

Radik Mulyukov

List of Publications by Year in descending order

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93
papers

1,975
citations

516561

16
h-index

254106

43
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95
all docs

95
docs citations

95
times ranked

1210
citing authors

#	ARTICLE	IF	CITATIONS
1	Microstructure and mechanical properties of a welded joint obtained by friction stir welding of thin copper and aluminum plates. Letters on Materials, 2022, 12, 106-110.	0.2	1
2	Annealing-induced phase transformations and hardness evolution in Al-Cu-Al composites obtained by high-pressure torsion. Acta Mechanica, 2021, 232, 1815-1828.	1.1	15
3	Thermal analysis and microhardness of nanostructured alloy Invar 36. Letters on Materials, 2021, 11, 382-385.	0.2	1
4	Ion-Induced Electron Emission and Surface Erosion of Nanostructured Nickel under High-Fluence Irradiation with 30-keV Argon Ions. Journal of Surface Investigation, 2021, 15, S66-S72.	0.1	1
5	Influence of Constrained High-Pressure Torsion on Microstructure and Mechanical Properties of an Aluminum-Based Metal Matrix Composite. Jom, 2020, 72, 2898-2911.	0.9	24
6	Surface of submicrocrystalline nickel after sputtering by Ar ions with 5 keV energy at different incidence angle of ions. Letters on Materials, 2020, 10, 223-226.	0.2	4
7	Mechanical Properties of a Metal-Matrix Composite Based on Copper and Aluminum, Obtained via Shear Deformation under Pressure. Bulletin of the Russian Academy of Sciences: Physics, 2019, 83, 1265-1269.	0.1	2
8	Effect of deformation on dehydrogenation mechanisms of crumpled graphene: molecular dynamics simulation. Letters on Materials, 2019, 9, 81-85.	0.2	14
9	Field electron emission from a copper-based composite reinforced with carbon nanotubes. Letters on Materials, 2019, 9, 566-570.	0.2	4
10	Influence of the inclination angle of stiffeners on folding during superplastic forming of corrugated core panels. Letters on Materials, 2019, 9, 433-435.	0.2	2
11	Effect of deformation nanostructuring of nickel and copper on ion sputtering with a focused gallium ion beam with an energy of 30 keV. Letters on Materials, 2019, 9, 212-217.	0.2	4
12	Ion sputtering rate of nanostructured FCC, BCC and HCP metals processed by severe plastic deformation. IOP Conference Series: Materials Science and Engineering, 2018, 447, 012001.	0.3	1
13	Al-Cu layered composites fabricated by deformation. AIP Conference Proceedings, 2018, , .	0.3	5
14	The effect of holding temperature on the strength of the diffusion bond of Ti-alloy and stainless steel through the ultrafine-grained interlayers of Ni and Ni-2%Cr alloy. IOP Conference Series: Materials Science and Engineering, 2018, 447, 012051.	0.3	0
15	Molecular Dynamics Study of the Deformation Processes of Metallic Materials in Structural and Phase (Martensitic) Transformations. Physics of Metals and Metallography, 2018, 119, 589-597.	0.3	6
16	Anisotropy of the Thermal Expansion of a Polycrystalline Ni-Mn-Ga Alloy Subjected to Plastic Deformation by Forging. Physics of the Solid State, 2018, 60, 1061-1067.	0.2	13
17	Effect of upsetting deformation temperature on the formation of the fine-grained cast alloy structure of the Ni-Mn-Ga system. Physics of the Solid State, 2017, 59, 1570-1576.	0.2	2
18	Plastic deformation by upsetting the Ni-Fe-Mn-Ga alloy. Materials Today: Proceedings, 2017, 4, 4851-4855.	0.9	1

