

Irina Tereshina

List of Publications by Year in descending order

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all docs

100
docs citations

100
times ranked

347
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic ordering temperature of nanocrystalline Gd: enhancement of magnetic interactions via hydrogenation-induced negative-pressure. Scientific Reports, 2016, 6, 22553.	3.3	37
2	ThMn12-type phases for magnets with low rare-earth content: Crystal-field analysis of the full magnetization process. Scientific Reports, 2018, 8, 3595.	3.3	35
3	Multifunctional Phenomena in Rare-Earth Intermetallic Compounds With a Laves Phase Structure: Giant Magnetostriction and Magnetocaloric Effect. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	33
4	Magnetocaloric properties of distilled gadolinium: Effects of structural inhomogeneity and hydrogen impurity. Applied Physics Letters, 2014, 104, .	3.3	30
5	Spin reorientation in high magnetic fields and the Co-Gd exchange field in GdCo5. Physical Review B, 2004, 70, .	3.2	29
6	Strong room-temperature easy-axis anisotropy in Tb ₂ Fe ₁₇ H. Journal of Applied Physics, 2011, 110, 083901.	3.2	29
7	Magnetic anisotropy and Mössbauer effect studies of YFe11Ti and YFe11TiH. Journal of Physics Condensed Matter, 2001, 13, 8161-8170.	1.8	28
8	High-field magnetic behavior and forced-ferromagnetic state in an ErF ₁₁ TiH single crystal. Physical Review B, 2015, 92, .	3.2	27
9	Magnetic anisotropy and magnetostriction in a Lu2Fe17 intermetallic single crystal. Physics of the Solid State, 2001, 43, 1720-1727.	0.6	26
10	Spin reorientation and crystal field in the single-crystal hydride HoFe11TiH. Physical Review B, 2001, 63, .	3.2	24
11	Variation of the intersublattice exchange coupling due to hydrogen absorption in Er2Fe14B: A high-field magnetization study. Journal of Applied Physics, 2012, 111, 093923.	2.5	24
12	Thermomagnetic and magnetocaloric properties of metamagnetic Ni-Mn-In-Co Heusler alloy in magnetic fields up to 140 kOe. EPJ Web of Conferences, 2014, 75, 04008.	0.3	24
13	Magnetic Properties of the Nanocrystalline Nd-Ho-Fe-Co-B Alloy at Low Temperatures: The Influence of Time and Annealing. Journal of Materials Engineering and Performance, 2017, 26, 4676-4680.	2.5	22
14	Probing the exchange coupling in the complex modified Ho-Fe-B compounds by high-field magnetization measurements. AIP Advances, 2018, 8, .	1.3	21
15	Magnetostructural phase transitions and magnetocaloric effect in Tb-Dy-Ho-Co-Al alloys with a Laves phase structure. Journal of Applied Physics, 2016, 120, .	2.5	19
16	Direct measurement of magnetocaloric effect in metamagnetic Ni43Mn37.9In12.1Co7 Heusler Alloy. Bulletin of the Russian Academy of Sciences: Physics, 2014, 78, 936-938.	0.6	18
17	A study of nanostructure magnetosolid Nd-Ho-Fe-Co-B materials via atomic force microscopy and magnetic force microscopy. Physics of the Solid State, 2016, 58, 1862-1869.	0.6	18
18	Effect of hydrogen on the magnetic characteristics of Nd2Fe14B single crystal. Physica Status Solidi A, 2003, 196, 317-320.	1.7	16

