.0	73
26	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.	1.5	71
27	High-performance solid-state cooling materials: Balancing magnetocaloric and non-magnetic properties in dual phase La-Fe-Si. Acta Materialia, 2017, 125, 506-512.	3.8	71
28	Influence of thermal hysteresis and field cycling on the magnetocaloric effect in LaFe _{11.6} Si _{1.4} . Journal of Alloys and Compounds, 2013, 552, 310-317.	2.8	70
29	Production and properties of metal-bonded La(Fe,Mn,Si) ₁₃ H composite material. Acta Materialia, 2017, 127, 389-399.	3.8	70
30	Dynamical Effects of the Martensitic Transition in Magnetocaloric Heusler Alloys from Direct $\langle \mathbf{I} \rangle$ Measurements under Different Magnetic-Field-Sweep Rates. Physical Review Applied, 2016, 5, .	1.5	68
31	Heat exchangers made of polymer-bonded La(Fe,Si) ₁₃ . Journal of Applied Physics, 2014, 115, .	1.1	66
32	Microstructure and magnetic properties of Mn-Al-C alloy powders prepared by ball milling. Journal of Alloys and Compounds, 2015, 622, 524-528.	2.8	65
33	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.	3.8	65
34	Magnetic properties of $\langle \mathbf{B} \rangle$ alloys and the effect of doping by $\langle \mathbf{B} \rangle$. Physical Review B, 2015, 92, .	1.1	62
35	Assessment of the magnetocaloric effect in La,Pr(Fe,Si) under cycling. Journal of Magnetism and Magnetic Materials, 2016, 406, 259-265.	1.0	62
36	Magnetocaloric effect of gadolinium in high magnetic fields. Physical Review B, 2019, 99, .	1.1	60

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37	Adiabatic temperature change at first-order magnetic phase transitions: Ni a case study. <i>Physical Review B</i> , 2008, 78, .	1.1	59
38	A new type of La(Fe,Si) ₁₃ -based magnetocaloric composite with amorphous metallic matrix. <i>Scripta Materialia</i> , 2015, 95, 50-53.	2.6	57
39	A Matter of Size and Stress: Understanding the First-Order Transition in Materials for Solid-State Refrigeration. <i>Advanced Functional Materials</i> , 2017, 27, 1606735.	7.8	55
40	Evaluation of the reliability of the measurement of key magnetocaloric properties: A round robin study of La(Fe,Si,Mn)H ₁₇ conducted by the SSEEC consortium of European laboratories. <i>International Journal of Refrigeration</i> , 2012, 35, 1528-1536.	1.8	54
41	Asymmetric first-order transition and interlocked particle state in magnetocaloric La(Fe,Si) ₁₃ . <i>Physica Status Solidi - Rapid Research Letters</i> , 2015, 9, 136-140.	1.2	54
42	Magnetostructural transition and adiabatic temperature change in Mn-Co-Ge magnetic refrigerants. <i>Scripta Materialia</i> , 2012, 66, 642-645.	2.6	53
43	Magnetocaloric materials with first-order phase transition: thermal and magnetic hysteresis in LaFe _{11.8} Si _{1.2} and Ni _{2.21} Mn _{0.77} Ga _{1.02} (invited). <i>Journal of Applied Physics</i> , 2012, 111, .	1.1	50
44	Large entropy change, adiabatic temperature change, and small hysteresis in La(Fe,Mn) _{11.6} Si _{1.4} strip-cast flakes. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 377, 90-94.	1.0	46
45	A Comparative Study on the Magnetocaloric Properties of Ni-Mn-Co Heusler Alloys. <i>Physica Status Solidi (B): Basic Research</i> , 2018, 255, 1700331.	0.7	45
46	The role of Ni in modifying the order of the phase transition of La(Fe,Ni,Si) ₁₃ . <i>Acta Materialia</i> , 2018, 160, 137-146.	3.8	45
47	Tunable first order transition in La(Fe,Cr,Si) ₁₃ compounds: Retaining magnetocaloric response despite a magnetic moment reduction. <i>Acta Materialia</i> , 2019, 175, 406-414.	3.8	45
