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List of Publications by Year
in descending order

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95 papers	2,832 citations	172457 29 h-index	197818 49 g-index
96 all docs	96 docs citations	96 times ranked	988 citing authors

#	Article	IF	Citations
1	Experimental Observations versus Firstâ€Principles Calculations for Niâ€“Mnâ€“Ga Ferromagnetic Shape Memory Alloys: A Review. Physica Status Solidi - Rapid Research Letters, 2022, 16, .	2.4	5
2	Dependence of martensite transformation temperature on magnetic field in Ni2MnGa and Ni2MnGa0.95In0.05 single crystals. Journal of Alloys and Compounds, 2022, 908, 164514.	5.5	2
3	Nanotwinned (inter)martensite transformation interfaces in Ni50Mn25Ga20Fe5 magnetic shape memory single crystal foil. Materials Characterization, 2022, 190, 112007.	4.4	3
4	Hysteretic structural changes within five-layered modulated 10M martensite of Niâ€“Mnâ€“Ga(â€“Fe). Journal of Physics Condensed Matter, 2021, 33, 265404.	1.8	10
5	Effect of crystal quality on twinning stress in Niâ€“Mnâ€“Ga magnetic shape memory alloys. Journal of Materials Research and Technology, 2021, 14, 1934-1944.	5.8	17
6	Effect of electron localization in theoretical design of Ni-Mn-Ga based magnetic shape memory alloys. Materials and Design, 2021, 209, 109917.	7.0	12
7	Magnetic domain structure across the austeniteâ€“martensite interface in Ni50Mn25Ga20Fe5 single crystalline thin foil. Applied Physics Letters, 2021, 119, 212901.	3.3	1
8	The Effect of Local Arrangement of ExcessÂMn on Phase Stability in Niâ€“Mnâ€“Ga Martensite: An Ab Initio Study. Shape Memory and Superelasticity, 2020, 6, 35-44.	2.2	5
9	Highly mobile twin boundaries in seven-layer modulated Niâ€“Mnâ€“Gaâ€“Fe martensite. Scripta Materialia, 2020, 178, 62-66.	5.2	18
10	Antiphase boundaries, magnetic domains, and magnetic vortices in Niâ€“Mnâ€“Ga single crystals. Acta Materialia, 2020, 184, 179-186.	7.9	17
11	Systematic Trends of Transformation Temperatures and Crystal Structure of Niâ€“Mnâ€“Gaâ€“Feâ€“Cu Alloys. Shape Memory and Superelasticity, 2020, 6, 97-106.	2.2	12
12	First-principles study of Zn-doping effects on phase stability and magnetic anisotropy of Ni-Mn-Ga alloys. Materials Research Express, 2020, 7, 026101.	1.6	6
13	Origin of magnetocrystalline anisotropy in Ni-Mn-Ga-Co-Cu tetragonal martensite. Journal of Magnetism and Magnetic Materials, 2020, 503, 166522.	2.3	13
14	Switching the soft shearing mode orientation in Niâ€“Mnâ€“Ga non-modulated martensite by Co and Cu doping. Smart Materials and Structures, 2020, 29, 045022.	3.5	12
15	Non-conventional twins in five-layer modulated Ni-Mn-Ga martensite. Scripta Materialia, 2019, 162, 497-502.	5.2	11
16	Magnetic coercivity control by heat treatment in Heusler Niâ€“Mnâ€“Ga(â€“B) single crystals. Acta Materialia, 2019, 169, 109-121.	7.9	19
17	2019, 171, 107703.	7.0	37
18	Ultrafast actuation of Ni-Mn-Ga micropillars by pulsed magnetic field. Scripta Materialia, 2019, 162, 482-485.	5.2	25

