

# Natalia N Kuranova

## List of Publications by Year in descending order

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59  
papers

558  
citations

840585

11  
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713332

21  
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59  
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59  
docs citations

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times ranked

292  
citing authors

#	ARTICLE	IF	CITATIONS
1	Particularités de la structure et des transformations de phase dans les alliages à mémoire de forme à base de TiNi après déformation plastique intense. <i>Annales De Chimie: Science Des Materiaux</i> , 2002, 27, 77-88.	0.2	86
2	Effect of heat treatment on the structural and phase transformations and mechanical properties of TiNi alloy subjected to severe plastic deformation by torsion. <i>Physics of Metals and Metallography</i> , 2009, 108, 556-568.	0.3	45
3	On the nature of anomalously high plasticity of high-strength titanium nickelide alloys with shape-memory effects: I. Initial structure and mechanical properties. <i>Physics of Metals and Metallography</i> , 2008, 106, 520-530.	0.3	28
4	Design and Development of Ti-Ni, Ni-Mn-Ga and Cu-Al-Ni-based Alloys with High and Low Temperature Shape Memory Effects. <i>Materials</i> , 2019, 12, 2616.	1.3	28
5	Formation of nanocrystalline structure in the amorphous Ti50Ni25Cu25 alloy upon severe thermomechanical treatment and the size effect of the thermoelastic martensitic B2 → B19 transformation. <i>Physics of Metals and Metallography</i> , 2012, 113, 271-282.	0.3	24
6	Application of severe plastic deformation by torsion to form amorphous and nanocrystalline states in large-size TiNi alloy sample. <i>Physics of Metals and Metallography</i> , 2009, 108, 131-138.	0.3	23
7	On the nature of anomalously high plasticity of high-strength titanium nickelide alloys with shape-memory effects: II. Mechanisms of plastic deformation upon isothermal loading. <i>Physics of Metals and Metallography</i> , 2009, 107, 298-311.	0.3	20
8	Phase and structural transformations in the Ti49.5Ni50.5 alloy with a shape-memory effect during torsion under high pressure. <i>Physics of Metals and Metallography</i> , 2012, 113, 256-270.	0.3	20
9	Effect of the Thermomechanical Treatment on Structural and Phase Transformations in Cu-14Al-3Ni Shape Memory Alloy Subjected to High-Pressure Torsion. <i>Physics of Metals and Metallography</i> , 2018, 119, 374-382.	0.3	16
10	High-temperature shape memory effect and the B2-L10 thermoelastic martensitic transformation in Ni-Mn intermetallics. <i>Technical Physics</i> , 2013, 58, 878-887.	0.2	15
11	Structure and thermoelastic martensitic transformations in ternary Ni-Ti-Hf alloys with a high-temperature shape memory effect. <i>Technical Physics</i> , 2016, 61, 1009-1014.	0.2	15
12	Influence of Thermomechanical Treatment on Structural-Phase Transformations and Mechanical Properties of the Cu-Al-Ni Shape-Memory Alloys. <i>Russian Physics Journal</i> , 2019, 61, 1681-1686.	0.2	12
13	Formation of the nanocrystalline structure in the Ti50Ni25Cu25 shape-memory alloy under severe thermomechanical treatment. <i>Physics of Metals and Metallography</i> , 2011, 112, 603-612.	0.3	11
14	Effect of copper on the structure and phase transformations and the properties of quasi-binary TiNi-TiCu alloys. <i>Technical Physics</i> , 2016, 61, 554-562.	0.2	11
15	Baroelastic shape memory effects in titanium nickelide alloys subjected to plastic deformation under high pressure. <i>Technical Physics</i> , 2012, 57, 1106-1114.	0.2	10
16	Structural and phase transformations, mechanical properties, and shape-memory effects in quasibinary Ni50Ti38Hf12 alloy obtained by quenching from the melt. <i>Physics of Metals and Metallography</i> , 2016, 117, 1251-1260.	0.3	10
17	Effect of the Temperature of Isothermal Upsetting on the Structure and the Properties of the Shape Memory Cu-14 wt % Al-4 wt % Ni Alloy. <i>Physics of Metals and Metallography</i> , 2019, 120, 1159-1165.	0.3	10
18	Application of Isothermal Upset for Megaplastic Deformation of Cu-Al-Ni $\beta^2$ Alloys. <i>Technical Physics</i> , 2020, 65, 1044-1050.	0.2	10

