

Alexei Vinogradov

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/2196003/alexei-vinogradov-publications-by-year.pdf>

Version: 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

222
papers

6,369
citations

39
h-index

74
g-index

228
ext. papers

7,127
ext. citations

3.5
avg, IF

6.42
L-index

#	Paper	IF	Citations
222	The grain size effect on strain hardening and necking instability revisited from the dislocation density evolution approach. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 831, 142330	5.3	2
221	Deformation behaviour of TWIP steels: Constitutive modelling informed by local and integral experimental methods used in concert. <i>Materials Characterization</i> , 2022 , 184, 111667	3.9	0
220	Evidence for the presence of corrosive solution within corrosion products film in magnesium alloy ZK60. <i>Letters on Materials</i> , 2022 , 12, 76-80	0.9	1
219	Fracture behaviour of ultrafine-grained materials under static and cyclic loading. <i>International Journal of Materials Research</i> , 2022 , 97, 1566-1570	0.5	3
218	Effect of strain rate and corrosion products on pre-exposure stress corrosion cracking in the ZK60 magnesium alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 830, 142304	5.3	3
217	Tooth flank fracture – An applied fatigue study of case hardened bevel gears. <i>Engineering Failure Analysis</i> , 2021 , 105911	3.2	4
216	The processing route towards outstanding performance of the severely deformed Al-Mg-Mn-Sc-Zr alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 806, 140818	5.3	3
215	On the role of pre-exposure time and corrosion products in stress-corrosion cracking of ZK60 and AZ31 magnesium alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 806, 140876	5.3	5
214	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	3	8
213	Kinetics of cyclically-induced mechanical twinning in β -TiAl unveiled by a combination of acoustic emission, neutron diffraction and electron microscopy. <i>Acta Materialia</i> , 2021 , 212, 116921	8.4	5
212	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	2.6	6
211	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	5	7
210	Fatigue of carburised CrNiMo steel: Testing and modelling concept. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2021 , 44, 788-804	3	2
209	Heat dissipation and acoustic emission features of titanium alloys in cyclic deformation mode. <i>Acta Mechanica</i> , 2021 , 232, 1853	2.1	2
208	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	0.6	0
207	A phenomenological model of deformation twinning kinetics. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 803, 140700	5.3	3
206	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	8.4	14

205	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	0.9	
204	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 & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 824, 141826	5.3	1
203	In situ characterization of the functional degradation of a [001] oriented Fe-Mn-Al-Ni single crystal under compression using acoustic emission measurements. <i>Acta Materialia</i> , 2021 , 117333	8.4	0
202	A Time-Frequency Based Approach for Acoustic Emission Assessment of Sliding Wear. <i>Lubricants</i> , 2020 , 8, 52	3.1	3
201	A phenomenological model of twinning-mediated strain hardening. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 780, 139194	5.3	8
200	On the long-term correlations in the twinning and dislocation slip dynamics. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 777, 139091	5.3	5
199	The Functional Properties of Mg-Zn-X Biodegradable Magnesium Alloys. <i>Materials</i> , 2020 , 13,	3.5	9
198	On subsurface initiated failures in marine bevel gears. <i>Engineering Failure Analysis</i> , 2020 , 110, 104415	3.2	6
197	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	0.9	3
196	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	0.9	5
195	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	0.9	5
194	Quantitative comparison of cleavage and quasi-cleavage fracture surfaces in hydrogen embrittled low-carbon steel. <i>Letters on Materials</i> , 2020 , 10, 303-308	0.9	3
193	A New Method of Low Amplitude Signal Detection and Its Application in Acoustic Emission. <i>Applied Sciences (Switzerland)</i> , 2020 , 10, 73	2.6	7
192	Fractographic features of technically pure magnesium, AZ31 and ZK60 alloys subjected to stress corrosion cracking. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 772, 138744	5.3	11
191	Shear Bands Topology in the Deformed Bulk Metallic Glasses. <i>Metals</i> , 2020 , 10, 374	2.3	5
190	On the role of hydrogen in stress corrosion cracking of magnesium and its alloys: Gas-analysis study. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 748, 337-346	5.3	14
189	Phenomenological approach towards modelling the acoustic emission due to plastic deformation in metals. <i>Scripta Materialia</i> , 2019 , 170, 172-176	5.6	14
188	Quasi-cleavage hydrogen-assisted cracking path investigation by fractographic and side surface observations. <i>Engineering Fracture Mechanics</i> , 2019 , 214, 177-193	4.2	15

