Svetlana A Barannikova

List of Publications by Year
in descending order

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187	865	623734	677142
papers	citations	14 h-index	22 g-index

191	191	191	345
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Autowave Criteria of Fracture and Plastic Strain Localization of Zirconium Alloys. Metals, 2022, 12, 95.	2.3	2
2	Autowave plasticity of hydrogenated alloys. , 2022, 25, 60-74.		0
3	Resonant Raman scattering of anthraceneâ€based carbons in the secondary carbonization stage. Journal of Raman Spectroscopy, 2021, 52, 670-677.	2.5	5
4	Plasticity: from Crystal Lattice to Macroscopic Phenomena. Progress in Physics of Metals, 2021, 22, 3-57.	1.5	23
5	Kinetics of Plastic Deformation Localization Bands in Polycrystalline Nickel. Metals, 2021, 11, 1440.	2.3	1
6	Kinetics of deformation bands in a low-carbon steel â€“ stainless steel bimetal. , 2021, 60, 59-62.		3
7	In situ digital image speckle correlation (DISC) observation of plastic strain increment in low-carbon steel. , 2021, 60, 55-58.		3
8	Effect of Radial Forging on the Microstructure and Mechanical Properties of Ti-Based Alloys. Metals, 2020, 10, 1488.	2.3	2
9	Autowave Plasticity: Principles and Possibilities. Technical Physics, 2020, 65, 741-748.	0.7	5
10	Autowave process of plastic flow localization. Journal of Physics: Conference Series, 2020, 1527, 012026.	0.4	0
11	Autowave Plasticity of Metals and their Positions in the Periodic Table of Elements. Russian Physics Journal, 2020, 63, 954-961.	0.4	1
12	Plastic strain increment in low-carbon steel. AIP Conference Proceedings, 2020, , .	0.4	0
13	Deformation behavior of stainless steel under uniaxial tension. Journal of Physics: Conference Series, 2020, 1611, 012003.	0.4	1
14	Ductile failure viewed as a final stage of the autowave process of plastic flow localization. Journal of Physics: Conference Series, 2020, 1527, 012016.	0.4	0
15	Development Kinetics of the Plastic Wave Front at the Metal Interface. Russian Physics Journal, 2020, 63, 731-737.	0.4	6
16	Quasi-Particle Approach to the Autowave Physics of Metal Plasticity. Metals, 2020, 10, 1446.	2.3	4
17	Hallâ€“Petch Relation and the Localized Plasticity Parameters. Russian Metallurgy (Metally), 2020, 2020, 265-270.	0.5	2
18	A Comparative Analysis of Asymmetric (BaTiO₃) <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="M1"><mml:msub><mml:mrow /><mml:mrow><mml:mfenced open="(" close=")" separators="|"><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^’</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:mfenced><mml:mathvariant="normal">Î›</mml:mi></mml:mrow></mml:msub></mml:math>/(BaZrO₃)<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="M2"><mml:msub><mml:mrow /><mml:mrow><	1.8	2

