

# Marek Vronka

## List of Publications by Year in descending order

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28  
papers

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citations

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times ranked

323  
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#	ARTICLE	IF	CITATIONS
1	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
2	Interface-Driven Strain in Heavy Ion-Irradiated Zr/Nb Nanoscale Metallic Multilayers: Validation of Distortion Modeling via Local Strain Mapping. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 12777-12796.	8.0	11
3	Effect of pulsed methane gas flow on the incorporation of phosphorous in diamond. <i>Diamond and Related Materials</i> , 2022, 124, 108928.	3.9	4
4	Revealing nanoscale strain mechanisms in ion-irradiated multilayers. <i>Acta Materialia</i> , 2022, 229, 117807.	7.9	31
5	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
6	Interphase boundary layer-dominated strain mechanisms in Cu+ implanted Zr-Nb nanoscale multilayers. <i>Acta Materialia</i> , 2021, 202, 317-330.	7.9	21
7	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
8	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
9	Ni nanoparticles in TiO <sub>2</sub> films and their magnetic properties. <i>Physica B: Condensed Matter</i> , 2020, 578, 411862.	2.7	3
10	Effect of temperature on fatigue of superelastic NiTi wires. <i>International Journal of Fatigue</i> , 2020, 134, 105470.	5.7	43
11	Antiphase boundaries, magnetic domains, and magnetic vortices in Ni-Mn-Ga single crystals. <i>Acta Materialia</i> , 2020, 184, 179-186.	7.9	17
12	TEM observation of twins in surface grains of superelastic NiTi wire after cyclic loading. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 782, 139271.	5.6	4
13	Influence of antiphase and ferroelastic domain boundaries on ferromagnetic domain wall width in multiferroic Ni-Mn-Ga compound. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	8
14	Beyond the strain recoverability of martensitic transformation in NiTi. <i>International Journal of Plasticity</i> , 2019, 116, 232-264.	8.8	89
15	Synthesis and properties of diamond - silicon carbide composite layers. <i>Journal of Alloys and Compounds</i> , 2019, 800, 327-333.	5.5	9
16	Ultrafast actuation of Ni-Mn-Ga micropillars by pulsed magnetic field. <i>Scripta Materialia</i> , 2019, 162, 482-485.	5.2	25
17	Suppression of twinning mechanism on nanoscale: size effect in Cu-Ni-Al shape memory alloy. <i>Journal of Materials Science</i> , 2019, 54, 6586-6593.	3.7	12
18	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

#	ARTICLE	IF	CITATIONS
19	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
20	The Use of Selective Laser Melting to Increase the Performance of AlSi9Cu3Fe Alloy. Materials, 2018, 11, 1918.	2.9	26
21	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
22	Influence of zinc addition on the precipitation in Al-Mn-Zr alloys. Metallic Materials, 2018, 55, 395-401.	0.3	0
23	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
24	Magnetic Shape Memory Effect in Ni-Mn-Ga Single Crystal. Materials Science Forum, 2016, 879, 738-743.	0.3	0
25	Ni-Mn-Ga Single Crystal Exhibiting Multiple Magnetic Shape Memory Effects. Shape Memory and Superelasticity, 2016, 2, 272-280.	2.2	13
26	Influence of cold rolling on the precipitation in an Al-Mn-Zr alloy. Materials and Design, 2015, 85, 361-366.	7.0	9
27	Microstructure and Mechanical Properties of Al-Mn Sheets with Zr Addition. Key Engineering Materials, 0, 606, 19-22.	0.4	2
28	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. SSRN Electronic Journal, 0, , .	0.4	1