

Vasily Buchelnikov

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Electronic and structural properties of Co-Ni δ Heusler alloys. <i>Journal of Magnetism and Magnetic Materials</i> , 2022, 557, 169437.	1.0	2
2	Electronic and Vibrational Properties of Fe δ ,NiAl and Co δ ,NiAl Full Heusler Alloys: A First-Principles Comparison. <i>IEEE Transactions on Magnetics</i> , 2022, 58, 1-5.	1.2	0
3	Impact of local arrangement of Fe and Ni on the phase stability and magnetocrystalline anisotropy in Fe-Ni-Al Heusler alloys. <i>Physical Review Materials</i> , 2022, 6, .	0.9	6
4	Structural and magnetic properties of Fe δ Al alloys: Ab Initio studies. <i>Journal of Magnetism and Magnetic Materials</i> , 2022, 557, 169437.	1.0	3
5	Segregation tendency and properties of FeRh δ -Pt alloys. <i>Journal of Magnetism and Magnetic Materials</i> , 2022, 556, 169403.	1.0	1
6	Giant high-temperature superelasticity in a Ni-Fe-Mn-Sn shape memory microwire. <i>Materials Letters</i> , 2022, 320, 132360.	1.3	0
7	Exchange Correlation Effects in Modulated Martensitic Structures of the Mn δ NiGa Alloy. <i>Physics of Metals and Metallography</i> , 2022, 123, 375-380.	0.3	3
8	Review of Modern Theoretical Approaches for Study of Magnetocaloric Materials. <i>Physics of Metals and Metallography</i> , 2022, 123, 319-374.	0.3	12
9	Study of Heat Transfer Processes in a System Containing Fe δ Rh Microwires. <i>Physics of Metals and Metallography</i> , 2022, 123, 381-385.	0.3	0
10	Magnetocaloric Effect in Metals and Alloys. <i>Physics of Metals and Metallography</i> , 2022, 123, 315-318.	0.3	13
11	Prediction of a Heusler alloy with switchable metal-to-half-metal behavior. <i>Physical Review B</i> , 2021, 103, .	1.1	8
12	A Ternary Map of Ni δ Mn δ Ga Heusler Alloys from Ab Initio Calculations. <i>Metals</i> , 2021, 11, 973.	1.0	4
13	Phase transitions in Fe-(23 δ ~24)Ga alloys: Experimental results and modeling. <i>Journal of Alloys and Compounds</i> , 2021, 885, 160917.	2.8	3
14	Design of a Stable Heusler Alloy with Switchable Metal δ ~Half δ Metal Transition at Finite Temperature. <i>Advanced Theory and Simulations</i> , 2021, 4, 2100311.	1.3	6
15	Optimization of the Microwave-Assisted Carbothermal Reduction Process for Metals from Electric Arc Furnace Dust with Biochar. <i>Metals</i> , 2021, 11, 1765.	1.0	2
16	FIRST-PRINCIPLES STUDIES OF THE PHASE TRANSITIONS IN Fe-Si ALLOYS. <i>Bulletin of the South Ural State University Series Mathematics Mechanics Physics</i> , 2021, 13, 52-58.	0.2	0
17	Statistical model for the martensitic transformation simulation in Heusler alloys. <i>Physica B: Condensed Matter</i> , 2020, 578, 411874.	1.3	2
18	Structural, magnetic and electronic properties of FeRh δ Pd δ -x compounds: Ab initio study. <i>Physica B: Condensed Matter</i> , 2020, 578, 411882.	1.3	2

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19	First principles study of structural and magnetic properties in Fe _{100-x} Ge alloys. Physica B: Condensed Matter, 2020, 580, 411934.	1.3	4
20	Phase transitions in Fe ₃ Al-based alloys: <i>ab initio</i> study. Phase Transitions, 2020, 93, 43-53.	0.6	1
21	Electronic structure beyond the generalized gradient approximation for $\text{Ni}_{2x}\text{Mn}_{1-x}\text{Ga}$. Physical Review B, 2020, 102, .		
