Dmitry V Lychagin

List of Publications by Year
in descending order

76	567	687363	713466
papers	citations	13 h-index	21 g-index

76	76	76	287
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Growth and Deformation Simulation of Aluminum Bronze Grains Produced by Electron Beam Additive Manufacturing. Metals, 2022, 12, 114.	2.3	6
2	Mechanical Aspects of Nonhomogeneous Deformation of Aluminum Single Crystals under Compression along [100] and [110] Directions. Metals, 2022, 12, 397.	2.3	0
3	Numerical Study and Experimental Validation of Deformation of <111> FCC CuAl Single Crystal Obtained by Additive Manufacturing. Metals, 2021, 11, 582.	2.3	9
4	Microstructure of Vein Quartz Aggregates as an Indicator of Their Deformation History: An Example of Vein Systems from Western Transbaikalia (Russia). Minerals (Basel, Switzerland), 2020, 10, 865.	2.0	7
5	Strength and Ductility Improvement through Thermomechanical Treatment of Wire-Feed Electron Beam Additive Manufactured Low Stacking Fault Energy (SFE) Aluminum Bronze. Metals, 2020, 10, 1568.	2.3	17
6	Crystallographic and Geometric Factors in the Shear Development in <001> FCC Single Crystals: Molecular Dynamics Simulation and Experimental Study. Crystals, 2020, 10, 666.	2.2	12
7	Tailoring the Surface Morphology and the Crystallinity State of Cu- and Zn-Substituted Hydroxyapatites on Ti and Mg-Based Alloys. Materials, 2020, 13, 4449.	2.9	11
8	Influence of oblique angle deposition on Cu-substituted hydroxyapatite nano-roughness and morphology. Surface and Coatings Technology, 2020, 394, 125883.	4.8	19
9	Study of the Structure and Mechanical Properties of Aluminum Bronze Printed by Electron Beam Additive Manufacturing. Metal Working and Material Science, 2020, 22, 118-129.	0.3	1
10	Determination of sliding and twinning shear stress during microindentation of Hadfield steel single crystals. Letters on Materials, 2020, 10, 451-456.	0.7	0
11	Pure Aluminum Structure and Mechanical Properties Modified by Al2O3 Nanoparticles and Ultrasonic Treatment. Metals, 2019, 9, 1199.	2.3	11
12	Deformation behavior of Cu-1.5Co-3Al single crystals during sliding friction. AIP Conference Proceedings, 2019, , .	0.4	0
13	Features of plastic deformations of quartz-pyrite mineral associations of the Gabriel mine. AIP Conference Proceedings, 2019, , .	0.4	2
14	IMPACT OF THE MICROSTRUCTURE CHANGES UNDER CYCLIC GROOVE PRESSING ON THE MECHANICAL BEHAVIOR OF MGâˆ’MNâˆ’Đ¡E MAGNESIUM ALLOY. Vestnik Tomskogo Gosudarstvennogo Universiteta, Matematika I Mekhanika, 2019, , 109-118.	0.3	1
15	Dry sliding of Hadfield steel single crystal oriented to deformation by slip and twinning: Deformation, wear, and acoustic emission characterization. Tribology International, 2018, 119, 1-18.	5.9	38
16	Self-organization of plastic deformation and deformation relief in FCC single crystals. Mechanics of Materials, 2018, 117, 202-213.	3.2	30
17	Relationship between acoustic emission and microcrack formation in single crystals of Hadfield steel. AIP Conference Proceedings, 2018, , .	0.4	2
18	Structure and Mechanical Properties of Aluminum 1560 Alloy after Severe Plastic Deformation by Groove Pressing. Physical Mesomechanics, 2018, 21, 515-522.	1.9	9

