# Oleg Heczko

List of Publications by Year
in descending order



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|---|---|---|---|
| 212 papers | 5,915 citations | 71061 41 h-index | 98753 67 g-index |
| 213 all docs | 213 docs citations | 213 times ranked | 2206 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Giant field-induced reversible strain in magnetic shape memory NiMnGa alloy. IEEE Transactions on Magnetics, 2000, 36, 3266-3268. | 1.2 | 320 |
| 2 | Adaptive Modulations of Martensites. Physical Review Letters, 2010, 104, 145702. | 2.9 | 218 |
| 3 | Coexistence of ferromagnetic and antiferromagnetic order in Mn-dopedNi2MnGa. Physical Review B, 2003, 67, . | 1.1 | 208 |
| 4 | Highly mobile twinned interface in 10M modulated Niâ€“Mnâ€“Ga martensite: Analysis beyond the tetragonal approximation of lattice. Acta Materialia, 2011, 59, 7450-7463. | 3.8 | 183 |
| 5 | Magnetic shape memory effect and magnetization reversal. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 787-794. | 1.0 | 159 |
| 6 | Magnetic anisotropy in Niâ€“Mnâ€“Ga martensites. Journal of Applied Physics, 2003, 93, 8636-8638. | 1.1 | 144 |
| 7 | Temperature dependence and temperature limits of magnetic shape memory effect. Journal of Applied Physics, 2003, 94, 7139-7143. | 1.1 | 142 |
| 8 | Modulated martensite: why it forms and why it deforms easily. New Journal of Physics, 2011, 13, 053029. | 1.2 | 119 |
| 9 | Magnetically induced reorientation of martensite variants in constrained epitaxial Niâ€“Mnâ€“Ga films grown on MgO(001). New Journal of Physics, 2008, 10, 023040. | 1.2 | 104 |
| 10 | The Role of Adaptive Martensite in Magnetic Shape Memory Alloys. Advanced Engineering Materials, 2012, 14, 562-581. | 1.6 | 99 |
| 11 | 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. | 2.3 | 88 |
| 12 | Superelastic response of Ni-Mn-Ga martensite in magnetic fields and a simple model. IEEE Transactions on Magnetics, 2003, 39, 3402-3404. | 1.2 | 86 |
| 13 | Magnetic anisotropy in as-quenched and stress-annealed amorphous and nanocrystalline Fe73.5Cu1Nb3Si13.5B9 alloys. Journal of Magnetism and Magnetic Materials, 1992, 112, 275-277. | 1.0 | 83 |
| 14 | Temperature dependence of magnetic anisotropy in Niâ€“Mnâ€“Ga alloys exhibiting giant field-induced strain. Journal of Applied Physics, 2002, 91, 8228. | 1.1 | 82 |
| 15 | Magnetic properties and domain structure of magnetic shape memory Niâ€“Mnâ€“Ga alloy. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 996-998. | 1.0 | 81 |
| 16 | Various magnetic domain structures in a Niâ€“Mnâ€“Ga martensite exhibiting magnetic shape memory effect. Journal of Applied Physics, 2004, 96, 2159-2163. | 1.1 | 81 |
| 17 | Activation of magnetic shape memory effect in Niâ€“Mnâ€“Ga alloys by mechanical and magnetic treatment. Acta Materialia, 2008, 56, 5492-5499. | 3.8 | 81 |
| 18 | Different microstructures of mobile twin boundaries in 10 M modulated Niâ€“Mnâ€“Ga martensite. Acta Materialia, 2013, 61, 622-631. | 3.8 | 81 |

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|---|---|---|---|
| 19 | Metamagnetic transitions and magnetocaloric effect in epitaxial Niâ€“Coâ€“Mnâ€“In films. Applied Physics Letters, 2010, 97, . | 1.5 | 71 |
| 20 | Magnetic shape memory effect and highly mobile twin boundaries. Materials Science and Technology, 2014, 30, 1559-1578. | 0.8 | 69 |
| 21 | Strayâ€Fieldâ€Induced Actuation of Freeâ€Standing Magnetic Shapeâ€Memory Films. Advanced Materials, 2009, 21, 3708-3711. | 11.1 | 68 |
