

Vladimir Pushin

List of Publications by Year in descending order

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83
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394286

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83
all docs

83
docs citations

83
times ranked

628
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanostructuring of TiNi Alloy by SPD Processing for Advanced Properties. Materials Transactions, 2008, 49, 97-101.	0.4	68
2	Effect of Severe Plastic Deformation on the Behavior of Ti–Ni Shape Memory Alloys. Materials Transactions, 2006, 47, 694-697.	0.4	45
3	Comparative study of structure formation and mechanical behavior of age-hardened Ti–Nb–Zr and Ti–Nb–Ta shape memory alloys. Materials Characterization, 2015, 103, 65-74.	1.9	44
4	Mechanical behavior of nanocrystalline TiNi alloy produced by severe plastic deformation. Journal of Materials Science, 2012, 47, 7848-7853.	1.7	41
5	The Nanostructured TiNi Shape-Memory Alloys: New Properties and Applications. Solid State Phenomena, 2003, 94, 13-24.	0.3	39
6	Actuators based on composite material with shape-memory effect. Journal of Communications Technology and Electronics, 2010, 55, 818-830.	0.2	38
7	An enhanced composite scheme of shape memory actuator for smart systems. Physics Procedia, 2010, 10, 58-64.	1.2	32
8	Design and Development of Ti–Ni, Ni–Mn–Ga and Cu–Al–Ni-based Alloys with High and Low Temperature Shape Memory Effects. Materials, 2019, 12, 2616.	1.3	28
9	Severe Plastic Deformation of Melt-Spun Shape Memory Ti ₂ NiCu and Ni ₂ MnGa Alloys. Materials Transactions, 2006, 47, 546-549.	0.4	25
10	Effect of Equal Channel Angular Pressing and Repeated Rolling on Structure, Phase Transformations and Properties of TiNi Shape Memory Alloys. Materials Science Forum, 2006, 503-504, 539-544.	0.3	25
11	High-entropy equiatomic AlCrFeCoNiCu alloy: Hypotheses and experimental data. Technical Physics, 2014, 59, 211-223.	0.2	25
12	Microstructure of nanocrystalline PbS powders and films. Inorganic Materials, 2012, 48, 21-27.	0.2	24
13	Formation of nanocrystalline structure in the amorphous Ti ₅₀ Ni ₂₅ Cu ₂₅ alloy upon severe thermomechanical treatment and the size effect of the thermoelastic martensitic B2 → B19 transformation. Physics of Metals and Metallography, 2012, 113, 271-282.	0.3	24
14	Structure and Properties of Ti-19.7Nb-5.8Ta Shape Memory Alloy Subjected to Thermomechanical Processing Including Aging. Journal of Materials Engineering and Performance, 2013, 22, 2656-2664.	1.2	23
15	Effect of severe plastic deformation by torsion on the properties and structure of the Ni ₅₄ Mn ₂₁ Ga ₂₅ and Ni ₅₄ Mn ₂₀ Fe ₁ Ga ₂₅ alloys. Physics of the Solid State, 2011, 53, 91-99.	0.2	22
16	Processing of nanostructured TiNi-shape memory alloys: Methods, structures, properties, application. European Physical Journal Special Topics, 2003, 112, 659-662.	0.2	21
17	Crystal-structural features of pretransition phenomena and thermoelastic martensitic transformations in alloys of nonferrous metals. Physics of Metals and Metallography, 2011, 111, 165-189.	0.3	21
18	Peculiar features of physical properties of the rapid quenched AlCrFeCoNiCu high-entropy alloy. Journal of Alloys and Compounds, 2015, 636, 304-309.	2.8	21