22	Superconducting and antiferromagnetic properties of dual-phase V ₃ Ga. Applied Physics Letters, 2020, 117, 062401.	1.5	5
23	Magnetocaloric properties of Ni _{2-x} Mn _{1-x} Ga with coupled magnetostructural phase transition. Journal of Applied Physics, 2020, 127, .	1.1	9
24	Ab Initio Studies of Phase Transformations in Fe _{100-x} Si _x . Physics of the Solid State, 2020, 62, 739-743.	0.2	2
25	Exchange-correlation corrections for electronic properties of half-metallic Co ₂ FeSi and nonmagnetic semiconductor CoFeTiAl. Journal of Applied Physics, 2020, 127, .	1.1	10
26	Electronic and Magnetic Properties of DyFe ₄ Ge ₂ Alloys near a Phase Transition. Physics of the Solid State, 2020, 62, 931-936.	0.2	0
27	A Study of the Structure and Magnetic Properties of FeRh _{1-x} Al _x (x = 0.5-1) Alloys by First-Principles Methods. Physics of the Solid State, 2020, 62, 963-967.	0.2	2
28	First-Principles Study of the Structure and Properties of Fe ₃ Pd and FePdRh Alloys. Shape Memory and Superelasticity, 2020, 6, 61-66.	1.1	2
29	Coulomb correlation in noncollinear antiferromagnetic $\text{Fe}_{1-x}\text{Mn}_x$ -Mn. Physical Review B, 2020, 101, .	1.1	27
30	Prediction of giant magnetocaloric effect in Ni ₄₀ Co ₁₀ Mn ₃₆ Al ₁₄ Heusler alloys: An insight from <i>ab initio</i> and Monte Carlo calculations. Journal of Applied Physics, 2020, 127, 163901.	1.1	8
31	Phase Transformations in Ni(Co) _x Mn(Cr,C) _{1-x} (In,Sn) Alloys: An Ab Initio Study. Physics of Metals and Metallography, 2020, 121, 202-209.	0.3	4
32	Theoretical Approach to Investigation of the Magnetic and Magnetocaloric Properties of Heusler NiMnGa Alloys. Physics of the Solid State, 2020, 62, 785-792.	0.2	4
33	VOLUME MAGNETOSTRICTION OF FE-GA ALLOYS: CALCULATION FROM FIRST PRINCIPLES. Bulletin of the South Ural State University Series Mathematics Mechanics Physics, 2020, 12, 57-62.	0.2	0
34	Structural and Elastic Properties of Fe-Ge Alloys: <i>ab initio</i> studies. Bulletin of the South Ural State University Series Mathematics Mechanics Physics, 2020, 12, 49-56.	0.2	0
35	Phase Diagram of Fe-Al Alloys: A Study from First Principles. Bulletin of the Russian Academy of Sciences: Physics, 2019, 83, 844-846.	0.1	3
36	Correlation effects in the ground state of Ni-(Co)-Mn-Sn Heusler compounds. MRS Advances, 2019, 4, 441-446.	0.5	3

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37	Monte Carlo simulations of hysteresis effects at the martensitic transformation. Physica B: Condensed Matter, 2019, 575, 411692.	1.3	2
38	Soft Phonon Modes in Ni ₂ MnGa and Ni ₂ MnAl Heusler Alloys. Bulletin of the Russian Academy of Sciences: Physics, 2019, 83, 909-911.	0.1	0
39	Correlation effects on ground-state properties of ternary Heusler alloys: First-principles study. Physical Review B, 2019, 99, .	1.1	28
40	Phase diagram of magnetostrictive Fe-Ga alloys: insights from theory and experiment. Phase Transitions, 2019, 92, 101-116.	0.6	33
41	Magnetostriction of Fe _{100-x} Ga _x alloys from first principles calculations. Journal of Magnetism and Magnetic Materials, 2019, 476, 120-123.	1.0	7
42	Investigation of electronic, magnetic and structural properties of the Fe _{1-x} Mn _x Rh. Journal of Magnetism and Magnetic Materials, 2019, 476, 325-328.	1.0	6
43	First-principles study of Ni-Co-Mn-Sn alloys with regular and inverse Heusler structure. Journal of Magnetism and Magnetic Materials, 2019, 476, 546-550.	1.0	7
44	Ground state and magnetic properties of the Cr-doped Ni-Mn-(Ga, Ge, In, Sn) alloys: Insights from ab initio study. Journal of Magnetism and Magnetic Materials, 2019, 470, 123-126.	1.0	7
45	Modeling of the structural and magnetic properties of Fe-Rh-(Z) (Z = Mn, Pt) alloys by first principles methods. Journal of Magnetism and Magnetic Materials, 2019, 470, 69-72.	1.0	7
46	Ternary diagrams of magnetic properties of Ni-Mn-Ga Heusler alloys from ab initio and Monte Carlo studies. Journal of Magnetism and Magnetic Materials, 2019, 470, 64-68.	1.0	10
47	Peculiarities of phonons in Ni-Mn-Ga alloys: Ab initio studies. Journal of Magnetism and Magnetic Materials, 2019, 470, 73-76.	1.0	2
48	Magnetic properties of Fe _{100-x} Ga _x : Ab initio and Monte Carlo study. Journal of Magnetism and Magnetic Materials, 2019, 470, 118-122.	1.0	8
49	Segregation tendency of Heusler alloys. Physical Review Materials, 2019, 3, .	0.9	12
50	Theoretical study of heat transfer processes in Heusler-type magnetic microwires. Letters on Materials, 2019, 9, 395-399.	0.2	3
