

Konstantin P Skokov

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1848440/publications.pdf>

Version: 2024-02-01

231
papers

7,809
citations

57719

44
h-index

60583

81
g-index

235
all docs

235
docs citations

235
times ranked

3613
citing authors

#	ARTICLE	IF	CITATIONS
1	Textured (Ce,La,Y)-Fe-B permanent magnets by hot deformation. Journal of Materials Research and Technology, 2022, 17, 1459-1468.	2.6	16
2	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.	2.4	1
3	Formation of pure α -phase in Mn-Al-C by fast annealing using spark plasma sintering. Journal of Materials Science, 2022, 57, 6056-6065.	1.7	10
4	On the μ - β phase transformation and twinning in L1 $_0$ -MnAl alloys. Acta Materialia, 2022, 232, 117892.	3.8	8
5	Magnetic glassiness and crystal field effects on thermal and electrical properties of Er ₅ Pd ₂ -type compounds. Intermetallics, 2022, 144, 107519.	1.8	2
6	Microstructure, coercivity and thermal stability of nanostructured (Nd,Ce)-(Fe,Co)-B hot-compacted permanent magnets. Acta Materialia, 2022, 235, 118062.	3.8	17
7	A two-sublattice model for extracting rare-earth anisotropy constants from measurements on (Nd,Ce) ₂ (Fe,Co) ₁₄ B single crystals. Journal of Magnetism and Magnetic Materials, 2021, 520, 167470.	1.0	5
8	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
9	Intrinsically weak magnetic anisotropy of cerium in potential hard-magnetic intermetallics. Npj Quantum Materials, 2021, 6, .	1.8	12
10	The impact of Pr and Nd substitution on structure, hysteresis and magnetocaloric properties of La _{1-x} (Pr,Nd) _x Fe _{11.6} Si _{1.4} . Journal Physics D: Applied Physics, 2021, 54, 225001.	1.3	2
11	Magnetic properties and microstructure of Sm ₅ Fe ₁₇ -based composite magnets. Acta Materialia, 2021, 212, 116912.	3.8	5
12	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
13	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
14	Epitaxy Induced Highly Ordered Sm ₂ Co ₁₇ -SmCo ₅ Nanoscale Thin-Film Magnets. ACS Applied Materials & Interfaces, 2021, 13, 32415-32423.	4.0	6
15	Large magnetic entropy change in Nd ₂ In near the boiling temperature of natural gas. Applied Physics Letters, 2021, 119, .	1.5	10
16	Twins - A weak link in the magnetic hardening of ThMn ₁₂ -type permanent magnets. Acta Materialia, 2021, 214, 116968.	3.8	31
17	Electric-field manipulation of the magnetocaloric effect in a Fe ₄₉ Rh ₅₁ /PZT composite. Journal Physics D: Applied Physics, 2021, 54, 505002.	1.3	2
18	Magnetocaloric effect in the Laves-phase $\text{Ho}_{1-x}\text{Lu}_x$ in high magnetic fields. Physical Review Materials, 2021, 5, .	1.0	10