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19	The use of severe deformations for preparing bulk nanocrystalline materials from amorphous alloys. Doklady Physics, 2004, 49, 519-521.	0.2	20
20	Phase and structural transformations in the Ti _{49.5} Ni _{50.5} alloy with a shape-memory effect during torsion under high pressure. Physics of Metals and Metallography, 2012, 113, 256-270.	0.3	20
21	Features of the mechanical behavior of ultrafine-grained and nanostructured TiNi alloys. Materials Today: Proceedings, 2017, 4, 4825-4829.	0.9	19
22	Specific features of cast high-entropy AlCrFeCoNiCu alloys produced by ultrarapid quenching from the melt. Physics of Metals and Metallography, 2013, 114, 503-513.	0.3	18
23	Metastable Nanostructured SPD Ti-Ni Alloys with Unique Properties. Journal of Metastable and Nanocrystalline Materials, 2005, 24-25, 7-12.	0.1	17
24	Mechanical Behavior and Stress-Induced Martensitic Transformation in Nanocrystalline Ti _{49.4} Ni _{50.6} Alloy. Materials Science Forum, 0, 584-586, 470-474.	0.3	17
25	Microstructure features of high-entropy equiatomic cast AlCrFeCoNiCu alloys. Physics of Metals and Metallography, 2013, 114, 514-520.	0.3	17
26	Evolution of the amorphous structure in melt-spun Ti ₅₀ Ni ₂₅ Cu ₂₅ alloy subjected to high pressure torsion deformation. Intermetallics, 2015, 66, 77-81.	1.8	17
27	Bimodal size distribution of Ti ₃ Ni ₄ particles and martensitic transformations in slowly cooled nickel-rich TiNi alloys. Scripta Materialia, 1997, 37, 79-84.	2.6	16
28	Effect of the deviation of the chemical composition from the stoichiometric composition on the structural and phase transformations and properties of rapidly quenched Ti ₅₀ + x Ni ₂₅ - x Cu ₂₅ alloys. Physics of Metals and Metallography, 2012, 113, 283-294.	0.3	16
29	Electrical properties of ferromagnetic Ni ₂ MnGa and Co ₂ CrGa Heusler alloys. Journal of Experimental and Theoretical Physics, 2013, 117, 121-125.	0.2	16
30	High-temperature shape memory effect and the B2-L10 thermoelastic martensitic transformation in Ni-Mn intermetallics. Technical Physics, 2013, 58, 878-887.	0.2	15
31	Structure and mechanical properties of aging Al-Li-Cu-Zr-Sc-Ag alloy after severe plastic deformation by high-pressure torsion. Physics of Metals and Metallography, 2015, 116, 346-355.	0.3	14
32	Microstructure and Mechanical Properties of the SPD-Processed TiNi Alloys. Materials Science Forum, 2013, 738-739, 486-490.	0.3	12
33	Effect of storage on the stability of the grained structure and phase transformations in the nanocrystalline alloy 1450 doped with Sc and Mg. Physics of Metals and Metallography, 2012, 113, 867-877.	0.3	11
34	Baroelastic shape memory effects in titanium nickelide alloys subjected to plastic deformation under high pressure. Technical Physics, 2012, 57, 1106-1114.	0.2	10
35	Effect of deviations of composition from the quasi-binary section TiNi-TiCu on structural and phase transformations in rapidly quenched alloys. Physics of Metals and Metallography, 2013, 114, 692-702.	0.3	10
36	Peculiarities of the Rheological Behavior for the Al-Mg-Sc-Zr Alloy Under High-Temperature Deformation. Journal of Materials Engineering and Performance, 2014, 23, 4271-4277.	1.2	10