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19	Vibrating kinetics of the Luders front. Journal of Physics: Conference Series, 2020, 1431, 012023.	0.4	0
20	Lattice Dynamics of Barium Titanate: Single Crystal, Ceramic, and Polycrystalline Film. Physica Status Solidi (B): Basic Research, 2020, 257, 1900762.	1.5	4
21	Study of deformation relief of polycrystalline nickel by atomic force microscopy. AIP Conference Proceedings, 2020, , .	0.4	1
22	Macroscopic strain localization in polycrystalline nickel. AIP Conference Proceedings, 2020, , .	0.4	0
23	The Temperature Dependence of the Autowave Mechanism of Plastic Flow. Technical Physics Letters, 2020, 46, 1249-1252.	0.7	0
24	Plastic strain localization kinetics in vanadium. AIP Conference Proceedings, 2020, , .	0.4	0
25	A comparative analysis of lattice dynamic peculiarities in barium titanate structures via Raman spectroscopy. AIP Conference Proceedings, 2020, , .	0.4	0
26	The effect of temperature on the parameters of plastic deformation localization in stainless steel. AIP Conference Proceedings, 2020, , .	0.4	2
27	Plastic strain localization in stainless steel. AIP Conference Proceedings, 2020, , .	0.4	2
28	Metal plasticity and Mendeleevâ€™s law. Deformatsiya I Razrushenie Materialov, 2020, , 2-8.	0.1	0
29	Evaluation of metals deformability. , 2020, , 243-246.		0
30	Distinction of polished and unpolished sp2 carbons via principal component analysis. AIP Conference Proceedings, 2020, , .	0.4	0
31	LOCALIZED PLASTIC DEFORMATION AND PERIODIC TABLE. International Journal of GEOMATE, 2020, 18, .	0.3	0
32	Plasticity of Metals and Mendeleevâ€™s Periodic Law. Russian Metallurgy (Metally), 2020, 2020, 1039-1044.	0.5	0
33	The mechanics of macro scale level plastic deformation localization. Journal of Physics: Conference Series, 2019, 1327, 012006.	0.4	1
34	Characteristics of Localized Plasticity Autowaves and the Debye Parameter in Metals. Technical Physics Letters, 2019, 45, 721-722.	0.7	1
35	Autowave Physics of Material Plasticity. Crystals, 2019, 9, 458.	2.2	34
36	Plastic Flow Localization and Strain Hardening of Metals. Russian Metallurgy (Metally), 2019, 2019, 273-280.	0.5	1

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37	Basic Relationships of the Autowave Model of a Plastic Flow. Russian Physics Journal, 2019, 61, 1709-1717.	0.4	9
38	Deformability criteria of metal at uniaxial tension. IOP Conference Series: Materials Science and Engineering, 2019, 597, 012039.	0.6	0
39	The influence of temperature on the localization parameters of Hadfield steel single crystals under tensile plastic strain. AIP Conference Proceedings, 2019, , .	0.4	0
40	On the Use of Atomic Force Microscopy in Metallography. Russian Metallurgy (Metally), 2019, 2019, 1040-1044.	0.5	1
41	Estimates of Metal Deformability. MATEC Web of Conferences, 2019, 297, 05002.	0.2	0
42	On the determination of graphene edge chirality via Raman spectroscopy. AIP Conference Proceedings, 2019, , .	0.4	0
43	Study of the structural inhomogeneity of bimetal layers at the yield plateau stage. AIP Conference Proceedings, 2019, , .	0.4	3
44	Raman scattering in C60@SWCNTs peapods. AIP Conference Proceedings, 2019, , .	0.4	1
45	Vibrational Kinetics of the LÃ¼ders Front. Russian Physics Journal, 2019, 62, 1338-1342.	0.4	4
46	Correlation characteristics of autowave of localized plastic deformation and parameters of interatomic interactions. AIP Conference Proceedings, 2019, , .	0.4	0
47	A Comparative Analysis of BaTiO3/(Ba,Sr)TiO3 and BaTiO3/(Ba,Sr)TiO3/SrTiO3 Artificial Superlattices via Raman Spectroscopy. Materials Research, 2019, 22, .	1.3	4
48	Characterization of an UO2 ceramic via Raman imaging and electron back-scattering diffraction. Materials Characterization, 2019, 147, 280-285.	4.4	12
49	Fine structural characterization of the elements of a Nb-Ti superconducting cable. Journal of Materials Research and Technology, 2019, 8, 323-332.	5.8	11
50	The Features of Localized Plasticity Autowaves in Solids. Materials Research, 2019, 22, .	1.3	15
51	On using of atomic force microscopy in metallography. Deformatsiya I Razrushenie Materialov, 2019, , 32-36.	0.1	0
52	Hallâ€"Petch relation and parameters of localized plasticity. Deformatsiya I Razrushenie Materialov, 2019, , 2-7.	0.1	0
53	AUTOWAVE MECHANICS OF METAL PLASTICITY. PNRPU Mechanics Bulletin, 2019, , .	0.4	1
54	Elastoplastic Invariant as a Universal Regularity of Deformation. Metallofizika I Noveishie Tekhnologii, 2019, 41, 193-201.	0.5	0