#	ARTICLE	IF	CITATIONS
19	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
20	Influence of martensitic configuration on hysteretic properties of Heusler films studied by advanced imaging in magnetic field and temperature. Acta Materialia, 2021, 221, 117356.	3.8	3
21	Toxicological evaluation of MnAl based permanent magnets using different in vitro models. Chemosphere, 2021, 263, 128343.	4.2	7
22	Magnetolectric Tuning of Pinning-Type Permanent Magnets through Atomic-Scale Engineering of Grain Boundaries. Advanced Materials, 2021, 33, 2006853.	11.1	13
23	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
24	Maximum performance of an active magnetic regenerator. Applied Physics Letters, 2021, 119, .	1.5	4
25	Low-temperature synthesis of nanoscale ferromagnetic Fe-MnB . Dalton Transactions, 2020, 49, 131-135.	1.6	9
26	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
27	Nanocrystalline Sm-based 1:12 magnets. Acta Materialia, 2020, 200, 652-658.	3.8	26
28	Induction of uniaxial anisotropy by controlled phase separation in Y-Co thin films. Physical Review B, 2020, 102, .	1.1	2
29	Giant voltage-induced modification of magnetism in micron-scale ferromagnetic metals by hydrogen charging. Nature Communications, 2020, 11, 4849.	5.8	16
30	Determination of the crystal field parameters in SmFe_2Ti . Physical Review B, 2020, 102, .		
31	Magnetocaloric properties of $\text{Ni}_2\text{Mn}_2\text{Ga}$ with coupled magnetostructural phase transition. Journal of Applied Physics, 2020, 127, .	1.1	9
32	Accelerated crystallization and phase formation in $\text{Fe}_{40}\text{Ni}_{40}\text{B}_{20}$ by electric current assisted annealing technique. Journal of Alloys and Compounds, 2020, 836, 155338.	2.8	12
33	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
34	Pressure Dependence of Magnetic Properties in $\text{LaFe}_{1-x}\text{Co}_x$: Multistimulus Responsiveness of Caloric Effects by Modeling and Experiment. Physical Review Applied, 2020, 13, .		
35	Exchange stiffness of ferromagnets. European Physical Journal Plus, 2020, 135, 1.	1.2	13
36	Influence of hydrogenation on the vibrational density of states of magnetocaloric $\text{LaFe}_{1-x}\text{Si}_x$: Multistimulus Responsiveness of Caloric Effects by Modeling and Experiment. Physical Review Applied, 2020, 13, .	1.1	15

#	ARTICLE	IF	CITATIONS
55	<i>Ab initio</i> phase stabilities of Ce-based hard magnetic materials and comparison with experimental phase diagrams. <i>Physical Review Materials</i> , 2019, 3, .	0.9	18
56	Intrinsic magnetic properties of hydrided and non-hydrided Nd ₅ Fe ₁₇ single crystals. <i>Journal of Alloys and Compounds</i> , 2018, 741, 1012-1020.	2.8	9
57	Heavy rare earth free, free rare earth and rare earth free magnets - Vision and reality. <i>Scripta Materialia</i> , 2018, 154, 289-294.	2.6	149
58	Origin of field-induced discontinuous phase transitions in Nd ₂ Fe ₁₇ . <i>Physical Review B</i> , 2018, 97, .	1.1	4
59	Microstructural origin of hysteresis in Ni-Mn-In based magnetocaloric compounds. <i>Acta Materialia</i> , 2018, 147, 342-349.	3.8	28
60	Consolidation of cobalt nanorods: A new route for rare-earth free nanostructured permanent magnets. <i>Acta Materialia</i> , 2018, 145, 290-297.	3.8	30
61	Plastically deformed Gd-X (X = Y, In, Zr, Ga, B) solid solutions for magnetocaloric regenerator of parallel plate geometry. <i>Journal of Alloys and Compounds</i> , 2018, 754, 207-214.	2.8	19
62	Effects of severe plastic deformation on the magnetic properties of terbium. <i>AIP Advances</i> , 2018, 8, 048103.	0.6	12
63	Magnetocaloric effect in cold rolled foils of Gd _{100-x} In _x (x = 0, 1, 3). <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 459, 46-48.	1.0	13
64	A Comparative Study on the Magnetocaloric Properties of Ni-Mn-X (X = Co) Heusler Alloys. <i>Physica Status Solidi (B): Basic Research</i> , 2018, 255, 1700331.	0.7	45
65	Quantitative Analysis of Domain Structure and Rapid Search for New Materials for Permanent Magnets. <i>Metal Science and Heat Treatment</i> , 2018, 60, 544-547.	0.2	4
66	A multicaloric cooling cycle that exploits thermal hysteresis. <i>Nature Materials</i> , 2018, 17, 929-934.	13.3	158
67	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
68	Stress-induced magnetic domain structure in DyFe ₁₁ Ti compound. <i>EPJ Web of Conferences</i> , 2018, 185, 04027.	0.1	2
69	A quantitative criterion for determining the order of magnetic phase transitions using the magnetocaloric effect. <i>Nature Communications</i> , 2018, 9, 2680.	5.8	273
70	Hysteresis Design of Magnetocaloric Materials – From Basic Mechanisms to Applications. <i>Energy Technology</i> , 2018, 6, 1397-1428.	1.8	79
71	Infrared heating mediated synthesis and characterization of FeCo/C nanocomposites. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 429, 94-101.	1.0	12
72	Production and properties of metal-bonded La(Fe,Mn,Si) ₁₃ H composite material. <i>Acta Materialia</i> , 2017, 127, 389-399.	3.8	70