| 22 | Magnetic field-induced twin boundary motion in polycrystalline Niâ€“Mnâ€“Ga fibres. New Journal of Physics, 2008, 10, 073002. | 1.2 | 67 |
| 23 | A piezopaint-based sensor for monitoring structure dynamics. Smart Materials and Structures, 2007, 16, 2571-2576. | 1.8 | 66 |
| 24 | Epitaxial Niâ€“Mnâ€“Ga films deposited on SrTiO3 and evidence of magnetically induced reorientation of martensitic variants at room temperature. Applied Physics Letters, 2008, 92, . | 1.5 | 66 |
| 25 | Temperature variation of structure and magnetic properties of Niâ€“Mnâ€“Ga magnetic shape memory alloys. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1446-1449. | 1.0 | 63 |
| 26 | 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. | 2.6 | 63 |
| 27 | Niâ€“Mnâ€“Ga multifunctional compounds. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 481-482, 80-85. | 2.6 | 63 |
| 28 | In situ studies of the martensitic transformation in epitaxial Niâ€“Mnâ€“Ga films. Acta Materialia, 2009, 57, 2516-2526. | 3.8 | 62 |
| 29 | Temperature dependence of single twin boundary motion in Niâ€“Mnâ€“Ga martensite. Applied Physics Letters, 2011, 98, . | 1.5 | 57 |
| 30 | Effect of temperature on magnetic properties of Ni-Mn-Ga magnetic shape memory (MSM) alloys. IEEE Transactions on Magnetics, 2001, 37, 2672-2674. | 1.2 | 56 |
| 31 | DMA testing of Niâ€“Mnâ€“Ga/polymer composites. Composites Part A: Applied Science and Manufacturing, 2009, 40, 125-129. | 3.8 | 55 |
| 32 | 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 |
| 33 | Magnetic Shape Memory Phenomena. , 2009, , 399-439. | | 51 |
| 34 | 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. | 2.6 | 50 |
| 35 | In situ TEM study of deformation twinning in Niâ€“Mnâ€“Ga non-modulated martensite. Acta Materialia, 2013, 61, 5290-5299. | 3.8 | 50 |
| 36 | The magnetic and oxidation behavior of bare and silica-coated iron oxide nanoparticles synthesized by reverse co-precipitation of ferrous ion (Fe2+) in ambient atmosphere. Journal of Magnetism and Magnetic Materials, 2014, 353, 15-22. | 1.0 | 50 |

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| 37 | Magnetic domain evolution with applied field in a Niâ€“Mnâ€“Ga magnetic shape memory alloy. Scripta Materialia, 2006, 54, 2155-2160. | 2.6 | 49 |
| 38 | Magnetic properties of various martensitic phases in Ni-Mn-Ga alloy. IEEE Transactions on Magnetics, 2002, 38, 2835-2837. | 1.2 | 48 |
| 39 | Magnetic shape memory effect at 1.7â€‰K. Applied Physics Letters, 2013, 103, . | 1.5 | 47 |
| 40 | Nucleation and growth of hierarchical martensite in epitaxial shape memory films. Acta Materialia, 2017, 132, 327-334. | 3.8 | 46 |
| 41 | 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. | 1.0 | 45 |
| 42 | 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. | 2.6 | 44 |
| 43 | Magnetic shape memory effect in thin foils. Applied Physics Letters, 2008, 93, . | 1.5 | 44 |
| 44 | Magnetic properties of Ni-Mn-Ga ribbon prepared by rapid solidification. IEEE Transactions on Magnetics, 2002, 38, 2841-2843. | 1.2 | 43 |
| 45 | 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. | 1.0 | 43 |
| 46 | Effect of intermartensite transformation on twinning stress in Ni-Mn-Ga 10â€‰M martensite. Journal of Applied Physics, 2013, 114, . | 1.1 | 42 |
| 47 | Stress induced martensite in epitaxial Niâ€“Mnâ€“Ga films deposited on MgO(001). Applied Physics Letters, 2008, 92, . | 1.5 | 41 |
