## Elena D Tabachnikova

## List of Publications by Citations

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69 papers 15 29 g-index

70 1,016 2.2 3.7 ext. papers ext. citations avg, IF L-index

#	Paper	IF	Citations
69	Fatigue behavior of nanocrystalline metals and alloys. <i>International Journal of Fatigue</i> , <b>2005</b> , 27, 1147-1	158	204
68	Shear band melting and serrated flow in metallic glasses. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 031907	3.4	100
67	Temperature Effects on Deformation and Serration Behavior of High-Entropy Alloys (HEAs). <i>Jom</i> , <b>2014</b> , 66, 2002-2008	2.1	62
66	New features of the low temperature ductile shear failure observed in bulk amorphous alloys. <i>Journal of Materials Science</i> , <b>2000</b> , 35, 4449-4457	4.3	55
65	Deformation-induced phase transformation of Co 20 Cr 26 Fe 20 Mn 20 Ni 14 high-entropy alloy during high-pressure torsion at 77 K. <i>Materials Letters</i> , <b>2017</b> , 202, 86-88	3.3	40
64	Mechanical properties of the CoCrFeNiMnV x high entropy alloys in temperature range 4.2B00IK. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 698, 501-509	5.7	36
63	Microstructure and Mechanical Properties of High-Entropy Alloy CoCrFeMnNi Processed by High-Pressure Torsion at 77 K and 300 K. <i>Scientific Reports</i> , <b>2018</b> , 8, 11074	4.9	30
62	The contribution of grain boundary dislocations to the plastic deformation of nanostructured titanium from the SD-effect of the yield stress. <i>Materials Science &amp; Discourse Materials: Properties, Microstructure and Processing</i> , <b>2001</b> , 309-310, 524-527	5.3	28
61	Microstructure and mechanical properties of high purity nanostructured titanium processed by high pressure torsion at temperatures 300 and 77 K. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 4689-4697	4.3	26
60	Cryogenic equal channel angular pressing of commercially pure titanium: microstructure and properties. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 6803-6812	4.3	25
59	Mechanical properties and thermally activated plasticity of the Ti30Zr25Hf15Nb20Ta10 high entropy alloy at temperatures 4.2B50 K. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 710, 136-141	5.3	21
58	Low-temperature deformation and fracture of bulk nanostructural titanium obtained by intense plastic deformation using equal channel angular pressing. <i>Low Temperature Physics</i> , <b>2002</b> , 28, 864-874	0.7	20
57	Low-temperature plasticity anomaly in the bulk metallic glass Zr64.13Cu15.75Ni10.12Al10. <i>Low Temperature Physics</i> , <b>2008</b> , 34, 675-677	0.7	19
56	Possible local superplasticity of amorphous metallic alloys in the catastrophic shear band under low temperature ductile shear failure. <i>Scripta Materialia</i> , <b>1996</b> , 35, 781-784	5.6	19
55	Plastic dynamics of the Al0.5CoCrCuFeNi high entropy alloy at cryogenic temperatures: Jerky flow, stair-like fluctuation, scaling behavior, and non-chaotic state. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 251905	3.4	17
54	Thermal activation plasticity of nanocrystalline Ni🛮 8.75 at. % Fe alloy in temperature range 4.2 🛮 50 K. Low Temperature Physics, <b>2012</b> , 38, 239-247	0.7	15
53	Temperature-dependent mechanical behavior of a nanostructured NiBe alloy. <i>Materials Science</i> & amp; Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 493, 93-96	5.3	15