#	ARTICLE	IF	CITATIONS
73	Viewpoint on the letter "Self pumping magnetic cooling"™ by V Chaudhary et al (2017 J. Phys. D: Appl. Phys. 50, 113001)	1.3	3
74	Domain Structure of R ₂ Fe ₁₇ Intermetallic Compounds with Planar-Type Anisotropy. Metal Science and Heat Treatment, 2017, 58, 594-598.	0.2	3
75	Heat Exchangers From Metal-Bonded La(Fe,Mn,Si) ₁₃ H _x Powder. IEEE Transactions on Magnetics, 2017, 53, 1-7.	1.2	15
76	Microstructural and magnetic properties of Mn-Fe-P-Si (Fe ₂ P-type) magnetocaloric compounds. Acta Materialia, 2017, 132, 222-229.	3.8	92
77	Properties of magnetically semi-hard (FeCo _{1-x}) ₃ B compounds. Journal of Alloys and Compounds, 2017, 696, 543-547.	2.8	17
78	Reversibility of minor hysteresis loops in magnetocaloric Heusler alloys. Applied Physics Letters, 2017, 110, .	1.5	42
79	Magnetic properties of Mo-stabilized bulk Fe ₃ B magnet. Scripta Materialia, 2017, 130, 234-237.	2.6	11
80	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
81	Influence of magnetic field, chemical pressure and hydrostatic pressure on the structural and magnetocaloric properties of the MnNiGe system. Journal Physics D: Applied Physics, 2017, 50, 464005.	1.3	30
82	Predicting the tricritical point composition of a series of LaFeSi magnetocaloric alloys via universal scaling. Journal Physics D: Applied Physics, 2017, 50, 414004.	1.3	38
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	Modification of the field dependence and scaling of the magnetocaloric effect in LaFeSi across the tricritical point. , 2017, , .		1
85	A Matter of Size and Stress: Understanding the First-Order Transition in Materials for Solid-State Refrigeration. Advanced Functional Materials, 2017, 27, 1606735.	7.8	55
86	Direct Measurement of the Magnetocaloric Effect in LaFeSi _{1-x} Co _x in Pulsed Magnetic Fields. Physical Review Applied, 2017, 8, .	1.5	28
87	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
88	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
89	Synthesis and magnetic properties of (Fe,Co)<inf>3</inf>B based semi-hard magnets. , 2017, , .		0
90	Magnetocaloric heat exchangers made from metal-bonded La(Fe,Mn,Si) ₁₃ H _x powder. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
91	Study on the viability of MnNiGe-system for magnetocaloric applications. , 2017, , .		0
92	Co@CoSb Core-Shell Nanorods: From Chemical Coating at the Nanoscale to Macroscopic Consolidation. Chemistry of Materials, 2016, 28, 4982-4990.	3.2	11
93	A unified approach to describe the thermal and magnetic hysteresis in Heusler alloys. Applied Physics Letters, 2016, 109, .	1.5	14
94	The influence of magnetocrystalline anisotropy on the magnetocaloric effect: A case study on Co ₂ B. Applied Physics Letters, 2016, 109, .	1.5	27
95	Direct measurement of the magnetocaloric effect in cementite. Journal of Magnetism and Magnetic Materials, 2016, 410, 105-108.	1.0	16
96	First-Order Reversal Curve (FORC) Analysis of Magnetocaloric Heusler-Type Alloys. IEEE Magnetics Letters, 2016, 7, 1-4.	0.6	30
97	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
98	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
99	Direct Measurements of Magnetocaloric Effect in a Single Crystalline Ni _{2.13} Mn _{0.81} Ga _{1.06} Heusler Alloy. Materials Science Forum, 2016, 872, 38-42.	0.3	0
100	Dynamical Effects of the Martensitic Transition in Magnetocaloric Heusler Alloys from Direct \hat{I} Measurements under Different Magnetic-Field-Sweep Rates. Physical Review Applied, 2016, 5, .	1.5	68
101	Mastering hysteresis in magnetocaloric materials. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150308.	1.6	210
102	Contradictory role of the magnetic contribution in inverse magnetocaloric Heusler materials. Physical Review B, 2016, 93, .	1.1	112
103	Magnetic anisotropy of S_m	1.1	11
104	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
105	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
106	Magnetic Properties of Nd and Sm Rare-Earth Metals After Severe Plastic Deformation. IEEE Magnetics Letters, 2016, 7, 1-4.	0.6	4
107	Rotational Magnetocaloric Effect in the Er ₂ Fe ₁₄ B Single Crystal. IEEE Transactions on Magnetics, 2016, 52, 1-4.	1.2	13
108	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