187	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	3.2	8
186	Mechanical Twinning is a Correlated Dynamic Process. <i>Scientific Reports</i> , 2019 , 9, 5748	4.9	5
185	High Performance Fine-Grained Biodegradable Mg-Zn-Ca Alloys Processed by Severe Plastic Deformation. <i>Metals</i> , 2019 , 9, 186	2.3	24
184	Effect of fracture mode on acoustic emission behavior in the hydrogen embrittled low-alloy steel. <i>Engineering Fracture Mechanics</i> , 2019 , 210, 342-357	4.2	15
183	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	4.2	1
182	About the Nature of Quasi-Cleavage in Low-Carbon Steel Embrittled with Hydrogen. <i>Metal Science and Heat Treatment</i> , 2019 , 61, 191-195	0.6	3
181	Anisotropy of the acoustic emission signal on scratch testing of a single crystal of aluminum. <i>Letters on Materials</i> , 2019 , 9, 130-135	0.9	1
180	High strength and fatigue properties of Mg-Zn-Ca alloys after severe plastic deformation. <i>Letters on Materials</i> , 2019 , 9, 157-161	0.9	4
179	Acoustic emission study of the kinetics of kink bands in the LPSO structure. <i>Letters on Materials</i> , 2019 , 9, 504-508	0.9	1
178	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	5.7	19
177	Structure and strength of the 1570C aluminum alloy after complex SPD processing. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019 , 672, 012041	0.4	
176	Probing elementary dislocation mechanisms of local plastic deformation by the advanced acoustic emission technique. <i>Scripta Materialia</i> , 2018 , 151, 53-56	5.6	13
175	Analytical and numerical approaches to modelling severe plastic deformation. <i>Progress in Materials Science</i> , 2018 , 95, 172-242	42.2	81
174	On the shear band velocity in metallic glasses: A high-speed imaging study. <i>Materials Letters</i> , 2018 , 225, 105-108	3.3	5
173	Tailoring Microstructure and Properties of Fine Grained Magnesium Alloys by Severe Plastic Deformation. <i>Advanced Engineering Materials</i> , 2018 , 20, 1700785	3.5	17
172	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	3.7	8
171	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 & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 709, 330-338	5.3	24
170	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	3.5	8

169	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,	3.5	5
168	Corrosion Fatigue of Fine Grain Mg-Zn-Zr and Mg-Y-Zn Alloys. <i>Metals</i> , 2018 , 8, 20	2.3	3
167	Quantitative Assessment of the Bauschinger Effect in Magnesium Alloys with the Asymmetry Effect. <i>Inorganic Materials</i> , 2018 , 54, 1532-1536	0.9	1
166	Assessing Fracture Surface Ductility by Confocal Laser Scanning Microscopy. <i>Procedia Structural Integrity</i> , 2018 , 13, 2152-2157	1	4
165	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	1	1
164	Deformation behavior of Mg-alloy-based composites at different temperatures studied by neutron diffraction. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 685, 284-293	5.3	9
163	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	4.3	
162	Dislocation characteristics of shear bands in metallic glasses. <i>Scripta Materialia</i> , 2017 , 130, 138-142	5.6	16
161	Improving of Acoustic Emission Signal Detection for Fatigue Fracture Monitoring. <i>Procedia Engineering</i> , 2017 , 176, 284-290		6
160	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	3	5
159	What governs ductility of ultrafine-grained metals? A microstructure based approach to necking instability. <i>Acta Materialia</i> , 2017 , 141, 18-28	8.4	42
158	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
157	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	2.5	10
156	Confocal laser scanning microscopy: The technique for quantitative fractographic analysis. <i>Engineering Fracture Mechanics</i> , 2017 , 183, 147-158	4.2	21
155	Advanced-reliability acoustic-emission transducers. <i>Russian Journal of Nondestructive Testing</i> , 2017 , 53, 32-38	0.7	
154	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	3	9
153	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	5	13
152	A Phenomenological Model of Twinning Kinetics. <i>Advanced Engineering Materials</i> , 2017 , 19, 1600092	3.5	8