48	Reversible solid-state hydrogen-pump driven by magnetostructural transformation in the prototype system La(Fe,Si) ₁₃ H ₁₇ . <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	44
49	Reversibility of minor hysteresis loops in magnetocaloric Heusler alloys. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	42
50	Effect of carbon on magnetocaloric effect of LaFe _{11.6} Si _{1.4} compounds and on the thermal stability of its hydrides. <i>Journal of Applied Physics</i> , 2012, 111, .	1.1	41
51	Database of novel magnetic materials for high-performance permanent magnet development. <i>Computational Materials Science</i> , 2019, 168, 188-202.	1.4	41
52	Magnetic field dependence of the maximum adiabatic temperature change. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	39
53	Predicting the tricritical point composition of a series of LaFeSi magnetocaloric alloys via universal scaling. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 414004.	1.3	38
54	Giant induced anisotropy ruins the magnetocaloric effect in gadolinium. <i>Journal of Magnetism and Magnetic Materials</i> , 2013, 331, 33-36.	1.0	34

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55	Twins – A weak link in the magnetic hardening of ThMn12-type permanent magnets. Acta Materialia, 2021, 214, 116968.	3.8	31
56	Magnetocaloric and magnetic properties of Ni ₂ Mn _{1-x} Cu _x Ga Heusler alloys: An insight from the direct measurements and <i>ab initio</i> and Monte Carlo calculations. Journal of Applied Physics, 2013, 114, .	1.1	30
57	First-Order Reversal Curve (FORC) Analysis of Magnetocaloric Heusler-Type Alloys. IEEE Magnetics Letters, 2016, 7, 1-4.	0.6	30
58	Influence of magnetic field, chemical pressure and hydrostatic pressure on the structural and magnetocaloric properties of the Mn–Ni–Ge system. Journal Physics D: Applied Physics, 2017, 50, 464005.	1.3	30
59	Consolidation of cobalt nanorods: A new route for rare-earth free nanostructured permanent magnets. Acta Materialia, 2018, 145, 290-297.	3.8	30
60	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.	3.8	30
61	Spin reorientation in high magnetic fields and the Co-Gd exchange field in GdCo ₅ . Physical Review B, 2004, 70, .	1.1	29
62	The maximal cooling power of magnetic and thermoelectric refrigerators with La(FeCoSi) ₁₃ alloys. Journal of Applied Physics, 2013, 113, .	1.1	29
63	Magnetostriction and magnetic anisotropy in TbFe ₁₁ TiH _x (x=0, 1) single crystals. Journal of Alloys and Compounds, 2001, 322, 42-44.	2.8	28
64	High-field magnetization measurements on Er ₂ Fe ₁₇ single crystals. Physical Review B, 2007, 75, .	1.1	28
65	Polymer-Bonded La(Fe,Mn,Si) ₁₃ H _x Plates for Heat Exchangers. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	28
66	Direct Measurement of the Magnetocaloric Effect in $\langle \text{La} \rangle \langle \text{Fe} \rangle \langle \text{Si} \rangle \langle \text{Co} \rangle$ in Pulsed Magnetic Fields. Physical Review Applied, 2017, 8, .	1.5	28
67	Microstructural origin of hysteresis in Ni-Mn-In based magnetocaloric compounds. Acta Materialia, 2018, 147, 342-349.	3.8	28
68	Magnetocrystalline anisotropy of R ₂ Fe ₁₇ H _x (x=0, 3) single crystals. Journal of Alloys and Compounds, 2003, 350, 264-270.	2.8	27
69	Structural and magnetic properties of Dy ₂ Fe ₁₇ H _x (and 3) single crystals. Journal of Alloys and Compounds, 2005, 404-406, 172-175.	2.8	27