| 48 | Determination of ordinary magnetostriction in Niâ€“Mnâ€“Ga magnetic shape memory alloy. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 846-849. | 1.0 | 38 |
| 49 | Temperature dependence of the damping properties of Niâ€“Mnâ€“Ga alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 481-482, 314-317. | 2.6 | 38 |
| 50 | Magnetic anisotropy of nonmodulated Niâ€“Mnâ€“Ga martensite revisited. Journal of Applied Physics, 2010, 107, . | 1.1 | 37 |
| 51 | Stress-induced transition from modulated 14M to non-modulated martensite in Niâ€“Mnâ€“Ga alloy. Acta Materialia, 2015, 90, 151-160. | 3.8 | 37 |
| 52 | Temperature dependence of elastic properties in austenite and martensite of Ni-Mn-Ga epitaxial films. Acta Materialia, 2018, 145, 298-305. | 3.8 | 37 |
| 53 | Temperature dependence of reversible field-induced strain in Niâ€“Mnâ€“Ga single crystal. Scripta Materialia, 2006, 54, 1497-1500. | 2.6 | 36 |
| 54 | Pulsed laser deposition of NiMnGa thin films on silicon. Applied Physics A: Materials Science and Processing, 2004, 79, 1505-1508. | 1.1 | 35 |

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| 55 | Thermodynamic, kinetic, and magnetic properties of a<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Ni</mml:mi><mml:mn>54</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Fe</mml:mi><mml:mn>19</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Ga</mml:mi><mml:mn>27</mml:mn></mml:msub></mml:mrow></mml:math>magnetic shape-memory single crystal. Physical Review B, 2008, 77, . | 1.1 | 34 |
| 56 | Tuning avalanche criticality: Acoustic emission during the martensitic transformation of a compressed Ni-Mn-Ga single crystal. Physical Review B, 2012, 86, . | 1.1 | 34 |
| 57 | Localizing sources of acoustic emission during the martensitic transformation. Physical Review B, 2014, 89, . | 1.1 | 34 |
| 58 | Direct optical observation of magnetic domains in Niâ€“Mnâ€“Ga martensite. Applied Physics Letters, 2006, 89, 082502. | 1.5 | 31 |
| 59 | Temperature dependence of mechanical damping in Niâ€“Mnâ€“Ga austenite and non-modulated martensite. Scripta Materialia, 2008, 59, 550-553. | 2.6 | 31 |
| 60 | A fabrication technology for epitaxial Ni-Mn-Ga microactuators. European Physical Journal: Special Topics, 2008, 158, 167-172. | 1.2 | 30 |
| 61 | Combined effect of structural softening and magneto-elastic coupling on elastic coefficients of Ni Mn Ga austenite. Journal of Alloys and Compounds, 2013, 577, S131-S135. | 2.8 | 30 |
| 62 | Building Hierarchical Martensite. Advanced Functional Materials, 2021, 31, 2005715. | 7.8 | 30 |
| 63 | Investigation of magnetic anisotropy of Niâ€“Mnâ€“Ga seven-layered orthorhombic martensite. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 2049-2050. | 1.0 | 28 |
| 64 | Niâ€“Mnâ€“Ga films on Si, GaAs and Niâ€“Mnâ€“Ga single crystals by pulsed laser deposition. Applied Surface Science, 2004, 238, 155-158. | 3.1 | 28 |
| 65 | 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:mrow></mml:math>. Physical Review B, 2016, 94, . | 3.8 | 28 |
| 66 | Magnetically induced martensite transition in freestanding epitaxial Niâ€“Mnâ€“Ga films. Applied Physics Letters, 2009, 94, . | 1.5 | 27 |
| 67 | On the electronic origin of the inverse magnetocaloric effect in Niâ€“Coâ€“Mnâ€“In Heusler alloys. Journal Physics D: Applied Physics, 2010, 43, 055004. | 1.3 | 27 |