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19	Copper and Hadfield steel deformation structures near the friction surface. AIP Conference Proceedings, 2018, , .	0.4	2
20	Influence of crystallographic symmetry on the self-organization of plastic deformation in [111] nickel single crystals. AIP Conference Proceedings, 2018, , .	0.4	0
21	Deformation relief on the surface of Hadfield steel single crystals, observed using a scratch test. AIP Conference Proceedings, 2018, , .	0.4	0
22	Influence of Ultrafine Particles on Structure, Mechanical Properties, and Strengthening of Ductile Cast Iron. Metals, 2018, 8, 559.	2.3	1
23	Subsurface structural evolution and wear lip formation on copper single crystals under unlubricated sliding conditions. Wear, 2018, 410-411, 210-221.	3.1	19
24	Relation between the Hurst Exponent and the Efficiency of Self-organization of a Deformable System. Technical Physics, 2018, 63, 540-545.	0.7	2
25	Octahedral slip in nickel single crystals induced by scratch testing. Letters on Materials, 2018, 8, 415-418.	0.7	4
26	Friction-induced slip band relief of -Hadfield steel single crystal oriented for multiple slip deformation. Wear, 2017, 374-375, 5-14.	3.1	40
27	Slip as the basic mechanism for formation of deformation relief structural elements. Physics of the Solid State, 2017, 59, 1433-1439.	0.6	3
28	Acoustic emission evolution during sliding friction of Hadfield steel single crystal. AIP Conference Proceedings, 2017, , .	0.4	0
29	Transformations of the dislocation structure of nickel single crystals. AIP Conference Proceedings, 2017, , .	0.4	0
30	Two-dimensional and three-dimensional evaluation of the deformation relief. AIP Conference Proceedings, 2017, , .	0.4	0
31	The formation of a quasi-periodic surface profile by means of dislocation slip. Journal of Physics: Conference Series, 2017, 803, 012002.	0.4	0
32	Compression strain-induced folding at intersecting deformation macrobands on the copper single crystals. AIP Conference Proceedings, 2017, , .	0.4	0
33	Regularities of misorientation in [1Â¯11] FCC single crystals. AIP Conference Proceedings, 2017, , .	0.4	1
34	Deformation relief evolution during sliding friction of Hadfield steel single crystal. AIP Conference Proceedings, 2017, , .	0.4	0
35	Deformation relief induced by scratch testing on the surface of Hadfield steel. AIP Conference Proceedings, 2017, , .	0.4	3
36	Deformation relief in crystals as a way of stress relaxation. Letters on Materials, 2017, 7, 155-159.	0.7	6

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37	The empirical definition of total emissivity of modern superthin liquid composite thermal insulators. IOP Conference Series: Materials Science and Engineering, 2016, 156, 012001.	0.6	0
38	Influence of Lateral Incision on Inhomogeneous Deformation of a Nickel [001] - Single Cristal at Axial Compression. IOP Conference Series: Materials Science and Engineering, 2016, 125, 012004.	0.6	0
39	Development of Misorientation in FCC Single Crystals Under Compression at Different Scales. IOP Conference Series: Materials Science and Engineering, 2016, 142, 012053.	0.6	0
40	Systematic Classifier OF Manufacturing Processes For Medium Size Shafts. IOP Conference Series: Materials Science and Engineering, 2016, 125, 012030.	0.6	2
41	Effect of Initial Microtopography and Ultrasonic Treatment Mode on Steel Surface Layer Quality. IOP Conference Series: Materials Science and Engineering, 2016, 125, 012033.	0.6	0
42	Experimental Research Into Generation of Acoustic Emission Signals in the Process of Friction of Hadfield Steel Single Crystals. IOP Conference Series: Materials Science and Engineering, 2016, 142, 012098.	0.6	4
43	Segmentation Effect on Inhomogeneity of [110]-Single Crystal Deformation. IOP Conference Series: Materials Science and Engineering, 2016, 142, 012052.	0.6	0
44	Strain-induced folding on [11Â¯1Â¯]-copper single crystals under uniaxial compression. Applied Surface Science, 2016, 371, 547-561.	6.1	28
45	Influence of structure to plastic deformation resistance of aluminum alloy 1560 after groove pressing treatment. Letters on Materials, 2016, 6, 141-145.	0.7	23
46	Patterns of folded structure formation in the maximum bending zone of [111] FCC single crystals. IOP Conference Series: Materials Science and Engineering, 2015, 91, 012024.	0.6	0
47	Folding in single crystals concavity areas during compression. AIP Conference Proceedings, 2015, , .	0.4	0
48	Preferred Orientation Evolution of Olivine Grains as an Indicator of Change in the Deformation Mechanism. IOP Conference Series: Materials Science and Engineering, 2015, 91, 012025.	0.6	0
49	Comparison of mathematical methods of geochemical data processing. IOP Conference Series: Materials Science and Engineering, 2015, 91, 012083.	0.6	0
50	Structure of welded joints obtained by contact weld in nanostructured titanium. AIP Conference Proceedings, 2015, , .	0.4	1
51	Misorientation Development During the Formation of Macrobands in the [001] Nickel Single Crystals. Russian Physics Journal, 2015, 58, 717-723.	0.4	7
52	Macrosegmentation and strain hardening stages in copper single crystals under compression. International Journal of Plasticity, 2015, 69, 36-53.	8.8	36
53	Folding in FCC metal single crystals under compression. Physics of the Solid State, 2015, 57, 2034-2038.	0.6	8
54	Plastic strain arrangement in copper single crystals in sliding. , 2014, , .		3