51	Ab Initio Calculation of Vacancy Formation Energy in Antiperovskite Mn ₃ GaC. Bulletin of the South Ural State University Series Mathematics Mechanics Physics, 2019, 11, 58-64.	0.2	0
52	FIRST-PRINCIPLES INVESTIGATIONS OF REFERENCE STATES OF Co ₂ CrIn HEUSLER ALLOYS. Bulletin of the South Ural State University Series Mathematics Mechanics Physics, 2019, 11, 59-66.	0.2	0
53	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.	0.7	2
54	Phenomenological analysis of thermal hysteresis in Ni-Mn-Ga Heusler alloys. Phase Transitions, 2018, 91, 469-476.	0.6	1

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55	Structural, magnetic and thermodynamic properties of Mn ₃ -X-C (X = Ga, Sn) compounds: ab initio study. <i>Physica B: Condensed Matter</i> , 2018, 549, 94-97.	1.3	1
56	Probing Structural and Magnetic Instabilities and Hysteresis in Heuslers by Density Functional Theory Calculations. <i>Physica Status Solidi (B): Basic Research</i> , 2018, 255, 1700296.	0.7	11
57	Magnetocaloric effect in Ni-Co-Mn-(Sn, Al) Heusler alloys: Theoretical study. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 459, 295-300.	1.0	9
58	Magnetic states of Ni ₂ MnZ and Ni ₂ CrZ (Z = Al, As, Bi, Ga, Ge, In, P, Pb, Sb, Si, Sn, Tl) Heusler alloys. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 459, 78-83.	1.0	11
59	Monte Carlo Simulations of Thermal Hysteresis in Ni-Mn-Based Heusler Alloys. <i>Physica Status Solidi (B): Basic Research</i> , 2018, 255, 1700265.	0.7	3
60	Investigation of structural and magnetic properties of Fe-Rh-(Z) (Z = Co, Pt) alloys by first principles method. <i>EPJ Web of Conferences</i> , 2018, 185, 05005.	0.1	1
61	The Effect of Anti-Site Disorder on Structural and Magnetic Properties of Ni-Co-Mn-In Alloys: Ab Initio and Monte Carlo Studies. <i>IEEE Transactions on Magnetics</i> , 2018, 54, 1-5.	1.2	5
62	Ab Initio Study of the Structural, Magnetic, Electronic, and Thermodynamic Properties of Pd ₂ MnZ (Z =) Tj ETQq0 0 0 rgBT / Overlock 10	0.2	8
63	First-Principles Study of the Structure and Magnetic Properties of Fe ₈ Rh ₈ xZx (Z = Mn, Pt, Co; x = 1,) Tj ETQq1 1 0.784314 rgBT /	0.2	1
64	Ternary phase diagram of Ni-Mn-Ga: insights from ab initio calculations. <i>EPJ Web of Conferences</i> , 2018, 185, 05012.	0.1	1
65	Structural and magnetic properties of heusler alloys Pd ₂ MnZ (Z=Ga, Ge, As): AB INITIO study. <i>EPJ Web of Conferences</i> , 2018, 185, 05007.	0.1	3
66	Simplified Core-Shell Model of Biochar - Iron Ore Mixture for Calculation of Effective Permittivity and Permeability. <i>Solid State Phenomena</i> , 2018, 279, 240-244.	0.3	1
67	Complex investigations of phase diagram of Ni-Pt-Mn-Ga Heusler alloys. <i>Letters on Materials</i> , 2018, 8, 21-26.	0.2	4
68	First-principles and Monte Carlo studies of the Ni ₂ (Mn,Cr)Ga Heusler alloys electronic and magnetic properties. <i>Materials Research Express</i> , 2017, 4, 026105.	0.8	10
69	Magnetic properties and martensitic transformation of Ni-Mn-Ge Heusler alloys from first-principles and Monte Carlo studies. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 195001.	1.3	8
70	Ab initio calculations of structural and magnetic properties of Ni-Co-Mn-Cr-Sn supercell. <i>Intermetallics</i> , 2017, 87, 55-60.	1.8	11
71	Complex investigation of structural and magnetic properties of the Ni-Mn-(Ga, Ge) alloys within ab initio approach. <i>Materials Today: Proceedings</i> , 2017, 4, 4616-4620.	0.9	0
72	Effect of structural disorder on the ground state properties of Co ₂ CrAl Heusler alloy. <i>Physica B: Condensed Matter</i> , 2017, 519, 82-89.	1.3	16

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73	Ab initio study of the composite phase diagram of Ni-Mn-Ga shape memory alloys. Journal of Experimental and Theoretical Physics, 2017, 125, 104-110.	0.2	5
74	Dynamic magnetic losses in powders consisting of metallized dielectric particles at microwaves. Journal of Magnetism and Magnetic Materials, 2017, 444, 307-312.	1.0	8
75	Method for determining the effective permeability and permittivity of metamaterial. AIP Conference Proceedings, 2017, , .	0.3	0
76	Structural, magnetic and electronic properties of Ni-Mn-Ga-Cr Heusler alloys: ab initio and Monte Carlo studies. Materials Today: Proceedings, 2017, 4, 4621-4625.	0.9	1
77	First principles study of the structural and magnetic properties of Fe(Rh, Pd) and Fe(Rh, Ni) alloys. Materials Today: Proceedings, 2017, 4, 4642-4646.	0.9	11
78	Large change of magnetic moment in Ni ₁₃ Co ₃ Mn ₁₃ Sn ₃ and Ni ₁₃ Co ₃ Mn ₁₃ Sn ₂ Al Heusler alloys at martensitic transitions: Investigation from first principles. , 2017, , .		0
