

# Alexei Vinogradov

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2196003/publications.pdf>

Version: 2024-02-01

223  
papers

7,892  
citations

70961

41  
h-index

58464

82  
g-index

228  
all docs

228  
docs citations

228  
times ranked

4149  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of strain rate and corrosion products on pre-exposure stress corrosion cracking in the ZK60 magnesium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 830, 142304.	2.6	7
2	The grain size effect on strain hardening and necking instability revisited from the dislocation density evolution approach. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 831, 142330.	2.6	19
3	Tooth flank fracture – An applied fatigue study of case hardened bevel gears. <i>Engineering Failure Analysis</i> , 2022, 132, 105911.	1.8	8
4	Monitoring Dynamic Recrystallisation in Bioresorbable Alloy Mg-1Zn-0.2Ca by Means of an In Situ Acoustic Emission Technique. <i>Materials</i> , 2022, 15, 328.	1.3	4
5	Deformation behaviour of TWIP steels: Constitutive modelling informed by local and integral experimental methods used in concert. <i>Materials Characterization</i> , 2022, 184, 111667.	1.9	9
6	On the Corrosion Fatigue of Magnesium Alloys Aimed at Biomedical Applications: New Insights from the Influence of Testing Frequency and Surface Modification of the Alloy ZK60. <i>Materials</i> , 2022, 15, 567.	1.3	11
7	Evidence for the presence of corrosive solution within corrosion products film in magnesium alloy ZK60. <i>Letters on Materials</i> , 2022, 12, 76-80.	0.2	2
8	Fracture behaviour of ultrafine-grained materials under static and cyclic loading. <i>International Journal of Materials Research</i> , 2022, 97, 1566-1570.	0.1	5
9	Early Detection of Subsurface Fatigue Cracks in Rolling Element Bearings by the Knowledge-Based Analysis of Acoustic Emission. <i>Sensors</i> , 2022, 22, 5187.	2.1	4
10	Novel method for in situ damage monitoring during ultrasonic fatigue testing by the advanced acoustic emission technique. <i>International Journal of Fatigue</i> , 2021, 142, 105918.	2.8	18
11	Fatigue of carburised CrNiMo steel: Testing and modelling concept. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2021, 44, 788-804.	1.7	5
12	Heat dissipation and acoustic emission features of titanium alloys in cyclic deformation mode. <i>Acta Mechanica</i> , 2021, 232, 1853.	1.1	4
13	Effect of Hydrogen Concentration and Strain Rate on Hydrogen Embrittlement of Ultra-Fine-Grained Low-Carbon Steel. <i>Advanced Structured Materials</i> , 2021, , 159-170.	0.3	2
14	The application of acoustic emission method for ultrasonic fatigue testing monitoring. <i>Vektor Nauki Tol Yattinskogo Gosudarstvennogo Universiteta</i> , 2021, , 47-56.	0.1	0
15	A phenomenological model of deformation twinning kinetics. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 803, 140700.	2.6	6
16	Inhibiting stress corrosion cracking by removing corrosion products from the Mg-Zn-Zr alloy pre-exposed to corrosion solutions. <i>Acta Materialia</i> , 2021, 205, 116570.	3.8	30
17	The processing route towards outstanding performance of the severely deformed Al–Mg–Mn-Sc-Zr alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 806, 140818.	2.6	6
18	On the role of pre-exposure time and corrosion products in stress-corrosion cracking of ZK60 and AZ31 magnesium alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 806, 140876.	2.6	15

