

# Alexei Vinogradov

## List of Publications by Citations

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222  
papers

6,369  
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39  
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228  
ext. papers

7,127  
ext. citations

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#	Paper	IF	Citations
222	Extreme grain refinement by severe plastic deformation: A wealth of challenging science. <i>Acta Materialia</i> , <b>2013</b> , 61, 782-817	8.4	1230
221	Structure and properties of ultra-fine grain Cu-30Zr alloy produced by equal-channel angular pressing. <i>Acta Materialia</i> , <b>2002</b> , 50, 1639-1651	8.4	242
220	Fatigue behaviour of light alloys with ultrafine grain structure produced by severe plastic deformation: An overview. <i>International Journal of Fatigue</i> , <b>2010</b> , 32, 898-907	5	205
219	Cyclic behavior of ultrafine-grain titanium produced by severe plastic deformation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2001</b> , 318, 163-173	5.3	171
218	Multiscale Phenomena in Fatigue of Ultra-Fine Grain Materials &mdash; an Overview. <i>Materials Transactions</i> , <b>2001</b> , 42, 74-84	1.3	159
217	Overview of fatigue performance of Cu processed by severe plastic deformation. <i>Journal of Electronic Materials</i> , <b>1999</b> , 28, 1038-1044	1.9	146
216	Enhanced fatigue properties of nanostructured austenitic SUS 316L stainless steel. <i>Acta Materialia</i> , <b>2011</b> , 59, 7060-7069	8.4	133
215	Effect of strain path on structure and mechanical behavior of ultra-fine grain Cu-30Zr alloy produced by equal-channel angular pressing. <i>Acta Materialia</i> , <b>2005</b> , 53, 2181-2192	8.4	122
214	Probing shear-band initiation in metallic glasses. <i>Physical Review Letters</i> , <b>2011</b> , 107, 185502	7.4	121
213	Fatigue properties of 5056 Al-Mg alloy produced by equal-channel angular pressing. <i>Scripta Materialia</i> , <b>1999</b> , 11, 925-934		119
212	On the corrosion behaviour of ultra-fine grain copper. <i>Scripta Materialia</i> , <b>1999</b> , 41, 319-326	5.6	118
211	Corrosion of ultra-fine grained copper fabricated by equal-channel angular pressing. <i>Corrosion Science</i> , <b>2008</b> , 50, 1215-1220	6.8	117
210	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> , <b>2001</b> , 300, 171-182	5.3	115
209	Fatigue limit and crack growth in ultra-fine grain metals produced by severe plastic deformation. <i>Journal of Materials Science</i> , <b>2007</b> , 42, 1797-1808	4.3	110
208	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> , <b>2003</b> , 349, 318-326	5.3	101
207	A real-time approach to acoustic emission clustering. <i>Mechanical Systems and Signal Processing</i> , <b>2013</b> , 40, 791-804	7.8	100
206	Enhanced strength and fatigue life of ultra-fine grain Fe-6Ni Invar alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2003</b> , 355, 277-285	5.3	92