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55	Crystallographic analysis of rock grain orientation at meso- and microscale levels. , 2014, , .		1
56	Laws of Development of Deformation Folds in [1⁻ 11] Copper Single Crystal at Axis Compression. Applied Mechanics and Materials, 2014, 682, 448-452.	0.2	2
57	Orientation dependence of subsurface deformation in dry sliding wear of Cu single crystals. Applied Surface Science, 2013, 274, 22-26.	6.1	28
58	Distribution of Alloying Elements in Î³- and Î³â€²-Phases of Heat-Resistant Alloy PWA 1480. Applied Mechanics and Materials, 2013, 379, 149-153.	0.2	1
59	Structural State, Phase Composition and Mechanical Properties of Wear-Resistant Cast Iron Modified by Ultrafine Powders. Advanced Materials Research, 2013, 872, 84-88.	0.3	2
60	DISPERSIVE OPTICAL PARAMETERS OFNi(100) CRYSTAL AND THERMALLY EVAPORATED NICKEL FILMS. Modern Physics Letters B, 2012, 26, 1150029.	1.9	10
61	Subsurface deformation in copper single crystals during reciprocal sliding. Physics of the Solid State, 2012, 54, 2034-2038.	0.6	17
62	Micromorphology and spectroscopic ellipsometry of Ni(100) crystal surface. Physics Procedia, 2012, 23, 61-64.	1.2	2
63	Formation of a single image of material surfaces to measure displacement and strain fields. Optoelectronics, Instrumentation and Data Processing, 2011, 47, 388-394.	0.6	7
64	Effect of crystallogeometric states on the development of macrobands and deformation inhomogeneity in [111] nickel single crystals. Physical Mesomechanics, 2011, 14, 66-78.	1.9	21
65	Dispersive optical parameters of evaporated nickel films. , 2010, , .		0
66	Spatial organization of deformation in aluminum [1Ä«2] single crystals in compression. Physical Mesomechanics, 2009, 12, 166-174.	1.9	8
67	Formation of dislocation cell substructure in face-centred cubic metallic solid solutions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 483-484, 179-183.	5.6	39
68	The primary macrofragmentation of shear in compressed aluminum single crystals. Technical Physics Letters, 2003, 29, 516-518.	0.7	7
69	Contact and barrier dislocation resistance and their effect on characteristics of slip and work hardening. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 319-321, 261-265.	5.6	8
70	Cyclic hardening and substructure of Alî—¸Mg alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 138, 49-61.	5.6	4
71	Nucleation and growth of small surface cracks in aluminium alloy AMg6 as related to discontinuity of the fatigue curve. International Journal of Fatigue, 1991, 13, 370-376.	5.7	1
72	Characterization of Deformation Pattern Structure Elements Generated in Uniaxial Compression of Nickel Single Crystals. Applied Mechanics and Materials, 0, 379, 66-70.	0.2	11

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73	Fragmentation, Texturing and Plastic Flow in the Subsurface of Friction-Processed Copper Single Crystal. Advanced Materials Research, 0, 872, 30-35.	0.3	15
74	Improving Characteristics of Austenitic Steels by Modification. Advanced Materials Research, 0, 1040, 236-240.	0.3	7
75	Wrinkling and Folding in Copper Single Crystals under Compression and Sliding. Advanced Materials Research, 0, 1085, 351-354.	0.3	1
76	The Effect of a Severe Plastic Deformation by Groove Pressing on the Grain Structure of the Al-Mg Alloy. Key Engineering Materials, 0, 743, 187-190.	0.4	7