#	ARTICLE	IF	CITATIONS
19	A novel predictive model for multiaxial fatigue in carburized bevel gears. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2021, 44, 2033-2053.	1.7	18
20	Kinetics of cyclically-induced mechanical twinning in $\hat{\gamma}$ -TiAl unveiled by a combination of acoustic emission, neutron diffraction and electron microscopy. <i>Acta Materialia</i> , 2021, 212, 116921.	3.8	14
21	Challenges and Accomplishments in Mechanical Testing Instrumented by In Situ Techniques: Infrared Thermography, Digital Image Correlation, and Acoustic Emission. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 6718.	1.3	15
22	Effect of the stress-strain state on the path of quasi-cleavage hydrogen-assisted cracking in low-carbon steel. <i>Letters on Materials</i> , 2021, 11, 298-303.	0.2	0
23	The fundamental difference between cleavage and hydrogen-assisted quasi-cleavage in ferritic materials revealed by multiscale quantitative fractographic and side surface characterization. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 820, 111333.	2.6	4
24	In situ characterization of the functional degradation of a <math>Fe-Mn-Al-Ni</math> single crystal under compression using acoustic emission measurements. <i>Acta Materialia</i> , 2021, 220, 117333.	3.8	10
25	Fractographic features of technically pure magnesium, AZ31 and ZK60 alloys subjected to stress corrosion cracking. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 772, 138744.	2.6	22
26	Shear Bands Topology in the Deformed Bulk Metallic Glasses. <i>Metals</i> , 2020, 10, 374.	1.0	9
27	A Time-Frequency Based Approach for Acoustic Emission Assessment of Sliding Wear. <i>Lubricants</i> , 2020, 8, 52.	1.2	10
28	A phenomenological model of twinning-mediated strain hardening. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 780, 139194.	2.6	9
29	On the long-term correlations in the twinning and dislocation slip dynamics. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 777, 139091.	2.6	9
30	The Functional Properties of Mg-Zn-X Biodegradable Magnesium Alloys. <i>Materials</i> , 2020, 13, 544.	1.3	18
31	On subsurface initiated failures in marine bevel gears. <i>Engineering Failure Analysis</i> , 2020, 110, 104415.	1.8	10
32	Effect of grain size on mechanical properties and hydrogen occluding capacity of pure magnesium and alloy MA14 subjected to stress-corrosion cracking. <i>Letters on Materials</i> , 2020, 10, 94-99.	0.2	5
33	Effect of equal-channel angular pressing (ECAP) and current density of cathodic hydrogen charging on hydrogen trapping in the low-alloy steel. <i>Letters on Materials</i> , 2020, 10, 152-157.	0.2	6
34	Effect of deformation processing of the dilute Mg-1Zn-0.2Ca alloy on the mechanical properties and corrosion rate in a simulated body fluid. <i>Letters on Materials</i> , 2020, 10, 217-222.	0.2	12
35	Quantitative comparison of cleavage and quasi-cleavage fracture surfaces in hydrogen embrittled low-carbon steel. <i>Letters on Materials</i> , 2020, 10, 303-308.	0.2	4
36	A New Method of Low Amplitude Signal Detection and Its Application in Acoustic Emission. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 73.	1.3	17

#	ARTICLE	IF	CITATIONS
37	Effect of fracture mode on acoustic emission behavior in the hydrogen embrittled low-alloy steel. <i>Engineering Fracture Mechanics</i> , 2019, 210, 342-357.	2.0	21
38	Acoustic emission study on the effect of notch shape and temperature on elastic energy release during impact testing of 17Mn1Si pipe steel. <i>Engineering Fracture Mechanics</i> , 2019, 210, 288-299.	2.0	3
39	About the Nature of Quasi-Cleavage in Low-Carbon Steel Embrittled with Hydrogen. <i>Metal Science and Heat Treatment</i> , 2019, 61, 191-195.	0.2	3
40	On the role of hydrogen in stress corrosion cracking of magnesium and its alloys: Gas-analysis study. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 748, 337-346.	2.6	24
41	Phenomenological approach towards modelling the acoustic emission due to plastic deformation in metals. <i>Scripta Materialia</i> , 2019, 170, 172-176.	2.6	31
42	Quasi-cleavage hydrogen-assisted cracking path investigation by fractographic and side surface observations. <i>Engineering Fracture Mechanics</i> , 2019, 214, 177-193.	2.0	26
43	Influence of long-term cold climate operation on structure, fatigue durability and impact toughness of 09Mn2Si pipe steel. <i>Engineering Failure Analysis</i> , 2019, 102, 87-101.	1.8	15
44	Mechanical Twinning is a Correlated Dynamic Process. <i>Scientific Reports</i> , 2019, 9, 5748.	1.6	8
45	High Performance Fine-Grained Biodegradable Mg-Zn-Ca Alloys Processed by Severe Plastic Deformation. <i>Metals</i> , 2019, 9, 186.	1.0	36
46	Influence of the solute concentration on the anelasticity in Mg-Al alloys: A multiple-approach study. <i>Journal of Alloys and Compounds</i> , 2019, 786, 779-790.	2.8	25
47	Structure and strength of the 1570C aluminum alloy after complex SPD processing. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 672, 012041.	0.3	0
48	Anisotropy of the acoustic emission signal on scratch testing of a single crystal of aluminum. <i>Letters on Materials</i> , 2019, 9, 130-135.	0.2	2
49	High strength and fatigue properties of Mg-Zn-Ca alloys after severe plastic deformation. <i>Letters on Materials</i> , 2019, 9, 157-161.	0.2	7
50	Acoustic emission study of the kinetics of kink bands in the LPSO structure. <i>Letters on Materials</i> , 2019, 9, 504-508.	0.2	1
51	Probing elementary dislocation mechanisms of local plastic deformation by the advanced acoustic emission technique. <i>Scripta Materialia</i> , 2018, 151, 53-56.	2.6	20
52	Analytical and numerical approaches to modelling severe plastic deformation. <i>Progress in Materials Science</i> , 2018, 95, 172-242.	16.0	126
53	On the shear band velocity in metallic glasses: A high-speed imaging study. <i>Materials Letters</i> , 2018, 225, 105-108.	1.3	7
54	Tailoring Microstructure and Properties of Fine Grained Magnesium Alloys by Severe Plastic Deformation. <i>Advanced Engineering Materials</i> , 2018, 20, 1700785.	1.6	28