79	Modeling of heat transfer processes in Ni ₂ MnIn magnetic wires. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 390-398.	0.8	6
80	Electronic and magnetic properties of the Co ₂ -based Heusler compounds under pressure: first-principles and Monte Carlo studies. Journal Physics D: Applied Physics, 2016, 49, 355004.	1.3	41
81	Direct and inverse magnetocaloric effect in Ni _{1.81} Mn _{1.64} In _{0.55} , Ni _{1.73} Mn _{1.80} In _{0.47} , and Ni _{1.72} Mn _{1.51} In _{0.49} Co _{0.28} Heusler alloys. Journal of Communications Technology and Electronics, 2016, 61, 1129-1138.	0.2	7
82	<i>Ab Initio</i> Investigations of Structural and Magnetic Properties of Cr-Doped Ni-Co-Mn-Sn Heusler Alloys. Materials Science Forum, 2016, 845, 134-137.	0.3	3
83	First principles study of the structural properties of Ni _{1.75} Co _{0.25} Mn _{1.5-x} Cr _x In _{0.5} Heusler alloy. MATEC Web of Conferences, 2015, 33, 02002.	0.1	1
84	Magnetic states of C-doped Ni _{43.75} Co _{6.25} Mn _{37.5} In _{12.5} Heusler alloys. MATEC Web of Conferences, 2015, 33, 05001.	0.1	1
85	Ab initio calculations of structural and magnetic properties of Ni-Co-Mn-Cr-Sn alloys. MATEC Web of Conferences, 2015, 33, 05003.	0.1	0
86	First-principles and Monte Carlo studies of C-doped Ni ₄₅ Co ₅ Mn ₃₇ In ₁₃ Heusler alloys. MATEC Web of Conferences, 2015, 33, 05004.	0.1	1
87	Compositional trends in Ni-Mn-Ga Heusler alloys: first-principles approach. MATEC Web of Conferences, 2015, 33, 05005.	0.1	4
88	Achieving large magnetocaloric effects in Co- and Cr-substituted Heusler alloys: Predictions from first-principles and Monte Carlo studies. Physical Review B, 2015, 91, .	1.1	36
89	Phase Transformations and Magnetocaloric Effect in Ni-Mn-(Co)-In Heusler Alloys. Physics Procedia, 2015, 75, 1259-1264.	1.2	6
90	Large magnetocaloric effects in magnetic intermetallics: First-principles and Monte Carlo studies. MATEC Web of Conferences, 2015, 33, 02001.	0.1	2

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91	Martensitic transformation in shape memory crystal with defects: Monte Carlo simulations and Landau theory. <i>Physica Status Solidi (B): Basic Research</i> , 2015, 252, 2309-2316.	0.7	2
92	First Principles and Monte Carlo Calculations of Structural and Magnetic Properties of $\text{FeNi}_{2-x}\text{Mn}_{1+y}\text{Al}_{1-y}$ Heusler Alloys. <i>MATEC Web of Conferences</i> , 2015, 33, 05002.	0.1	0
93	Magnetic States of the $\text{Ni}_{1.75}\text{Co}_{0.25}\text{Mn}_{1.25}\text{Cr}_{0.25}\text{In}_{0.5}$ Heusler Alloy. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.		
94	First-Principles Calculations of Magnetic Properties of Cr -Doped $\text{Ni}_{45}\text{Co}_5\text{Mn}_{37}\text{In}_{13}$ Heusler Alloys. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.	1.2	5
95	The metamagnetic behavior and giant inverse magnetocaloric effect in $\text{NiCoMn}(\text{Ga, In, Sn})$ Heusler alloys. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 385, 193-197.	1.0	22
96	First Principles Investigation of Magnetic Properties of Fe-Ni-Mn-Al Heusler Alloys. <i>Physics Procedia</i> , 2015, 75, 1427-1434.	1.2	7
97	First Principles Investigations of Structural and Magnetic Properties of Fe-Ni-Mn-Al Heusler Alloys. <i>Solid State Phenomena</i> , 2015, 233-234, 187-191.	0.3	3
98	Predictions of a Large Magnetocaloric Effect in Co- and Cr-Substituted Heusler Alloys Using First-Principles and Monte Carlo Approaches. <i>Physics Procedia</i> , 2015, 75, 1381-1388.	1.2	3
99	First principles investigation of structural and magnetic properties of NiCoMnIn Heusler alloys. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 164005.	1.3	18
100	Magnetocaloric Properties of Severe Plastic Deformed $\text{Gd}_{100-x}\text{Y}_x$ Alloys. <i>Acta Physica Polonica A</i> , 2015, 127, 641-643.	0.2	3
101	Effect of severe plastic deformation on the specific heat and magnetic properties of cold rolled Gd sheets. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	23
102	First-principles calculations of magnetic properties of Cr-doped $\text{Ni}_{45}\text{Co}_5\text{Mn}_{37}\text{In}_{13}$ Heusler alloys. , 2015, , .		0
103	Direct and Inverse Magnetocaloric Effect in $\text{Ni}_{1.81}\text{Mn}_{1.64}\text{In}_{0.55}$ Multifunctional Heusler Alloy. <i>Solid State Phenomena</i> , 2015, 233-234, 183-186.	0.3	5
104	Monte Carlo Study of the Polycrystalline Ni_2MnGa Heusler Alloy. <i>Solid State Phenomena</i> , 2015, 233-234, 251-254.	0.3	1
105	The magnetic states of the $\text{Ni}_{1.75}\text{Co}_{0.25}\text{Mn}_{1.25}\text{Cr}_{0.25}\text{In}_{0.5}$ Heusler alloy. , 2015, , .		