205	Effect of grain size on the mechanisms of plastic deformation in wrought Mg <sub>97</sub> Zn <sub>3</sub> alloy revealed by acoustic emission measurements. <i>Acta Materialia</i> , <b>2013</b> , 61, 2044-2056	8.4	88
204	Analytical and numerical approaches to modelling severe plastic deformation. <i>Progress in Materials Science</i> , <b>2018</b> , 95, 172-242	42.2	81
203	Revisiting the Considère criterion from the viewpoint of dislocation theory fundamentals. <i>Scripta Materialia</i> , <b>2014</b> , 76, 37-40	5.6	81
202	Cyclic response of ultrafine-grained copper at constant plastic strain amplitude. <i>Scripta Materialia</i> , <b>1997</b> , 36, 1345-1351	5.6	78
201	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> , <b>2001</b> , 319-321, 862-866	5.3	77
200	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> , <b>2013</b> , 61, 2434-2449	8.4	76
199	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> , <b>2015</b> , 72, 127-150	7.6	69
198	Fatigue of Severely Deformed Metals. <i>Advanced Engineering Materials</i> , <b>2003</b> , 5, 351-358	3.5	66
197	Microstructure and texture development of copper single crystals deformed by equal-channel angular pressing. <i>Philosophical Magazine Letters</i> , <b>2004</b> , 84, 235-243	1	52
196	Dislocation structures and crystal orientations of copper single crystals deformed by equal-channel angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 405, 221-232	5.3	50
195	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> , <b>2014</b> , 597, 183-193	5.3	48
194	Dynamic precipitation during cyclic deformation of an underaged Al <sub>70</sub> Cu <sub>30</sub> alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 7410-7416	5.3	48
193	Nanostructurization assisted by twinning during equal channel angular pressing of metastable 316L stainless steel. <i>Journal of Materials Science</i> , <b>2011</b> , 46, 4276-4283	4.3	46
192	Controlling strength and ductility: Dislocation-based model of necking instability and its verification for ultrafine grain 316L steel. <i>Acta Materialia</i> , <b>2016</b> , 106, 295-303	8.4	45
191	Effect of solid solution hardening and stacking fault energy on plastic flow and acoustic emission in Cu <sub>90</sub> Fe <sub>10</sub> alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2003</b> , 341, 57-73	5.3	45
190	Kinetics of shear banding in a bulk metallic glass monitored by acoustic emission measurements. <i>Philosophical Magazine</i> , <b>2004</b> , 84, 2147-2166	1.6	43
189	What governs ductility of ultrafine-grained metals? A microstructure based approach to necking instability. <i>Acta Materialia</i> , <b>2017</b> , 141, 18-28	8.4	42
188	On the Cyclic Behavior of Ultra-Fine Grained Copper Produced by Equi-Channel Angular Pressing. <i>Materials Science Forum</i> , <b>1999</b> , 312-314, 593-598	0.4	42

187	Mechanical Properties of Ultrafine-Grained Metals: New Challenges and Perspectives. <i>Advanced Engineering Materials</i> , <b>2015</b> , 17, 1710-1722	3.5	41
186	On the reversibility of dislocation slip during cyclic deformation of Al alloys containing shear-resistant particles. <i>Acta Materialia</i> , <b>2011</b> , 59, 3720-3736	8.4	41
185	High-strength and ductile glassy-crystal Ni <sub>40</sub> Co <sub>40</sub> Zr <sub>20</sub> composite exhibiting stress-induced martensitic transformation. <i>Philosophical Magazine</i> , <b>2009</b> , 89, 2887-2901	1.6	41
184	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> , <b>2004</b> , 45, 2187-2191	1.3	40
183	Propagation of shear bands in metallic glasses and transition from serrated to non-serrated plastic flow at low temperatures. <i>Acta Materialia</i> , <b>2010</b> , 58, 6736-6743	8.4	39
182	On shear band velocity and the detectability of acoustic emission in metallic glasses. <i>Scripta Materialia</i> , <b>2010</b> , 63, 89-92	5.6	37
181	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> , <b>2015</b> , 621, 243-251	5.3	36
180	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> , <b>2001</b> , 318, 122-128	5.3	35
179	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> , <b>2002</b> , 82, 317-335		35
178	Continuous acoustic emission during intermittent plastic flow in $\beta$ brass. <i>Scripta Materialia</i> , <b>2012</b> , 66, 745-748	5.6	34
177	Improvement of fatigue strength of a Mg <sub>92</sub> Zn <sub>8</sub> alloy by integrated extrusion and equal-channel angular pressing. <i>Scripta Materialia</i> , <b>2012</b> , 67, 209-212	5.6	34
176	On the limits of acoustic emission detectability for twinning. <i>Materials Letters</i> , <b>2016</b> , 183, 417-419	3.3	33
175	On the Cyclic Response of Ultrafine-Grained Copper. <i>Materials Science Forum</i> , <b>1998</b> , 269-272, 987-992	0.4	31
174	Wavelet based approach to signal activity detection and phase picking: Application to acoustic emission. <i>Signal Processing</i> , <b>2015</b> , 115, 110-119	4.4	30
173	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> , <b>2001</b> , 81, 1427-1446		30
172	Stochastic dislocation kinetics and fractal structures in deforming metals probed by acoustic emission and surface topography measurements. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 233506	2.5	28
171	Microstructural characteristics of pure gold processed by equal-channel angular pressing. <i>Scripta Materialia</i> , <b>2007</b> , 56, 947-950	5.6	28
170	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> , <b>2016</b> , 665, 35-46	5.3	27