#	ARTICLE	IF	CITATIONS
55	Influence of energy dissipation at the interphase boundaries on impact fracture behaviour of a plain carbon steel. <i>Theoretical and Applied Fracture Mechanics</i> , 2018, 97, 478-499.	2.1	14
56	Structure, texture and strength of Mg-5.8Zn-0.65Zr alloy after hot-to-warm multi-step isothermal forging and isothermal rolling to large strains. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 709, 330-338.	2.6	38
57	Quantitative Assessment of the Bauschinger Effect in Magnesium Alloys with the Asymmetry Effect. <i>Inorganic Materials</i> , 2018, 54, 1532-1536.	0.2	2
58	Assessing Fracture Surface Ductility by Confocal Laser Scanning Microscopy. <i>Procedia Structural Integrity</i> , 2018, 13, 2152-2157.	0.3	6
59	Features of the Hydrogen-Assisted Cracking Mechanism in the Low-Carbon Steel at Ex- and In-situ Hydrogen Charging. <i>Procedia Structural Integrity</i> , 2018, 13, 1141-1147.	0.3	5
60	Using acoustic emission signal categorization for reconstruction of wear development timeline in tribosystems: Case studies and application examples. <i>Wear</i> , 2018, 410-411, 83-92.	1.5	12
61	Investigation of the Microstructure Evolution and Deformation Mechanisms of a Mg-Zn-Zr-RE Twin-Roll-Cast Magnesium Sheet by In-Situ Experimental Techniques. <i>Materials</i> , 2018, 11, 200.	1.3	8
62	Corrosion Fatigue of Fine Grain Mg-Zn-Zr and Mg-Y-Zn Alloys. <i>Metals</i> , 2018, 8, 20.	1.0	10
63	Deformation behavior of Mg-alloy-based composites at different temperatures studied by neutron diffraction. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 685, 284-293.	2.6	10
64	Surface modification of an austenitic stainless steel wire by a multi-pulse treatment with a high-power electric current. <i>Journal of Materials Science</i> , 2017, 52, 8007-8015.	1.7	1
65	Dislocation characteristics of shear bands in metallic glasses. <i>Scripta Materialia</i> , 2017, 130, 138-142.	2.6	20
66	Improving of Acoustic Emission Signal Detection for Fatigue Fracture Monitoring. <i>Procedia Engineering</i> , 2017, 176, 284-290.	1.2	7
67	The role of notch tip shape and radius on deformation mechanisms of 12Cr1MoV steel under impact loading. Part 2. Influence of strain localization on fracture and numeric simulations. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2017, 40, 1838-1853.	1.7	8
68	What governs ductility of ultrafine-grained metals? A microstructure based approach to necking instability. <i>Acta Materialia</i> , 2017, 141, 18-28.	3.8	66
69	Temperature Effect on Deformation and Fracture Mechanisms under Impact Loading of 17Mn1Si Steel with Explicit Accounting Structural Heterogeneity. <i>Procedia Engineering</i> , 2017, 187, 680-687.	1.2	1
70	Effect of severe plastic deformation on tensile and fatigue properties of fine-grained magnesium alloy ZK60. <i>Journal of Materials Research</i> , 2017, 32, 4362-4374.	1.2	13
71	Confocal laser scanning microscopy: The technique for quantitative fractographic analysis. <i>Engineering Fracture Mechanics</i> , 2017, 183, 147-158.	2.0	33
72	Advanced-reliability acoustic-emission transducers. <i>Russian Journal of Nondestructive Testing</i> , 2017, 53, 32-38.	0.3	0

#	ARTICLE	IF	CITATIONS
73	The role of notch tip shape and radius on deformation mechanisms of 12Cr1MoV steel under impact loading. Part 1. Energy parameters of fracture. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2017, 40, 586-596.	1.7	14
74	Application of the strain energy density approach in comparing different design solutions for improving the fatigue strength of load carrying shear welded joints. <i>International Journal of Fatigue</i> , 2017, 101, 371-384.	2.8	15
75	A Phenomenological Model of Twinning Kinetics. <i>Advanced Engineering Materials</i> , 2017, 19, 1600092.	1.6	10
76	Technique for the Determination of the Critical Points under Acoustic Emission Tribological Tests. <i>Inorganic Materials</i> , 2017, 53, 1506-1512.	0.2	2
77	Universal Educational and Research Facility for the Study of the Processes of Generation and Propagation of Acoustic Emission Waves. <i>Inorganic Materials</i> , 2017, 53, 1548-1554.	0.2	1
78	Effect of Structural Heterogeneity of 17Mn1Si Steel on the Temperature Dependence of Impact Deformation and Fracture. <i>Metals</i> , 2017, 7, 280.	1.0	4
79	Effect of Temperature-Force Factors and Concentrator Shape on Impact Fracture Mechanisms of 17Mn1Si Steel. <i>Advances in Materials Science and Engineering</i> , 2017, 2017, 1-12.	1.0	6
80	On the corrosion of ZK60 magnesium alloy after severe plastic deformation. <i>Letters on Materials</i> , 2017, 7, 421-427.	0.2	28
81	The effect of stacking fault energy on acoustic emission in pure metals with face-centered crystal lattice. <i>Letters on Materials</i> , 2017, 7, 437-441.	0.2	6
82	Acoustic Emission Assessment of Impending Fracture in a Cyclically Loading Structural Steel. <i>Metals</i> , 2016, 6, 266.	1.0	7
83	Evolution of Mechanical Twinning during Cyclic Deformation of Mg-Zn-Ca Alloys. <i>Metals</i> , 2016, 6, 304.	1.0	9
84	Quantitative characterization of cleavage and hydrogen-assisted quasi-cleavage fracture surfaces with the use of confocal laser scanning microscopy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 665, 35-46.	2.6	34
85	Numerical and Experimental Study of Strain Localization in Notched Specimens of a Ductile Steel on Meso- and Macroscales. <i>Advanced Engineering Materials</i> , 2016, 18, 2095-2106.	1.6	9
86	The Use of Confocal Laser Scanning Microscopy for the 3D Quantitative Characterization of Fracture Surfaces and Cleavage Facets.. <i>Procedia Structural Integrity</i> , 2016, 2, 533-540.	0.3	12
87	A novel Bayesian approach to acoustic emission data analysis. <i>Ultrasonics</i> , 2016, 72, 89-94.	2.1	21
88	Acoustic Emission as a Tool for Exploring Deformation Mechanisms in Magnesium and Its Alloys In Situ. <i>Jom</i> , 2016, 68, 3057-3062.	0.9	17
89	On the limits of acoustic emission detectability for twinning. <i>Materials Letters</i> , 2016, 183, 417-419.	1.3	45
90	In situ observations of the kinetics of twinning, detwinning and dislocation slip in magnesium. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 676, 351-360.	2.6	33