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55	Deformation localization in austenitic chromium â€“ nickel steel. AIP Conference Proceedings, 2018, , .	0.4	0
56	Unstable plastic deformation in bimetal. Journal of Physics: Conference Series, 2018, 1115, 042037.	0.4	0
57	On the macroscopic phenomena of plastic flow localization and solids microscopic characteristics. Journal of Physics: Conference Series, 2018, 1115, 042038.	0.4	0
58	Patterns of the localization of plastic deformation in Hadfield steel single crystals under tension. AIP Conference Proceedings, 2018, , .	0.4	0
59	Phase transition peculiarities in BaTiO3-based perovskite superlattices. AIP Conference Proceedings, 2018, , .	0.4	3
60	Ultrasonic criteria of plastic deformation and fracture in structural metals. AIP Conference Proceedings, 2018, , .	0.4	2
61	The localization of plastic deformation under tension of bimetal. Journal of Physics: Conference Series, 2018, 1129, 012004.	0.4	1
62	Investigation of the deformed bimetal microstructure by the AFM method. AIP Conference Proceedings, 2018, , .	0.4	2
63	The kinetics of deformation localization nuclei for the coarse-grained Fe-3%Si alloy. Materials Today: Proceedings, 2018, 5, 1121-1124.	1.8	0
64	Evaluation of T2g band intensity distribution across a surface of an UO2 ceramic. AIP Conference Proceedings, 2018, , .	0.4	1
65	Structure and Plastic Flow Heterogeneities of the 12Kh18N9T Steelâ€“St3 Steel Bimetal during Tension. Russian Metallurgy (Metally), 2018, 2018, 383-388.	0.5	3
66	Kinetics of Macrolocalization Patterns of Plastic Flow of Metals. Physics of the Solid State, 2018, 60, 1368-1374.	0.6	5
67	Structure of a Carbon Steelâ€“Stainless Steel Bimetal. Steel in Translation, 2018, 48, 219-223.	0.3	8
68	Origin of Elasticâ€“Plastic Deformation Invariant. Technical Physics, 2018, 63, 829-833.	0.7	2
69	Acoustic Parameters as Criteria of Localized Deformation in Aluminum Alloys. Acta Physica Polonica A, 2018, 134, 342-345.	0.5	15
70	Elastoplastic Strain Invariant of Metals. Progress in Physics of Metals, 2018, 19, 379-417.	1.5	12
71	PLASTIC FLOW HETEROGENEITY AND FAILURE OF BIMETAL MATERIAL. International Journal of GEOMATE, 2018, 14, .	0.3	3
72	The localization of plastic deformation in bimetal. Ã‰pÃ‡Å‘anyag: Journal of Silicate Based and Composite Materials, 2018, 70, 168-171.	0.2	0