70	The influence of magnetocrystalline anisotropy on the magnetocaloric effect: A case study on Co ₂ B. Applied Physics Letters, 2016, 109, .	1.5	27
71	Magnetic anisotropy and magnetostriction in a Lu ₂ Fe ₁₇ intermetallic single crystal. Physics of the Solid State, 2001, 43, 1720-1727.	0.2	26
72	Nanocrystalline Sm-based 1:12 magnets. Acta Materialia, 2020, 200, 652-658.	3.8	26

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73	Influence of sample geometry on determination of magnetocaloric effect for Gd ₆₀ Co ₃₀ Al ₁₀ glassy ribbons using direct and indirect methods. Journal of Magnetism and Magnetic Materials, 2011, 323, 1782-1786.	1.0	25
74	Magnetocaloric effect in GdNi ₂ for cryogenic gas liquefaction studied in magnetic fields up to 50%T. Journal of Applied Physics, 2020, 127, .	1.1	25
75	Dependence of the inverse magnetocaloric effect on the field-change rate in Mn ₃ GaC and its relationship to the kinetics of the phase transition. Journal of Applied Physics, 2015, 117, 233902.	1.1	24
76	Rapid solidification of Nd _{1-x} Fe ₁₋₁₁ Ti compounds: Phase formation and magnetic properties. Acta Materialia, 2019, 180, 15-23.	3.8	24
77	Magnetocaloric effect of an Fe-based metallic glass compared to benchmark gadolinium. Journal of Applied Physics, 2012, 112, .	1.1	23
78	Effect of severe plastic deformation on the specific heat and magnetic properties of cold rolled Gd sheets. Journal of Applied Physics, 2015, 117, .	1.1	23
79	Magnetic, magnetocaloric and structural properties of manganese based monoborides doped with iron and cobalt – A candidate for thermomagnetic generators. Acta Materialia, 2016, 113, 213-220.	3.8	23
80	Influence of thermal treatment on magnetocaloric properties of Gd cold rolled ribbons. Journal of Applied Physics, 2013, 113, 17A933.	1.1	22
81	Magnet properties of Mn ₇₀ Ga ₃₀ prepared by cold rolling and magnetic field annealing. Journal of Magnetism and Magnetic Materials, 2015, 382, 265-270.	1.0	22
82	Pressure Dependence of Magnetic Properties in $L_{1-x}Fe_x$: Multistimulus Responsiveness of Caloric Effects by Modeling and Experiment. Physical Review Applied, 2020, 13, .	1.1	22
83	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.	3.8	21
84	$L_{1-x}Mn_x$ rare-earth-free permanent magnets: The effects of twinning versus dislocations in Mn-Al magnets. Physical Review Materials, 2020, 4, .	0.9	21
85	Plastically deformed Gd-X (X = Y, In, Zr, Ga, B) solid solutions for magnetocaloric regenerator of parallel plate geometry. Journal of Alloys and Compounds, 2018, 754, 207-214.	2.8	19
86	Design and Qualification of Pr-Fe-Cu-B Alloys for the Additive Manufacturing of Permanent Magnets. Advanced Functional Materials, 2021, 31, 2102148.	7.8	19
87	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.	3.8	18
88	Ab initio phase stabilities of Ce-based hard magnetic materials and comparison with experimental phase diagrams. Physical Review Materials, 2019, 3, .	0.9	18
89	Unveiling the mechanism of abnormal magnetic behavior of FeNiCoMnCu high-entropy alloys through a joint experimental-theoretical study. Physical Review Materials, 2020, 4, .	0.9	18
90	Specific heat of the Gd ₃ Co and Gd ₃ Ni compounds. Journal of Magnetism and Magnetic Materials, 2003, 258-259, 583-585.	1.0	17

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91	Specific heat and magnetic susceptibility of intermetallic compounds R3Ni. Physica B: Condensed Matter, 2004, 344, 462-469.	1.3	17
