

Konstantin Ivanov

List of Publications by Year in descending order

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papers

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840776
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docs citations

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times ranked

426
citing authors

#	ARTICLE	IF	CITATIONS
1	Deformation behavior of Cu-based nanocomposite processed by severe plastic deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 319-321, 872-876.	5.6	75
2	Grain Boundary Diffusion and Mechanisms of Creep of Nanostructured Metals. <i>Journal of Materials Science</i> , 2002, 10, 31-36.	1.2	68
3	The structure and microhardness evolution in submicrocrystalline molybdenum processed by severe plastic deformation followed by annealing. <i>International Journal of Refractory Metals and Hard Materials</i> , 2003, 21, 69-73.	3.8	39
4	Grain boundary sliding in ultrafine grained aluminum under tension at room temperature. <i>Scripta Materialia</i> , 2012, 66, 511-514.	5.2	34
5	Diffusion induced creep of polycrystalline and nanostructured metals. <i>Scripta Materialia</i> , 1999, 12, 1127-1130.	0.5	30
6	Caractéristiques du fluage des matériaux nanostructurés produits par hypercorroyage. <i>Annales De Chimie: Science Des Matériaux</i> , 2002, 27, 89-98.	0.4	23
7	Tensile behavior and deformation mechanisms of ultrafine-grained aluminum processed using equal-channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 606, 313-321.	5.6	22
8	Structural features of ultrafine-grained aluminum processed through accumulative roll bonding providing improved mechanical properties and thermal stability. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 775, 138988.	5.6	17
9	Effect of Alumina Nanoparticles on the Microstructure, Texture, and Mechanical Properties of Ultrafine-Grained Aluminum Processed by Accumulative Roll Bonding. <i>Advanced Engineering Materials</i> , 2019, 21, 1701135.	3.5	15
10	Effect of Surface Layer Structural-Phase Modification on Tribological and Strength Properties of a Ti-Ni-Cr Metal Ceramic Alloy. <i>Acta Metallurgica Sinica (English Letters)</i> , 2018, 31, 547-551.	2.9	12
11	On the fatigue strength of grade 20Cr13 hardened steel modified by an electron beam. <i>Journal of Surface Investigation</i> , 2013, 7, 90-93.	0.5	11
12	Activation parameters and deformation mechanisms of ultrafine-grained copper under tension at moderate temperatures. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 608, 123-129.	5.6	11
13	Modification of the Structural-Phase State of the Surface Layer of a Cermet Composite Under Electron Beam Irradiation in Inert Gas Plasmas. <i>Russian Physics Journal</i> , 2017, 59, 2114-2121.	0.4	11
14	Diffusion and Plasticity of Submicrocrystalline Metals and Alloys. <i>Solid State Phenomena</i> , 2003, 94, 35-40.	0.3	10
15	Application of high current pulsed electron beam irradiation to smoothing of cold spray aluminum bronze coating. <i>Vacuum</i> , 2022, 197, 110780.	3.5	10
16	Effect of the velocity of equal-channel angular pressing on the formation of the structure of pure aluminum. <i>Physics of Metals and Metallography</i> , 2008, 106, 411-417.	1.0	9
17	Structure and properties of fixed joints formed by ultrasonic-assisted friction-stir welding. <i>AIP Conference Proceedings</i> , 2015, , .	0.4	9
18	Characteristic Features and Thermal Stability of Molybdenum Processed by Different Ways of Severe Plastic Deformation. <i>Materials Science Forum</i> , 0, 584-586, 917-922.	0.3	8