| 68 | Room Temperature Synthesis of Magnetite (Fe<sub>3â^'Î´</sub>O<sub>4</sub>) Nanoparticles by a Simple Reverse Co-Precipitation Method. IOP Conference Series: Materials Science and Engineering, 2011, 18, 032020. | 0.3 | 27 |
| 69 | 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. | 2.6 | 26 |
| 70 | Magnetization changes in Niâ€“Mnâ€“Ga magnetic shape memory single crystal during compressive stress reorientation. Scripta Materialia, 2006, 54, 1549-1552. | 2.6 | 26 |
| 71 | Microstructure, martensitic transformation and anomalies in câ€²-softening in Coâ€“Niâ€“Al ferromagnetic shape memory alloys. Acta Materialia, 2013, 61, 5869-5876. | 3.8 | 26 |
| 72 | Giant magnetic-field-induced strain in Ni-Mn-Ga micropillars. Scripta Materialia, 2018, 150, 173-176. | 2.6 | 26 |

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| 73 | Structural, magnetic and magneto-optical properties of SrFe12â^'xAlxO19 hexaferrite thin films prepared by laser ablation deposition. Thin Solid Films, 2000, 358, 206-214. | 0.8 | 25 |
| 74 | The effect of antiphase boundaries on the elastic properties of Niâ€“Mnâ€“Ga austenite and premartensite. Journal of Physics Condensed Matter, 2013, 25, 425402. | 0.7 | 25 |
| 75 | Ultrafast actuation of Ni-Mn-Ga micropillars by pulsed magnetic field. Scripta Materialia, 2019, 162, 482-485. | 2.6 | 25 |
| 76 | Elasticity and magnetism of Ni<sub>2</sub> MnGa premartensitic tweed. Physica Status Solidi (B): Basic Research, 2014, 251, 2097-2103. | 0.7 | 24 |
| 77 | Phase structures of gas atomized equiatomic CrFeNiMn high entropy alloy powder. Journal of Alloys and Compounds, 2020, 827, 154142. | 2.8 | 24 |
| 78 | The relation between lattice parameters and very low twinning stress in Ni<sub>50</sub>Mn<sub>25+x</sub>Ga<sub>25â^'x</sub>magnetic shape memory alloys. Smart Materials and Structures, 2016, 25, 025001. | 1.8 | 23 |
| 79 | Transformation Paths from Cubic to Low-Symmetry Structures in Heusler Ni2MnGa Compound. Scientific Reports, 2018, 8, 7275. | 1.6 | 23 |
| 80 | Behaviour of Ni-Mn-Ga alloys under mechanical stress. European Physical Journal Special Topics, 2003, 112, 943-946. | 0.2 | 23 |
| 81 | Magnetic and magnetoelastic properties of Ni-Mn-Ga â€“ Do they need a revision?. Journal of Physics: Conference Series, 2011, 303, 012081. | 0.3 | 22 |
| 82 | Understanding Motion of Twin Boundaryâ€”A Key to Magnetic Shape Memory Effect. IEEE Transactions on Magnetics, 2014, 50, 1-7. | 1.2 | 22 |
| 83 | Inapplicability of the Maxwell relation for the quantification of caloric effects in anisotropic ferroic materials. International Journal of Refrigeration, 2014, 37, 281-288. | 1.8 | 22 |
| 84 | Structure and microstructure of Ni-Mn-Ga single crystal exhibiting magnetic shape memory effect analysed by high resolution X-ray diffraction. Acta Materialia, 2016, 115, 250-258. | 3.8 | 22 |
| 85 | Influence of Magnetic Field and Stress on Large Magnetic Shape Memory Effect in Single Crystalline Ni-Mn-Ga Ferromagnetic Alloy at Room Temperature. Materials Science Forum, 2001, 373-376, 341-344. | 0.3 | 21 |
| 86 | Direct observation of a-b twin laminate in monoclinic five-layered martensite of Ni-Mn-Ga magnetic shape memory single crystal. Scripta Materialia, 2017, 131, 76-79. | 2.6 | 21 |
| 87 | Anomalous lattice softening of Ni2MnGa austenite due to magnetoelastic coupling. Journal of Applied Physics, 2012, 111, . | 1.1 | 20 |