106	Structural and Magnetic Properties of Mn_2NiZ ($Z = \text{Ga, In, Sn, Sb}$) Heusler Alloys from <i>Ab Initio</i> Calculations. <i>Solid State Phenomena</i> , 2015, 233-234, 229-232.	0.3	8
107	Magnetocaloric Properties of Cold Rolled $\text{Gd}_{100-x}\text{Zr}_x$ ($x = 0, 1, 2$) Alloys. <i>Journal of Applied Physics</i> , 2015, 117, 104301.	1.1	23
108	First-principles study of the structural and magnetic properties of the $\text{Ni}_{45}\text{Co}_5\text{Mn}_{39}\text{Sn}_{11}$ Heusler alloy. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 383, 180-185.	1.0	7

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109	Calculation of Electronic Structure and Field Induced Magnetic Collapse in Ferroic Materials. , 2015, , 405-408.		0
110	Monte Carlo and first-principles approaches for single crystal and polycrystalline Ni ₂ MnGa Heusler alloys. Journal Physics D: Applied Physics, 2014, 47, 425002.	1.3	20
111	Thermodynamic analysis of possible phase states in Ni ₅₀ Mn ₃₅ In ₁₅ Heusler alloy. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 1144-1148.	0.8	0
112	Theoretical prediction of the spin glass behavior in the low-temperature phase of Ni ₂ Mn _{1.36} In _{0.64} Heusler alloy. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 1110-1115.	0.8	1
113	Investigation of structural and magnetic properties of Heusler Fe _{2+x} Mn _{1-x} Al alloys by first principles method. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 979-983.	0.8	3
114	First-principles calculation of the instability leading to giant inverse magnetocaloric effects. Physical Review B, 2014, 89, .	1.1	73
115	Interacting magnetic cluster spin glasses and strain glasses in Ni-Mn based Heusler structured intermetallics. Physica Status Solidi (B): Basic Research, 2014, 251, 2135-2148.	0.7	37
116	Tuning magnetic exchange interactions to enhance magnetocaloric effect in Ni ₅₀ Mn ₃₄ In ₁₆ Heusler alloy: Monte Carlo and ab initio studies. International Journal of Refrigeration, 2014, 37, 273-280.	1.8	14
117	Ab Initio and Monte Carlo Approaches For the Magnetocaloric Effect in Co- and In-Doped Ni-Mn-Ga Heusler Alloys. Entropy, 2014, 16, 4992-5019.	1.1	40
118	Magnetocaloric and magnetic properties of Ni ₂ Mn _{1-x} Cu _x Ga Heusler alloys: An insight from the direct measurements and ab initio and Monte Carlo calculations. Journal of Applied Physics, 2013, 114, .	1.1	30
119	Complex magnetic ordering as a driving mechanism of multifunctional properties of Heusler alloys from first principles. European Physical Journal B, 2013, 86, 1.	0.6	88
120	Publisher's Note: First-principles investigation of chemical and structural disorder in magnetic Ni ₂ Mn _{1+x} Sn _{1-x} Heusler alloys [Phys. Rev. B86, 134418 (2012)]. Physical Review B, 2013, 87, .	1.1	3
121	Quaternary Ni-Mn-In Heusler alloys: a way to achieve materials with better magnetocaloric properties?. Journal Physics D: Applied Physics, 2013, 46, 305003.	1.3	24
122	Reflecting electromagnetic waves from a surface of TbMnO ₃ with sinusoidal antiferromagnetic structure. Bulletin of the Russian Academy of Sciences: Physics, 2013, 77, 1120-1122.	0.1	2
123	Giant induced anisotropy ruins the magnetocaloric effect in gadolinium. Journal of Magnetism and Magnetic Materials, 2013, 331, 33-36.	1.0	34
124	Optimization of smart Heusler alloys from first principles. Journal of Alloys and Compounds, 2013, 577, S107-S112.	2.8	46
125	Influence of thermal treatment on magnetocaloric properties of Gd cold rolled ribbons. Journal of Applied Physics, 2013, 113, 17A933.	1.1	22
126	Theoretical treatment and direct measurements of magnetocaloric effect in Ni _{2.19} FexMn _{0.81} Ga Heusler alloys. Journal of Magnetism and Magnetic Materials, 2013, 343, 6-12.	1.0	14

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127	Ab initio study of magnetic properties of Fe-Mn-Al Heusler alloys. Materials Research Society Symposia Proceedings, 2013, 1581, 1.	0.1	1
128	The Supercell Scaling Investigation of Magnetic Properties in Ni-Mn-X (X=Ga, In, Sn, Sb) Heusler Alloys by Means of First-principles Methods. Materials Research Society Symposia Proceedings, 2013, 1581, 1.	0.1	0
129	Ab initio investigation of the structural and magnetic properties of Ni-Pt-Mn-Ga alloys. Materials Research Society Symposia Proceedings, 2013, 1581, 1.	0.1	1