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19	The heterogeneity of the aluminum structure and mechanical properties under equal-channel angular pressing. Russian Physics Journal, 2009, 52, 1030-1035.	0.4	8
20	Quasi-static and shock-wave loading of ultrafine-grained aluminum: effect of microstructural characteristics. Journal of Materials Science, 2018, 53, 14681-14693.	3.7	8
21	Grain Boundary Diffusion-Controlled Processes and Properties of Bulk Nanostructured Alloys and Steels. Materials Science Forum, 2006, 503-504, 141-148.	0.3	7
22	The Effect of Grain Boundary State on Deformation Process Development in Nanostructured Metals Produced by the Methods of Severe Plastic Deformation. Materials Science Forum, 2011, 683, 69-79.	0.3	7
23	Formation of a multigrain structure and its influence on the strength and plasticity of the Ni3Al intermetallic compound. Physics of the Solid State, 2015, 57, 1293-1299.	0.6	7
24	Formation of Grain Structure in Ni3Al Intermetallic Compound Synthesized by Thermal Explosion. Combustion, Explosion and Shock Waves, 2019, 55, 191-196.	0.8	7
25	Structure and phase composition of "ZrO2 thin coating" aluminum substrate-system processed through pulsed electron beam irradiation. Applied Surface Science, 2020, 534, 147628.	6.1	7
26	Enhancing mechanical and tribological properties of Ni3Al-15vol%TiC composite by high current pulsed electron beam irradiation. Journal of Alloys and Compounds, 2022, 898, 162860.	5.5	7
27	Investigation of possibility to get superplastic state of nanostructured copper. Scripta Materialia, 1999, 12, 947-950.	0.5	6
28	Title is missing!. Russian Physics Journal, 2002, 45, 547-552.	0.4	6
29	Structure Evolution and Mechanical Properties of a Ti-6Al-4V Alloy During Helical Rolling and Subsequent Deformation and Heat Treatments. Russian Physics Journal, 2017, 60, 1226-1232.	0.4	6
30	Effectiveness of inert plasma gases in formation of modified structures in the surface layer of a cermet composite under pulsed electron irradiation. International Journal of Refractory Metals and Hard Materials, 2018, 77, 31-36.	3.8	6
31	Microplastic deformation of polycrystalline and submicrocrystalline titanium during static and cyclic loading. Russian Physics Journal, 1998, 41, 1188-1192.	0.4	5
32	Structure, deformation behavior and failure of aluminum and copper processed by accumulative roll bonding. AIP Conference Proceedings, 2016, , .	0.4	5
33	On the Similarity of Deformation Mechanisms During Friction Stir Welding and Sliding Friction of the AA5056 Alloy. Russian Physics Journal, 2018, 60, 2123-2129.	0.4	5
34	Corrosion and Wear Resistance of Coatings Produced by Nonvacuum Electron Beam Cladding of Refractory Carbides on Low-Carbon Steel. Inorganic Materials, 2020, 56, 328-332.	0.8	5
35	Characteristic features of diffusion-controlled processes in ordinary and ultrafine-grained polycrystalline metals. Russian Physics Journal, 2004, 47, 840-856.	0.4	4
36	Characteristic Features of Structure Evolution and Phase Composition of an Ultrafine-Grained Al-Mg-Li-Zr Alloy Produced by Severe Plastic Deformation. Russian Physics Journal, 2014, 56, 1025-1029.	0.4	4