| 88 | Differently mobile twin boundaries and magnetic shape memory effect in 10M martensite of Niâ€“Mnâ€“Ga. Materials Research Bulletin, 2013, 48, 5105-5109. | 2.7 | 19 |
| 89 | Magnetic coercivity control by heat treatment in Heusler Niâ€“Mnâ€“Ga(â€“B) single crystals. Acta Materialia, 2019, 169, 109-121. | 3.8 | 19 |
| 90 | Elastic constants of non-modulated Ni-Mn-Ga martensite. Scripta Materialia, 2017, 136, 20-23. | 2.6 | 18 |

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| 91 | Highly mobile twin boundaries in seven-layer modulated Niâ€“Mnâ€“Gaâ€“Fe martensite. Scripta Materialia, 2020, 178, 62-66. | 2.6 | 18 |
| 92 | Magnetic indication of the stress-induced martensitic transformation in ferromagnetic Niâ€“Mnâ€“Ga alloy. Journal of Magnetism and Magnetic Materials, 2006, 302, 387-390. | 1.0 | 17 |
| 93 | Magnetic properties of Ni-Mn-Ga-Co-Cu tetragonal martensites exhibiting magnetic shape memory effect. Scripta Materialia, 2018, 142, 61-65. | 2.6 | 17 |
| 94 | Antiphase boundaries, magnetic domains, and magnetic vortices in Niâ€“Mnâ€“Ga single crystals. Acta Materialia, 2020, 184, 179-186. | 3.8 | 17 |
| 95 | 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. | 2.6 | 17 |
| 96 | 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 |
| 97 | Orthorhombic intermediate phase originating from {110} nanotwinning in Ni50.0Mn28.7Ga21.3 modulated martensite. Acta Materialia, 2017, 132, 335-344. | 3.8 | 16 |
| 98 | Stress-induced martensite variant reorientation in magnetic shape memory Niâ€“Mnâ€“Ga single crystal studied by neutron diffraction. Smart Materials and Structures, 2008, 17, 035014. | 1.8 | 15 |
| 99 | Investigation of magnetic domains in Niâ€“Mnâ€“Ga alloys with a scanning electron microscope. Smart Materials and Structures, 2005, 14, S211-S215. | 1.8 | 14 |
| 100 | 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. | 2.6 | 14 |
| 101 | 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. | 2.6 | 14 |
| 102 | Low temperature a/b nanotwins in Ni50Mn25+xGa25â^'x Heusler alloys. Scientific Reports, 2018, 8, 11943. | 1.6 | 14 |
| 103 | Fe2MnSn â€“ Experimental quest for predicted Heusler alloy. Journal of Magnetism and Magnetic Materials, 2020, 501, 166426. | 1.0 | 14 |
| 104 | Magnetic shape memory fatigue. , 2005, 5761, 513. | | 13 |
| 105 | Probing structure and microstructure of epitaxial Niâ€“Mnâ€“Ga films by reciprocal space mapping and pole figure measurements. Acta Materialia, 2010, 58, 6665-6671. | 3.8 | 13 |
| 106 | Resonant ultrasound spectroscopy â€“ a tool to probe magneto-elastic properties of ferromagnetic shape memory alloys. European Physical Journal B, 2013, 86, 1. | 0.6 | 13 |
| 107 | Magneto-optical spectroscopy of ferromagnetic shape-memory Ni-Mn-Ga alloy. Journal of Applied Physics, 2014, 115, . | 1.1 | 13 |
| 108 | Structure and magnetic properties of nickel nanoparticles prepared by selective leaching. Materials Letters, 2014, 137, 221-224. | 1.3 | 13 |

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| 109 | Mechanically induced demagnetization and remanent magnetization rotation in Niâ€“Mnâ€“Ga (â€“B) magnetic shape memory alloy. Scripta Materialia, 2014, 87, 25-28. | 2.6 | 13 |
| 110 | Niâ€“Mnâ€“Ga Single Crystal Exhibiting Multiple Magnetic Shape Memory Effects. Shape Memory and Superelasticity, 2016, 2, 272-280. | 1.1 | 13 |
| 111 | Origin of magnetocrystalline anisotropy in Ni-Mn-Ga-Co-Cu tetragonal martensite. Journal of Magnetism and Magnetic Materials, 2020, 503, 166522. | 1.0 | 13 |