151	Technique for the Determination of the Critical Points under Acoustic Emission Tribological Tests. <i>Inorganic Materials</i> , 2017 , 53, 1506-1512	0.9	2
150	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	0.9	0
149	Effect of Structural Heterogeneity of 17Mn1Si Steel on the Temperature Dependence of Impact Deformation and Fracture. <i>Metals</i> , 2017 , 7, 280	2.3	3
148	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	1.5	4
147	On the corrosion of ZK60 magnesium alloy after severe plastic deformation. <i>Letters on Materials</i> , 2017 , 7, 421-427	0.9	16
146	The Portevin-Peierls Effect in a Metastable Austenitic Stainless Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016 , 47, 59-74	2.3	22
145	Acoustic Emission as a Tool for Exploring Deformation Mechanisms in Magnesium and Its Alloys In Situ. <i>Jom</i> , 2016 , 68, 3057-3062	2.1	14
144	On the limits of acoustic emission detectability for twinning. <i>Materials Letters</i> , 2016 , 183, 417-419	3.3	33
143	In situ observations of the kinetics of twinning-detwinning and dislocation slip in magnesium. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 676, 351-360	5.3	26
142	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	8.4	45
141	Influence of alloying with hafnium on the microstructure, texture, and properties of Cu-Zr alloy after equal channel angular pressing. <i>Journal of Materials Science</i> , 2016 , 51, 5493-5501	4.3	17
140	Acoustic Emission Assessment of Impending Fracture in a Cyclically Loading Structural Steel. <i>Metals</i> , 2016 , 6, 266	2.3	3
139	Evolution of Mechanical Twinning during Cyclic Deformation of Mg-Zn-Ca Alloys. <i>Metals</i> , 2016 , 6, 304	2.3	8
138	Quantitative characterization of cleavage and hydrogen-assisted quasi-cleavage fracture surfaces with the use of confocal laser scanning microscopy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 665, 35-46	5.3	27
137	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	3.5	6
136	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	1	11
135	A novel Bayesian approach to acoustic emission data analysis. <i>Ultrasonics</i> , 2016 , 72, 89-94	3.5	20
134	Wavelet based approach to signal activity detection and phase picking: Application to acoustic emission. <i>Signal Processing</i> , 2015 , 115, 110-119	4.4	30

133	Deformation mechanisms underlying tension-compression asymmetry in magnesium alloy ZK60 revealed by acoustic emission monitoring. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 621, 243-251	5.3	36
132	Mechanical Properties of Ultrafine-Grained Metals: New Challenges and Perspectives. <i>Advanced Engineering Materials</i> , 2015 , 17, 1710-1722	3.5	41
131	Fatigue Performance of Mg-Zn-Zr Alloy Processed by Hot Severe Plastic Deformation. <i>Metals</i> , 2015 , 5, 2316-2327	2.3	18
130	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	7.6	69
129	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	0.7	1
128	Irreversible thermodynamics approach to plasticity: dislocation density based constitutive modelling. <i>Materials Science and Technology</i> , 2015 , 31, 1664-1672	1.5	6
127	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	5.7	18
126	Deformation mechanisms in austenitic TRIP/TWIP steels at room and elevated temperature investigated by acoustic emission and scanning electron microscopy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 597, 183-193	5.3	48
125	Revisiting the Considère criterion from the viewpoint of dislocation theory fundamentals. <i>Scripta Materialia</i> , 2014 , 76, 37-40	5.6	81
124	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	0.4	1
123	On the nature of acoustic emission and internal friction during cyclic deformation of metals. <i>Acta Materialia</i> , 2014 , 70, 8-18	8.4	19
122	Real time acoustic emission methodology in effective tribology testing. <i>International Journal of Microstructure and Materials Properties</i> , 2014 , 9, 360	0.4	2
121	Note: High-speed optical imaging powered by acoustic emission triggering. <i>Review of Scientific Instruments</i> , 2014 , 85, 076103	1.7	15
120	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, 233506	2.5	28
119	Structure and Properties of Cu Alloys Alloying with Cr and Hf after Equal Channel Angular Pressing. <i>Advanced Materials Research</i> , 2014 , 922, 651-656	0.5	12
118	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	0.8	
117	Localized and homogeneous plastic flow in bulk glassy Pd40Cu30Ni10P20: An acoustic emission study. <i>Journal of Applied Physics</i> , 2013 , 113, 153503	2.5	7
116	Location of noise-like sources of acoustic emissions using the spectral similarity method. <i>Russian Journal of Nondestructive Testing</i> , 2013 , 49, 553-561	0.7	2