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37	Effect of cryorolling on the structure and the mechanical properties of ultrafine-grained nickel. Russian Metallurgy (Metally), 2014, 2014, 303-307.	0.5	4
38	The effect of strain rate on tensile behavior and deformation mechanisms of ultrafine-grained aluminum. IOP Conference Series: Materials Science and Engineering, 2014, 63, 012123.	0.6	4
39	Improving Hygienic Characteristics of Coated Electrodes for Welding High-Alloy Steels. IOP Conference Series: Earth and Environmental Science, 2017, 50, 012047.	0.3	4
40	Structure, Phase Composition, and Hardness of Coatings Obtained by High-Energy Electron Beam Cladding of a Mixture of Cr ₃ C ₂ and TiC Powders on Low-Carbon Steel. Inorganic Materials: Applied Research, 2019, 10, 595-599.	0.5	4
41	Diffusion and Properties of Bulk Nanostructured Metals and Alloys Processed by Severe Plastic Deformation. Defect and Diffusion Forum, 2003, 216-217, 253-262.	0.4	3
42	Wear resistance of the surface layers of hard alloys with a multilevel structural phase state. Journal of Surface Investigation, 2016, 10, 718-722.	0.5	3
43	INVESTIGATION OF STRUCTURE AND MECHANICAL PROPERTIES UNDER QUASI-STATIC AND PLANAR IMPACT LOADING OF ALUMINUM COMPOSITE REINFORCED WITH Al ₂ O ₃ NANOPARTICLES OF DIFFERENT SHAPE. Materials Today Communications, 2021, 29, 102942.	1.9	3
44	Features of plastic flow of powder Al-40Sn alloy during extrusion. Russian Journal of Non-Ferrous Metals, 2011, 52, 504-510.	0.6	2
45	Evolution of grain-boundary ensembles in nickel during boundary migration induced by copper diffusion. Bulletin of the Russian Academy of Sciences: Physics, 2013, 77, 1382-1385.	0.6	2
46	The changes in phase composition of the subsurface layer of an ultrafine-grained Al-Mg-Li alloy during its deformation under superplasticity conditions. Russian Physics Journal, 2014, 56, 1018-1024.	0.4	2
47	Effect of atomic displacement on the parameters of the grain boundary ensemble in nickel-based alloys with L12 superstructure. Bulletin of the Russian Academy of Sciences: Physics, 2015, 79, 715-718.	0.6	2
48	Comparative TEM study of microstructures of Ti-6Al-4V alloy processed by equal channel angular pressing and helical plus groove rolling. AIP Conference Proceedings, 2016, , .	0.4	2
49	Modification of a hard alloy cermet structure upon pulsed electron-ion-plasma irradiation. Inorganic Materials: Applied Research, 2016, 7, 786-790.	0.5	2
50	Impact of High-Temperature, High-Pressure Synthesis Conditions on the Formation of the Grain Structure and Strength Properties of Intermetallic Ni ₃ Al. IOP Conference Series: Earth and Environmental Science, 2018, 115, 012049.	0.3	2
51	Influence of High Energy Impact on the Structural-Phase State and Tribological Properties of the Surface Layer of Metal-Ceramic Composite Materials. Journal of Surface Investigation, 2018, 12, 485-491.	0.5	2
52	The Structure, Microhardness and Wear Resistance of Coatings Obtained through Non-Vacuum Electron Beam Cladding of Chromium and Titanium Carbides on Low Carbon Steel. Materials Science Forum, 2018, 927, 13-19.	0.3	2
53	About the features of the chemical composition of additive products from nickel-based superalloy. AIP Conference Proceedings, 2020, , .	0.4	2
54	Change in grain-boundary ensemble upon the Al \rightarrow L12 phase transition in Ni ₃ Mn alloy. Bulletin of the Russian Academy of Sciences: Physics, 2012, 76, 836-839.	0.6	1

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55	Bulk nanostructuring intermetallic composite material. , 2014, , .		1
56	Investigating the grain structure of Cu-Al and Cu-Mn alloys via electron backscatter diffraction and optical metallography. Bulletin of the Russian Academy of Sciences: Physics, 2014, 78, 253-256.	0.6	1
57	Nanostructuring and Physical Properties of Metal-Ceramic Composites With a Different Content the Ceramic Components. IOP Conference Series: Materials Science and Engineering, 2016, 125, 012008.	0.6	1
58	Modification of subsurface structure in TiC-(Ni-Cr) cermet composite under pulsed electron-beam irradiation of samples in plasmas of light and heavy inert gases. AIP Conference Proceedings, 2016, , .	0.4	1
59	The effect of aluminum nanoparticles on the structure, mechanical properties and failure of aluminum processed by accumulative roll bonding. AIP Conference Proceedings, 2017, , .	0.4	1
60	The effect of geometric shape of Al ₂ O ₃ nanoparticles on the nanoparticles distribution, microstructure and microhardness of Al-Al ₂ O ₃ nanocomposite fabricated by accumulative roll bonding. AIP Conference Proceedings, 2018, , .	0.4	1
61	Corrosion resistance of coatings obtained by electron beam cladding of (Cr ₃ C ₂ + TiC) powders on low-carbon steel in air. AIP Conference Proceedings, 2018, , .	0.4	1
62	SEM Studies on the Microstructure and Phase Composition Distribution in Cr ₃ C ₂ + TiC Claddings on Low-Carbon Steel. Solid State Phenomena, 2020, 303, 59-66.	0.3	1
63	The effect of shear strains on grain size in the Ni ₃ Al intermetallic compound synthesized under pressure. Mechanics of Materials, 2021, 161, 103988.	3.2	1
64	Structure, phase composition and hardness of coatings produced by high-energy electron beam cladding Cr ₃ C ₂ and TiC powder mixture on a low carbon steel. Fizika I Khimiya Obrabotki Materialov, 2018, , 43-49.	0.1	1
65	Formation of a Nanostructured Hardened Surface Layer on the TiC-(Ni-Cr) Metal-Ceramic Alloy by Pulsed Electron-Beam Irradiation. Springer Tracts in Mechanical Engineering, 2021, , 421-459.	0.3	1
66	Structure Evolution and Deformation Mechanisms in Ultrafine-Grained Aluminum under Tension at Room Temperature. Materials Science Forum, 2010, 667-669, 915-920.	0.3	0
67	Influence of the degree of long-range atomic order on parameters of the solid solution and the granular structure of the Pd ₃ Fe alloy with superstructure L12. Physics of the Solid State, 2013, 55, 1936-1940.	0.6	0
68	The evolution of the grain boundary ensemble of polycrystalline nickel under creep at elevated temperatures. Russian Physics Journal, 2013, 55, 1105-1110.	0.4	0
69	Evolution of Structure and Phase Composition of Aluminum Alloy under Severe Plastic Deformation. Advanced Materials Research, 2014, 880, 179-183.	0.3	0
70	Investigation of Surface Layers of Aluminum Alloy after Superplastic Deformation. Advanced Materials Research, 2014, 880, 190-194.	0.3	0
71	Electron backscatter diffraction study of changes in the grain structure of Ni ₃ Fe ordering alloy upon an Al α' L12 phase transition. Bulletin of the Russian Academy of Sciences: Physics, 2014, 78, 807-810.	0.6	0
72	Grain structure and strength of a plastically deformed Ni ₃ Al intermetallic compound. Doklady Physics, 2015, 60, 440-441.	0.7	0