#	ARTICLE	IF	CITATIONS
109	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
110	Giant adiabatic temperature change in FeRh alloys evidenced by direct measurements under cyclic conditions. Acta Materialia, 2016, 106, 15-21.	3.8	145
111	Assessment of the magnetic entropy change of $(La_{0.6}Pr_{0.4})_{13}(Fe, Si)_{13}$ under cycling. , 2015, , .		0
112	Magnetic Phase Transitions and Magnetocaloric Effect in $R_{2}Fe_{17}$ (R = Y, Tb, Er). Solid State Phenomena, 2015, 233-234, 204-207.	0.3	1
113	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
114	Magnetocaloric and hysteretic properties of Ni-Mn based Heusler alloys. , 2015, , .		0
115	The influence of magnetocrystalline anisotropy on the magnetocaloric effect of $Co_{2}B$. , 2015, , .		0
116	Influence of Severe Plastic Deformation on Magnetic Properties of Fe ₄₈ Ni ₄₈ Zr ₄ , Fe _{49.5} Co _{16.5} B ₃₃ Ta and Co ₈₀ Zr ₁₆ B ₄ Alloys. Physics Procedia, 2015, 75, 1404-1409.	1.2	4
117	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
118	Large reversible magnetocaloric effect in Ni-Mn-In-Co. Applied Physics Letters, 2015, 106, .	1.5	181
119	Polymer-Bonded $La(Fe,Mn,Si)_{13}H_x$ Plates for Heat Exchangers. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	28
120	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
121	Giant volume magnetostriction in the Y ₂ Fe ₁₇ single crystal at room temperature. Journal of Applied Physics, 2015, 117, .	1.1	12
122	Magnetocaloric Properties of Severe Plastic Deformed Gd _{100-x} Y _x Alloys. Acta Physica Polonica A, 2015, 127, 641-643.	0.2	3
123	Asymmetric first-order transition and interlocked particle state in magnetocaloric $La(Fe,Si)_{13}$. Physica Status Solidi - Rapid Research Letters, 2015, 9, 136-140.	1.2	54
124	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
125	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
126	Magnetic anisotropy of La ₂ Co ₇ . Journal of Applied Physics, 2015, 118, .	1.1	14