115	Kinetics of Deformation Processes in a High-Alloy Cast TWIP Steel Determined by Acoustic Emission and Scanning Electron Microscopy. <i>Key Engineering Materials</i> , 2013 , 592-593, 489-492	0.4	1
114	Extreme grain refinement by severe plastic deformation: A wealth of challenging science. <i>Acta Materialia</i> , 2013 , 61, 782-817	8.4	1230
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	8.4	76
112	Effect of grain size on the mechanisms of plastic deformation in wrought Mg ₉₂ Zn ₈ Zr alloy revealed by acoustic emission measurements. <i>Acta Materialia</i> , 2013 , 61, 2044-2056	8.4	88
111	Tensile and Fatigue Properties of Al-Mg-Sc-Zr Alloy Fine-Grained by Equal-Channel Angular Pressing 2013 , 341-350		
110	A real-time approach to acoustic emission clustering. <i>Mechanical Systems and Signal Processing</i> , 2013 , 40, 791-804	7.8	100
109	Corrosion Fatigue of Ultra-Fine Grain Copper Fabricated by Severe Plastic Deformation 2013 , 361-370		3
108	Cluster Analysis of Acoustic Emissions Measured during Deformation of Duplex Stainless Steels. <i>Materials Transactions</i> , 2013 , 54, 532-539	1.3	11
107	Cyclic Response of SUS316L Stainless Steel Processed by ECAP. <i>Materials Transactions</i> , 2013 , 54, 1612-1618		5
106	Structure, Properties and Thermal Stability of Ultra-Fine Grained Cu-Cr-Zr Alloy 2013 , 351-360		
105	Modeling of Severe Plastic Deformation: Time-Proven Recipes and New Results 2013 , 69-90		2
104	Continuous acoustic emission during intermittent plastic flow in brass. <i>Scripta Materialia</i> , 2012 , 66, 745-748	5.6	34
103	Improvement of fatigue strength of a Mg ₉₂ Zn ₈ Zr alloy by integrated extrusion and equal-channel angular pressing. <i>Scripta Materialia</i> , 2012 , 67, 209-212	5.6	34
102	Effect of strain rate on acoustic emission during hydrogen assisted cracking in high carbon steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 550, 408-417	5.3	13
101	Evolution of fractal structures in dislocation ensembles during plastic deformation. <i>Physical Review Letters</i> , 2012 , 108, 205504	7.4	25
100	Effect of dislocation hardening on monotonic and cyclic strength of severely deformed copper. <i>Philosophical Magazine</i> , 2012 , 92, 666-689	1.6	11
99	Fatigue Crack Growth and Related Microstructure Evolution in Ultrafine Grain Copper Processed by ECAP. <i>Materials Transactions</i> , 2012 , 53, 101-108	1.3	20
98	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	5.7	14