92	Determining anisotropy constants from a first-order magnetization process in Tb_2Fe_{17} . Physical Review B, 2008, 77, .	1.1	17
93	Er2Fe14B single crystal as magnetic refrigerant at the spin reorientation transition. Journal of Applied Physics, 2011, 109, .	1.1	17
94	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.	2.8	17
95	Properties of magnetically semi-hard (FeCo \hat{x})3B compounds. Journal of Alloys and Compounds, 2017, 696, 543-547.	2.8	17
96	Tuning the magnetocrystalline anisotropy of Fe3Sn by alloying. Physical Review B, 2019, 99, .	1.1	17
97	Magnetic Refrigeration with Recycled Permanent Magnets and Free Rare Earth Magnetocaloric La-Fe-Si. Energy Technology, 2020, 8, 1901025.	1.8	17
98	Microstructure, coercivity and thermal stability of nanostructured (Nd,Ce)-(Fe,Co)-B hot-compacted permanent magnets. Acta Materialia, 2022, 235, 118062.	3.8	17
99	Magnetic Properties of (Fe,Co) \hat{x} B Alloys With Easy-Axis Anisotropy. IEEE Transactions on Magnetics, 2014, 50, 1-4.	1.2	16
100	Direct measurement of the magnetocaloric effect in cementite. Journal of Magnetism and Magnetic Materials, 2016, 410, 105-108.	1.0	16
101	The effect of plastic deformation on magnetic and magnetocaloric properties of Gd-B alloys. Journal of Magnetism and Magnetic Materials, 2017, 442, 360-363.	1.0	16
102	Giant voltage-induced modification of magnetism in micron-scale ferromagnetic metals by hydrogen charging. Nature Communications, 2020, 11, 4849.	5.8	16
103	Textured (Ce,La,Y)-Fe-B permanent magnets by hot deformation. Journal of Materials Research and Technology, 2022, 17, 1459-1468.	2.6	16
104	Spin-reorientation transitions and magnetic anisotropy in TbFe \hat{x} Co Ti compounds. Journal of Alloys and Compounds, 1998, 280, 20-25.	2.8	15
105	Heat Exchangers From Metal-Bonded La(Fe,Mn,Si) \hat{x} H \hat{x} Powder. IEEE Transactions on Magnetics, 2017, 53, 1-7.	1.2	15
106	Production of net-shape Mn-Al permanent magnets by electron beam melting. Additive Manufacturing, 2019, 30, 100787.	1.7	15
107	Structural and magnetic properties of $Ce_{1-x}Fe_x$. Influence of hydrogenation on the vibrational density of states of magnetocaloric $LaFe_{1-x}Si_x$. Physical Review B, 2020, .	3.8	15
108	Influence of hydrogenation on the vibrational density of states of magnetocaloric $LaFe_{1-x}Si_x$. Physical Review B, 2020, .	1.1	15

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109	Magnetic anisotropy of La ₂ Co ₇ . Journal of Applied Physics, 2015, 118, .	1.1	14
110	A unified approach to describe the thermal and magnetic hysteresis in Heusler alloys. Applied Physics Letters, 2016, 109, .	1.5	14
111	Experimental and computational analysis of binary Fe-Sn ferromagnetic compounds. Acta Materialia, 2019, 180, 126-140.	3.8	14
112	Magnetization of a Gd ₃ Ni single crystal. Journal of Alloys and Compounds, 2002, 334, 40-44.	2.8	13
113	Specific heat of the R ₃ Co (R = heavy rare earth or Y) compounds. Physica Status Solidi A, 2003, 196, 325-328.	1.7	13
114	Magnetocaloric effect, magnetic domain structure and spin-reorientation transitions in HoCo ₅ single crystals. Journal of Magnetism and Magnetic Materials, 2011, 323, 447-450.	1.0	13
115	Analysis of the Magnetocaloric Effect in Heusler Alloys: Study of Ni ₅₀ CoMn ₃₆ Sn ₁₃ by Calorimetric Techniques. Entropy, 2015, 17, 1236-1252.	1.1	13
116	Local electronic and magnetic properties of pure and Mn-containing magnetocaloric LaFe ₁₃ Si _x compounds inferred from Mössbauer spectroscopy and magnetometry. Journal Physics D: Applied Physics, 2015, 48, 305006.	1.3	13