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73	The Special Features of the Deformation Behavior of an Ultrafine-Grained Aluminum Alloy of the Al-Mg-Li System at Room Temperature. Russian Physics Journal, 2015, 57, 1705-1708.	0.4	0
74	Nanostructured Hardening of Hard Alloys Surface Layers Through Electron Irradiation in Heavy Inert Gas Plasma Conditions. IOP Conference Series: Materials Science and Engineering, 2016, 142, 012093.	0.6	0
75	The Evolution of the Structure and Mechanical Properties of Aluminum During Accumulative Roll Bonding. Russian Physics Journal, 2017, 60, 163-169.	0.4	0
76	Microstructure, tribological and strength properties of the surface layer in metal-ceramic composite nano-structured by electron irradiation. AIP Conference Proceedings, 2017, , .	0.4	0
77	Structure formation of 5083 alloy during friction stir welding. AIP Conference Proceedings, 2017, , .	0.4	0
78	Modification of Structure and Tribological Properties of the Surface Layer of Metal-Ceramic Composite under Electron Irradiation in the Plasmas of Inert Gases. IOP Conference Series: Earth and Environmental Science, 2018, 115, 012048.	0.3	0
79	Thermal Stability of the Structure and Microhardness of the Al-0.05 vol % Al ₂ O ₃ Nanocomposite Fabricated by Accumulative Roll Bonding. Russian Journal of Non-Ferrous Metals, 2019, 60, 524-530.	0.6	0
80	Structural heterogeneity of ultrafine-grained FCC metals processed through equal-channel angular pressing on mesoscale level. AIP Conference Proceedings, 2019, , .	0.4	0
81	The Effect of Pulsed Electron-Ion Irradiation on Defects in Ceramic-Metal Coatings on Dies for Pelletizing Plastics. IOP Conference Series: Earth and Environmental Science, 2020, 543, 012031.	0.3	0
82	Structure and mechanical properties of aluminum - aluminum nanoparticles composite produced by accumulative roll bonding. Letters on Materials, 2017, 7, 34-38.	0.7	0
83	Thermal stability of Al-0.05 vol.1.% Al ₂ O ₃ nanocomposite fabricated by accumulative roll bonding. Russian Journal of Non-Ferrous Metals, 2019, , 48-56.	0.1	0
84	<i>Technical Note:</i> Effect of High-Current Pulsed Electron Beam Processing of Zr-1%Nb Alloy on Its Oxidation Kinetics at 1,200°C in Air and Steam. Corrosion, 2022, 78, 163-167.	1.1	0