

Lev B Zuev

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Autowave Criteria of Fracture and Plastic Strain Localization of Zirconium Alloys. <i>Metals</i> , 2022, 12, 95.	2.3	2
2	Ultrasonic and Optical Evaluation of Deformation Stages from the Beginning to Fracture: A Case Study of Low-Carbon Steels. <i>Journal of Nondestructive Evaluation</i> , 2021, 40, 1.	2.4	2
3	Plasticity Autowave Characteristics of Metals and the Periodic Table of Elements. <i>Metals</i> , 2021, 11, 1270.	2.3	2
4	Structural-Phase State, Mechanical Properties, Acoustic and Magnetic Characteristics in the Sustainable Deformation Localization Zones of Power Equipment Made of Structural and Heat Resistant Steels. <i>Metals</i> , 2021, 11, 1638.	2.3	3
5	Autowave Mechanics of Plastic Flow. <i>Springer Tracts in Mechanical Engineering</i> , 2021, , 245-274.	0.3	4
6	The Effect of Preliminary Thermomechanical Processing on the Kinetics of Localized Plasticity Autowaves in Trip Steel. <i>Metals</i> , 2020, 10, 1494.	2.3	6
7	The influence of temperature on the localization parameters of Hadfield steel single crystals under tensile plastic strain. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	0
8	Study of the structural inhomogeneity of bimetal layers at the yield plateau stage. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	3
9	Patterns of the localization of plastic deformation in Hadfield steel single crystals under tension. <i>AIP Conference Proceedings</i> , 2018, , .	0.4	0
10	Influence of the Lüders band front on the Rayleigh wave velocity in low-carbon steel. <i>AIP Conference Proceedings</i> , 2018, , .	0.4	0
11	Observation of the seismic wave in marble in laboratory conditions. <i>AIP Conference Proceedings</i> , 2018, , .	0.4	0
12	Investigation of the deformed bimetal microstructure by the AFM method. <i>AIP Conference Proceedings</i> , 2018, , .	0.4	2
13	Study of pearlite using atomic force microscopy. <i>AIP Conference Proceedings</i> , 2018, , .	0.4	0
14	Atomic force microscopy application to carbon steel structure study. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	0
15	Estimation of A516-70 carbon steel fatigue damage on the basis of acoustic nonlinearity. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	0
16	Macroscopic criteria for the deformation and fracture of iron based alloys. <i>Frattura Ed Integrita Strutturale</i> , 2017, 11, 293-302.	0.9	1
17	Ultrasound Velocity Measurements in High-Chromium Steel Under Plastic Deformation. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016, 125, 012007.	0.6	2
18	On the plastic flow localization of martensitic stainless steel saturated with hydrogen. <i>AIP Conference Proceedings</i> , 2016, , .	0.4	1

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19	Acoustic parameters as the material formability criteria. AIP Conference Proceedings, 2016, , .	0.4	7
20	Study of localized plastic deformation of stainless steel electrically saturated with hydrogen. AIP Conference Proceedings, 2016, , .	0.4	0
21	Titanium and Zirconium Base Alloys in Ultra-Fine Grain State: Mechanical Stability and Failure Behavior. Key Engineering Materials, 2016, 683, 162-167.	0.4	1
22	Velocity and attenuation of ultrasound waves under cyclic loading of low-carbon steel. AIP Conference Proceedings, 2016, , .	0.4	4
23	Heterogeneity of plastic flow of bimetals electrolytically saturated with hydrogen. AIP Conference Proceedings, 2016, , .	0.4	0
24	On the kinetics of mobile Chernovâ€™s band fronts. AIP Conference Proceedings, 2016, , .	0.4	1
25	The Influence of Hydrogen on the Process of Plastic Flow Self-Organization in Ti. Key Engineering Materials, 2016, 685, 601-606.	0.4	0
26	The effect of hydrogen embrittlement on the localized plastic deformation of aluminum alloy. AIP Conference Proceedings, 2015, , .	0.4	0
27	The Effect of Electrolytic Hydrogenation on the Plastic Flow of Aluminum Alloy. Applied Mechanics and Materials, 2015, 756, 59-64.	0.2	0
28	The effect of electrolytic hydrogenation on the localized plastic deformation of high-chromium steel. , 2015, , .		0
29	On Technological Uses of Local Strain Patterns of the Commercial Zr-Nb Alloys. Advanced Materials Research, 2014, 1040, 113-118.	0.3	0
30	Effect of Hydrogen on Plastic Strain Localization of Construction Steels. Advanced Materials Research, 2014, 880, 42-47.	0.3	14
31	The effect of hydrogen on the parameters of plastic deformation localization in low carbon steel. , 2014, , .		0
32	Elastic-plastic invariant of localized deformation autowaves. , 2014, , .		0
33	The distinctive features of plastic deformation localization in polycrystalline aluminum by creep. AIP Conference Proceedings, 2014, , .	0.4	1
34	Localization of deformation and prognostibility of rock failure. Journal of Mining Science, 2014, 50, 43-49.	0.6	10
35	Experimental study of plastic flow macro-scale localization process: Pattern, propagation rate, dispersion. International Journal of Mechanical Sciences, 2014, 88, 1-7.	6.7	37
36	Regularities in localization of plastic flow upon electrolytic hydrogenation of an iron bcc-alloy. Technical Physics Letters, 2014, 40, 211-214.	0.7	5