| 112 | Formation of amorphous Fe1â^'xBx alloys during solid state alloying with hexane. Journal of Non-Crystalline Solids, 1998, 224, 36-42. | 1.5 | 12 |
| 113 | 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. | 2.6 | 12 |
| 114 | In situneutron diffraction study of magnetic field induced martensite reorientation in Niâ€“Mnâ€“Ga under constant stress. Journal of Physics Condensed Matter, 2008, 20, 104224. | 0.7 | 12 |
| 115 | Suppression of twinning mechanism on nanoscale: size effect in Cuâ€“Niâ€“Al shape memory alloy. Journal of Materials Science, 2019, 54, 6586-6593. | 1.7 | 12 |
| 116 | Systematic Trends of Transformation Temperatures and Crystal Structure of Niâ€“Mnâ€“Gaâ€“Feâ€“Cu Alloys. Shape Memory and Superelasticity, 2020, 6, 97-106. | 1.1 | 12 |
| 117 | Full Variation of Site Substitution in Ni-Mn-Ga by Ferromagnetic Transition Metals. Metals, 2021, 11, 850. | 1.0 | 12 |
| 118 | Effect of electron localization in theoretical design of Ni-Mn-Ga based magnetic shape memory alloys. Materials and Design, 2021, 209, 109917. | 3.3 | 12 |
| 119 | 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. | 1.8 | 12 |
| 120 | Mechanically Alloyed Fe-B, Fe-Si and Fe-B-Si Powders. Key Engineering Materials, 1993, 81-83, 159-168. | 0.4 | 11 |
| 121 | Magnetic Domains and Twin Microstructure of Single Crystal Niâ€“Mnâ€“Ga Exhibiting Magnetic Shape Memory Effect. IEEE Transactions on Magnetics, 2015, 51, 1-4. | 1.2 | 11 |
| 122 | Temperature dependence of twinning stress â€“ Analogy between Cuâ€“Niâ€“Al and Niâ€“Mnâ€“Ga shape memory single crystals. Philosophical Magazine, 2017, 97, 1479-1497. | 0.7 | 11 |
| 123 | Non-conventional twins in five-layer modulated Ni-Mn-Ga martensite. Scripta Materialia, 2019, 162, 497-502. | 2.6 | 11 |
| 124 | Rapid floating zone growth of Ni2MnGa single crystals exhibiting magnetic shape memory functionality. Journal of Alloys and Compounds, 2019, 775, 533-541. | 2.8 | 11 |
| 125 | Magnetic properties of compacted alloy Fe/sub 73.5/Cu/sub 7/Nb/sub 3/Si/sub 13.5/B/sub 9/ in amorphous and nanocrystalline state. IEEE Transactions on Magnetics, 1993, 29, 2670-2672. | 1.2 | 10 |
| 126 | Enhanced magnetic hysteresis in Ni-Mn-Ga single crystal and its influence on magnetic shape memory effect. Journal of Applied Physics, 2015, 117, . | 1.1 | 10 |

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| 127 | Changes in magnetic domain structure during twin boundary motion in single crystal Ni-Mn-Ga exhibiting magnetic shape memory effect. AIP Advances, 2016, 6, 056208. | 0.6 | 10 |
| 128 | Softening of Shear Elastic Coefficients in Shape Memory Alloys Near the Martensitic Transition: A Study by Laser-Based Resonant Ultrasound Spectroscopy. Metals, 2020, 10, 1383. | 1.0 | 10 |
| 129 | Hysteretic structural changes within five-layered modulated 10M martensite of Niâ€“Mnâ€“Ga(â€“Fe). Journal of Physics Condensed Matter, 2021, 33, 265404. | 0.7 | 10 |
| 130 | Magnetic properties of the crystalline and amorphous components of a nanocrystalline FeNbB alloy. Journal of Magnetism and Magnetic Materials, 1996, 160, 259-260. | 1.0 | 9 |
| 131 | Structure and Magnetic Properties of a Shape-Memory NiMnGa Alloy. Materials Science Forum, 2002, 394-395, 541-544. | 0.3 | 9 |
| 132 | Optical and magneto-optical studies of martensitic transformation in Ni-Mn-Ga magnetic shape memory alloys. Journal of Applied Physics, 2015, 117, 17A919. | 1.1 | 9 |