#	ARTICLE	IF	CITATIONS
91	Controlling strength and ductility: Dislocation-based model of necking instability and its verification for ultrafine grain 316L steel. <i>Acta Materialia</i> , 2016, 106, 295-303.	3.8	66
92	Influence of alloying with hafnium on the microstructure, texture, and properties of Cu-Cr alloy after equal channel angular pressing. <i>Journal of Materials Science</i> , 2016, 51, 5493-5501.	1.7	27
93	The Portevin-Le Châtelier Effect in a Metastable Austenitic Stainless Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 59-74.	1.1	31
94	Mechanical Properties of Ultrafine-Grained Metals: New Challenges and Perspectives. <i>Advanced Engineering Materials</i> , 2015, 17, 1710-1722.	1.6	46
95	Fatigue Performance of Mg-Zn-Zr Alloy Processed by Hot Severe Plastic Deformation. <i>Metals</i> , 2015, 5, 2316-2327.	1.0	22
96	Effect of the loading mode on the evolution of the deformation mechanisms in randomly textured magnesium polycrystals - Comparison of experimental and modeling results. <i>International Journal of Plasticity</i> , 2015, 72, 127-150.	4.1	86
97	The specific features of acoustic-emission testing of vessel equipment with a wall delamination of a technological origin. <i>Russian Journal of Nondestructive Testing</i> , 2015, 51, 280-291.	0.3	1
98	Irreversible thermodynamics approach to plasticity: Dislocation density based constitutive modelling. <i>Materials Science and Technology</i> , 2015, 31, 1664-1672.	0.8	9
99	Application of acoustic emission method for investigation of hydrogen embrittlement mechanism in the low-carbon steel. <i>Journal of Alloys and Compounds</i> , 2015, 645, S460-S463.	2.8	24
100	Wavelet based approach to signal activity detection and phase picking: Application to acoustic emission. <i>Signal Processing</i> , 2015, 115, 110-119.	2.1	40
101	Deformation mechanisms underlying tension-compression asymmetry in magnesium alloy ZK60 revealed by acoustic emission monitoring. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 621, 243-251.	2.6	46
102	Note: High-speed optical imaging powered by acoustic emission triggering. <i>Review of Scientific Instruments</i> , 2014, 85, 076103.	0.6	15
103	Stochastic dislocation kinetics and fractal structures in deforming metals probed by acoustic emission and surface topography measurements. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	36
104	Deformation mechanisms in austenitic TRIP/TWIP steels at room and elevated temperature investigated by acoustic emission and scanning electron microscopy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 597, 183-193.	2.6	57
105	Revisiting the Considère criterion from the viewpoint of dislocation theory fundamentals. <i>Scripta Materialia</i> , 2014, 76, 37-40.	2.6	138
106	Low-cycle fatigue of Fe-20%Cr alloy processed by equal-channel angular pressing. <i>IOP Conference Series: Materials Science and Engineering</i> , 2014, 63, 012160.	0.3	1
107	On the nature of acoustic emission and internal friction during cyclic deformation of metals. <i>Acta Materialia</i> , 2014, 70, 8-18.	3.8	20
108	Real time acoustic emission methodology in effective tribology testing. <i>International Journal of Microstructure and Materials Properties</i> , 2014, 9, 360.	0.1	2