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19	The Effect of Plastification of Cu-14Al-4Ni Alloy with the Shape Memory Effect in High-Temperature Isothermal Precipitation. <i>Technical Physics Letters</i> , 2020, 46, 118-121.	0.2	9
20	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
21	Structural and phase transformations in quasi-binary TiNi-TiCu alloys with thermomechanical shape-memory effects. <i>Physics of Metals and Metallography</i> , 2015, 116, 1221-1233.	0.3	8
22	The structure-phase transformations and mechanical properties of the shape memory effect alloys based on the system Cu-Al-Ni. <i>Materials Today: Proceedings</i> , 2017, 4, 4758-4762.	0.9	8
23	Structural and Phase Transformations and Physical and Mechanical Properties of Cu-Al-Ni Shape Memory Alloys Subjected to Severe Plastic Deformation and Annealing. <i>Materials</i> , 2021, 14, 4394.	1.3	8
24	Effect of cobalt doping on thermoelastic martensitic transformations and physical properties of magnetic shape memory alloys Ni <sub>50</sub> - x Co x Mn <sub>29</sub> Ga <sub>21</sub> . <i>Physics of the Solid State</i> , 2013, 55, 2413-2421.	0.2	7
25	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
26	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
27	Effect of gallium alloying on the structure, the phase composition, and the thermoelastic martensitic transformations in ternary Ni-Mn-Ga alloys. <i>Technical Physics</i> , 2016, 61, 547-553.	0.2	7
28	Structure and phase transformations in copper-alloyed rapidly melt-quenched Ni <sub>50</sub> Ti <sub>32</sub> Hf <sub>18</sub> -based alloys with high-temperature shape memory effect. <i>Physics of Metals and Metallography</i> , 2017, 118, 997-1005.	0.3	7
29	Crystal structure and physical properties of magnetic shape memory alloys Ni <sub>50</sub> - x Cu x Mn <sub>29</sub> Ga <sub>21</sub> . <i>Physics of the Solid State</i> , 2013, 55, 2471-2478.	0.2	6
30	Thermoelastic martensitic transformations, mechanical properties, and shape-memory effects in rapidly quenched Ni <sub>45</sub> Ti <sub>32</sub> Hf <sub>18</sub> Cu <sub>5</sub> alloy in the ultrafine-grained state. <i>Physics of Metals and Metallography</i> , 2016, 117, 1261-1269.	0.3	6
31	Molecular Dynamics Study of the Deformation Processes of Metallic Materials in Structural and Phase (Martensitic) Transformations. <i>Physics of Metals and Metallography</i> , 2018, 119, 589-597.	0.3	6
32	Deformation-Induced Atomic Disordering and bcc -> fcc Transformation in Heusler Alloy Ni <sub>54</sub> Mn <sub>21</sub> Ga <sub>25</sub> Subjected to Megaplastic Deformation by High Pressure Torsion. <i>Physics of Metals and Metallography</i> , 2020, 121, 330-336.	0.3	6
33	Effect of heat treatment on structural and phase transformations in the Ti <sub>49.5</sub> Ni <sub>50.5</sub> alloy amorphized by high-pressure torsion. <i>Physics of Metals and Metallography</i> , 2013, 114, 488-502.	0.3	5
34	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
35	Fine structure and mechanical properties of the shape-memory Ni <sub>50</sub> Ti <sub>32</sub> Hf <sub>18</sub> alloy rapidly quenched by spinning. <i>Technical Physics</i> , 2017, 62, 1189-1193.	0.2	5
36	Structure and Thermoelastic Martensitic Transformations in Ternary Ni-Ti-Zr Alloys with High-Temperature Shape Memory Effects. <i>Physics of Metals and Metallography</i> , 2018, 119, 582-588.	0.3	5

