

# Marek Vronka

## List of Publications by Year in descending order

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28  
papers

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citations

933447

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839539

18  
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28  
all docs

28  
docs citations

28  
times ranked

323  
citing authors

#	ARTICLE	IF	CITATIONS
1	Beyond the strain recoverability of martensitic transformation in NiTi. International Journal of Plasticity, 2019, 116, 232-264.	8.8	89
2	Effect of temperature on fatigue of superelastic NiTi wires. International Journal of Fatigue, 2020, 134, 105470.	5.7	43
3	Revealing nanoscale strain mechanisms in ion-irradiated multilayers. Acta Materialia, 2022, 229, 117807.	7.9	31
4	The Use of Selective Laser Melting to Increase the Performance of AlSi9Cu3Fe Alloy. Materials, 2018, 11, 1918.	2.9	26
5	Ultrafast actuation of Ni-Mn-Ga micropillars by pulsed magnetic field. Scripta Materialia, 2019, 162, 482-485.	5.2	25
6	Interphase boundary layer-dominated strain mechanisms in Cu+ implanted Zr-Nb nanoscale multilayers. Acta Materialia, 2021, 202, 317-330.	7.9	21
7	Antiphase boundaries, magnetic domains, and magnetic vortices in Ni-Mn-Ga single crystals. Acta Materialia, 2020, 184, 179-186.	7.9	17
8	Ni-Mn-Ga Single Crystal Exhibiting Multiple Magnetic Shape Memory Effects. Shape Memory and Superelasticity, 2016, 2, 272-280.	2.2	13
9	Suppression of twinning mechanism on nanoscale: size effect in Cu-Ni-Al shape memory alloy. Journal of Materials Science, 2019, 54, 6586-6593.	3.7	12
10	Temperature dependence of twinning stress – Analogy between Cu-Ni-Al and Ni-Mn-Ga shape memory single crystals. Philosophical Magazine, 2017, 97, 1479-1497.	1.6	11
11	Interface-Driven Strain in Heavy Ion-Irradiated Zr/Nb Nanoscale Metallic Multilayers: Validation of Distortion Modeling via Local Strain Mapping. ACS Applied Materials & Interfaces, 2022, 14, 12777-12796.	8.0	11
12	Influence of cold rolling on the precipitation in an Al-Mn-Zr alloy. Materials and Design, 2015, 85, 361-366.	7.0	9
13	Synthesis and properties of diamond - silicon carbide composite layers. Journal of Alloys and Compounds, 2019, 800, 327-333.	5.5	9
14	Influence of antiphase and ferroelastic domain boundaries on ferromagnetic domain wall width in multiferroic Ni-Mn-Ga compound. Applied Physics Letters, 2019, 115, .	3.3	8
15	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
16	TEM observation of twins in surface grains of superelastic NiTi wire after cyclic loading. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 782, 139271.	5.6	4
17	Effect of pulsed methane gas flow on the incorporation of phosphorous in diamond. Diamond and Related Materials, 2022, 124, 108928.	3.9	4
18	Mechanical Stabilization of Martensite in Cu-Ni-Al Single Crystal and Unconventional Way to Detect It. Shape Memory and Superelasticity, 2018, 4, 77-84.	2.2	3

#	ARTICLE	IF	CITATIONS
19	Ni nanoparticles in TiO <sub>2</sub> films and their magnetic properties. <i>Physica B: Condensed Matter</i> , 2020, 578, 411862.	2.7	3
20	Radiation damage evolution in pure W and W-Cr-Hf alloy caused by 5 MeV Au ions in a broad range of dpa. <i>Nuclear Materials and Energy</i> , 2021, 29, 101085.	1.3	3
21	Deformation twinning with different twin-boundary mobility in 2H martensite in Cu-Ni-Al shape memory alloy. <i>Acta Materialia</i> , 2022, 226, 117598.	7.9	3
22	Nanotwinned (inter)martensite transformation interfaces in Ni <sub>50</sub> Mn <sub>25</sub> Ga <sub>20</sub> Fe <sub>5</sub> magnetic shape memory single crystal foil. <i>Materials Characterization</i> , 2022, 190, 112007.	4.4	3
23	Microstructure and Mechanical Properties of Al-Mn Sheets with Zr Addition. <i>Key Engineering Materials</i> , 0, 606, 19-22.	0.4	2
24	Transitions Between Austenite and Martensite Structures in Ni <sub>50</sub> Mn <sub>25</sub> Ga <sub>20</sub> Fe <sub>5</sub> Thin Foil. <i>SSRN Electronic Journal</i> , 0, , .	0.4	1
25	Magnetic domain structure across the austenite-martensite interface in Ni <sub>50</sub> Mn <sub>25</sub> Ga <sub>20</sub> Fe <sub>5</sub> single crystalline thin foil. <i>Applied Physics Letters</i> , 2021, 119, 212901.	3.3	1
26	Magnetic Shape Memory Effect in Ni-Mn-Ga Single Crystal. <i>Materials Science Forum</i> , 2016, 879, 738-743.	0.3	0
27	Comparison of Highly Mobile Twin Boundaries in Cu-Ni-Al and Ni-Mn-Ga Shape Memory Single Crystals. <i>Minerals, Metals and Materials Series</i> , 2018, , 257-261.	0.4	0
28	Influence of zinc addition on the precipitation in Al-Mn-Zr alloys. <i>Metallic Materials</i> , 2018, 55, 395-401.	0.3	0