#	ARTICLE	IF	CITATIONS
109	Dislocation model for the behavior of fractal dimension of the microstructure of a strained solid. <i>Physics of the Solid State</i> , 2013, 55, 346-352.	0.2	1
110	Localized and homogeneous plastic flow in bulk glassy Pd40Cu30Ni10P20: An acoustic emission study. <i>Journal of Applied Physics</i> , 2013, 113, 153503.	1.1	7
111	Location of noise-like sources of acoustic emissions using the spectral similarity method. <i>Russian Journal of Nondestructive Testing</i> , 2013, 49, 553-561.	0.3	2
112	Extreme grain refinement by severe plastic deformation: A wealth of challenging science. <i>Acta Materialia</i> , 2013, 61, 782-817.	3.8	1,505
113	Kinetics of deformation processes in high-alloyed cast transformation-induced plasticity/twinning-induced plasticity steels determined by acoustic emission and scanning electron microscopy: Influence of austenite stability on deformation mechanisms. <i>Acta Materialia</i> , 2013, 61, 2434-2449.	3.8	91
114	Effect of grain size on the mechanisms of plastic deformation in wrought Mg-Zn-Zr alloy revealed by acoustic emission measurements. <i>Acta Materialia</i> , 2013, 61, 2044-2056.	3.8	104
115	A real-time approach to acoustic emission clustering. <i>Mechanical Systems and Signal Processing</i> , 2013, 40, 791-804.	4.4	131
116	Cluster Analysis of Acoustic Emissions Measured during Deformation of Duplex Stainless Steels. <i>Materials Transactions</i> , 2013, 54, 532-539.	0.4	11
117	Cyclic Response of SUS316L Stainless Steel Processed by ECAP. <i>Materials Transactions</i> , 2013, 54, 1612-1618.	0.4	5
118	Fatigue Crack Growth and Related Microstructure Evolution in Ultrafine Grain Copper Processed by ECAP. <i>Materials Transactions</i> , 2012, 53, 101-108.	0.4	20
119	Evolution of Fractal Structures in Dislocation Ensembles during Plastic Deformation. <i>Physical Review Letters</i> , 2012, 108, 205504.	2.9	33
120	Effect of dislocation hardening on monotonic and cyclic strength of severely deformed copper. <i>Philosophical Magazine</i> , 2012, 92, 666-689.	0.7	14
121	Continuous acoustic emission during intermittent plastic flow in $\alpha$ -brass. <i>Scripta Materialia</i> , 2012, 66, 745-748.	2.6	37
122	Improvement of fatigue strength of a Mg-Zn-Zr alloy by integrated extrusion and equal-channel angular pressing. <i>Scripta Materialia</i> , 2012, 67, 209-212.	2.6	39
123	Effect of strain rate on acoustic emission during hydrogen assisted cracking in high carbon steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 550, 408-417.	2.6	17
124	The influence of temporary hydrogenation on ECAP formability and low cycle fatigue life of CP titanium. <i>Journal of Alloys and Compounds</i> , 2011, 509, 2709-2715.	2.8	14
125	Acoustic Emission during Hydrogen Charging of a Pipeline Steel. <i>ISIJ International</i> , 2011, 51, 1682-1687.	0.6	2
126	The control of texture to improve high-cyclic fatigue performance in copper after equal channel angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 530, 174-182.	2.6	13



#	ARTICLE	IF	CITATIONS
127	Probing Shear-Band Initiation in Metallic Glasses. <i>Physical Review Letters</i> , 2011, 107, 185502.	2.9	135
128	Enhanced fatigue properties of nanostructured austenitic SUS 316L stainless steel. <i>Acta Materialia</i> , 2011, 59, 7060-7069.	3.8	167
129	Nanostructurization assisted by twinning during equal channel angular pressing of metastable 316L stainless steel. <i>Journal of Materials Science</i> , 2011, 46, 4276-4283.	1.7	52
130	Dynamic precipitation during cyclic deformation of an underaged Al-Cu alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 7410-7416.	2.6	60
131	Deformation and Fracture Behavior of Metallic Glassy Alloys and Glassy-Crystal Composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011, 42, 1504-1510.	1.1	18
132	On the reversibility of dislocation slip during cyclic deformation of Al alloys containing shear-resistant particles. <i>Acta Materialia</i> , 2011, 59, 3720-3736.	3.8	51
133	Reversible nature of shear bands in copper single crystals subjected to iterative shear of ECAP in forward and reverse directions. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 2602-2609.	2.6	17
134	On shear band velocity and the detectability of acoustic emission in metallic glasses. <i>Scripta Materialia</i> , 2010, 63, 89-92.	2.6	39
135	Fatigue behaviour of light alloys with ultrafine grain structure produced by severe plastic deformation: An overview. <i>International Journal of Fatigue</i> , 2010, 32, 898-907.	2.8	235
136	Propagation of shear bands in metallic glasses and transition from serrated to non-serrated plastic flow at low temperatures. <i>Acta Materialia</i> , 2010, 58, 6736-6743.	3.8	40
137	Formation of Deformation Twins and Related Shear Bands in Copper Single Crystals Pressed by ECAP. <i>Materials Science Forum</i> , 2010, 654-656, 1231-1234.	0.3	0
138	Comparative analysis of inhomogeneous plastic flow in bulk and ribbon metallic glasses monitored by acoustic emission. <i>Journal of Alloys and Compounds</i> , 2010, 504, S60-S64.	2.8	5
139	On the role of dislocation hardening in the monotonic and cyclic strength of severely plastically deformed metals. <i>Scripta Materialia</i> , 2009, 61, 817-820.	2.6	10
140	Nanostructure formation in the surface layer of metals under influence of high-power electric current pulse. <i>Journal of Materials Science</i> , 2009, 44, 4546-4552.	1.7	2
141	High-strength and ductile glassy-crystal Ni-Cu-Zr-Ti composite exhibiting stress-induced martensitic transformation. <i>Philosophical Magazine</i> , 2009, 89, 2887-2901.	0.7	42
142	Formation of Deformation Twins and Related Shear Bands in a Copper Single Crystal Deformed by Equal-Channel Angular Pressing for One Pass at Room Temperature. <i>Materials Transactions</i> , 2009, 50, 1924-1929.	0.4	19
143	Corrosion of ultra-fine grained copper fabricated by equal-channel angular pressing. <i>Corrosion Science</i> , 2008, 50, 1215-1220.	3.0	135
144	On the deformation and fracture behaviour of a Zr-based glassy alloy. <i>Philosophical Magazine</i> , 2008, 88, 2979-2987.	0.7	23