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37	Effect of the megaplastic torsion deformation on the heat capacity of the Ni ₂ MnGa alloy. <i>Physics of the Solid State</i> , 2012, 54, 2128-2131.	0.2	9
38	SPD-Induced Nanocrystallization of Shape Memory Ni ₂ MnGa-Based and NiTi-Based Alloys Quenched from Liquid State. <i>Materials Science Forum</i> , 2006, 503-504, 545-550.	0.3	8
39	Effect of frictional heating on the surface-layer structure and tribological properties of titanium nickelide. <i>Physics of Metals and Metallography</i> , 2011, 112, 290-300.	0.3	8
40	Structure and phase transformations in TiNiFe ternary alloys subjected to plastic deformation by high-pressure torsion and subsequent heat treatment. <i>Physics of Metals and Metallography</i> , 2014, 115, 365-379.	0.3	8
41	Structural and phase transformations in quasi-binary TiNi-Cu alloys with thermomechanical shape-memory effects. <i>Physics of Metals and Metallography</i> , 2015, 116, 1221-1233.	0.3	8
42	Mechanical properties of the nanocrystalline Ti _{49.4} Ni _{50.6} alloy, produced by High Pressure Torsion. <i>European Physical Journal: Special Topics</i> , 2008, 158, 53-58.	1.2	7
43	Low-temperature properties of magnetic Ni _{50-x} Mn _{25-y} Ga _{25-x+y} shape memory alloys. <i>Physics of the Solid State</i> , 2008, 50, 2127-2132.	0.2	7
44	Effect of plastic deformation by torsion on the heat capacity of the Ni _{50.5} Ti _{49.5} alloy. <i>Physics of the Solid State</i> , 2012, 54, 883-885.	0.2	7
45	Effect of cobalt doping on thermoelastic martensitic transformations and physical properties of magnetic shape memory alloys Ni _{50-x} Co _x Mn ₂₉ Ga ₂₁ . <i>Physics of the Solid State</i> , 2013, 55, 2413-2421.	0.2	7
46	Effect of titanium alloying on the structure, the phase composition, and the thermoelastic martensitic transformations in ternary Ni-Mn-Ti alloys. <i>Technical Physics</i> , 2015, 60, 1330-1334.	0.2	7
47	Effect of annealing on the structure and properties of Al-Li-Cu-Zr-Sc-Ag alloy subjected to severe plastic deformation. <i>Physics of Metals and Metallography</i> , 2015, 116, 932-941.	0.3	7
48	Structure and physical properties of the high-entropy AlCrFeCoNiCu alloy rapidly quenched from the melt. <i>Physics of the Solid State</i> , 2015, 57, 1616-1626.	0.2	7
49	Electronic properties of strain-disordered Ni _{2.16} Mn _{0.84} Ga alloy. <i>Physics of the Solid State</i> , 2007, 49, 1773-1779.	0.2	6
50	Modification of the titanium nickelide surface using frictional treatment and subsequent heating in air. <i>Physics of Metals and Metallography</i> , 2012, 113, 629-636.	0.3	6
51	Crystal structure and physical properties of magnetic shape memory alloys Ni _{50-x} Cu _x Mn ₂₉ Ga ₂₁ . <i>Physics of the Solid State</i> , 2013, 55, 2471-2478.	0.2	6
52	Microstructure and properties of melt-quenched TiNi-based alloys. <i>Technical Physics Letters</i> , 2014, 40, 449-451.	0.2	6
53	Imprinting Bias Stress in Functional Composites. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 100212.	0.8	5
54	Effect of alloying additions and atomic disordering on the physical properties of magnetic Ni ₂ MnGa-based shape memory alloys. <i>Technical Physics</i> , 2012, 57, 207-213.	0.2	5

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55	Effect of heat treatment on structural and phase transformations in the Ti _{49.5} Ni _{50.5} alloy amorphized by high-pressure torsion. <i>Physics of Metals and Metallography</i> , 2013, 114, 488-502.	0.3	5
56	Effect of aluminum alloying on the structure, the phase composition, and the thermoelastic martensitic transformations in ternary Ni-Mn-Al alloys. <i>Technical Physics</i> , 2015, 60, 1000-1004.	0.2	5
57	Structure of aging Al-Li-Cu-Zr-Ag alloy after severe plastic deformation and long-term storage. <i>Physics of Metals and Metallography</i> , 2015, 116, 1108-1115.	0.3	5
58	Effect of Equal Channel Angular Pressing and Repeated Rolling on Structure, Phase Transformations and Properties of TiNi Shape Memory Alloys. <i>Materials Science Forum</i> , 0, , 539-544.	0.3	5
59	Microstructure and Magnetic Hysteresis in Nanocrystalline Nd-Fe-Co-B Alloys on the Base of Nd ₂ Fe ₁₄ B Phase. <i>Solid State Phenomena</i> , 2010, 168-169, 420-423.	0.3	4
60	Effect of plastic deformation on physical properties and structure of the shape memory alloy Ti _{49.5} Ni _{50.5} . <i>Physics of the Solid State</i> , 2011, 53, 1397-1403.	0.2	4
61	Magnetic and structural phase transitions and the tetragonality of thermoelastic martensite in quasi-binary Heusler alloys Ni ₂ + x Mn _{1 - x} Ga. <i>Physics of the Solid State</i> , 2015, 57, 45-52.	0.2	4
62	Mechanical Behavior and Structural Characterization of a Cu-Al-Ni-Based Shape-Memory Alloy Subjected to Isothermal Uniaxial Megaplastic Compression. <i>Materials</i> , 2022, 15, 3713.	1.3	4
63	Recrystallization of deformed single crystals of iridium. <i>Scripta Materialia</i> , 1999, 42, 209-212.	2.6	3
64	New composite shape memory functional material for nano and microengineering application. , 2008, , .		3
65	Low temperature kinetic properties and structure of Ni _{50+x} Mn _{25-x+y} Ga _{25-y} alloys with shape memory. <i>Journal of Physics: Conference Series</i> , 2009, 150, 022054.	0.3	3
66	Effect of severe plastic deformation on the properties of the Pt ₃ Fe antiferromagnet. <i>Physics of the Solid State</i> , 2010, 52, 317-322.	0.2	3
67	Thermo- and Deformation Induced Martensitic Transformations in Binary TiNi-Based Alloys Subjected to Severe Plastic Deformation. <i>Materials Science Forum</i> , 2013, 738-739, 530-534.	0.3	3
68	Specific Features of the Phase Composition and Structure of a High-Strength Multi-Component Fe-W-Mo-Cr-V-Si-Mn-C Steel Synthesized via Laser Remelting. <i>Advanced Engineering Materials</i> , 1.6 2015, 17, 1504-1510.		3
69	Effect of severe plastic deformation on the electronic properties of the Cu ₇₂ Au ₂₄ Ag ₄ alloy. <i>Physics of the Solid State</i> , 2010, 52, 12-17.	0.2	2
70	Effect of magnetic field on the morphology and fine structure of low-temperature martensite phase in a ferromagnetic Ni _{2.08} Mn _{0.96} Ga _{0.96} alloy. <i>Physics of Metals and Metallography</i> , 2011, 112, 488-494.	0.3	2
71	On the effect of cobalt doping on thermoelastic martensitic transformations in ferromagnetic Heusler Ni _{50 - x} Co _x Mn ₂₉ Ga ₂₁ magnetically controlled shape memory alloys. <i>Technical Physics Letters</i> , 2013, 39, 737-740.	0.2	2
72	Structure, Phase Transformations and Properties of Rapidly Quenched Ti ₂ NiCu Alloys. <i>Materials Science Forum</i> , 2013, 738-739, 321-325.	0.3	2