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19	Fine-grained structure and properties of a NiMnIn alloy after a settling plastic deformation. <i>Physics of the Solid State</i> , 2016, 58, 1605-1610.	0.2	12
20	Improvement of mechanical properties of the Ti-45Al-5Nb-1Mo-0.2B (δ° t %) intermetallic alloy by means of microstructure controlling. <i>Physics of Metals and Metallography</i> , 2016, 117, 1038-1046.	0.3	4
21	Promises of Low-Temperature Superplasticity for the Enhanced Production of Hollow Titanium Components. <i>Materials Science Forum</i> , 2016, 838-839, 610-614.	0.3	3
22	New Technologies Development and Equipment for Local Shape-Forming of the Complicated Parts Made of Heat-Resistant Alloys under Superplastic Deformation Conditions. <i>Materials Science Forum</i> , 2016, 838-839, 615-620.	0.3	4
23	Calculation of the structure of carbon clusters based on fullerene-like C ₂₄ and C ₄₈ molecules. <i>Physics of the Solid State</i> , 2016, 58, 394-401.	0.2	22
24	Special Features of Fracture of a Solid-State Titanium Alloy - Nickel - Stainless Steel Joint. <i>Russian Physics Journal</i> , 2015, 58, 822-827.	0.2	3
25	The formation of a multipeak relief on the surface on nanostructured nickel and field electron emission from it. <i>Technical Physics Letters</i> , 2015, 41, 522-525.	0.2	3
26	Fabrication, microstructure, and microhardness of copper composites reinforced by carbon nanotubes. <i>Physics of the Solid State</i> , 2015, 57, 1206-1212.	0.2	9
27	Crystallographic texture and the preferential orientation of a martensite in the polycrystalline Ni _{2.08} Mn _{0.96} Ga _{0.96} alloy. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015, 82, 012064.	0.3	6
28	Temperature Dependence of the Magnetization of the Ni ₅₂ Mn ₂₄ Ga ₂₄ Alloy in Various Structural States. <i>Russian Physics Journal</i> , 2015, 58, 745-749.	0.2	5
29	Technological features of a process and equipment for superplastic rolling of axially symmetric heat-resistant alloy components of rotors for modern aircraft engines. <i>Journal of Machinery Manufacture and Reliability</i> , 2014, 43, 311-318.	0.1	2
30	Changes in the microstructure and mechanical properties of nanomaterials under an ultrasonic wave effect. <i>Journal of Machinery Manufacture and Reliability</i> , 2014, 43, 153-159.	0.1	10
31	Nonuniform Elastic Deformation of Nanofilms Formed from NiAl and FeAl Alloys. <i>Russian Physics Journal</i> , 2014, 57, 69-78.	0.2	7
32	Theoretical shear strength of FCC and HCP metals. <i>Physics of the Solid State</i> , 2014, 56, 423-428.	0.2	14
33	Effect of temperature on inhomogeneous elastic deformation and negative stiffness of NiAl and FeAl alloy nanofilms. <i>Physics of the Solid State</i> , 2014, 56, 1157-1162.	0.2	5
34	Effects of carbon nanotube content and annealing temperature on the hardness of CNT reinforced aluminum nanocomposites processed by the high pressure torsion technique. <i>Journal of Alloys and Compounds</i> , 2014, 613, 68-73.	2.8	56
35	Development of martensitic transformation induced by severe plastic deformation and subsequent heat treatment in polycrystalline Ni ₅₂ Mn ₂₄ Ga ₂₄ alloy. <i>Letters on Materials</i> , 2014, 4, 265-268.	0.2	9
36	Thermal expansion of nickel subjected to intense plastic deformation. <i>Doklady Physics</i> , 2013, 58, 79-81.	0.2	1