169	In situ observations of the kinetics of twinning and dislocation slip in magnesium. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2016</b> , 676, 351-360	5.3	26
168	Evolution of fractal structures in dislocation ensembles during plastic deformation. <i>Physical Review Letters</i> , <b>2012</b> , 108, 205504	7.4	25
167	High Performance Fine-Grained Biodegradable Mg-Zn-Ca Alloys Processed by Severe Plastic Deformation. <i>Metals</i> , <b>2019</b> , 9, 186	2.3	24
166	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> , <b>2018</b> , 709, 330-338	5.3	24
165	Acoustic emission in ultra-fine grained copper. <i>Scripta Materialia</i> , <b>1998</b> , 39, 797-805	5.6	24
164	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> , <b>2001</b> , 319-321, 587-591	5.3	23
163	The Portevin-Le Châtelier Effect in a Metastable Austenitic Stainless Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2016</b> , 47, 59-74	2.3	22
162	Confocal laser scanning microscopy: The technique for quantitative fractographic analysis. <i>Engineering Fracture Mechanics</i> , <b>2017</b> , 183, 147-158	4.2	21
161	Fatigue Crack Growth and Related Microstructure Evolution in Ultrafine Grain Copper Processed by ECAP. <i>Materials Transactions</i> , <b>2012</b> , 53, 101-108	1.3	20
160	On the deformation and fracture behaviour of a Zr-based glassy alloy. <i>Philosophical Magazine</i> , <b>2008</b> , 88, 2979-2987	1.6	20
159	A novel Bayesian approach to acoustic emission data analysis. <i>Ultrasonics</i> , <b>2016</b> , 72, 89-94	3.5	20
158	On the nature of acoustic emission and internal friction during cyclic deformation of metals. <i>Acta Materialia</i> , <b>2014</b> , 70, 8-18	8.4	19
157	Fracture behaviour of ultrafine-grained materials under static and cyclic loading. <i>International Journal of Materials Research</i> , <b>2006</b> , 97, 1566-1570	0.5	19
156	Correlation between Spectral Parameters of Acoustic Emission during Plastic Deformation of Cu and Cu-Al Single and Polycrystals. <i>Materials Transactions, JIM</i> , <b>1995</b> , 36, 426-431		19
155	Influence of the solute concentration on the anelasticity in Mg-Al alloys: A multiple-approach study. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 786, 779-790	5.7	19
154	Fatigue Performance of Mg-Zn-Zr Alloy Processed by Hot Severe Plastic Deformation. <i>Metals</i> , <b>2015</b> , 5, 2316-2327	2.3	18
153	Application of acoustic emission method for investigation of hydrogen embrittlement mechanism in the low-carbon steel. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 645, S460-S463	5.7	18
152	Deformation and Fracture Behavior of Metallic Glassy Alloys and Glassy-Crystal Composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2011</b> , 42, 1504-1510	2.3	18

151	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> , <b>2009</b> , 50, 1924-1929	1.3	18
150	Acoustic Emission Spectrum and Its Orientation Dependence in Copper Single Crystals. <i>Materials Transactions, JIM</i> , <b>1995</b> , 36, 496-503		18
149	Tailoring Microstructure and Properties of Fine Grained Magnesium Alloys by Severe Plastic Deformation. <i>Advanced Engineering Materials</i> , <b>2018</b> , 20, 1700785	3.5	17
148	Influence of alloying with hafnium on the microstructure, texture, and properties of CuZr alloy after equal channel angular pressing. <i>Journal of Materials Science</i> , <b>2016</b> , 51, 5493-5501	4.3	17
147	Dislocation characteristics of shear bands in metallic glasses. <i>Scripta Materialia</i> , <b>2017</b> , 130, 138-142	5.6	16
146	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> , <b>2011</b> , 528, 2602-2609	5.3	16
145	The Effect of the Initial Orientation on Microstructure Development of Copper Single Crystals Subjected to Equal-Channel Angular Pressing. <i>Materials Science Forum</i> , <b>2006</b> , 503-504, 799-804	0.4	16
144	On the corrosion of ZK60 magnesium alloy after severe plastic deformation. <i>Letters on Materials</i> , <b>2017</b> , 7, 421-427	0.9	16
143	Quasi-cleavage hydrogen-assisted cracking path investigation by fractographic and side surface observations. <i>Engineering Fracture Mechanics</i> , <b>2019</b> , 214, 177-193	4.2	15
142	Effect of fracture mode on acoustic emission behavior in the hydrogen embrittled low-alloy steel. <i>Engineering Fracture Mechanics</i> , <b>2019</b> , 210, 342-357	4.2	15
141	Note: High-speed optical imaging powered by acoustic emission triggering. <i>Review of Scientific Instruments</i> , <b>2014</b> , 85, 076103	1.7	15
140	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> , <b>2019</b> , 748, 337-346	5.3	14
139	Phenomenological approach towards modelling the acoustic emission due to plastic deformation in metals. <i>Scripta Materialia</i> , <b>2019</b> , 170, 172-176	5.6	14
138	Acoustic Emission as a Tool for Exploring Deformation Mechanisms in Magnesium and Its Alloys In Situ. <i>Jom</i> , <b>2016</b> , 68, 3057-3062	2.1	14
137	The influence of temporary hydrogenation on ECAP formability and low cycle fatigue life of CP titanium. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 2709-2715	5.7	14
136	Fracture and Fatigue Resistance of Ultrafine Grain CuCrZr Alloy Produced ECAP. <i>Materials Science Forum</i> , <b>2006</b> , 503-504, 811-816	0.4	14
135	Strength Enhancement and Deformation Behavior of Gold after Equal-Channel Angular Pressing. <i>Materials Transactions</i> , <b>2004</b> , 45, 2200-2208	1.3	14
134	The role of structural relaxation in the plastic flow of metallic glasses. <i>Journal of Applied Physics</i> , <b>1998</b> , 83, 5724-5731	2.5	14