| 133 | Effect of Magnetostatic Interactions on Twin Boundary Motion in NiMnGa Magnetic Shape Memory Alloy. IEEE Magnetics Letters, 2015, 6, 1-4. | 0.6 | 9 |
| 134 | Niâ€“TiO 2 nanocomposite films and their magnetic properties. Physica B: Condensed Matter, 2016, 503, 44-50. | 1.3 | 9 |
| 135 | Antiphase boundaries in bulk Ni-Mn-Ga Heusler alloy observed by magnetic force microscopy. Applied Physics Letters, 2018, 113, 172901. | 1.5 | 9 |
| 136 | Systematic experimental search for Fe2YZ Heusler compounds predicted by ab-initio calculation. Intermetallics, 2021, 131, 107073. | 1.8 | 9 |
| 137 | Comparison of different methods for studying magnetic domains in Niâ€“Mnâ€“Ga martensites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 481-482, 302-305. | 2.6 | 8 |
| 138 | Direct observation of magnetic domains by Kerr microscopy in a Ni-Mn-Ga magnetic shape-memory alloy. Physical Review B, 2017, 95, . | 1.1 | 8 |
| 139 | Influence of antiphase and ferroelastic domain boundaries on ferromagnetic domain wall width in multiferroic Ni-Mn-Ga compound. Applied Physics Letters, 2019, 115, . | 1.5 | 8 |
| 140 | Morphology of ferromagnetic solâ€“gel submicron silica powders doped with iron and nickel particles. Materials Letters, 2007, 61, 3171-3173. | 1.3 | 7 |
| 141 | Magnetic properties of epitaxial Feâ€“Pd films measured at elevated temperatures. Journal of Applied Physics, 2008, 103, . | 1.1 | 7 |
| 142 | Magnetoelastic Coupling in Ni-Mn-Ga Magnetic Shape Memory Alloy. Materials Science Forum, 0, 635, 125-130. | 0.3 | 7 |
| 143 | Influence of different synthesis approach on doping behavior of silver nanoparticles onto the iron oxideâ€“silica coreshell surfaces. Journal of Nanoparticle Research, 2012, 14, 1. | 0.8 | 7 |
| 144 | Band mapping of the weakly off-stoichiometric Heusler alloy<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mtext>Ni</mml:mtext><mml:mrow><mml:mn> the austenitic phase. Physical Review B, 2015, 91, . | | 7 |

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| 145 | Magnetic order in Mn excess Ni-Mn-Ga Heusler alloy single crystal probed by ferromagnetic resonance. Journal of Magnetism and Magnetic Materials, 2021, 532, 167983. | 1.0 | 7 |
| 146 | Time-dependent magnetostrain and thermal phonons in the Ni-Mn-Ga magnetic shape-memory alloys. International Journal of Applied Electromagnetics and Mechanics, 2006, 23, 75-79. | 0.3 | 6 |
| 147 | Neutron diffraction studies of magnetic-shape memory Niâ€“Mnâ€“Ga single crystal. Journal of Magnetism and Magnetic Materials, 2007, 316, 386-389. | 1.0 | 6 |
| 148 | High magnetic field study of the Dy2Fe17Hx compounds with x=0â€“3.8. Journal of Alloys and Compounds, 2015, 627, 101-107. | 2.8 | 6 |
| 149 | Mechanical and magnetic properties of semi-Heusler/light-metal composites consolidated by spark plasma sintering. Materials and Design, 2017, 126, 351-357. | 3.3 | 6 |
| 150 | First-principles study of Zn-doping effects on phase stability and magnetic anisotropy of Ni-Mn-Ga alloys. Materials Research Express, 2020, 7, 026101. | 0.8 | 6 |
| 151 | The behaviour of Ni-Mn-Ga martensitic alloys in magnetic field. European Physical Journal Special Topics, 2001, 11, Pr8-287-Pr8-292. | 0.2 | 6 |
| 152 | Creep-induced magnetic anisotropy and magnetostriction in partly nanocrystalline Fe74Nb3Cu1Si13B9 alloy. Journal of Magnetism and Magnetic Materials, 1996, 157-158, 151-152. | 1.0 | 5 |
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