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73	Plastic flow localization and strain hardening of metals. Deformatsiya I Razrushenie Materialov, 2018, , 2-10.	0.1	0
74	On the deformation behavior of bi-metal via digital image correlation. Advanced Materials Letters, 2018, 9, 20-24.	0.6	0
75	INVESTIGATION OF A PLASTIC DEFORMATION INHOMOGENEITY AND FAILURE OF THE CORROSION-RESISTANT BIMETAL UNDER UNIAXIAL TENSION. Vestnik Tomskogo Gosudarstvennogo Universiteta, Matematika I Mekhanika, 2018, , 25-34.	0.3	1
76	CHANGES IN ULTRASONIC VELOCITY AT HYDROGEN EMBRITTLEMENT OF HIGH-CHROMIUM STEEL. Vestnik Tomskogo Gosudarstvennogo Arkhitekturno-stroitel Nogo Universiteta JOURNAL of Construction and Architecture, 2018, , 187-196.	0.2	0
77	STUDY OF THE STRUCTURE OF BIMETAL CONSTRUCTION CARBON STEEL â€“ STAINLESS STEEL. Izvestiya Vysshikh Uchebnykh Zavedenij Chernaya Metallurgiya, 2018, 61, 300-305.	0.3	3
78	Analysis of Plastic Flow Localization in Bimetal Electrolytically Saturated with Hydrogen. International Journal of Engineering and Technology(UAE), 2018, 7, 475.	0.3	0
79	ON NUMERICAL ESTIMATES OF THE PARAMETERS OF LOCALIZED PLASTICITY DURING METAL TENSION. Vestnik Tomskogo Gosudarstvennogo Universiteta, Matematika I Mekhanika, 2018, , 83-94.	0.3	0
80	Investigation of structure and heterogeneity of the plastic deformation in bimetal exposed to uniaxial tension. AIP Conference Proceedings, 2017, , .	0.4	0
81	Optimal concentration of nanostructured powder in protective gas. Steel in Translation, 2017, 47, 241-244.	0.3	1
82	Atomic force microscopy application to carbon steel structure study. AIP Conference Proceedings, 2017, , .	0.4	0
83	LÃ¼ders band propagation in bimetallic materials. AIP Conference Proceedings, 2017, , .	0.4	0
84	Microstructure of stainless steel after heat treatment: Data from atomic-force microscopy. Steel in Translation, 2017, 47, 99-104.	0.3	4
85	Use of Acoustic Parameter Measurements for Evaluating the Reliability Criteria of Machine Parts and Metalwork . Key Engineering Materials, 2017, 743, 486-489.	0.4	6
86	Ultrasound estimation of nonuniform plastic strains in metals. AIP Conference Proceedings, 2017, , .	0.4	7
87	Influence of hydrogen embrittlement on the localization of plastic strain in Alâ€“Cuâ€“Mg alloy. Inorganic Materials: Applied Research, 2017, 8, 535-538.	0.5	1
88	Analysis of Localized Plasticity Pattern and Ultrasound Parameters. IOP Conference Series: Materials Science and Engineering, 2017, 225, 012121.	0.6	1
89	APPLICATION OF ATOMIC FORCE MICROSCOPY FOR STAINLESS STEEL MICROSTRUCTURE STUDY AT VARIOUS KINDS OF HEAT TREATMENT. Izvestiya Vysshikh Uchebnykh Zavedenij Chernaya Metallurgiya, 2017, 60, 133-139.	0.3	1
90	METHOD OF DETERMINING THE OPTIMAL CONCENTRATION OF NANOSTRUCTURED POWDERS IN SHIELDING GAS. Izvestiya Vysshikh Uchebnykh Zavedenij Chernaya Metallurgiya, 2017, 60, 292-297.	0.3	0

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91	Effect on the microstructure of deposit metal nanostructured powders. Vestnik Đ¢omskogo Gosudarstvennogo Universiteta Khimiya, 2017, , 49-58.	0.1	0
92	Ultrasound Velocity Measurements in High-Chromium Steel Under Plastic Deformation. IOP Conference Series: Materials Science and Engineering, 2016, 125, 012007.	0.6	2
93	Effect of hydrogen on plastic strain localization and fracture of steels. IOP Conference Series: Materials Science and Engineering, 2016, 116, 012024.	0.6	1
94	Effect of the 0.3 T magnetic field on the microhardness of commercially pure VT1-0 titanium. AIP Conference Proceedings, 2016, , .	0.4	2
95	On the plastic flow localization of martensitic stainless steel saturated with hydrogen. AIP Conference Proceedings, 2016, , .	0.4	1
96	Influence of hydrogen on the localization of plastic strain in low-carbon steel. Steel in Translation, 2016, 46, 851-854.	0.3	2
97	Acoustic parameters as the material formability criteria. AIP Conference Proceedings, 2016, , .	0.4	7
98	Study of localized plastic deformation of stainless steel electrically saturated with hydrogen. AIP Conference Proceedings, 2016, , .	0.4	0
99	Evolution of Macro-Scale Plastic Flow Localization of Tri-Layered Stainless Steel - Low Carbon Steel - Stainless Steel Metal with Digital Image Correlation Method. Materials Science Forum, 2016, 870, 60-65.	0.3	2
100	Effect of alloying on elastic properties of ternary Ni-Al-Ti system: Experimental validation. Journal of Alloys and Compounds, 2016, 688, 534-541.	5.5	7
101	Autowave process of the localized plastic deformation of high-chromium steel saturated with hydrogen. Journal of Physics: Conference Series, 2016, 722, 012024.	0.4	0
102	Heterogeneity of plastic flow of bimetals electrolytically saturated with hydrogen. AIP Conference Proceedings, 2016, , .	0.4	0
103	On the kinetics of localized plasticity domains emergent at the pre-failure stage of deformation process. AIP Conference Proceedings, 2016, , .	0.4	21
104	Special features of macro-scale localized plastic deformation in bimetal. AIP Conference Proceedings, 2016, , .	0.4	0
105	Changes in ultrasound velocity in the plastic deformation of high-chromium steel. Steel in Translation, 2016, 46, 552-557.	0.3	11
106	The Influence of Hydrogen on the Process of Plastic Flow Self-Organization in Ti. Key Engineering Materials, 2016, 685, 601-606.	0.4	0
107	Influence of hydrogen on the localization of plastic strain in low-carbon steel during electrolytic saturation. Steel in Translation, 2016, 46, 107-111.	0.3	1
108	Recent progress in simulations of the paramagnetic state of magnetic materials. Current Opinion in Solid State and Materials Science, 2016, 20, 85-106.	11.5	67