97	Acoustic Emission during Hydrogen Charging of a Pipeline Steel. <i>ISIJ International</i> , 2011 , 51, 1682-1687	1.7	2
96	The control of texture to improve high-cyclic fatigue performance in copper after equal channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 530, 174-182	5.3	13
95	Probing shear-band initiation in metallic glasses. <i>Physical Review Letters</i> , 2011 , 107, 185502	7.4	121
94	Enhanced fatigue properties of nanostructured austenitic SUS 316L stainless steel. <i>Acta Materialia</i> , 2011 , 59, 7060-7069	8.4	133
93	Nanostructuring assisted by twinning during equal channel angular pressing of metastable 316L stainless steel. <i>Journal of Materials Science</i> , 2011 , 46, 4276-4283	4.3	46
92	Dynamic precipitation during cyclic deformation of an underaged Al ₇₀ Mg ₃₀ alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 7410-7416	5.3	48
91	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	2.3	18
90	On the reversibility of dislocation slip during cyclic deformation of Al alloys containing shear-resistant particles. <i>Acta Materialia</i> , 2011 , 59, 3720-3736	8.4	41
89	Reversible nature of shear bands in copper single crystals subjected to iterative shear of ECAP in forward and reverse directions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 2602-2609	5.3	16
88	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	0.4	
87	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	5.7	4
86	On shear band velocity and the detectability of acoustic emission in metallic glasses. <i>Scripta Materialia</i> , 2010 , 63, 89-92	5.6	37
85	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	5	205
84	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	8.4	39
83	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	5.6	8
82	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	4.3	2
81	High-strength and ductile glassy-crystal Ni ₄₀ Zr ₆₀ composite exhibiting stress-induced martensitic transformation. <i>Philosophical Magazine</i> , 2009 , 89, 2887-2901	1.6	41
80	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	1.3	18

79	Susceptibility to Stress Corrosion Cracking in Ammonia of Nanostructured Cu-10wt%Zn Alloy Produced by Severe Plastic Deformation. <i>Materials Science Forum</i> , 2008 , 584-586, 887-892	0.4	3
78	On the Effect of Deformation Mode on Fatigue: Simple Shear vs. Pure Shear. <i>Materials Science Forum</i> , 2008 , 584-586, 797-802	0.4	6
77	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. <i>Materials Science Forum</i> , 2008 , 584-586, 387-392	0.4	3
76	Corrosion of ultra-fine grained copper fabricated by equal-channel angular pressing. <i>Corrosion Science</i> , 2008 , 50, 1215-1220	6.8	117
75	On the deformation and fracture behaviour of a Zr-based glassy alloy. <i>Philosophical Magazine</i> , 2008 , 88, 2979-2987	1.6	20
74	Intergranular Corrosion of Ultrafine Grain Copper Fabricated by ECAP. <i>Materials Science Forum</i> , 2007 , 561-565, 2385-2388	0.4	3
73	Microstructural characteristics of pure gold processed by equal-channel angular pressing. <i>Scripta Materialia</i> , 2007 , 56, 947-950	5.6	28
72	Fatigue limit and crack growth in ultra-fine grain metals produced by severe plastic deformation. <i>Journal of Materials Science</i> , 2007 , 42, 1797-1808	4.3	110
71	Surface amorphization in conductors by using skin effect: Model and experiment. <i>Journal of Applied Physics</i> , 2007 , 101, 033510	2.5	5
70	Fracture behaviour of ultrafine-grained materials under static and cyclic loading. <i>International Journal of Materials Research</i> , 2006 , 97, 1566-1570	0.5	19
69	Fracture and Fatigue Resistance of Ultrafine Grain CuCrZr Alloy Produced ECAP. <i>Materials Science Forum</i> , 2006 , 503-504, 811-816	0.4	14
68	The Effect of the Initial Orientation on Microstructure Development of Copper Single Crystals Subjected to Equal-Channel Angular Pressing. <i>Materials Science Forum</i> , 2006 , 503-504, 799-804	0.4	16
67	Structure and Mechanical Properties of Submicrocrystalline Copper Produced by ECAP to Very High Strains. <i>Materials Science Forum</i> , 2006 , 503-504, 971-976	0.4	13
66	Monotonic and Cyclic Behavior of Ultrafine Grain Metals: Overview. <i>Materials Science Forum</i> , 2006 , 503-504, 267-274	0.4	5
65	Hardening Mechanisms of Metals and Alloys Produced by SPD. <i>Materials Science Forum</i> , 2006 , 503-504, 967-970	0.4	1
64	Correlation between Acoustic Emission and Internal Friction in Materials. <i>Advanced Materials Research</i> , 2006 , 13-14, 313-322	0.5	2
63	Dislocation structures and crystal orientations of copper single crystals deformed by equal-channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 405, 221-232	5.3	50
62	Effect of strain path on structure and mechanical behavior of ultra-fine grain CuZr alloy produced by equal-channel angular pressing. <i>Acta Materialia</i> , 2005 , 53, 2181-2192	8.4	122