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37	Microstructure of the elements of a superconducting Alloy Nb-Ti cable. Russian Metallurgy (Metally), 2013, 2013, 229-234.	0.5	9
38	Laboratory observation of slow movements in rocks. Journal of Applied Mechanics and Technical Physics, 2012, 53, 467-470.	0.5	12
39	Significant correlation between macroscopic and microscopic parameters for the description of localized plastic flow auto-waves in deforming alloys. Solid State Communications, 2012, 152, 784-787.	1.9	25
40	Relationship between burgers vectors of dislocations and plastic strain localization patterns in compression-strained alkali halide crystals. Technical Physics Letters, 2011, 37, 750-753.	0.7	5
41	Tensile plastic strain localization in single crystals of austenite steel electrolytically saturated with hydrogen. Technical Physics Letters, 2011, 37, 793-796.	0.7	22
42	On inhomogeneous straining in compressed sylvinitite. Technical Physics Letters, 2010, 36, 507-510.	0.7	5
43	Plastic Flow Macrolocalization: Autowave and Quasi-Particle. Journal of Modern Physics, 2010, 01, 1-8.	0.6	18
44	Evidence for the existence of localized plastic flow au-to-waves generated in deforming metals. Natural Science, 2010, 02, 476-483.	0.4	15
45	Autowave model of localized plastic flow of solids. Physics of Wave Phenomena, 2009, 17, 66-75.	1.1	35
46	On the localization of plastic flow under compression of NaCl and KCl crystals. Physics of the Solid State, 2009, 51, 1142-1148.	0.6	7
47	Plastic deformation localization in commercial Zr-base alloys. International Journal of Plasticity, 2004, 20, 1227-1249.	8.8	17
48	<title>Instrumentation for speckle interferometry and techniques for investigating deformation and fracture</title>., 2002, 4900, 1197.		26
49	Pattern formation in the work hardening process of single alloyed $\hat{3}$ -Fe crystals. International Journal of Plasticity, 2001, 17, 47-63.	8.8	31
50	Wave phenomena in low-rate plastic flow of solids. Annalen Der Physik, 2001, 10, 965-984.	2.4	58
51	Phenomenology of wave processes in a localized plastic flow. Physics of the Solid State, 2001, 43, 1483-1487.	0.6	8
52	On Evolution of Plasticity Zone in the Vicinity of Crack Tip. International Journal of Fracture, 2000, 101, 35-40.	2.2	3
53	Kinetics of periodic processes during plastic flow. Physics of the Solid State, 1999, 41, 1112-1114.	0.6	2
54	Plastic Flow Localization Viewed as an Auto-Wave Process Generated in Deforming Metals. Solid State Phenomena, 0, 172-174, 1279-1283.	0.3	18

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55	Localized Plastic Flow Autowaves and the Hall-Petch Relation for Al. Key Engineering Materials, 0, 592-593, 271-274.	0.4	0
56	Autowave Features of Plastic Deformation by Ductile Fracture. Key Engineering Materials, 0, 592-593, 664-667.	0.4	0
57	Investigation of the Fine Structure Localized Plastic Deformation Zone of Superconducting Cable Components. Applied Mechanics and Materials, 0, 682, 3-8.	0.2	2
58	Study of Plastic Flow of Aluminum Alloy Using Digital Speckle Photography. Key Engineering Materials, 0, 683, 118-124.	0.4	0