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37	Strengthening of NiAl nanofilms by introducing internal stresses. <i>Intermetallics</i> , 2013, 43, 171-176.	1.8	13
38	Negative stiffness of the FeAl intermetallic nanofilm. <i>Physics of the Solid State</i> , 2013, 55, 1963-1967.	0.2	10
39	On the thermal stability of the cobalt nanostructure formed under severe plastic deformation. <i>Physics of the Solid State</i> , 2013, 55, 2608-2612.	0.2	0
40	Effect of grain boundaries on the electron work function of nanocrystalline nickel. <i>Physics of the Solid State</i> , 2013, 55, 1-4.	0.2	25
41	Effect of a crystalline structure on the ion-electron emission of the Al + 6% Mg alloy. <i>Technical Physics Letters</i> , 2013, 39, 265-267.	0.2	3
42	Scientific fundamentals of high-efficiency roll forming technology for axially symmetrical parts of a gas-turbine engine rotor of high-temperature alloy. <i>Journal of Machinery Manufacture and Reliability</i> , 2013, 42, 419-426.	0.1	7
43	Inhomogeneous elastic deformation of nanofilms and nanowires of NiAl and FeAl alloys. <i>JETP Letters</i> , 2013, 98, 91-95.	0.4	12
44	Extraordinary High Strain Rate Superplasticity of an Al-Mg-Sc-Zr Alloy Subjected to Equal Channel Angular Pressing. <i>Materials Science Forum</i> , 2012, 735, 295-300.	0.3	0
45	Current Status of Research and Development on Superplasticity at the Institute for Metals Superplasticity Problems. <i>Materials Science Forum</i> , 2012, 735, 403-408.	0.3	0
46	On combining high damping capacity and high strength in nanocrystalline materials. <i>Metal Science and Heat Treatment</i> , 2012, 54, 244-248.	0.2	2
47	Discrete breather on the edge of the graphene sheet with the armchair orientation. <i>JETP Letters</i> , 2012, 96, 222-226.	0.4	43
48	Microstructure and mechanical behavior of UFG copper processed by ECAP following different processing regimes. <i>Philosophical Magazine</i> , 2012, 92, 690-704.	0.7	23
49	Extraordinary high-strain rate superplasticity of severely deformed Al-Mg-Zr alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 538, 386-390.	2.6	73
50	Increasing the sensitivity of the X-ray testing of hollow fan blades. <i>Russian Journal of Nondestructive Testing</i> , 2012, 48, 104-108.	0.3	0
51	Evaluation of parameters of the potential barrier at the metal/polymer interface during recovery of the structure of nanocrystalline nickel. <i>Physics of the Solid State</i> , 2012, 54, 446-450.	0.2	1
52	Ni-based protective-lubricant coatings for zirconium alloys. <i>Inorganic Materials: Applied Research</i> , 2012, 3, 226-230.	0.1	6
53	Structure relaxation of nickel, processed by high pressure torsion, with the ultrasonic treatment. <i>Letters on Materials</i> , 2012, 2, 134-138.	0.2	6
54	Deformation of nanocrystalline materials in the formalism of coupled mode theory. <i>Mechanics of Solids</i> , 2011, 46, 123-128.	0.3	0

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55	Computer simulation of the effect of ultrasound and annealing on the structure of a two-dimensional severely deformed nanocrystalline material. <i>Physics of Metals and Metallography</i> , 2011, 111, 513-519.	0.3	17
56	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
57	Effect of formation of a nanocrystalline structure on the electron work function and ion-electron emission of nickel. <i>Technical Physics</i> , 2011, 56, 1661-1664.	0.2	10
58	Kinetics of changes in the saturation magnetization during annealings of the Fe-36% Ni invar alloy subjected to severe plastic deformation. <i>Physics of Metals and Metallography</i> , 2010, 109, 234-237.	0.3	6
59	Resonance interaction of an edge-dislocation wall with a traveling sound wave. <i>Physics of the Solid State</i> , 2010, 52, 2490-2495.	0.2	5
60	The use of nanostructured materials and nanotechnologies for the elaboration of hollow structures. <i>Nanotechnologies in Russia</i> , 2010, 5, 108-122.	0.7	9
61	Rapid change of stresses in thickness direction in long orthotropic tube under internal pressure and axial load. <i>Acta Mechanica</i> , 2010, 211, 323-336.	1.1	3
62	Density of phonon states in nanostructured copper. <i>JETP Letters</i> , 2010, 92, 238-243.	0.4	6
63	Deformational methods of material nanostructuring: Premises, history, state of the art, and prospects. <i>Russian Physics Journal</i> , 2008, 51, 492-504.	0.2	11
64	Localized vibrational modes in an A ₃ B two-dimensional perfect crystal. <i>Russian Physics Journal</i> , 2008, 51, 858-865.	0.2	27
65	Production, properties and application prospects of bulk nanostructured materials. <i>Journal of Materials Science</i> , 2008, 43, 7257-7263.	1.7	32
66	Effect of severe plastic deformation on the properties of the Fe-36% Ni invar alloy. <i>Physics of Metals and Metallography</i> , 2006, 102, 91-96.	0.3	17
67	Influence of nanocrystalline structure on work function of tungsten. <i>Journal of Vacuum Science & Technology B</i> , 2006, 24, 1061.	1.3	7
68	Influence of Nanocrystalline Structure on Work Function of Tungsten. , 2006, , .		0
69	Identification of complex field emission spectra (total electron energy distributions) for cathodes with a nonuniform work function. <i>Technical Physics</i> , 2004, 49, 758-763.	0.2	1
70	Work function of nanocrystalline tungsten. <i>Doklady Physics</i> , 2004, 49, 730-731.	0.2	7
71	Structure and damping of nanocrystalline metals and alloys prepared by high plastic deformation techniques. <i>Journal of Alloys and Compounds</i> , 2003, 355, 26-30.	2.8	10
72	Characteristics of field emission from nanocrystalline metals. <i>Physica B: Condensed Matter</i> , 2002, 324, 329-335.	1.3	10