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73	Formation of nanostructured states in ternary TiNiFe-based shape memory alloys during megaplastic deformation and subsequent heat treatment. <i>Technical Physics</i> , 2014, 59, 685-691.	0.2	2
74	Specific features of magnetic properties upon martensitic transition M_{\uparrow}^{\uparrow} L21 in $Ni_{2+x}Mn_{1-x}Ga$ alloys. <i>Physics of the Solid State</i> , 2015, 57, 316-319.	0.2	2
75	Peculiarities of the phase composition and structure of the high-entropy FeWMoCrVSiMnC multicomponent steel. <i>Technical Physics</i> , 2015, 60, 1088-1092.	0.2	2
76	Localization of uranium in radiation-damaged nanoheterogeneous natural zircon. <i>Glass Physics and Chemistry</i> , 2015, 41, 389-397.	0.2	2
77	Structure, phase transformations and properties of the TiNi-TiCu alloys subjected to high pressure torsion. <i>Materials Today: Proceedings</i> , 2017, 4, 4846-4850.	0.9	2
78	Transmutation of a part of the extracted material of brass electrodes with pulses of electric current in an aqueous solution of NaCl. <i>Letters on Materials</i> , 2020, 10, 66-71.	0.2	2
79	Structural State and Magnetic Properties of Nd ₂ Fe ₁₄ B-Type Rapidly Quenched Alloys. <i>Journal of Iron and Steel Research International</i> , 2006, 13, 199-204.	1.4	0
80	Effect of Severe Plastic Deformation by Torsion on Structure and Properties of Ni ₅₄ Mn ₂₁ Ga ₂₅ and Ni ₅₄ Mn ₂₀ Fe ₁ Ga ₂₅ . <i>Solid State Phenomena</i> , 2010, 168-169, 553-556.	0.3	0
81	Structural transformations and wear resistance of titanium nickelide under conditions of sliding friction at a cryogenic ($\sim 196^{\circ}C$) temperature. <i>Physics of Metals and Metallography</i> , 2012, 113, 82-92.	0.3	0
82	Effect of Low-Temperature Thermomechanical Treatment on the Structure and Mechanical, Fatigue and Corrosion Characteristics of Sheets from an Alloy of the Al-Mg-Si-Cu-Zn System. <i>Metal Science and Heat Treatment</i> , 2014, 56, 416-419.	0.2	0
83	The concept of quasineutrons and the synthesis of zinc from the extraction of a part of the material of copper electrodes during electric current discharges in an aqueous solution of NaCl. <i>Letters on Materials</i> , 2020, 10, 486-490.	0.2	0