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19	Magnetic anisotropy of YFe ₁₁ Ti and its hydride. <i>Physics of the Solid State</i> , 1998, 40, 258-262.	0.6	14
20	Magnetocaloric effect in (Tb,Dy, <i>R</i>)(Co,Fe) ₂ (<i>R</i> = Ho, Er) multicomponent compounds. <i>Journal of Physics: Conference Series</i> , 2011, 266, 012077.	0.4	14
21	High-Field Magnetization Study of R ₂ Fe ₁₇ H ₃ (R = Tb, Dy, Ho and Er) Single-Crystalline Hydrides. <i>IEEE Transactions on Magnetics</i> , 2011, 47, 3617-3620.	2.1	12
22	Magnetic-field induced phase transitions in intermetallic rare-earth ferrimagnets with a compensation point. <i>Low Temperature Physics</i> , 2017, 43, 551-558.	0.6	12
23	Properties of metamagnetic alloy Fe ₄₈ Rh ₅₂ in high magnetic fields. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2015, 79, 1086-1088.	0.6	11
24	Forced-ferromagnetic state in a Tm ₂ Fe ₁₇ H ₅ single crystal. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 24LT01.	1.8	11
25	Magnetostriction and magnetization of the intermetallic compounds RFe ₂ × Co _x (R = Tb, Dy, Er) with compensated magnetic anisotropy. <i>Physics of the Solid State</i> , 2009, 51, 92-98.	0.6	10
26	Effect of heat treatment on the properties of nanostructured magnetically hard Pr-Dy-Fe-Co-B materials. <i>Russian Metallurgy (Metally)</i> , 2010, 2010, 442-447.	0.5	9
27	Magnetocaloric effect in compounds exhibiting gigantic magnetostriction. <i>Doklady Physics</i> , 2011, 56, 513-516.	0.7	9
28	The magnetocaloric effect in hydrogen-doped Nd ₂ Fe ₁₄ B and Er ₂ Fe ₁₄ B intermetallic compounds. <i>Doklady Physics</i> , 2017, 62, 10-13.	0.7	9
29	Effect of Hydrogenation on the Magnetic and Magnetoelastic Properties of the Tb _[sub 0.27] Dy _[sub 0.73] Fe _[sub 2] and Tb _[sub 0.27] Dy _[sub 0.73] Co _[sub 2] Compounds with Compensated Magnetic Anisotropy. <i>Physics of the Solid State</i> , 2005, 47, 1909.	0.6	8
30	Spontaneous and external magnetic field-induced magnetostriction in RCo ₂ -based multicomponent alloys. <i>Physics of the Solid State</i> , 2015, 57, 2417-2422.	0.6	8
31	Magnetic properties of HoFe ₆ Al ₆ with a compensation point near absolute zero: A theoretical and experimental study. <i>Journal of Alloys and Compounds</i> , 2017, 708, 1161-1167.	5.5	8
32	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.	0.6	7
33	Magnetostriction in the vicinity of spin-reorientation phase transitions in singlecrystal DyFe ₁₁ Ti. <i>Physics of the Solid State</i> , 1999, 41, 1508-1510.	0.6	6
34	Effect of interstitial atoms on the effective exchange fields in ferrimagnetic rare-earth and 3d transition metal compounds R ₂ Fe ₁₇ and RFe ₁₁ Ti. <i>Physics of the Solid State</i> , 2003, 45, 1944-1951.	0.6	6
35	Increase in the magnetostrictive susceptibility of Tb _{0.3} Dy _{0.67} Ho _{0.03} Fe ₂ × Co _x alloys upon substitution of cobalt for iron. <i>Physics of the Solid State</i> , 2007, 49, 315-319.	0.6	6
36	Structural, magnetic, and magnetothermal properties of the Tb _{0.3} Dy _{0.7} Co ₂ compound. <i>Physics of the Solid State</i> , 2011, 53, 2028-2031.	0.6	6