133	Crack propagation in <110> oriented copper bicrystals with the $\theta$ and random boundary. <i>Scripta Metallurgica Et Materialia</i> , <b>1995</b> , 32, 427-431		14
132	Inhibiting stress corrosion cracking by removing corrosion products from the Mg-Zn-Zr alloy pre-exposed to corrosion solutions. <i>Acta Materialia</i> , <b>2021</b> , 205, 116570	8.4	14
131	Fatigue Properties of Bulk Nanostructured Materials	481-500	14
130	Probing elementary dislocation mechanisms of local plastic deformation by the advanced acoustic emission technique. <i>Scripta Materialia</i> , <b>2018</b> , 151, 53-56	5.6	13
129	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> , <b>2012</b> , 550, 408-417	5.3	13
128	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> , <b>2017</b> , 101, 371-384	5	13
127	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> , <b>2011</b> , 530, 174-182	5.3	13
126	Structure and Mechanical Properties of Submicrocrystalline Copper Produced by ECAP to Very High Strains. <i>Materials Science Forum</i> , <b>2006</b> , 503-504, 971-976	0.4	13
125	Corrosion, corrosion sous contrainte et fatigue du cuivre à grains ultra-fins élaborés par hypercorroyage. <i>Annales De Chimie: Science Des Materiaux</i> , <b>2002</b> , 27, 65-75	2.1	13
124	Structure and Properties of Cu Alloys Alloying with Cr and Hf after Equal Channel Angular Pressing. <i>Advanced Materials Research</i> , <b>2014</b> , 922, 651-656	0.5	12
123	Effect of grain boundary on acoustic emission during plastic deformation of copper-aluminum bicrystals. <i>Acta Materialia</i> , <b>1996</b> , 44, 2883-2890	8.4	12
122	Effect of dislocation hardening on monotonic and cyclic strength of severely deformed copper. <i>Philosophical Magazine</i> , <b>2012</b> , 92, 666-689	1.6	11
121	Cluster Analysis of Acoustic Emissions Measured during Deformation of Duplex Stainless Steels. <i>Materials Transactions</i> , <b>2013</b> , 54, 532-539	1.3	11
120	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> , <b>2002</b> , 38, 508-516	0.7	11
119	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> , <b>2020</b> , 772, 138744	5.3	11
118	The Use of Confocal Laser Scanning Microscopy for the 3D Quantitative Characterization of Fracture Surfaces and Cleavage Facets.. <i>Procedia Structural Integrity</i> , <b>2016</b> , 2, 533-540	1	11
117	Effect of severe plastic deformation on tensile and fatigue properties of fine-grained magnesium alloy ZK60. <i>Journal of Materials Research</i> , <b>2017</b> , 32, 4362-4374	2.5	10
116	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> , <b>2017</b> , 685, 284-293	5.3	9