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109	MICROSTRUCTURE OF SUPERCONDUCTING CABLE COMPONENTS. International Journal of GEOMATE, 2016, , .	0.3	1
110	ULTRASOUND VELOCITY VARIATION AT PLASTIC DEFORMATION OF HIGH-CHROMIUM STEEL. Izvestiya Vysshikh Uchebnykh Zavedenij Chernaya Metallurgiya, 2016, 59, 558-564.	0.3	1
111	HYDROGEN EFFECT ON MACROLOCALIZATION OF PLASTIC DEFORMATION OF LOW CARBON STEEL. Izvestiya Vysshikh Uchebnykh Zavedenij Chernaya Metallurgiya, 2016, 59, 891-895.	0.3	4
112	Effects of interstitial impurity content on the plastic deformation behavior in austenitic steel monocrystals. , 2016, , 187-191.		0
113	EFFECT OF HYDROGEN ON THE LOCALIZATION OF PLASTIC DEFORMATION AND STRUCTURE OF THE ELECTROLYTICALLY SATURATED LOW-CARBON STEEL. Izvestiya Vysshikh Uchebnykh Zavedenij Chernaya Metallurgiya, 2016, 59, 128-133.	0.3	0
114	The effect of hydrogen embrittlement on the localized plastic deformation of aluminum alloy. AIP Conference Proceedings, 2015, , .	0.4	0
115	Calculation of mechanical properties of BCC Ti-Nb alloys. AIP Conference Proceedings, 2015, , .	0.4	3
116	The effect of hydrogen embrittlement on the mechanical properties of aluminum alloy. IOP Conference Series: Materials Science and Engineering, 2015, 71, 012057.	0.6	6
117	The Effect of Electrolytic Hydrogenation on the Plastic Flow of Aluminum Alloy. Applied Mechanics and Materials, 2015, 756, 59-64.	0.2	0
118	The effect of electrolytic hydrogenation on the localized plastic deformation of high-chromium steel. , 2015, , .		0
119	Theoretical description of pressure-induced phase transitions: a case study of Tiâ€“V alloys. High Pressure Research, 2015, 35, 42-48.	1.2	2
120	Influence of stresses on structure and properties of Ti and Zr- based alloys from first-principles simulations. IOP Conference Series: Materials Science and Engineering, 2015, 71, 012078.	0.6	5
121	Methods for Defining the Concentration of Nanostructured Powders in Protective Gas and its Effect on the Microstructure of Deposit Metal. Applied Mechanics and Materials, 2015, 770, 28-33.	0.2	6
122	On slow wave process in rocks. IOP Conference Series: Materials Science and Engineering, 2015, 71, 012074.	0.6	0
123	Elastoplastic Invariant Relation for Deformation of Alkali-Halide Crystals. Advanced Materials Research, 2015, 1085, 340-344.	0.3	0
124	On Technological Uses of Local Strain Patterns of the Commercial Zr-Nb Alloys. Advanced Materials Research, 2014, 1040, 113-118.	0.3	0
125	Effect of Hydrogen on Plastic Strain Localization of Construction Steels. Advanced Materials Research, 2014, 880, 42-47.	0.3	14
126	The effect of hydrogen on the parameters of plastic deformation localization in low carbon steel. , 2014, , .		0