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19	Rapid floating zone growth of Ni2MnGa single crystals exhibiting magnetic shape memory functionality. Journal of Alloys and Compounds, 2019, 775, 533-541.	5.5	11
20	Giant magnetic-field-induced strain in Ni-Mn-Ga micropillars. Scripta Materialia, 2018, 150, 173-176.	5.2	26
21	Composition and temperature dependence of twinning stress in non-modulated martensite of Ni-Mn-Ga-Co-Cu magnetic shape memory alloys. Scripta Materialia, 2018, 144, 52-55.	5.2	21
22	Magnetic properties of Ni-Mn-Ga-Co-Cu tetragonal martensites exhibiting magnetic shape memory effect. Scripta Materialia, 2018, 142, 61-65.	5.2	17
23	Antiphase boundaries in bulk Ni-Mn-Ga Heusler alloy observed by magnetic force microscopy. Applied Physics Letters, 2018, 113, 172901.	3.3	9
24	Transformation Paths from Cubic to Low-Symmetry Structures in Heusler Ni2MnGa Compound. Scientific Reports, 2018, 8, 7275.	3.3	23
25	Low temperature a/b nanotwins in Ni50Mn25+xGa25â^'x Heusler alloys. Scientific Reports, 2018, 8, 11943.	3.3	14
26	Mechanical Stabilization of Martensite: Comparison of Ni-Mn-Ga and Cu-Ni-Al Shape Memory Single Crystals. Acta Physica Polonica A, 2018, 134, 627-630.	0.5	5
27	Study of 10M' Nanotwinned Phase in the Vicinity of Martensitic Transformation in Ni-Mn-Ga Magnetic Shape Memory Alloy. Acta Physica Polonica A, 2018, 134, 859-862.	0.5	2
28	Temperature dependence of twinning and magnetic stresses in Ni 46 Mn 24 Ga 22 Co 4 Cu 4 alloy with giant 12% magnetic field-induced strain. Scripta Materialia, 2017, 131, 33-36.	5.2	32
29	Branched needle microstructure in Ni-Mn-Ga 10M martensite: EBSD study. Acta Materialia, 2017, 128, 113-119.	7.9	14
30	Orthorhombic intermediate phase originating from {110} nanotwinning in Ni50.0Mn28.7Ga21.3 modulated martensite. Acta Materialia, 2017, 132, 335-344.	7.9	16
31	Effect of Magnetic Ordering on the Stability of Niâ€“Mnâ€“Ga(â€“Coâ€“Cu) Alloys Along the Tetragonal Deformation Path. IEEE Transactions on Magnetics, 2017, 53, 1-6.	2.1	3
32	Ab initio prediction of stable nanotwin double layers and 4O structure in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ni</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:r Physical Review B, 2016, 94, .	3.2	28
33	The relation between lattice parameters and very low twinning stress in Ni₅₀Mn_{25+x}Ga_{25â^'x}magnetic shape memory alloys. Smart Materials and Structures, 2016, 25, 025001.	3.5	23
34	Magnetic domains and twin microstructure of single crystal Ni-Mn-Ga exhibiting magnetic shape memory effect. , 2015, , .		0
35	Ab initiostudy of Ni2MnGa under shear deformation. MATEC Web of Conferences, 2015, 33, 05006.	0.2	3
36	Ab Initio Study of Properties of Co- and Cu- Doped Ni-Mn-Ga Alloys. Materials Today: Proceedings, 2015, 2, S601-S604.	1.8	8