130	Interaction of phase transformation and magneto- and elastocaloric properties of Heusler alloys. Materials Research Society Symposia Proceedings, 2013, 1581, 1.	0.1	1
131	Theoretical Study of Magnetic Properties and Twin Boundary Motion in Heusler Ni-Mn-X Shape Memory Alloys Using First Principles and Monte Carlo Method. Advances in Science and Technology, 2012, 78, 7-12.	0.2	1
132	First-principles investigations of caloric effects in ferroic materials. , 2012, , .		6
133	Phase Diagrams of Conventional and Inverse Functional Magnetic Heusler Alloys: New Theoretical and Experimental Investigations. Springer Series in Materials Science, 2012, , 19-47.	0.4	6
134	Monte Carlo Study of the Magnetic and Magnetocaloric Properties of $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$ ($x = 0.33$ and 0.5). Solid State Phenomena, 2012, 190, 347-350.	0.3	7
135	Optimization of the magnetocaloric effect in Ni-Mn-In alloys: A theoretical study. Journal of Experimental and Theoretical Physics, 2012, 115, 662-665.	0.2	5
136	First-principles investigation of chemical and structural disorder in magnetic $\text{Ni}_{1-x}\text{Mn}_x$ alloys. Journal of Applied Physics, 2011, 110, 043707.	1.1	111
137	Monte Carlo simulations of the magnetocaloric effect in magnetic $\text{Ni}_{1-x}\text{Mn}_x$ (X = Ga, In) Heusler alloys. Journal Physics D: Applied Physics, 2011, 44, 064012.	1.3	62
138	Monte Carlo Simulations of the Exchange Bias Effect in Heusler $\text{Ni}_{50}\text{Mn}_{37.5}\text{Sb}_{12.5}$ Alloys Using Real Unit Cell. Materials Research Society Symposia Proceedings, 2011, 1310, 1.	0.1	0
139	Modeling of the Magnetocaloric Effect in Heusler Ni-Mn-X (X = In, Sn, Sb) Alloys Using Antiferromagnetic Five-State Potts Model with Competing Interactions. Materials Research Society Symposia Proceedings, 2011, 1310, 1.	0.1	0
140	Monte Carlo modeling of exchange bias effect in $\text{Ni}_{50}\text{Mn}_{25+x}\text{Sb}_{25-x}$ Heusler alloys. Journal of Physics: Conference Series, 2011, 303, 012084.	0.3	7
141	Magnetocaloric effect in Ni-Mn-X (X = Ga, In, Sn, Sb) Heusler alloys. Physics of Metals and Metallography, 2011, 112, 633-665.	0.3	127
142	Phase diagrams of $\text{Ni}_{2+x}\text{Mn}_{1-x}\text{Ga}$ Heusler alloys from Hubbard Hamiltonian with account of Jahn-Teller effect. Materials Research Society Symposia Proceedings, 2011, 1310, 1.	0.1	0
143	Theoretical model of the coupled magnetostructural phase transitions in Heusler Ni-Mn-In alloys by Monte Carlo simulation. Journal of Physics: Conference Series, 2010, 200, 092004.	0.3	1
144	Absorption of electromagnetic waves in a nonmagnetic conductor-ferromagnet structure. Physics of the Solid State, 2010, 52, 2154-2163.	0.2	7

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145	Monte Carlo calculations of the phase transformations and the magnetocaloric properties in Heusler Ni _{1-x} Mn _x Ga alloys. Journal of Magnetism and Magnetic Materials, 2010, 322, 1597-1600.	1.0	14
146	The modeling of phase diagrams and premartensitic effects in Heusler Ni _{1-x} Mn _x Ga alloy by Monte Carlo method. Physics Procedia, 2010, 10, 132-137.	1.2	2
147	Magnetocaloric effect in ribbon samples of Heusler alloys Ni _{1-x} Mn _x M (M=In,Sn). Applied Physics Letters, 2010, 97, .	1.5	68
148	First-principles and Monte Carlo study of magnetostructural transition and magnetocaloric properties of Ni _{1-x} Mn _x Ga alloys. Physical Review B, 2010, 81, .	1.1	119
149	Monte Carlo study of magnetocaloric properties of Ni-Mn-Ga Heusler alloys. Journal of Physics: Conference Series, 2010, 200, 032008.	0.3	1
150	The Magnetocaloric Effect in Ni-Mn-X (X=Ga, In) Heusler Alloys and Manganites with Magnetic Transition close to Room Temperature. Solid State Phenomena, 2010, 168-169, 165-168.	0.3	2
151	Magnetocaloric Effect in Ni-Mn-Ga and Ni-Co-Mn-In Heusler Alloys. Materials Research Society Symposia Proceedings, 2009, 1200, 69.	0.1	2
152	Monte Carlo Study of Magnetostructural Phase Transitions in Ni _{50-x} Mn _{25+x} Sb _{25-x} Heusler Alloys. Solid State Phenomena, 2009, 154, 139-144.	0.3	2
153	Modeling inhomogeneous materials with preset spectra of reflection and transmission of electromagnetic waves. Technical Physics Letters, 2009, 35, 869-872.	0.2	0