#	ARTICLE	IF	CITATIONS
127	Polymer-bonded La(Fe, Mn, Si) ₁₃ H_x heat exchangers with optimized magnetocaloric properties. , 2015, , .		0
128	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
129	Micromagnetic analysis of spin-reorientation transitions. The role of magnetic domain structure. Physica B: Condensed Matter, 2015, 478, 12-16.	1.3	6
130	Magnetic properties of Fe ₂ B alloys and the effect of doping by Mn. Physical Review B, 2015, 92, .	1.1	62
131	Magnetocaloric Properties of Cold Rolled Gd _{100-x} Zr _x (x = 0, 1, 2). Tj ETQq1,1,0.784314 rgBT	0.3	0
132	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
133	A new type of La(Fe,Si) ₁₃ -based magnetocaloric composite with amorphous metallic matrix. Scripta Materialia, 2015, 95, 50-53.	2.6	57
134	Large entropy change, adiabatic temperature change, and small hysteresis in La(Fe,Mn) _{11.6} Si _{1.4} strip-cast flakes. Journal of Magnetism and Magnetic Materials, 2015, 377, 90-94.	1.0	46
135	Epoxy-bonded La-Fe-Co-Si magnetocaloric plates. Journal of Magnetism and Magnetic Materials, 2015, 375, 65-73.	1.0	82
136	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
137	Magnetic Properties of (Fe,Co) ₂ B Alloys With Easy-Axis Anisotropy. IEEE Transactions on Magnetics, 2014, 50, 1-4.	1.2	16
138	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
139	Towards high-performance permanent magnets without rare earths. Journal of Physics Condensed Matter, 2014, 26, 064205.	0.7	91
140	Heat exchangers made of polymer-bonded La(Fe,Si) ₁₃ . Journal of Applied Physics, 2014, 115, .	1.1	66
141	Changes in magnetic state of Y ₂ (Fe,Mn) ₁₇ -H systems: Regularities and potentialities. Journal of Alloys and Compounds, 2014, 587, 739-746.	2.8	4
142	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
143	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
144	Selective laser melting of La(Fe,Co,Si) ₁₃ geometries for magnetic refrigeration. Journal of Applied Physics, 2013, 114, .	1.1	111

#	ARTICLE	IF	CITATIONS
145	High-Field Transitions in ErFe ₁₁ Ti and HoFe ₁₁ Ti Single Crystals. Journal of Low Temperature Physics, 2013, 170, 307-312.	0.6	5
146	Giant induced anisotropy ruins the magnetocaloric effect in gadolinium. Journal of Magnetism and Magnetic Materials, 2013, 331, 33-36.	1.0	34
147	Influence of thermal treatment on magnetocaloric properties of Gd cold rolled ribbons. Journal of Applied Physics, 2013, 113, 17A933.	1.1	22
148	The maximal cooling power of magnetic and thermoelectric refrigerators with La(FeCoSi) ₁₃ alloys. Journal of Applied Physics, 2013, 113, .	1.1	29
149	The Magnetocaloric Effect in Two-Phase Y-Fe Nanocrystalline Alloys. Solid State Phenomena, 2012, 190, 323-326.	0.3	3
150	Numerical Simulation of Magnetic Cooling Cycles. Solid State Phenomena, 2012, 190, 319-322.	0.3	0
151	Effect of carbon on magnetocaloric effect of LaFe _{11.6} Si _{1.4} compounds and on the thermal stability of its hydrides. Journal of Applied Physics, 2012, 111, .	1.1	41
152	Reversible solid-state hydrogen-pump driven by magnetostructural transformation in the prototype system La(Fe,Si) ₁₃ H<i>y</i>. Journal of Applied Physics, 2012, 112, .	1.1	44
153	Evaluation of the reliability of the measurement of key magnetocaloric properties: A round robin study of La(Fe,Si,Mn)H<i>′</i> conducted by the SSEEC consortium of European laboratories. International Journal of Refrigeration, 2012, 35, 1528-1536.	1.8	54
154	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). Journal of Applied Physics, 2012, 111, .	1.1	50
155	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
156	Exploring La(Fe,Si) ₁₃ -based magnetic refrigerants towards application. Scripta Materialia, 2012, 67, 584-589.	2.6	157
157	Magnetocaloric effect of an Fe-based metallic glass compared to benchmark gadolinium. Journal of Applied Physics, 2012, 112, .	1.1	23
158	Procedure for numerical integration of the magnetocaloric effect. Journal of Applied Physics, 2012, 112, 063920.	1.1	8
159	Giant magnetocaloric effect driven by structural transitions. Nature Materials, 2012, 11, 620-626.	13.3	1,266
160	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
161	Magnetostructural transition and adiabatic temperature change in Mn"Co"Ge magnetic refrigerants. Scripta Materialia, 2012, 66, 642-645.	2.6	53
162	Magnetic field dependence of the maximum adiabatic temperature change. Applied Physics Letters, 2011, 99, .	1.5	39