117	Rotational Magnetocaloric Effect in the Er ₂ Fe ₁₄ B Single Crystal. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	13
118	Magnetocaloric effect in cold rolled foils of Gd _{100-x} In _x (x = 0, 1, 3). Journal of Magnetism and Magnetic Materials, 2018, 459, 46-48.	1.0	13
119	Exchange stiffness of ferromagnets. European Physical Journal Plus, 2020, 135, 1.	1.2	13
120	Magnetolectric Tuning of Pinning-Type Permanent Magnets through Atomic-Scale Engineering of Grain Boundaries. Advanced Materials, 2021, 33, 2006853.	11.1	13
121	Magnetic anisotropy and magnetic properties of RTSi (R=Gd, Y; T=Mn, Fe) compounds. Journal of Alloys and Compounds, 1998, 280, 16-19.	2.8	12
122	Giant volume magnetostriction in the Y ₂ Fe ₁₇ single crystal at room temperature. Journal of Applied Physics, 2015, 117, .	1.1	12
123	Infrared heating mediated synthesis and characterization of FeCo/C nanocomposites. Journal of Magnetism and Magnetic Materials, 2017, 429, 94-101.	1.0	12
124	Effects of severe plastic deformation on the magnetic properties of terbium. AIP Advances, 2018, 8, 048103.	0.6	12
125	Dynamics of the magnetoelastic phase transition and adiabatic temperature change in Mn _{1.3} Fe _{0.7} Po _{0.5} Si _{0.55} . Journal of Magnetism and Magnetic Materials, 2019, 477, 287-291.	1.0	12
126	Accelerated crystallization and phase formation in Fe ₄₀ Ni ₄₀ B ₂₀ by electric current assisted annealing technique. Journal of Alloys and Compounds, 2020, 836, 155338.	2.8	12

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127	Intrinsically weak magnetic anisotropy of cerium in potential hard-magnetic intermetallics. Npj Quantum Materials, 2021, 6, .	1.8	12
128	The magnetocrystalline anisotropy in YTi(Fe,Co) ₁₁ single crystals. Journal of Alloys and Compounds, 1999, 283, 45-48.	2.8	11
129	Effect of hydrogen on the magnetic anisotropy and spin reorientation transition in ErFe ₁₁ Ti single crystal. Journal of Alloys and Compounds, 2002, 345, 16-19.	2.8	11
130	Comparative analysis of the magnetization processes of the Gd ₃ Ni and Gd ₃ Co single crystals. Journal of Magnetism and Magnetic Materials, 2002, 251, 148-154.	1.0	11
131	Co@CoSb Core-Shell Nanorods: From Chemical Coating at the Nanoscale to Macroscopic Consolidation. Chemistry of Materials, 2016, 28, 4982-4990.	3.2	11
132	Magnetic anisotropy of S_m m^2 F_e e single crystals. Physical Review B, 2008, 78, .	1.1	11
133	Magnetic properties of Mo-stabilized bulk Fe ₃ B magnet. Scripta Materialia, 2017, 130, 234-237.	2.6	11
134	The magnetization processes, spin reorientation transitions and magnetic domain structure in DyFe ₁₀ CoTi single crystal. Journal of Magnetism and Magnetic Materials, 2002, 238, 215-220.	1.0	10
135	Anomalous Hall effect in S_m m^2 F_e e crystals. Physical Review B, 2008, 78, .	1.0	10
136	Influence of severe plastic deformation on magnetocaloric effect of dysprosium. Journal of Magnetism and Magnetic Materials, 2019, 479, 307-311.	1.0	10
137	Determination of the crystal field parameters in S_m m^2 F_e e Physical Review B, 2020, 102, .	1.0	10
138	Large magnetic entropy change in Nd ₂ In near the boiling temperature of natural gas. Applied Physics Letters, 2021, 119, .	1.5	10
139	Magnetocaloric effect in the Laves-phase S_m m^2 F_e e in high magnetic fields. Physical Review Materials, 2021, 5, .	1.0	10