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37	Effect of plastic deformation on physical properties and structure of the shape memory alloy Ti49.5Ni50.5. <i>Physics of the Solid State</i> , 2011, 53, 1397-1403.	0.2	4
38	Magnetic and structural phase transitions and the tetragonality of thermoelastic martensite in quasi-binary Heusler alloys Ni <sub>2</sub> + x Mn <sub>1 - x</sub> Ga. <i>Physics of the Solid State</i> , 2015, 57, 45-52.	0.2	4
39	Structure and Mechanical Properties of Shape-Memory Alloys of the Ti - Ni - Cu System. <i>Metal Science and Heat Treatment</i> , 2016, 57, 739-745.	0.2	4
40	Atomic Disordering and BCC → FCC Transformation in the Heusler Compound Ni <sub>54</sub> Mn <sub>20</sub> Fe <sub>1</sub> Ga <sub>25</sub> Subject to High-Pressure Torsional Megaplastic Deformation. <i>Technical Physics</i> , 2020, 65, 602-611.	0.2	4
41	Effect of severe plastic deformation by torsion on the structure and properties of TiNi-based alloys with shape memory effects. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2008, 72, 550-552.	0.1	3
42	Effect of severe plastic deformation on the phase and structural transformations and mechanical properties of metastable austenitic Ti-Ni alloys. <i>Russian Metallurgy (Metally)</i> , 2010, 2010, 296-300.	0.1	3
43	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
44	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> , 2015, 17, 1504-1510.		3
45	Specific Features of the Atomic Structure of the Ti <sub>50</sub> Ni <sub>25</sub> Cu <sub>25</sub> Alloy Amorphized during Rapid Quenching from a Melt. <i>Physics of Metals and Metallography</i> , 2019, 120, 164-170.	0.3	3
46	On the effect of cobalt doping on thermoelastic martensitic transformations in ferromagnetic Heusler Ni <sub>50 - x</sub> Co <sub>x</sub> Mn <sub>29</sub> Ga <sub>21</sub> magnetically controlled shape memory alloys. <i>Technical Physics Letters</i> , 2013, 39, 737-740.	0.2	2
47	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
48	Peculiarities of the phase composition and structure of the high-entropy FeWMoCrVSiMnCr multicomponent steel. <i>Technical Physics</i> , 2015, 60, 1088-1092.	0.2	2
49	Structural and phase transformations and properties of TiNi-TiCu quasi-binary alloys. <i>Technical Physics Letters</i> , 2016, 42, 376-379.	0.2	2
50	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
51	Features of Crystallization of Rapidly Quenched Ni <sub>45</sub> Ti <sub>32</sub> Hf <sub>18</sub> Cu <sub>5</sub> and Ni <sub>25</sub> Ti <sub>32</sub> Hf <sub>18</sub> Cu <sub>25</sub> Alloys from Melt with High-Temperature Shape Memory Effect. <i>Technical Physics</i> , 2017, 62, 1843-1847.	0.2	2
52	Thermoelastic martensitic transformations in ternary Ni <sub>50</sub> Mn <sub>50 - z</sub> Ga <sub>z</sub> alloys. <i>Technical Physics Letters</i> , 2016, 42, 75-78.	0.2	1
53	Electrical studies of surface reconstruction resulting from chalcogen evaporation at the Ag <sub>2</sub> X/Vacuum interface (X=S, Se). <i>Ionics</i> , 2000, 6, 235-238.	1.2	0
54	Specific features of the electronic properties of Ti <sub>50</sub> Ni <sub>50 - x</sub> Cu <sub>x</sub> alloys with the shape memory effect. <i>Physics of the Solid State</i> , 2016, 58, 1108-1114.	0.2	0

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55	Features of thermoelastic martensitic transformations, structure and properties in ternary B2-alloys based on NiMn $\hat{c}$ NiTi, NiMn $\hat{c}$ NiAl, NiMn $\hat{c}$ NiGa, Ni <sub>2</sub> MnGa $\hat{c}$ Ni <sub>3</sub> Ga quasi-binary systems. Materials Today: Proceedings, 2017, 4, 4717-4721.	0.9	0
56	Development of High-Strength, Fine, and Ultrafine-Grained Shape Memory Alloys. Physics of Metals and Metallography, 2018, 119, 1346-1349.	0.3	0
57	Multicomponent alloys with thermally, mechanically and magnetically controlled shape memory effects. Journal of Physics: Conference Series, 2019, 1389, 012098.	0.3	0
58	Specific Features of the Atomic Structure of Ti50Ni25Cu25 Alloy Rapidly Quenched from Melt. Crystallography Reports, 2020, 65, 12-17.	0.1	0
59	FEATURES OF LOW-TEMPERATURE CRYSTALLIZATION OF Ti <sub>2</sub> NiCu AMORPHIZED BY THE METHOD OF SPINNING FROM MELT. Diagnostics Resource and Mechanics of Materials and Structures, 2018, , 51-58.	0.1	0