61	Microstructure and texture development of copper single crystals deformed by equal-channel angular pressing. <i>Philosophical Magazine Letters</i> , 2004 , 84, 235-243	1	52
60	Kinetics of shear banding in a bulk metallic glass monitored by acoustic emission measurements. <i>Philosophical Magazine</i> , 2004 , 84, 2147-2166	1.6	43
59	Surface treatment of metals by high-power electric current pulses. <i>Philosophical Magazine Letters</i> , 2004 , 84, 575-585	1	2
58	Strengthening of Au and Au Alloys by ECAP Processing. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2004 , 68, 1086-1088	0.4	1
57	Strength Enhancement and Deformation Behavior of Gold after Equal-Channel Angular Pressing. <i>Materials Transactions</i> , 2004 , 45, 2200-2208	1.3	14
56	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	1.3	40
55	Thermodynamic aspects of structural evolution during electroplating of metals. <i>Annales De Chimie: Science Des Materiaux</i> , 2003 , 28, 117-125	2.1	2
54	Fatigue of Severely Deformed Metals. <i>Advanced Engineering Materials</i> , 2003 , 5, 351-358	3.5	66
53	Effect of solid solution hardening and stacking fault energy on plastic flow and acoustic emission in Cu-Zn alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 341, 57-73	5.3	45
52	Fatigue life of fine-grain Al-Mg-Sc alloys produced by equal-channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 349, 318-326	5.3	101
51	Enhanced strength and fatigue life of ultra-fine grain Fe-6Ni Invar alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 355, 277-285	5.3	92
50	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	0.4	3
49	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	8.4	242
48	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		35
47	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		9
46	Corrosion, corrosion sous contrainte et fatigue du cuivre à grains ultra-fins à partir hypercorroyage. <i>Annales De Chimie: Science Des Materiaux</i> , 2002 , 27, 65-75	2.1	13
45	Application of the Spectral Analysis of Acoustic Emission Signals to Studies of Vulnerability of TiN Coatings on Steel Substrates. <i>Russian Journal of Nondestructive Testing</i> , 2002 , 38, 508-516	0.7	11
44	Multiscale Phenomena in Fatigue of Ultra-Fine Grain Materials – an Overview. <i>Materials Transactions</i> , 2001 , 42, 74-84	1.3	159

43	Overview of fatigue properties of fine grain 5056 Al-Mg alloy processed by equal-channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 300, 171-182	5.3	115
42	Cyclic response of fine grain 5056 Al-Mg alloy processed by equal-channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 319-321, 587-591	5.3	23
41	Cyclic behavior of ultrafine-grain titanium produced by severe plastic deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 318, 163-173	5.3	171
40	Atomic force microscopic study on surface morphology of ultra-fine grained materials after tensile testing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 319-321, 862-866	5.3	77
39	Stress corrosion cracking susceptibility of ultra-fine grain copper produced by equal-channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 318, 122-128	5.3	35
38	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		30
37	Cyclic Stress-Strain Response of Pb-Sn and Zn-Al Eutectic Alloys Fine-Grained by Equal Channel Angular Pressing 2000 , 289-295		6
36	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	0.2	1
35	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	0.2	
34	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	0.2	2
33	Kinetics of structural relaxation and regularities of plastic flow of metallic glasses. <i>Physics of the Solid State</i> , 1999 , 41, 1989-1994	0.8	4
32	Overview of fatigue performance of Cu processed by severe plastic deformation. <i>Journal of Electronic Materials</i> , 1999 , 28, 1038-1044	1.9	146
31	On the corrosion behaviour of ultra-fine grain copper. <i>Scripta Materialia</i> , 1999 , 41, 319-326	5.6	118
30	Fatigue properties of 5056 Al-Mg alloy produced by equal-channel angular pressing. <i>Scripta Materialia</i> , 1999 , 11, 925-934		119
29	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	0.4	42
28	On Corrosion of Ultra-Fine Grained Copper Produced by Equi-Channel Angular Pressing. <i>Materials Science Forum</i> , 1999 , 312-314, 641-646	0.4	6
27	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	0.4	6
26	Hysteresis Loop Shape of a Cyclically-Deformed Copper Tricrystal Having Two Longitudinal Grain Boundaries. <i>Scripta Materialia</i> , 1998 , 38, 1609-1614	5.6	2