#	ARTICLE	IF	CITATIONS
163	High-field magnetization of Ho ₂ R ₂ single crystals. Journal of Magnetism and Magnetic Materials, 2011, 323, 447-450.	1.1	5
164	Physical properties of the intermetallic compound ErCo ₂ near the magnetic phase transition paramagnetism-ferrimagnetism. Journal of Physics: Conference Series, 2011, 303, 012032.	1.1	127
165	The magnetostriction of the intermetallic compound ErCo ₂ near the magnetic phase transition paramagnetism-ferrimagnetism. Journal of Physics: Conference Series, 2011, 303, 012032.	0.3	1
166	Magnetotransport in Tb ₂ Fe ₁₇ single crystals. Journal of Physics: Conference Series, 2011, 303, 012019.	0.3	0
167	Systematic study of the microstructure, entropy change and adiabatic temperature change in optimized LaFeSi alloys. Acta Materialia, 2011, 59, 3602-3611.	3.8	177
168	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
169	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
170	Er ₂ Fe ₁₄ B single crystal as magnetic refrigerant at the spin reorientation transition. Journal of Applied Physics, 2011, 109, .	1.1	17
171	Peculiarities of the magnetocaloric properties in Ni-Mn-Sn ferromagnetic shape memory alloys. Physical Review B, 2010, 81, .	1.1	96
172	Temperature Behaviour of Magnetic Domain Structure in RE-3d Intermetallics with Spin-Reorientation Transitions. Solid State Phenomena, 2010, 168-169, 122-125.	0.3	1
173	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
174	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
175	Magnetic Properties of RFe ₉ Ti Single Crystals with ThMn ₁₂ Structure. Solid State Phenomena, 2009, 152-153, 62-65.	0.3	1
176	Comparative Study of the Magnetocaloric Properties in Ni-Mn-X (X = Ga, In, Sn) by Magnetization and Specific Heat Measurements. Materials Research Society Symposia Proceedings, 2009, 1200, 77.	0.1	0
177	Magnetocaloric effect in micro- and nanocrystalline TbFe _{11-X} Ti intermetallic compounds. Journal of Physics: Conference Series, 2009, 144, 012087.	0.3	1
178	The kinetics of hydrogen-induced diffusive phase transformations in Sm ₂ Fe ₁₇ alloys. International Journal of Nuclear Hydrogen Production and Applications, 2009, 2, 42.	0.2	0
179	Adiabatic temperature change at first-order magnetic phase transitions: Ni ₂ Fe ₁₉ a case study. Physical Review B, 2008, 78, .	1.1	59
180	Anomalous Hall effect in Y ₂ Fe ₁₇ crystals. Physical Review B, 2008, 78, .	1.1	59