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73	Temperature dependences of thermal expansion and saturation magnetization in Fe(67.0%)-Ni(32.5%)-Co(0.5%) Invar alloy with nanocrystalline structure. <i>Technical Physics</i> , 2002, 47, 869-872.	0.2	1
74	Mass-spectroscopic study of the diffusion and solubility of helium in submicrocrystalline palladium. <i>Technical Physics</i> , 2002, 47, 1440-1443.	0.2	3
75	Defects in nanocrystalline Pd and submicrocrystalline Cu by EXAFS. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2000, 448, 372-375.	0.7	1
76	Field emission from submicron-grained tungsten. <i>JETP Letters</i> , 2000, 72, 257-259.	0.4	6
77	Effect of submicron crystalline structure on field emission of nickel. <i>Doklady Physics</i> , 2000, 45, 198-200.	0.2	1
78	Deformation-induced nonequilibrium grain-boundary phase in submicrocrystalline iron. <i>Scripta Materialia</i> , 1999, 11, 1017-1029.	0.5	15
79	Internal friction of submicrocrystalline metal. <i>Metal Science and Heat Treatment</i> , 1998, 40, 341-345.	0.2	1
80	Microstructure, microhardness and magnetic susceptibility of submicrocrystalline palladium. <i>Scripta Materialia</i> , 1996, 7, 667-674.	0.5	9
81	Damping properties of 18Cr \hat{r} –10Ni stainless steel with submicrocrystalline structure. <i>Materials Research Bulletin</i> , 1996, 31, 639-645.	2.7	16
82	Internal friction and shear modulus in submicrograined Cu. <i>Scripta Materialia</i> , 1995, 6, 577-580.	0.5	16
83	Structure and properties of ultrafine-grained materials produced by severe plastic deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1993, 168, 141-148.	2.6	973
84	Strain amplitude dependence of internal friction and strength of submicrometre-grained copper. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1993, 171, 143-149.	2.6	21
85	The effect of heat treatment on the elastic and dissipative properties of copper with the submicrocrystalline structure. <i>Acta Metallurgica Et Materialia</i> , 1993, 41, 1041-1046.	1.9	112
86	Direction of a grain-boundary phase in submicrometre-grained iron. <i>Philosophical Magazine Letters</i> , 1990, 62, 253-256.	0.5	63
87	On the Decrease of Curie Temperature in Submicron-Grained Nickel. <i>Physica Status Solidi A</i> , 1990, 117, 549-553.	1.7	28
88	Instrument for automatic measurement of rock thermophysical characteristics under near-natural conditions. <i>Measurement Techniques</i> , 1985, 28, 1019-1021.	0.2	0
89	Simultaneous measurement of thermal conductivity and specific heat of short-lived liquid. <i>Journal of Engineering Physics</i> , 1980, 38, 435-438.	0.0	0
90	Influence of nanocrystalline structure on work function of tungsten. , 0, , .		0

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91	Principles of Fabrication of Bulk Ultrafine-Grained and Nanostructured Materials by Multiple Isothermal Forging. Materials Science Forum, 0, 638-642, 1702-1707.	0.3	6
92	Effect of Ultrasonic Treatment on the Microstructure and Properties of Nanostructured Nickel Processed by High Pressure Torsion. Materials Science Forum, 0, 667-669, 605-609.	0.3	7
93	Effect of deformation nanostructuring on thermal expansion and phase composition of Fe - 36% Ni alloy. IOP Conference Series: Materials Science and Engineering, 0, 447, 012015.	0.3	3