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37	Multifunctional phenomena in sublimed dysprosium in high magnetic fields: The magnetocaloric effect and magnetostriction. <i>Doklady Physics</i> , 2016, 61, 168-171.	0.7	6
38	Experimental simulation of a magnetic refrigeration cycle in high magnetic fields. <i>Physics of the Solid State</i> , 2016, 58, 81-85.	0.6	6
39	High-Field Magnetization Study of $R_2\text{Fe}_{17}\text{N}_2$ ($R = \text{Er, Tb}$) <i>J. Appl. Phys.</i> 107, 074314 (2010)	1.4	6
40	The Influence of Hydrogenation on the Structure, Magnetic and Magnetocaloric Properties of Tb-Dy-Co Alloys with a Laves Phase Structure. <i>Physics of the Solid State</i> , 2019, 61, 1169-1175.	0.6	6
41	Structural, Magnetic, and Thermal Properties of the Compound Tb _{0.8} Sm _{0.2} Fe ₂ with a Laves Phase Structure. <i>Physics of the Solid State</i> , 2019, 61, 2503-2508.	0.6	6
42	Hydrogen-induced extremely large change in Curie temperatures in layered GdSiH ($T_c = 0$ Mn, Fe, Co). <i>Journal of Applied Physics</i> , 2020, 128, 143903.	2.5	6
43	X-ray and Mössbauer studies of the Tb _{0.3} Dy _{0.7} Fe _{2-x} Co _x system alloys. <i>Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika)</i> , 2007, 62, 237-239.	0.4	5
44	Effect of hydrogenation on the magnetic properties of the intermetallic compound Er ₂ Fe ₁₄ B with single-crystal and nanocrystalline structures. <i>Physics of the Solid State</i> , 2008, 50, 56-62.	0.6	5
45	Low-Temperature Magnetic Hysteresis in Nd(Pr)-Fe-B Nanostructured Alloys with Nd ₂ Fe ₁₄ B Type Main Phase Composition. <i>Defect and Diffusion Forum</i> , 0, 386, 125-130.	0.4	5
46	Effect of hydrogenation on the magnetic and magnetoelastic properties of R ₂ Fe ₁₄ B compounds (R = Er, Tb) <i>J. Appl. Phys.</i> 107, 074314 (2010)	0.6	4
47	Interplay between hydrogenation and pressure effects in magnetism of Lu ₂ Fe ₁₇ single crystal. <i>High Pressure Research</i> , 2006, 26, 485-487.	1.2	4
48	Spin-reorientation transition in TbCo ₅ . <i>Journal of Experimental and Theoretical Physics</i> , 2007, 105, 1230-1235.	0.9	4
49	Calculation of the temperature induction coefficient of nanostructured hard magnetic Pr-Dy-Gd-Fe-Co-B materials using the molecular-field approximation. <i>Russian Metallurgy (Metally)</i> , 2010, 2010, 53-56.	0.5	4
50	Hysteresis properties of nanostructured Nd-Ho-Fe-Co-B alloys. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2010, 74, 1395-1397.	0.6	4
51	Effect of hydrogenation on magnetic properties of R ₂ Fe ₁₆ M single crystals (R = Ce, Lu, and Y; M = Fe) <i>J. Appl. Phys.</i> 107, 074314 (2010)	0.5	4
52	The effect of adding aluminum and iron to Tb-Dy-Ho-Co multicomponent alloys on their structure and magnetic and magnetocaloric properties. <i>Technical Physics</i> , 2017, 62, 577-582.	0.7	4
53	Magnetic phase diagrams of Gd-H, Tb-H, Dy-H systems. <i>EPL Web of Conferences</i> , 2018, 185, 05011.	0.3	4
54	Substituted (Nd,Pr) ₂ Fe ₁₄ B alloys: structural features and magnetic properties. <i>Journal of Physics: Conference Series</i> , 2019, 1236, 012016.	0.4	4