#	ARTICLE	IF	CITATIONS
145	Surface amorphization in conductors by using skin effect: Model and experiment. Journal of Applied Physics, 2007, 101, 033510.	1.1	6
146	Intergranular Corrosion of Ultrafine Grain Copper Fabricated by ECAP. Materials Science Forum, 2007, 561-565, 2385-2388.	0.3	4
147	Microstructural characteristics of pure gold processed by equal-channel angular pressing. Scripta Materialia, 2007, 56, 947-950.	2.6	35
148	Fatigue limit and crack growth in ultra-fine grain metals produced by severe plastic deformation. Journal of Materials Science, 2007, 42, 1797-1808.	1.7	125
149	Fracture and Fatigue Resistance of Ultrafine Grain CuCrZr Alloy Produced ECAP. Materials Science Forum, 2006, 503-504, 811-816.	0.3	16
150	The Effect of the Initial Orientation on Microstructure Development of Copper Single Crystals Subjected to Equal-Channel Angular Pressing. Materials Science Forum, 2006, 503-504, 799-804.	0.3	17
151	Structure and Mechanical Properties of Submicrocrystalline Copper Produced by ECAP to Very High Strains. Materials Science Forum, 2006, 503-504, 971-976.	0.3	15
152	Monotonic and Cyclic Behavior of Ultrafine Grain Metals:Overview. Materials Science Forum, 2006, 503-504, 267-274.	0.3	5
153	Hardening Mechanisms of Metals and Alloys Produced by SPD. Materials Science Forum, 2006, 503-504, 967-970.	0.3	3
154	Correlation between Acoustic Emission and Internal Friction in Materials. Advanced Materials Research, 2006, 13-14, 313-322.	0.3	2
155	Fracture behaviour of ultrafine-grained materials under static and cyclic loading. International Journal of Materials Research, 2006, 97, 1566-1570.	0.1	22
156	Dislocation structures and crystal orientations of copper single crystals deformed by equal-channel angular pressing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 405, 221-232.	2.6	54
157	Effect of strain path on structure and mechanical behavior of ultra-fine grain Cu?Cr alloy produced by equal-channel angular pressing. Acta Materialia, 2005, 53, 2181-2192.	3.8	135
158	Microstructure and texture development of copper single crystals deformed by equal-channel angular pressing. Philosophical Magazine Letters, 2004, 84, 235-243.	0.5	57
159	Kinetics of shear banding in a bulk metallic glass monitored by acoustic emission measurements. Philosophical Magazine, 2004, 84, 2147-2166.	0.7	50
160	Surface treatment of metals by high-power electric current pulses. Philosophical Magazine Letters, 2004, 84, 575-585.	0.5	2
161	Strengthening of Au and Au Alloys by ECAP Processing. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2004, 68, 1086-1088.	0.2	2
162	Strength Enhancement and Deformation Behavior of Gold after Equal-Channel Angular Pressing. Materials Transactions, 2004, 45, 2200-2208.	0.4	22