154	Study of Magnetocaloric Properties of Ni-Mn-X (X = Ga, In) Heusler Alloys by Monte Carlo Technique. Materials Research Society Symposia Proceedings, 2009, 1200, 96.	0.1	0
155	Effective Medium Approximation for Composite from Three-layered Spherical Particles. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2009, 5, 365-368.	0.4	1
156	The phase diagram of Ni _{1-x} Mn _x Ga alloys with account of crystal lattice modulation and external magnetic field. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 481-482, 218-222.	2.6	3
157	Phase transitions in Heusler alloys with exchange inversion. Journal of Magnetism and Magnetic Materials, 2008, 320, e175-e178.	1.0	6
158	Modeling of microwave heating of metallic powders. Physica B: Condensed Matter, 2008, 403, 4053-4058.	1.3	20
159	Investigation of the coefficient of reflection from composite structures containing ferrites at microwave frequencies. Journal of Communications Technology and Electronics, 2008, 53, 460-462.	0.2	2
160	Magnetic shape memory and giant magnetocaloric effect in Heusler alloys. Bulletin of the Russian Academy of Sciences: Physics, 2008, 72, 527-528.	0.1	0
161	New Heusler alloys with a metamagnetostructural phase transition. Bulletin of the Russian Academy of Sciences: Physics, 2008, 72, 564-568.	0.1	5
162	Heating of metallic powders by microwaves: Experiment and theory. Journal of Applied Physics, 2008, 104, .	1.1	76

#	ARTICLE	IF	CITATIONS
163	Adiabatic temperature change at first-order magnetic phase transitions: $\langle \langle \text{Ni} \rangle \rangle$ Monte Carlo study of the influence of antiferromagnetic exchange interactions on the phase transitions of ferromagnetic $\langle \langle \text{Ni-Mn-X} \rangle \rangle$ alloys	1.1	59
164	$\langle \langle \text{Ni-Mn-X} \rangle \rangle$ alloys		

#	ARTICLE	IF	CITATIONS
181	The magnetoacoustic anomaly in Fe ₃ BO ₆ . Journal of Magnetism and Magnetic Materials, 2004, 272-276, 2113-2114.	1.0	11
182	Magnetocaloric effect and magnetization in a Ni ^{1-x} Mn ^x Ga Heusler alloy in the vicinity of magnetostructural transition. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 2040-2042.	1.0	63
183	Ultrasound-induced martensitic transition in ferromagnetic Ni _{2.15} Mn _{0.81} Fe _{0.04} Ga shape memory alloy. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 2025-2026.	1.0	27
184	The investigations of phase transitions in Ni ^{1-x} Mn ^x Ga under external magnetic field. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 2102-2103.	1.0	2
185	Magnetocaloric effect in Ni _{2+x} Mn _{1-x} Ga Heusler alloys. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 326, 146-151.	0.9	74
186	Dynamical properties of Ni ₂ MnGa determined from density functional calculations. Phase Transitions, 2004, 77, 253-259.	0.6	5
187	The kinetics of phase transformations in ferromagnetic shape memory alloys Ni ^{1-x} Mn ^x Ga. Journal of Magnetism and Magnetic Materials, 2003, 258-259, 497-499.	1.0	17
188	Electromagnetic-wave reflectivity of the surface of a cubic-ferrite plate. Physics of the Solid State, 2003, 45, 696-705.	0.2	3
189	A Ginzburg-Landau Theory For Ni-Mn-Ga. Phase Transitions, 2002, 75, 243-256.	0.6	20
190	Magnetoelastic influence on structural phase transitions in cubic ferromagnets. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1457-1459.	1.0	5
191	The reflection of electromagnetic waves at the surface of ferromagnetic insulator/non-magnetic metal layer structure. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 955-957.	1.0	0
192	Static and dynamic properties of a ferrite-garnet film in the neighborhood of orientational phase transitions. Journal of Experimental and Theoretical Physics, 2002, 95, 106-113.	0.2	1
193	Electromagnetic-acoustic transformation in an erbium single crystal. Physics of the Solid State, 2002, 44, 2116-2123.	0.2	2
194	Reflection of electromagnetic waves from the surface of a cubic ferrite. Physics of the Solid State, 2002, 44, 2287-2292.	0.2	2
195	Phenomenological theory of structural and magnetic phase transitions in shape memory Ni-Mn-Ga alloys. International Journal of Applied Electromagnetics and Mechanics, 2001, 12, 19-23.	0.3	9
196	On the relative contributions of precessional and longitudinal oscillations to the dynamics of magnets. Physics-Uspekh, 1999, 42, 957-990.	0.8	13