#	ARTICLE	IF	CITATIONS
181	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
182	Magnetotransport Properties of $\text{R}_{17}\text{Fe}_{17}\text{Co}_x$ Single Crystals. IEEE Transactions on Magnetics, 2008, 44, 4506-4508.	1.2	2
183	Determining anisotropy constants from a first-order magnetization process in $\text{TbFe}_{17}\text{Co}_x$ single crystals. Physical Review B, 2008, 77, .	1.1	17
184	High-field magnetization measurements on $\text{Er}_2\text{Fe}_{17}$ single crystals. Physical Review B, 2007, 75, .	1.1	28
185	Spin-reorientation transition in TbCo_5 . Journal of Experimental and Theoretical Physics, 2007, 105, 1230-1235.	0.2	4
186	Increase in the magnetostrictive susceptibility of $\text{Tb}_{0.3}\text{Dy}_{0.67}\text{Ho}_{0.03}\text{Fe}_{2-x}\text{Co}_x$ alloys upon substitution of cobalt for iron. Physics of the Solid State, 2007, 49, 315-319.	0.2	6
187	Consideration of the micromagnetic state of a sample in interpretation of magnetic measurement data. Bulletin of the Russian Academy of Sciences: Physics, 2007, 71, 1518-1520.	0.1	2
188	INFLUENCE OF HYDROGEN ON MAGNETOCRYSTALLINE ANISOTROPY OF $\text{TbFe}_6\text{Co}_5\text{Ti}$ SINGLE CRYSTAL. , 2007, , 485-492.		0
189	Spin-reorientation transitions in $\text{Nd}_2(\text{Fe},\text{Co})_{14}\text{B}$ compounds and their hydrides. Journal of Magnetism and Magnetic Materials, 2006, 300, e465-e468.	1.0	5
190	Magnetocrystalline anisotropy and magnetic domain structure of $\text{ErFe}_{11}\text{Ti}$ and $\text{HoFe}_{11}\text{Ti}$ compounds. Journal of Magnetism and Magnetic Materials, 2006, 300, e500-e502.	1.0	5
191	The magnetic domain structure of $\text{DyFe}_{11}\text{Ti}$ single crystals. Journal of Magnetism and Magnetic Materials, 2006, 300, e514-e517.	1.0	6
192	A magnetic and crystallographic study of new ternary $\text{GdSc}_x\text{Ti}_{1-x}\text{Ge}$ compounds. Journal of Magnetism and Magnetic Materials, 2006, 300, e489-e492.	1.0	5
193	Low-temperature magnetization distribution and magnetization reversal in FeNdB permanent magnets. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 644-646.	1.0	4
194	High-field investigation of the intersublattice interaction in GdCo_5 . Journal of Magnetism and Magnetic Materials, 2005, 290-291, 435-437.	1.0	8
195	Spin-Reorientation Transitions and Domain Structure in $\text{TbFe}_{11}\text{Co}_x\text{Ti}$ Single Crystals. Physics of the Solid State, 2005, 47, 517.	0.2	5
196	Structural and magnetic properties of $\text{R}_3\text{Fe}_{29}\text{Ti}_x$ alloys and $\text{R}_3\text{Fe}_{33}\text{Ti}_3$ single crystals, $\text{R}=\text{Dy, Tb}$. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 435-437.	1.0	3
197	The relationship between mechanical stresses and optical anomalies in germanium and paratellurite. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2005, 72, 572.	0.2	1
198	Structural and magnetic properties of $\text{Dy}_2\text{Fe}_{17}\text{H}_x$ (x = 1 and 3) single crystals. Journal of Alloys and Compounds, 2005, 404-406, 172-175.	2.8	27

#	ARTICLE	IF	CITATIONS
199	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
200	The magnetocrystalline anisotropy in Y(Fe,Co) ₁₁ TiH single crystals. Journal of Alloys and Compounds, 2005, 404-406, 208-211.	2.8	7
201	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
202	Specific heat and magnetic susceptibility of intermetallic compounds R ₃ Ni. Physica B: Condensed Matter, 2004, 344, 462-469.	1.3	17
203	Magnetization processes of the Dy ₃ Ni single crystal. Physica B: Condensed Matter, 2004, 346-347, 169-173.	1.3	0
204	Spin reorientation in high magnetic fields and the Co-Gd exchange field in GdCo ₅ . Physical Review B, 2004, 70, .	1.1	29
205	Magnetization and specific heat of the Ho ₃ Co compound. Journal of Magnetism and Magnetic Materials, 2003, 258-259, 561-563.	1.0	6
206	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
207	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
208	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
209	Magnetic properties and specific heat of the Dy ₃ Ni intermetallic compound. Journal of Physics Condensed Matter, 2003, 15, 5997-6004.	0.7	2
210	Magnetization of a Gd ₃ Ni single crystal. Journal of Alloys and Compounds, 2002, 334, 40-44.	2.8	13
211	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
212	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
213	Magnetic properties of the Gd ₃ Ni single crystal. European Physical Journal D, 2002, 52, A193-A196.	0.4	1
214	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
215	Incoherent rotation of the erbium magnetic moments during magnetization processes of the Er ₃ Ni and Er ₃ Co compounds. Journal of Magnetism and Magnetic Materials, 2002, 251, 155-162.	1.0	5
216	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