#	ARTICLE	IF	CITATIONS
163	Effect of Chemical Composition on Structure and Properties of Ultrafine Grained Cu-Cr-Zr Alloys Produced by Equal-Channel Angular Pressing. <i>Materials Transactions</i> , 2004, 45, 2187-2191.	0.4	46
164	Thermodynamic aspects of structural evolution during electroplating of metals. <i>Annales De Chimie: Science Des Materiaux</i> , 2003, 28, 117-125.	0.2	2
165	Fatigue of Severely Deformed Metals. <i>Advanced Engineering Materials</i> , 2003, 5, 351-358.	1.6	75
166	Effect of solid solution hardening and stacking fault energy on plastic flow and acoustic emission in Cu-Ge alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 341, 57-73.	2.6	48
167	Fatigue life of fine-grain Al-Mg-Sc alloys produced by equal-channel angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 349, 318-326.	2.6	107
168	Enhanced strength and fatigue life of ultra-fine grain Fe-36Ni Invar alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 355, 277-285.	2.6	105
169	Deformation Structure and Crystal Orientation of Copper Single Crystals Deformed by Equal Channel Angular Pressing. <i>Materials Science Forum</i> , 2003, 426-432, 2795-2800.	0.3	3
170	Acoustic emission during cyclic deformation of ultrafine-grain copper processed by severe plastic deformation. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2002, 82, 317-335.	0.8	39
171	Fatigue damage evolution in a particulate-reinforced metal matrix composite determined by acoustic emission and compliance method. <i>International Journal of Materials Research</i> , 2002, 93, 719-723.	0.8	10
172	Corrosion, corrosion sous contrainte et fatigue du cuivre à grains ultra-fins à labor par hypercorroyage. <i>Annales De Chimie: Science Des Materiaux</i> , 2002, 27, 65-75.	0.2	14
173	Title is missing!. <i>Russian Journal of Nondestructive Testing</i> , 2002, 38, 508-516.	0.3	12
174	Structure and properties of ultra-fine grain Cu-Cr-Zr alloy produced by equal-channel angular pressing. <i>Acta Materialia</i> , 2002, 50, 1639-1651.	3.8	293
175	Spectral analysis of acoustic emission during cyclic deformation of copper single crystals. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2001, 81, 1427-1446.	0.8	36
176	Multiscale Phenomena in Fatigue of Ultra-Fine Grain Materials &mdash; an Overview. <i>Materials Transactions</i> , 2001, 42, 74-84.	0.4	177
177	Overview of fatigue properties of fine grain 5056 Al-Mg alloy processed by equal-channel angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 300, 171-182.	2.6	131
178	Cyclic response of fine grain 5056 Al-Mg alloy processed by equal-channel angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 319-321, 587-591.	2.6	27
179	Cyclic behavior of ultrafine-grain titanium produced by severe plastic deformation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 318, 163-173.	2.6	186
180	Atomic force microscopic study on surface morphology of ultra-fine grained materials after tensile testing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 319-321, 862-866.	2.6	87

#	ARTICLE	IF	CITATIONS
181	Stress corrosion cracking susceptibility of ultra-fine grain copper produced by equal-channel angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 318, 122-128.	2.6	42
182	Cyclic Stress-Strain Response of Pb-Sn and Zn-Al Eutectic Alloys Fine-Grained by Equal Channel Angular Pressing. , 2000, , 289-295.		6
183	Acoustic Emission and Strain Localization in Ultra-Fine Grained Copper Produced by Equi-Channel Angular Pressing. <i>Journal of Metastable and Nanocrystalline Materials</i> , 1999, 2-6, 607-614.	0.1	1
184	On Corrosion of Ultra-Fine Grained Copper Produced by Equi-Channel Angular Pressing. <i>Journal of Metastable and Nanocrystalline Materials</i> , 1999, 2-6, 641-646.	0.1	0
185	On the Cyclic Behavior of Ultra-Fine Grained Copper Produced by Equi-Channel Angular Pressing. <i>Journal of Metastable and Nanocrystalline Materials</i> , 1999, 2-6, 593-598.	0.1	2
186	Kinetics of structural relaxation and regularities of plastic flow of metallic glasses. <i>Physics of the Solid State</i> , 1999, 41, 1989-1994.	0.2	4
187	Overview of fatigue performance of Cu processed by severe plastic deformation. <i>Journal of Electronic Materials</i> , 1999, 28, 1038-1044.	1.0	167
188	On the corrosion behaviour of ultra-fine grain copper. <i>Scripta Materialia</i> , 1999, 41, 319-326.	2.6	126
189	Fatigue properties of 5056 Al-Mg alloy produced by equal-channel angular pressing. <i>Scripta Materialia</i> , 1999, 11, 925-934.	0.5	140
190	On the Cyclic Behavior of Ultra-Fine Grained Copper Produced by Equi-Channel Angular Pressing. <i>Materials Science Forum</i> , 1999, 312-314, 593-598.	0.3	48
191	On Corrosion of Ultra-Fine Grained Copper Produced by Equi-Channel Angular Pressing. <i>Materials Science Forum</i> , 1999, 312-314, 641-646.	0.3	8
192	Acoustic Emission and Strain Localization in Ultra-Fine Grained Copper Produced by Equi-Channel Angular Pressing. <i>Materials Science Forum</i> , 1999, 312-314, 607-614.	0.3	6
193	Hysteresis Loop Shape of a Cyclically-Deformed Copper Tricrystal Having Two Longitudinal Grain Boundaries. <i>Scripta Materialia</i> , 1998, 38, 1609-1614.	2.6	3
194	Acoustic emission in ultra-fine grained copper. <i>Scripta Materialia</i> , 1998, 39, 797-805.	2.6	28
195	On the Cyclic Response of Ultrafine-Grained Copper. <i>Materials Science Forum</i> , 1998, 269-272, 987-992.	0.3	35
196	On the Nature of the Inhomogeneous-Homogeneous Flow Transition in Metallic Glasses. <i>Materials Science Forum</i> , 1998, 269-272, 993-998.	0.3	2
197	The role of structural relaxation in the plastic flow of metallic glasses. <i>Journal of Applied Physics</i> , 1998, 83, 5724-5731.	1.1	17
198	Effect of Crystallographic Orientation and Grain Boundary on Acoustic Emission in Aluminium Single- and Bi-crystals. <i>Materials Transactions, JIM</i> , 1997, 38, 607-614.	0.9	3