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55	Investigation of the Field-Induced Phase Transitions in the $(R,Ra^{2})_{2}Fe_{14}B$ Rare-Earth Intermetallics in Ultrahigh Magnetic Fields. IEEE Transactions on Magnetics, 2021, 57, 1-5.	2.1	4
56	Drastic reduction of the R-Fe exchange in interstitially modified $(Nd,Ho)_{2}Fe_{14}B$ compounds probed by megagauss magnetic fields. Physical Review Materials, 2021, 5, .	2.4	4
57	Specific features in thermal expansion of $RFe_{11}Ti$ single crystals. Physics of the Solid State, 2001, 43, 1273-1277.	0.6	3
58	Magnetic phase diagrams of the $Tm_{2}Fe_{17}H$ system. Doklady Physical Chemistry, 2016, 469, 102-105.	0.9	3
59	Crystal-Field and Exchange Parameters Obtained from the High-Field Magnetization of $ErFe_{11}Ti$: Revisited. Journal of Low Temperature Physics, 2020, 200, 164-172.	1.4	3
60	Magnetic and magnetoelastic properties of rare earth intermetallics based on $TbFe_{2}$. IOP Conference Series: Materials Science and Engineering, 2020, 905, 012071.	0.6	3
61	Magnetic Properties and Surface Morphology of the Intermetallic Compound $Dy_{2}Fe_{10}Al_{7}$ and Its Hydride. Physics of the Solid State, 2020, 62, 808-814.	0.6	3
62	Structural and high-field magnetic properties of Laves phase $RFe_{2}H$ hydrides. Journal of Applied Physics, 2021, 130, 210901.	2.5	3
63	The effect of hydrogen on the magnetostriction of rare-earth compounds $TbxDy_{1-x}Fe_{2}$. Low Temperature Physics, 2001, 27, 297-299.	0.6	2
64	Structure and temperature dependence of the magnetization of the $DyFe_{11}Ti$ nanocrystalline compound. Physics of the Solid State, 2002, 44, 1723-1726.	0.6	2
65	Nitrogen-containing compounds $RFe_{11}TiN_{x}$ ($R = Gd$ or Lu). Physics of the Solid State, 2003, 45, 104-108.	0.6	2
66	Effect of hydrogenation on magnetic phase transitions in the $Er_{2}Fe_{14}B$ single crystal. Doklady Physics, 2005, 50, 346-348.	0.7	2
67	The existence of a homogeneity range with respect to boron for the 2-14-1 hard-magnetic phase. Doklady Physics, 2012, 57, 439-441.	0.7	2
68	Development of nanostructured magnetic materials based on high-purity rare-earth metals and study of their fundamental characteristics. Physics of the Solid State, 2014, 56, 1778-1784.	0.6	2
69	Atomic-Force Microscopic Study of the Surface Morphology of the $Nd_{2}Fe_{14}B$ Alloys Prepared by Various Techniques. Russian Metallurgy (Metally), 2018, 2018, 859-866.	0.5	2
70	The Effect of Structural Inhomogeneities and Gas-Forming Impurities on the Functional Properties of High Purity Rare-Earth Metals. Physics of the Solid State, 2018, 60, 1115-1119.	0.6	2
71	A Numerical Model of Nitriding of a Gadolinium Specimen and Its Further Destruction during Storage. Protection of Metals and Physical Chemistry of Surfaces, 2018, 54, 308-315.	1.1	2
72	Effect of Hydrogenation on Magnetostriction and Magnetocaloric Effect in Gadolinium Single Crystal. Physics of the Solid State, 2019, 61, 90-93.	0.6	2