197	Structural phase transitions in cubic ferromagnets. Journal of Magnetism and Magnetic Materials, 1999, 191, 203-206.	1.0	10
198	Structural and magnetic phase transitions in shape memory alloys Ni ₂ + XMn _{1-x} Ga. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 837-839.	1.0	12

#	ARTICLE	IF	CITATIONS
199	Phase transitions in intermetallic compounds Ni-Mn-Ga with shape memory effect. IEEE Transactions on Magnetics, 1999, 35, 3811-3813.	1.2	31
200	Structural and magnetic phase transitions in shape-memory alloys $Ni_{2+x}Mn_{1-x}Ga$. Physical Review B, 1999, 59, 1113-1120.	1.1	401
201	Phase transitions in the ferromagnetic alloys $Ni_{2+x}Mn_{1-x}Ga$. JETP Letters, 1998, 67, 227-232.	0.4	30
202	New types of surface waves in antiferromagnetics with magnetoelectrical effect. Ferroelectrics, 1997, 204, 247-260.	0.3	5
203	Magnetoacoustics of rare-earth orthoferrites. Physics-Uspokhi, 1996, 39, 547-572.	0.8	28
204	Anomalous decrease of longitudinal sound velocity near magnetic phase transition in magnets. Journal of Magnetism and Magnetic Materials, 1995, 140-144, 1587-1589.	1.0	2
205	Coupled magnetoelastic and electromagnetic waves in uniaxial crystals having spiral magnetic structure. Journal of Magnetism and Magnetic Materials, 1993, 118, 169-174.	1.0	9
206	Magnetoelastic soliton. IEEE Transactions on Magnetics, 1982, 18, 929-930.	1.2	0
207	Shape Memory Alloys: A Summary of Recent Achievements. Materials Science Forum, 0, 583, 21-41.	0.3	64
208	Phase Diagrams of $Ni_{2+x}Mn_{1-x}Ga$ (X = In, Sn, Sb) Heusler Alloys with Inversion of Exchange Interaction. Materials Science Forum, 0, 583, 131-146.	0.3	7
209	Fundamental Aspects of Magnetic Shape Memory Alloys: Insights from <i>Ab Initio</i> and Monte Carlo Studies. Materials Science Forum, 0, 635, 3-12.	0.3	41
210	Microwave Heating of Metallic Powders. Solid State Phenomena, 0, 152-153, 385-388.	0.3	0
211	Penetration of Microwave Radiation into and through Metallic Powders. Solid State Phenomena, 0, 152-153, 361-364.	0.3	0
212	Monte-Carlo Calculation of the Magnetocaloric Effect in Ni-Mn-Ga Alloys. Solid State Phenomena, 0, 152-153, 493-496.	0.3	1
213	Theoretical Modeling of Magnetocaloric Effect in Heusler Ni-Mn-In Alloy by Monte Carlo Study. Materials Science Forum, 0, 635, 137-142.	0.3	7
214	Composition-Dependent Basics of Smart Heusler Materials from First-Principles Calculations. Materials Science Forum, 0, 684, 1-29.	0.3	39
215	Spectrum of the Coupled Waves in Magnetics Having the Ferromagnetic Spiral. Solid State Phenomena, 0, 190, 257-260.	0.3	2
216	Theoretical Study of Twin Boundary Motion in Heusler Ni-Mn-Ga Alloys Using Monte Carlo Method. Solid State Phenomena, 0, 190, 327-330.	0.3	0

#	ARTICLE	IF	CITATIONS
217	Theoretical Study of Magnetic Properties and Multiple Twin Boundary Motion in Heusler Ni-Mn-X Shape Memory Alloys Using First Principles and Monte Carlo Method. Materials Science Forum, 0, 738-739, 461-467.	0.3	0
218	Experimental Study of Magnetocaloric Effect in Ni-Fe-Mn-Ga and Ni-Co-Mn-Ga Heusler Alloys. Materials Science Forum, 0, 738-739, 456-460.	0.3	4
219	Ab Initio Study of Magnetic Properties and Phase Diagram of Ni-Mn-Ga Heusler Alloys. Materials Science Forum, 0, 738-739, 473-477.	0.3	3
220	Magnetocaloric and other Properties of Cold Rolled Gd Ribbons. Materials Science Forum, 0, 738-739, 441-445.	0.3	1
221	First Principles Calculations of Magnetic Exchange Parameters of Fe-Mn-Al Heusler Alloys. Solid State Phenomena, 0, 215, 131-136.	0.3	3
222	Novel Achievements in the Research Field of Multifunctional Shape Memory Ni-Mn-In and Ni-Mn-In-Z Heusler Alloys. Materials Science Foundations, 0, 81-82, 38-76.	0.2	15
223	The Influence of Cold Rolling on Magnetocaloric Properties of $\text{Gd}_{100-x}\text{Y}_x$ ($x = 0, 5, 10, 15$) Alloys. Solid State Phenomena, 0, 233-234, 238-242.	0.3	7
224	First Principles Study of the Structural and Magnetic Properties of Cr-Doped $\text{Ni}_{1.75}\text{Co}_{0.25}\text{Mn}_{1.5}\text{In}_{0.5}$ Heusler Alloys. Materials Science Forum, 0, 845, 138-141.	0.3	6
225	Ternary Diagrams of Ni-Mn-Ga from First Principles. Materials Science Forum, 0, 845, 130-133.	0.3	1
226	Density of States of Co- and Cr-Doped $\text{Ni}_{2.0}\text{Mn}_{1.5}\text{Sn}_{0.5}$ Heusler Alloys. Materials Science Forum, 0, 845, 162-165.	0.3	0