115	The Functional Properties of Mg-Zn-X Biodegradable Magnesium Alloys. <i>Materials</i> , <b>2020</b> , 13,	3.5	9
114	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> , <b>2017</b> , 40, 586-596	3	9
113	Fatigue damage evolution in a particulate-reinforced metal matrix composite determined by acoustic emission and compliance method. <i>International Journal of Materials Research</i> , <b>2002</b> , 93, 719-723		9
112	Influence of long-term cold climate operation on structure, fatigue durability and impact toughness of 09Mn2Si pipe steel. <i>Engineering Failure Analysis</i> , <b>2019</b> , 102, 87-101	3.2	8
111	A phenomenological model of twinning-mediated strain hardening. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2020</b> , 780, 139194	5.3	8
110	Influence of energy dissipation at the interphase boundaries on impact fracture behaviour of a plain carbon steel. <i>Theoretical and Applied Fracture Mechanics</i> , <b>2018</b> , 97, 478-499	3.7	8
109	Using acoustic emission signal categorization for reconstruction of wear development timeline in tribosystems: Case studies and application examples. <i>Wear</i> , <b>2018</b> , 410-411, 83-92	3.5	8
108	A Phenomenological Model of Twinning Kinetics . <i>Advanced Engineering Materials</i> , <b>2017</b> , 19, 1600092	3.5	8
107	On the role of dislocation hardening in the monotonic and cyclic strength of severely plastically deformed metals. <i>Scripta Materialia</i> , <b>2009</b> , 61, 817-820	5.6	8
106	Effect of triple junction on fatigue crack growth in copper and copper-3at.% aluminium tricrystals. <i>Scripta Materialia</i> , <b>1997</b> , 36, 417-423	5.6	8
105	A novel predictive model for multiaxial fatigue in carburized bevel gears. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , <b>2021</b> , 44, 2033-2053	3	8
104	Evolution of Mechanical Twinning during Cyclic Deformation of Mg-Zn-Ca Alloys. <i>Metals</i> , <b>2016</b> , 6, 304	2.3	8
103	Localized and homogeneous plastic flow in bulk glassy Pd40Cu30Ni10P20: An acoustic emission study. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 153503	2.5	7
102	On the role of free surface in acoustic emission. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1997</b> , 234-236, 587-590	5.3	7
101	Acoustic Emission in Amorphous Metals. <i>Materials Science Forum</i> , <b>1996</b> , 210-213, 549-556	0.4	7
100	A New Method of Low Amplitude Signal Detection and Its Application in Acoustic Emission. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 73	2.6	7
99	Novel method for in situ damage monitoring during ultrasonic fatigue testing by the advanced acoustic emission technique. <i>International Journal of Fatigue</i> , <b>2021</b> , 142, 105918	5	7
98	Improving of Acoustic Emission Signal Detection for Fatigue Fracture Monitoring. <i>Procedia Engineering</i> , <b>2017</b> , 176, 284-290		6



97	On subsurface initiated failures in marine bevel gears. <i>Engineering Failure Analysis</i> , <b>2020</b> , 110, 104415	3.2	6
96	Irreversible thermodynamics approach to plasticity: dislocation density based constitutive modelling. <i>Materials Science and Technology</i> , <b>2015</b> , 31, 1664-1672	1.5	6
95	On the Effect of Deformation Mode on Fatigue: Simple Shear vs. Pure Shear. <i>Materials Science Forum</i> , <b>2008</b> , 584-586, 797-802	0.4	6
94	Cyclic Stress-Strain Response of Pb-Sn and Zn-Al Eutectic Alloys Fine-Grained by Equal Channel Angular Pressing <b>2000</b> , 289-295		6
93	On Corrosion of Ultra-Fine Grained Copper Produced by Equi-Channel Angular Pressing. <i>Materials Science Forum</i> , <b>1999</b> , 312-314, 641-646	0.4	6
92	Acoustic Emission and Strain Localization in Ultra-Fine Grained Copper Produced by Equi-Channel Angular Pressing. <i>Materials Science Forum</i> , <b>1999</b> , 312-314, 607-614	0.4	6
91	Crack initiation and propagation in <110> oriented copper single crystals under cyclic deformation. <i>Acta Metallurgica Et Materialia</i> , <b>1995</b> , 43, 675-680		6
90	Challenges and Accomplishments in Mechanical Testing Instrumented by In Situ Techniques: Infrared Thermography, Digital Image Correlation, and Acoustic Emission. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 6718	2.6	6
89	Numerical and Experimental Study of Strain Localization in Notched Specimens of a Ductile Steel on Meso- and Macroscales . <i>Advanced Engineering Materials</i> , <b>2016</b> , 18, 2095-2106	3.5	6
88	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> , <b>2017</b> , 40, 1838-1853	3	5
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