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73	Specific Features in the Field and Temperature Dependences of the Magnetostriction of Multicomponent $\text{Sm}_{0.2}(\text{Y,Tb})_{0.8}\text{Fe}_2$ Alloys. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta), Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.4	2
74	Perspective on synthesis, structure, and magnetic properties of Fe-H hydrides. Journal of Applied Physics, 2021, 130, .	2.5	2
75	Investigation of spin-reorientation phase transitions in single-crystal $\text{DyFe}_{11}\text{Ti}$. Physics of the Solid State, 1998, 40, 643-644.	0.6	1
76	Specific features in magnetic resistivity of RFe_{11}Ti single crystals. Physica Status Solidi (B): Basic Research, 2003, 236, 462-465.	1.5	1
77	Magnetostriction and transformation of crystal structure of intermetallic compound NdCo_2 . Journal of Physics: Conference Series, 2011, 303, 012023.	0.4	1
78	Basic mechanisms of magnetic-anisotropy change under hydrogenation of the $\text{Tb}_2\text{Fe}_{17}$ compound. Doklady Physics, 2013, 58, 528-532.	0.7	1
79	The Influence of Milling Modes on the Structure and Magnetic Properties of $(\text{Sm}, \text{Ho})_2\text{Fe}_{17}\text{N}_x$ ($x = 0$). Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.7	1
80	New Magnetic Materials Based on RNi Compounds for Cryogenic Technology. Technical Physics Letters, 2020, 46, 303-306.	0.7	1
81	Strengthening the Intersublattice Exchange Interaction in $\text{R}(\text{Fe,Ti})_{12}\text{N}$ ($\text{R} = \text{Ho}$ and Er) Nitrides. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf	0.4	1
82	Study of the Properties of Sm-Fe-Co-Ti-H Compounds with ThMn_{12} -Type Structure by Magnetometry, Atomic Force Microscopy, and Magnetic Force Microscopy. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2020, 75, 631-637.	0.4	1
83	High-Field Magnetization Study of Laves Phase $(\text{Gd,Y,Sm})\text{Fe}_2\text{-H}$. IEEE Magnetics Letters, 2022, 13, 1-5.	1.1	1
84	Effect of Nd , Pr substitutional atoms on the magnetic and magnetostrictive properties in $(\text{Tb-Dy})(\text{Fe-Co})_2$ Laves phases. Journal of Physics: Conference Series, 2021, 2103, 012196.	0.4	1
85	High-field magnetization studies and their analysis in RFe_{11}Ti and $\text{RFe}_{11}\text{TiH}$ rare-earth intermetallics (an example:). Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 257 Td (H	0.4	1
86	The Influence of Interstitial and Substitutional Atoms on the Magnetic Properties of $\text{Sm}_2\text{Fe}_{17}$ Compound. Technical Physics Letters, 2021, 47, 624-627.	0.7	1
87	Effect of pressure and interstitial atoms on magnetic properties of $\text{LuFe}_{11}\text{Ti}$ Intermetallics. High Pressure Research, 2003, 23, 161-164.	1.2	0
88	Magnetoelastic effects in single-, poly-, and nanocrystalline iron- and cobalt-based rare-earth alloys and their hydrides. Russian Metallurgy (Metally), 2011, 2011, 675-679.	0.5	0
89	Magnetic Properties of Hydrides of RNi_6 Compounds ($\text{R} = \text{Dy}$, Gd , $x = 0.05, 0.02$). Physics of the Solid State, 2018, 60, 2517-2523.	0.6	0
90	A Cascade of Phase Transitions in Amorphous FeB Films. Moscow University Physics Bulletin (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.4	0

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91	The Thermal-Magnetic Properties of Terbium Before and After Severe Plastic Deformation. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2021, 76, 104-109.	0.4	0
92	The Effect of Hydrogenation on the Magnetocaloric Properties of Nanocrystalline Terbium. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2021, 76, 176-181.	0.4	0
93	Comparative High-Field Magnetization Study of $(\text{Sm,Er})_2\text{Fe}_{17}$ and $(\text{Er})_2\text{Fe}_{17}$ Compounds and their Nitrides. Materials Science Forum. 0, 1037, 148-153.	0.3	0
94	Magnetic anisotropy and Mössbauer effect studies of YFe ₁₁ and YFe ₁₁ Ti. Journal of Physics Condensed Matter, 2003, 15, .	1.8	0
95	Magnetic Properties Of Gd ₂ Fe ₁₄ BhX Hydrides. NATO Science for Peace and Security Series C: Environmental Security, 2008, , 415-422.	0.2	0
96	Magnetic Properties of Nanocrystalline (Nd,R)-(Fe,Co)-B (R = Pr, Ho) Alloys after Melt Spinning, Severe Plastic Deformation and Heat Treatment. Solid State Phenomena, 0, 312, 235-243.	0.3	0
97	Study of the effect of nitrogen and hydrogen on the structure and magnetic properties of (Sm,) Tj ETQq1 1 0.784314 rgBT / Overlock 10	0.4	0
98	The Structure and Magnetic Properties of (Sm,Er)-Fe-N Powders Prepared by Ball Milling. Key Engineering Materials, 0, 910, 841-848.	0.4	0
99	The Microstructure of the Membrane Alloy Pd-9.1 at $\mathbf{\%}$ Y. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2021, 76, 465-469.	0.4	0
100	Magnetic Phase Transitions in GdH _{0.15} : Some Peculiarities in the Behavior of Magnetocaloric and Magnetostrictive Effects. IEEE Magnetism Letters, 2022, 13, 1-5.	1.1	0