140	Formation of pure α -Au phase in Mn-Al-C by fast annealing using spark plasma sintering. Journal of Materials Science, 2022, 57, 6056-6065.	1.7	10
141	Stress-induced anisotropy, magnetic domain structure and spin-reorientation transition in R(FeCo) ₁₁ Ti single crystals (R=Dy, Tb). Journal of Alloys and Compounds, 2008, 451, 488-491.	2.8	9
142	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
143	Intrinsic magnetic properties of hydrided and non-hydrided Nd ₅ Fe ₁₇ single crystals. Journal of Alloys and Compounds, 2018, 741, 1012-1020.	2.8	9
144	Low-temperature synthesis of nanoscale ferromagnetic α -MnB. Dalton Transactions, 2020, 49, 131-135.	1.6	9

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145	Magnetocaloric properties of Ni _{2-x} Mn _{1-x} Ga with coupled magnetostructural phase transition. Journal of Applied Physics, 2020, 127, .	1.1	9
146	Magnetocaloric properties and specifics of the hysteresis at the first-order metamagnetic transition in Ni-doped FeRh. Physical Review Materials, 2021, 5, .	0.9	9
147	High-field investigation of the intersublattice interaction in GdCo ₅ . Journal of Magnetism and Magnetic Materials, 2005, 290-291, 435-437.	1.0	8
148	Procedure for numerical integration of the magnetocaloric effect. Journal of Applied Physics, 2012, 112, 063920.	1.1	8
149	Combined kinetic and Bean-Rodbell approach for describing field-induced transitions in LaFe _{11.6} Si _{1.4} alloys. Journal Physics D: Applied Physics, 2021, 54, 135003.	1.3	8
150	On the μ - β phase transformation and twinning in L10 MnAl alloys. Acta Materialia, 2022, 232, 117892.	3.8	8
151	Magnetostatic grain interaction and angular dependence of the nucleation field in Fe _{1-x} Nd _x B and SmCo ₅ permanent magnets. Journal of Magnetism and Magnetic Materials, 1996, 157-158, 67-68.	1.0	7
152	Effect of hydrogenation on spin-reorientation phase transitions and magnetic anisotropy constants of RFe ₁₁ Ti single crystals (R=Lu, Ho, and Er). Physics of the Solid State, 2001, 43, 290-299.	0.2	7
153	Magnetic properties of Gd ₃ Fe _x Ti ₃ (x=34, 33, 24), TbFe ₁₁ Ti and TbFe ₁₀ Ti single crystals. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 374-375.	1.0	7
154	Effect of hydrogen insertion on the magnetic properties of Er(Fe,Co) ₁₁ Ti single crystals. Journal of Alloys and Compounds, 2005, 404-406, 181-184.	2.8	7
155	The magnetocrystalline anisotropy in Y(Fe,Co) ₁₁ TiH single crystals. Journal of Alloys and Compounds, 2005, 404-406, 208-211.	2.8	7
156	Magnetocaloric Effect of RCo ₅ Single Crystals in the Region of Spin-Reorientation Transitions. Solid State Phenomena, 0, 168-169, 134-137.	0.3	7
157	Adiabatic Temperature Change in Metamagnetic Ni(Co)-Mn-Al Heusler Alloys. Materials Science Forum, 0, 738-739, 446-450.	0.3	7
158	The Influence of Cold Rolling on Magnetocaloric Properties of Gd _{100-x} Y _x (x = 0, 5, 10, 15) Alloys. Solid State Phenomena, 0, 233-234, 238-242.	0.3	7
159	Domain structure transformation and magnetic susceptibility of Ho ₂ Fe ₁₇ single crystals. Journal of Alloys and Compounds, 2016, 689, 894-898.	2.8	7
160	Adiabatic temperature change of micro- and nanocrystalline Y ₂ Fe ₁₇ heat-exchangers for magnetic cooling. Journal of Alloys and Compounds, 2016, 668, 40-45.	2.8	7
161	Electronic entropy change in Ni-doped FeRh. Materials Today Physics, 2019, 9, 100129.	2.9	7
162	Toxicological evaluation of MnAl based permanent magnets using different in vitro models. Chemosphere, 2021, 263, 128343.	4.2	7

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