#	ARTICLE	IF	CITATIONS
199	Effect of triple junction on fatigue crack growth in copper and copper-3at.% aluminium tricrystals. Scripta Materialia, 1997, 36, 417-423.	2.6	9
200	Acoustic emission during heterogeneous and homogeneous plastic flow of a metallic glass. Physics of the Solid State, 1997, 39, 787-790.	0.2	2
201	Cyclic response of ultrafine-grained copper at constant plastic strain amplitude. Scripta Materialia, 1997, 36, 1345-1351.	2.6	88
202	On the role of free surface in acoustic emission. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 234-236, 587-590.	2.6	9
203	Grain boundary cracking in fatigued bicrystals. Journal of Materials Science, 1997, 4, 347.	1.2	5
204	Acoustic Emission Analysis of Grain Boundary Effect on Plastic Deformation of Bicrystals. Materials Science Forum, 1996, 210-213, 565-572.	0.3	0
205	Interface Boundaries Formed during Electrodeposition. Materials Science Forum, 1996, 207-209, 693-696.	0.3	2
206	Acoustic Emission in Amorphous Metals. Materials Science Forum, 1996, 210-213, 549-556.	0.3	7
207	Fatigue crack initiation and propagation in [210] oriented copper single crystals in vacuum and in air. Scripta Materialia, 1996, 34, 775-779.	2.6	1
208	On the interpretation of acoustic emission during stage III of Cu-Al single crystals deformation. Revue De Metallurgie, 1996, 93, 667-672.	0.3	1
209	Comparative analysis of the acoustic emission spectra in copper and copper-aluminum single crystals. Revue De Metallurgie, 1996, 93, 215-224.	0.3	4
210	Effect of ambient air on fatigue crack propagation in copper compact tension bicrystals. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1996, 216, 30-40.	2.6	2
211	Effect of grain boundary on acoustic emission during plastic deformation of copper-aluminum bicrystals. Acta Materialia, 1996, 44, 2883-2890.	3.8	13
212	Fatigue Crack Propagation and Grain Boundary. Materials Science Forum, 1996, 207-209, 609-612.	0.3	1
213	Correlation between Spectral Parameters of Acoustic Emission during Plastic Deformation of Cu and Cu&ndash;Al Single and Polycrystals. Materials Transactions, JIM, 1995, 36, 426-431.	0.9	25
214	Acoustic Emission Spectrum and Its Orientation Dependence in Copper Single Crystals. Materials Transactions, JIM, 1995, 36, 496-503.	0.9	20
215	Acoustic emission analysis of the evolution of non-equilibrium dislocation-disclination structure of electrodeposited nickel under load. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1995, 197, 59-68.	2.6	0
216	Crack initiation and propagation in $\sim 110^\circ$ oriented copper single crystals under cyclic deformation. Acta Metallurgica Et Materialia, 1995, 43, 675-680.	1.9	6

#	ARTICLE	IF	CITATIONS
217	Crack propagation in $\{110\}$ oriented copper bicrystals with the $\{111\}$ and random boundary. Scripta Metallurgica Et Materialia, 1995, 32, 427-431.	1.0	14
218	Susceptibility to Stress Corrosion Cracking in Ammonia of Nanostructured Cu-10wt%Zn Alloy Produced by Severe Plastic Deformation. Materials Science Forum, 0, 584-586, 887-892.	0.3	3
219	On the Effect of Deformation Mode on Fatigue: Simple Shear vs. Pure Shear. Materials Science Forum, 0, 584-586, 797-802.	0.3	6
220	Influence of a Slip Plane Orientation with Respect to the Shear Plane of ECAP on Microstructure of Copper Single Crystal Subject to One Pressing at Room Temperature. Materials Science Forum, 0, 584-586, 387-392.	0.3	4
221	Kinetics of Deformation Processes in a High-Alloy Cast TWIP Steel Determined by Acoustic Emission and Scanning Electron Microscopy. Key Engineering Materials, 0, 592-593, 489-492.	0.4	1
222	Structure and Properties of Cu Alloys Alloying with Cr and Hf after Equal Channel Angular Pressing. Advanced Materials Research, 0, 922, 651-656.	0.3	15
223	Fatigue of Severely Deformed Metals. , 0, , 661-676.		0