25	Acoustic emission in ultra-fine grained copper. <i>Scripta Materialia</i> , 1998 , 39, 797-805	5.6	24
24	On the Cyclic Response of Ultrafine-Grained Copper. <i>Materials Science Forum</i> , 1998 , 269-272, 987-992	0.4	31
23	On the Nature of the Inhomogeneous-Homogeneous Flow Transition in Metallic Glasses. <i>Materials Science Forum</i> , 1998 , 269-272, 993-998	0.4	2
22	The role of structural relaxation in the plastic flow of metallic glasses. <i>Journal of Applied Physics</i> , 1998 , 83, 5724-5731	2.5	14
21	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		3
20	Effect of triple junction on fatigue crack growth in copper and copper-3at.% aluminium tricrystals. <i>Scripta Materialia</i> , 1997 , 36, 417-423	5.6	8
19	Acoustic emission during heterogeneous and homogeneous plastic flow of a metallic glass. <i>Physics of the Solid State</i> , 1997 , 39, 787-790	0.8	2
18	Cyclic response of ultrafine-grained copper at constant plastic strain amplitude. <i>Scripta Materialia</i> , 1997 , 36, 1345-1351	5.6	78
17	On the role of free surface in acoustic emission. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1997 , 234-236, 587-590	5.3	7
16	Grain boundary cracking in fatigued bicrystals. <i>Journal of Materials Science</i> , 1997 , 4, 347		2
15	Acoustic Emission Analysis of Grain Boundary Effect on Plastic Deformation of Bicrystals. <i>Materials Science Forum</i> , 1996 , 210-213, 565-572	0.4	
14	Interface Boundaries Formed during Electrodeposition. <i>Materials Science Forum</i> , 1996 , 207-209, 693-696	0.4	2
13	Acoustic Emission in Amorphous Metals. <i>Materials Science Forum</i> , 1996 , 210-213, 549-556	0.4	7
12	Fatigue crack initiation and propagation in [210] oriented copper single crystals in vacuum and in air. <i>Scripta Materialia</i> , 1996 , 34, 775-779	5.6	1
11	Comparative analysis of the acoustic emission spectra in copper and copper- aluminum single crystals. <i>Revue De Metallurgie</i> , 1996 , 93, 215-224		3
10	Effect of ambient air on fatigue crack propagation in copper compact tension bicrystals. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1996 , 216, 30-40	5.3	1
9	Effect of grain boundary on acoustic emission during plastic deformation of copper-aluminum bicrystals. <i>Acta Materialia</i> , 1996 , 44, 2883-2890	8.4	12
8	Fatigue Crack Propagation and Grain Boundary. <i>Materials Science Forum</i> , 1996 , 207-209, 609-612	0.4	

7	Acoustic emission analysis of the evolution of non-equilibrium dislocation-disclination structure of electrodeposited nickel under load. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1995 , 197, 59-68	53
6	Crack initiation and propagation in <110> oriented copper single crystals under cyclic deformation. <i>Acta Metallurgica Et Materialia</i> , 1995 , 43, 675-680	6
5	Crack propagation in <110> oriented copper bicrystals with the θ and random boundary. <i>Scripta Metallurgica Et Materialia</i> , 1995 , 32, 427-431	14
4	Correlation between Spectral Parameters of Acoustic Emission during Plastic Deformation of Cu and Cu–Al Single and Polycrystals. <i>Materials Transactions, JIM</i> , 1995 , 36, 426-431	19
3	Acoustic Emission Spectrum and Its Orientation Dependence in Copper Single Crystals. <i>Materials Transactions, JIM</i> , 1995 , 36, 496-503	18
2	Fatigue of Severely Deformed Metals 661-676	
1	Fatigue Properties of Bulk Nanostructured Materials 481-500	14