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127	First-principles modeling of materials for nuclear energy applications. , 2014, , .		0
128	Theoretical Modeling of Thermodynamic and Mechanical Properties of the Pure Components of Ti and Zr Based Alloys Using the Exact Muffin-Tin Orbitals Method. Russian Physics Journal, 2014, 56, 1030-1038.	0.4	8
129	Regularities of Macroscopic Localization of Plastic Deformation in the Stretching of a Low-Carbon Steel. Russian Physics Journal, 2014, 57, 396-402.	0.4	6
130	Structure of low-carbon steel sheet after scale removal. Steel in Translation, 2014, 44, 264-267.	0.3	2
131	Localization of deformation and prognostibility of rock failure. Journal of Mining Science, 2014, 50, 43-49.	0.6	10
132	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
133	Influence of scale removal on the mechanical properties of low-carbon steel. Steel in Translation, 2014, 44, 123-125.	0.3	0
134	Regularities in localization of plastic flow upon electrolytic hydrogenation of an iron bcc-alloy. Technical Physics Letters, 2014, 40, 211-214.	0.7	5
135	Microstructure of the elements of a superconducting Alloy Nb-Ti cable. Russian Metallurgy (Metally), 2013, 2013, 229-234.	0.5	9
136	Nanostructure of superconducting Nb-Ti cable. Steel in Translation, 2013, 43, 640-643.	0.3	3
137	Multiscale Approach to Theoretical Simulations of Materials for Nuclear Energy Applications: Fe-Cr and Zr-based Alloys. Materials Research Society Symposia Proceedings, 2013, 1514, 3-14.	0.1	0
138	Localization of plastic deformation in alloyed Î³-iron single crystals electrolytically saturated with hydrogen. Steel in Translation, 2013, 43, 480-484.	0.3	2
139	Laboratory observation of slow movements in rocks. Journal of Applied Mechanics and Technical Physics, 2012, 53, 467-470.	0.5	12
140	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
141	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
142	Tensile plastic strain localization in single crystals of austenite steel electrolytically saturated with hydrogen. Technical Physics Letters, 2011, 37, 793-796.	0.7	22
143	Autowaves of localized plastic flow, velocity of propagation, dispersion, and entropy. Physics of Metals and Metallography, 2011, 112, 109-116.	1.0	3
144	A new model of localized plastic flow and failure of solids. Procedia Engineering, 2011, 10, 948-952.	1.2	0

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145	On the localization of plastic strain under compression of LiF crystals. Physics of the Solid State, 2010, 52, 1382-1385.	0.6	4
146	Dispersion of autowaves in a localized plastic flow. Technical Physics, 2010, 55, 965-971.	0.7	7
147	On inhomogeneous straining in compressed sylvinite. Technical Physics Letters, 2010, 36, 507-510.	0.7	5
148	Plastic Flow Macrolocalization: Autowave and Quasi-Particle. Journal of Modern Physics, 2010, 01, 1-8.	0.6	18
149	Evidence for the existence of localized plastic flow au-to-waves generated in deforming metals. Natural Science, 2010, 02, 476-483.	0.4	15
150	A new model of localized plastic flow and failure of solids. Acta Crystallographica Section A: Foundations and Advances, 2010, 66, s169-s169.	0.3	0
151	Autowave model of localized plastic flow of solids. Physics of Wave Phenomena, 2009, 17, 66-75.	1.1	35
152	Autowave model of crystal plasticity: Macro- and microdefects. Crystallography Reports, 2009, 54, 1011-1020.	0.6	4
153	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
154	Characteristics of plastic flow localization autowaves. Technical Physics, 2009, 54, 1301-1305.	0.7	1
155	Deformation defects in solids: from dislocations to plasticity localization waves. Acta Crystallographica Section A: Foundations and Advances, 2009, 65, s231-s232.	0.3	0
156	Plastic flow, necking and failure in metals, alloys and ceramics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 483-484, 223-227.	5.6	2
157	Features of plastic strain localization at the yield plateau in Hadfield steel single crystals. Technical Physics Letters, 2008, 34, 597-600.	0.7	2
158	The effect of extension axis orientation on the localized plasticity in FCC single crystals. Acta Crystallographica Section A: Foundations and Advances, 2008, 64, C456-C456.	0.3	0
159	The Effect of Solids Microcharacteristics on the Macroscopic Parameters of Plastic Deformation Localization in Metals. Key Engineering Materials, 2007, 345-346, 93-96.	0.4	0
160	Strain localization in compressed ZrO2(Y2O3) ceramics. Technical Physics Letters, 2007, 33, 477-479.	0.7	2
161	Dispersion of the plastic strain localization waves. Technical Physics Letters, 2004, 30, 338-340.	0.7	23
162	Plastic strain localization in Fe-3%Si single crystals and polycrystals under tension. Technical Physics, 2004, 49, 1296-1300.	0.7	10