#	ARTICLE	IF	CITATIONS
217	Effect of hydrogenation on spin-reorientation phase transitions and magnetic anisotropy constants of RFe ₁₁ Ti single crystals (R=Lu, Ho, and Er). <i>Physics of the Solid State</i> , 2001, 43, 290-299.	0.2	7
218	Magnetic anisotropy and magnetostriction in a Lu ₂ Fe ₁₇ intermetallic single crystal. <i>Physics of the Solid State</i> , 2001, 43, 1720-1727.	0.2	26
219	Magnetocrystalline Anisotropy of Tb _{1.1} (FeCo) ₁₁ Ti. <i>Acta Physica Polonica A</i> , 2000, 97, 847-850.	0.2	3
220	The magnetocrystalline anisotropy in YTi(Fe,Co) ₁₁ single crystals. <i>Journal of Alloys and Compounds</i> , 1999, 283, 45-48.	2.8	11
221	Investigation of spin-reorientation phase transitions in single-crystal DyFe ₁₁ Ti. <i>Physics of the Solid State</i> , 1998, 40, 643-644.	0.2	1
222	Magnetic anisotropy and magnetic properties of RTSi (R=Gd, Y; T=Mn, Fe) compounds. <i>Journal of Alloys and Compounds</i> , 1998, 280, 16-19.	2.8	12
223	Spin-reorientation transitions and magnetic anisotropy in TbFe ₁₁ ~Co Ti compounds. <i>Journal of Alloys and Compounds</i> , 1998, 280, 20-25.	2.8	15
224	Magnetostatic grain interaction and angular dependence of the nucleation field in Fe _{1-x} Nd _x B and SmCo ₅ permanent magnets. <i>Journal of Magnetism and Magnetic Materials</i> , 1996, 157-158, 67-68.	1.0	7
225	Magnetocaloric Effect of RCo ₅ Single Crystals in the Region of Spin-Reorientation Transitions. <i>Solid State Phenomena</i> , 0, 168-169, 134-137.	0.3	7
226	Adiabatic Temperature Change in Metamagnetic Ni(Co)-Mn-Al Heusler Alloys. <i>Materials Science Forum</i> , 0, 738-739, 446-450.	0.3	7
227	The Influence of Cold Rolling on Magnetocaloric Properties of Gd _{100-x} Y _x (x = 0, 5, 10, 15) Alloys. <i>Solid State Phenomena</i> , 0, 233-234, 238-242.	0.3	7
228	Search the Hard Magnetic Tetraenaite Phase in the Fragments of Chelyabinsk Meteorite. <i>Materials Science Forum</i> , 0, 845, 265-268.	0.3	0
229	Microstructure Transformation under Itinerant-Electron Metamagnetic Transition in LaFe ₁₁ Si ₆ Si ₁ Si ₄ . <i>Materials Science Forum</i> , 0, 845, 42-45.	0.3	0
230	Electrotransport Properties of the La(Fe _{1-x} Si _x) ₁₁ Co _{1-x} Si _y 0.3 Compounds. <i>Materials Science Forum</i> , 0, 845, 50-55.		0
231	The Effect of Plastic Deformation on Magnetic and Magnetocaloric Properties of Gd ₉₀ Ga ₁₀ Alloy. <i>Materials Science Forum</i> , 0, 845, 56-60.	0.3	3