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37	Magnetic Domains and Twin Microstructure of Single Crystal Niâ€“Mnâ€“Ga Exhibiting Magnetic Shape Memory Effect. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	11
38	Enhanced magnetic hysteresis in Ni-Mn-Ga single crystal and its influence on magnetic shape memory effect. Journal of Applied Physics, 2015, 117, .	2.5	10
39	Optical and magneto-optical studies of martensitic transformation in Ni-Mn-Ga magnetic shape memory alloys. Journal of Applied Physics, 2015, 117, 17A919.	2.5	9
40	Equivalence of Mechanical and Magnetic Force in Magnetic Shape Memory Effect. Acta Physica Polonica A, 2015, 128, 754-758.	0.5	4
41	First-principles study of Co- and Cu-doped<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>Ni</mml:mi><mml:mn>2</mml:mn></mml:msub><mm the tetragonal deformation path. Physical Review B, 2014, 89, .	3.2	53
42	Magneto-optical spectroscopy of ferromagnetic shape-memory Ni-Mn-Ga alloy. Journal of Applied Physics, 2014, 115, .	2.5	13
43	A microstructural model of motion of macro-twin interfaces in Niâ€“Mnâ€“Ga 10M martensite. Journal of the Mechanics and Physics of Solids, 2014, 64, 198-211.	4.8	88
44	Mechanically induced demagnetization and remanent magnetization rotation in Niâ€“Mnâ€“Ga (â€“B) magnetic shape memory alloy. Scripta Materialia, 2014, 87, 25-28.	5.2	13
45	Differently mobile twin boundaries and magnetic shape memory effect in 10M martensite of Niâ€“Mnâ€“Ga. Materials Research Bulletin, 2013, 48, 5105-5109.	5.2	19
46	Magnetic shape memory effect at 1.7â€‰K. Applied Physics Letters, 2013, 103, .	3.3	47
47	Different microstructures of mobile twin boundaries in 10 M modulated Niâ€“Mnâ€“Ga martensite. Acta Materialia, 2013, 61, 622-631.	7.9	81
48	Characterization of mobile type I and type II twin boundaries in 10M modulated Niâ€“Mnâ€“Ga martensite by electron backscatter diffraction. Acta Materialia, 2013, 61, 1913-1920.	7.9	64
49	Modulation reorientation in 10M Niâ€“Mnâ€“Ga martensite. Scripta Materialia, 2013, 68, 671-674.	5.2	26
50	Effect of intermartensite transformation on twinning stress in Ni-Mn-Ga 10â€‰M martensite. Journal of Applied Physics, 2013, 114, .	2.5	42
51	Diffraction study of bending-induced polysynthetic twins in 10M modulated Ni-Mn-Ga martensite. Journal of Applied Physics, 2012, 112, .	2.5	25
52	Temperature dependence of twinning stress of Type I and Type II twins in 10M modulated Niâ€“Mnâ€“Ga martensite. Scripta Materialia, 2012, 67, 25-28.	5.2	84
53	Ni-Mn-Ga single crystals with very low twinning stress. Journal of Physics: Conference Series, 2011, 303, 012079.	0.4	48
54	Twin interaction and large magnetoelasticity in Ni-Mn-Ga single crystals. Journal of Applied Physics, 2011, 109, 063504.	2.5	49

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55	Highly mobile twinned interface in 10M modulated Niâ€“Mnâ€“Ga martensite: Analysis beyond the tetragonal approximation of lattice. Acta Materialia, 2011, 59, 7450-7463.	7.9	183
56	Temperature dependence of single twin boundary motion in Niâ€“Mnâ€“Ga martensite. Applied Physics Letters, 2011, 98, .	3.3	57
57	Highly mobile type II twin boundary in Ni-Mn-Ga five-layered martensite. Applied Physics Letters, 2011, 99, .	3.3	85
58	Twin microstructure dependent mechanical response in Niâ€“Mnâ€“Ga single crystals. Applied Physics Letters, 2010, 96, .	3.3	98
59	Magnetic anisotropy of nonmodulated Niâ€“Mnâ€“Ga martensite revisited. Journal of Applied Physics, 2010, 107, .	2.5	37
60	Effect of substrate deformation on functional properties of atomic-layer-deposited TiO2 coatings on stainless steel. Thin Solid Films, 2009, 517, 3797-3805.	1.8	8
61	Strain and concurrent magnetization changes in magnetic shape memory Niâ€“Mnâ€“Ga single crystals â€“ experiment and model. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 481-482, 283-287.	5.6	14
62	Activation of magnetic shape memory effect in Niâ€“Mnâ€“Ga alloys by mechanical and magnetic treatment. Acta Materialia, 2008, 56, 5492-5499.	7.9	81
63	Open-circuit potential as an indicator of damage of atomic layer deposited TiO2 on AISI 304 stainless steel. Thin Solid Films, 2008, 517, 641-647.	1.8	12
64	Detection of structural damage of aluminum alloy 6082 using elastic wave modulation spectroscopy. NDT and E International, 2008, 41, 554-563.	3.7	39
65	Photocatalytic Activity of Atomic Layer Deposited TiO[sub 2] Coatings on Austenitic Stainless Steels and Copper Alloys. Journal of the Electrochemical Society, 2008, 155, C62.	2.9	29
66	Stress dependence of magnetic shape memory effect and its model. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 438-440, 1003-1006.	5.6	14
67	Forced torsion pendulum for studies of interactions at solidâ€“liquid interface. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 442, 538-542.	5.6	0
68	Temperature dependence of reversible field-induced strain in Niâ€“Mnâ€“Ga single crystal. Scripta Materialia, 2006, 54, 1497-1500.	5.2	36
69	Magnetization changes in Niâ€“Mnâ€“Ga magnetic shape memory single crystal during compressive stress reorientation. Scripta Materialia, 2006, 54, 1549-1552.	5.2	26
70	Magnetic indication of the stress-induced martensitic transformation in ferromagnetic Niâ€“Mnâ€“Ga alloy. Journal of Magnetism and Magnetic Materials, 2006, 302, 387-390.	2.3	17
71	Reversible 6% strain of Niâ€“Mnâ€“Ga martensite using opposing external stress in static and variable magnetic fields. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 829-831.	2.3	45
72	Magnetic shape memory fatigue. , 2005, 5761, 513.		13