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163	Plastic deformation localization in commercial Zr-base alloys. International Journal of Plasticity, 2004, 20, 1227-1249.	8.8	17
164	Localized strain autowaves at the initial stage of plastic flow in single crystals. Technical Physics, 2003, 48, 1429-1435.	0.7	17
165	Localization of plastic deformation in Cu and Ni single crystals. Crystallography Reports, 2002, 47, 672-678.	0.6	3
166	Localization of twinning plastic strain in doped Î³-Fe single crystals. Technical Physics, 2002, 47, 1130-1133.	0.7	0
167	Pattern formation in the work hardening process of single alloyed Î³-Fe crystals. International Journal of Plasticity, 2001, 17, 47-63.	8.8	31
168	On a New Type of Plastic Deformation Waves in Solids. Russian Physics Journal, 2001, 44, 169-177.	0.4	5
169	Plastic flow localization as a new kind of wave processes in solids. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 319-321, 160-163.	5.6	7
170	Crystallographic aspects of macroinhomogeneous plastic flow in single crystals of metals. Crystallography Reports, 2001, 46, 92-99.	0.6	3
171	Phenomenology of wave processes in a localized plastic flow. Physics of the Solid State, 2001, 43, 1483-1487.	0.6	8
172	In situ study of stress-induced martensitic transformation in TiNi. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 448, 267-275.	1.6	3
173	Localization of stretching strain in doped carbon Î³-Fe single crystals. Technical Physics, 2000, 45, 1368-1370.	0.7	13
174	Regular features of the evolutionary behaviour exhibited by plastic flow localisation and fracture in metals and alloys. European Physical Journal Special Topics, 1999, 09, Pr9-165-Pr9-173.	0.2	5
175	Kinetics of periodic processes during plastic flow. Physics of the Solid State, 1999, 41, 1112-1114.	0.6	2
176	Deformation autowaves in nitrogen-doped Î³-Fe single crystals. Technical Physics, 1999, 44, 1179-1185.	0.7	1
177	Direct observation of a plastic deformation autowave in a zirconium alloy. Technical Physics Letters, 1998, 24, 12-13.	0.7	2
178	The self-excited wave nature of the instability and localisation of plastic deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 234-236, 699-702.	5.6	21
179	Plastic Flow Localization Viewed as an Auto-Wave Process Generated in Deforming Metals. Solid State Phenomena, 0, 172-174, 1279-1283.	0.3	18
180	Importance of Thermally Induced Magnetic Excitations in First-Principles Simulations of Elastic Properties of Transition Metal Alloys. Solid State Phenomena, 0, 190, 291-294.	0.3	0

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181	Plastic Deformation Localization of Low Carbon Steel: Hydrogen Effect. Advanced Materials Research, 0, 1013, 77-83.	0.3	1
182	Investigation of the Fine Structure Localized Plastic Deformation Zone of Superconducting Cable Components. Applied Mechanics and Materials, 0, 682, 3-8.	0.2	2
183	Study of Localized Plastic Deformation of Hadfield Steel Single Crystals Using Speckle Photography Technique. Key Engineering Materials, 0, 683, 84-89.	0.4	5
184	Study of Plastic Flow of Aluminum Alloy Using Digital Speckle Photography. Key Engineering Materials, 0, 683, 118-124.	0.4	0
185	Non-Destructive Criteria of Plastic Deformation and Fracture in Structural Metals. Solid State Phenomena, 0, 279, 16-20.	0.3	0
186	Effect of X46Cr13 Microstructure on the Ultrasound Rate Propagation under Plastic Deformation. Solid State Phenomena, 0, 313, 8-14.	0.3	1
187	Stages and Irregularities of Plastic Strain in Austenitic Stainless Steel within a Temperature Range of 143 < t < 420 k. Key Engineering Materials, 0, 910, 657-662.	0.4	1