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73	Temperature dependence of reversible field-induced strain and magnetization changes in Ni-Mn-Ga single crystals. , 2005, , .		1
74	Compositional dependence of structure, magnetization and magnetic anisotropy in Niâ€“Mnâ€“Ga magnetic shape memory alloys. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 2045-2046.	2.3	43
75	Effect of the chemical composition to martensitic transformation in Niâ€“Mnâ€“Gaâ€“Fe alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 378, 384-388.	5.6	63
76	Giant Magneto-elastic Strain-magnetic Shape Memory Effect. European Physical Journal D, 2004, 54, 611-614.	0.4	5
77	Acoustic emission of Niâ€“Mnâ€“Ga magnetic shape memory alloy in different straining modes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 374, 263-269.	5.6	44
78	Tensile/compressive behaviour of non-layered tetragonal Ni52.8Mn25.7Ga21.5 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 386, 27-33.	5.6	50
79	Investigation of magnetic anisotropy of Niâ€“Mnâ€“Ga seven-layered orthorhombic martensite. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 2049-2050.	2.3	28
80	Magnetic properties of stress-induced martensite and martensitic transformation in Niâ€“Mnâ€“Ga magnetic shape memory alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 378, 394-398.	5.6	26
81	Tensile/compressive behaviour of non-layered tetragonal Ni52.8Mn25.7Ga21.5 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 386, 27-33.	5.6	12
82	Superelastic response of Ni-Mn-Ga martensite in magnetic fields and a simple model. IEEE Transactions on Magnetics, 2003, 39, 3402-3404.	2.1	86
83	Temperature dependence and temperature limits of magnetic shape memory effect. Journal of Applied Physics, 2003, 94, 7139-7143.	2.5	142
84	Magnetic anisotropy in Niâ€“Mnâ€“Ga martensites. Journal of Applied Physics, 2003, 93, 8636-8638.	2.5	144
85	Relation between structure, magnetization process and magnetic shape memory effect of various martensites occurring in Ni-Mn-Ga alloys. European Physical Journal Special Topics, 2003, 112, 959-962.	0.2	54
86	Study of austenite-martensite transformation in Ni-Mn-Ga magnetic shape memory alloy. European Physical Journal Special Topics, 2003, 112, 911-915.	0.2	17
87	Behaviour of Ni-Mn-Ga alloys under mechanical stress. European Physical Journal Special Topics, 2003, 112, 943-946.	0.2	23
88	Temperature dependence of magnetic anisotropy in Niâ€“Mnâ€“Ga alloys exhibiting giant field-induced strain. Journal of Applied Physics, 2002, 91, 8228.	2.5	82
89	Magnetic properties of various martensitic phases in Ni-Mn-Ga alloy. IEEE Transactions on Magnetics, 2002, 38, 2835-2837.	2.1	48
90	Magnetic properties of various martensitic phases in Ni-Mn-Ga alloy. , 0, , .		0

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91	Relation between magnetic reversal and magnetic shape memory effect. , 0, , .		0
92	Superelastic response of Ni-Mn-Ga martensite in magnetic field and simple model. , 0, , .		1
93	Analysis of Twin Boundary in Single Crystal of Ni-Mn-Ga Martensite Using Powder Laboratory Diffractometer. Solid State Phenomena, 0, 203-204, 13-16.	0.3	0
94	Transitions Between Austenite and Martensite Structures in Ni ₅₀Mn ₂₅Ga ₂₀Fe ₅ Thin Foil. SSRN Electronic Journal, 0, , .	0.4	1
95	Universality of Temperature Dependence of Twinning Stress in Ni-Mn-Ga 10M Martensite and Effect of Crystal Quality. SSRN Electronic Journal, 0, , .	0.4	1