## (2009-2014)

52	Variation of the deformation mechanisms in a nanocrystalline Pdfl0at.% Au alloy at room and cryogenic temperatures. <i>International Journal of Plasticity</i> , <b>2014</b> , 60, 40-57	7.6	12	
51	Mechanical properties of the high-entropy alloy Al0.5CoCrCuFeNi in various structural states at temperatures of 0.5B00 K. <i>Low Temperature Physics</i> , <b>2017</b> , 43, 1108-1118	0.7	12	
50	Effect of carbon content and annealing on structure and hardness of CrFe2NiMnV0.25 high-entropy alloys processed by high-pressure torsion. <i>Journal of Materials Science</i> , <b>2018</b> , 53, 11813-11822	4.3	12	
49	Mechanical properties of ultrafine-grain zirconium in the temperature range 4.2B00K. <i>Low Temperature Physics</i> , <b>2008</b> , 34, 969-975	0.7	11	
48	Failure crack orientation at ductile shear fracture of Fe80⊠ Ni x B20 metallic glass ribbons. <i>Journal of Materials Science</i> , <b>1990</b> , 25, 1598-1602	4.3	11	
47	Anomalous Evolution of Strength and Microstructure of High-Entropy Alloy CoCrFeNiMn after High-Pressure Torsion at 300 and 77 K. <i>Advanced Engineering Materials</i> , <b>2020</b> , 22, 1900752	3.5	11	
46	Low-temperature fracture toughness of some iron, nickel-based metallic glass ribbons. <i>Journal of Materials Science</i> , <b>1987</b> , 22, 3732-3736	4.3	8	
45	The effect, studied by SANS, of rapid quenching from ambient to subambient temperatures on the microstructure of some metallic glass ribbons. <i>Applied Physics A: Materials Science and Processing</i> , <b>2002</b> , 74, s1131-s1135	2.6	7	
44	Low Temperature Ductile Shear Failure of Zr41.2Ti13.8Ni10Cu12.5Be22.5 and Cu50Zr35Ti8Hf5Ni2 Bulk Amorphous Alloys. <i>Materials Science Forum</i> , <b>2000</b> , 343-346, 197-202	0.4	7	
43	Strain hardening and microstructure evolution during uniaxial compression of ultrafine grained zirconium at temperatures of 4.2B00 K. <i>Low Temperature Physics</i> , <b>2011</b> , 37, 609-617	0.7	6	
42	Mechanical properties of nanocrystalline Ni-20%Fe alloy at temperatures from 300 to 4.2K. <i>Materials Science &amp; Microstructure and Processing</i> , <b>2009</b> , 503, 110-113	5.3	6	
41	Strain-Rate Sensitivity and Failure Peculiarities in Compression of the Nanocrystalline Ni-20 Pct Fe Alloy at Low Temperatures. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2010</b> , 41, 848-853	2.3	6	
40	Microscopic mechanism of the effect of composition and topological orders of metal glasses on plastic shear resistance. <i>Low Temperature Physics</i> , <b>1997</b> , 23, 1004-1009	0.7	6	
39	Fracture toughness of amorphous Fe40Ni40B20 ribbons: strain rate dependence. <i>Journal of Materials Science Letters</i> , <b>1990</b> , 9, 529-531		6	
38	Experimental investigation and comparative analysis of Ni-18.75 at. % Fe alloy plasticity, in coarse-grained and nano-crystalline states in the 4.2B50 K temperature range. <i>Low Temperature Physics</i> , <b>2014</b> , 40, 1104-1111	0.7	5	
37	Temperature dependent mechanical properties and thermal activation plasticity of nanocrystalline and coarse grained Ni-18.75 at.% Fe alloy. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2014</b> , 63, 012105	0.4	5	
36	Effect of counterpressure during equal-channel angular pressing on nanoporosity formation in ultrafine-grained copper. <i>Technical Physics Letters</i> , <b>2011</b> , 37, 767-768	0.7	5	
35	Mechanical characteristics, failure regularities, and dimple structures on failure surfaces of TiBAlBV ELIDITERIAL Science & Camp; Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 503, 106-109	5.3	5	

34	Low Temperature Mechanical Properties of Different Commercial Purity Nanostructured Titanium Processed by ECA Pressing. <i>Materials Science Forum</i> , <b>2006</b> , 503-504, 633-638	0.4	5
33	Temperature and Strain Rate Effects on Work-Hardening of KCl Single Crystals. <i>Crystal Research and Technology: Journal of Experimental and Industrial Crystallography</i> , <b>1974</b> , 9, 1187-1197		4
32	Thermally activated deformation of nanocrystalline and coarse grained CoCrFeNiMn high entropy alloy in the temperature range 4.2B50 K. <i>Low Temperature Physics</i> , <b>2018</b> , 44, 976-982	0.7	4
31	Unraveling the discontinuous plastic flow of a Co-Cr-Fe-Ni-Mo multiprincipal-element alloy at deep cryogenic temperatures. <i>Physical Review Materials</i> , <b>2021</b> , 5,	3.2	4
30	Microstructure and Properties of Nanostructured Zirconium Processed by High Pressure Torsion. <i>Materials Science Forum</i> , <b>2010</b> , 667-669, 433-438	0.4	3
29	Anomalous decrease of propagation rate of the macroscopic shear band in the Zr-based bulk metallic glasses at temperatures 170 and 77K. <i>Journal of Alloys and Compounds</i> , <b>2010</b> , 495, 345-347	5.7	3
28	Magnetic and electrical investigations of Fe85-xCoxB15 metallic glasses. <i>Applied Physics A: Materials Science and Processing</i> , <b>2004</b> , 79, 1947-1953	2.6	3
27	Monotonic and jumpwise deformation of bulk amorphous Zr46.8Ti8Cu7.5Ni10Be27.5 alloy in nanoindentation. <i>Crystallography Reports</i> , <b>2005</b> , 50, 291-296	0.6	3
26	Mechanical behavior of nanostructured metals and alloys in the 300\( \textit{L}\). 2 K temperature interval. International Journal of Materials Research, <b>2007</b> , 98, 339-345	0.5	3
25	Singularity of Some Low Temperature Physical Properties of Fe100-xBx Metallic Glasses of the Eutectic Composition. <i>Materials Science Forum</i> , <b>1996</b> , 225-227, 21-26	0.4	2
24	Microstructure features of failure and mechanical properties of ultra-fine grained TiBALAV ELI alloy at 300🛮 7 K. International Journal of Mechanics and Materials in Design, 2008, 4, 189-195	2.5	2
23	Microstructural features of failure surfaces and low-temperature mechanical properties of Ti-6Al-4V ELI ultra-fine grained alloy. <i>Strength of Materials</i> , <b>2008</b> , 40, 71-74	0.6	2
22	Jump-Like Deformation of Zr46,8Ti8Cu7,5Ni10Be27,5 Bulk Amorphous Alloy. <i>Journal of Metastable and Nanocrystalline Materials</i> , <b>2005</b> , 24-25, 89-92	0.2	2
21	On extending dislocation notions to the amorphous state of solids. <i>Materials Science &amp; amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2001</b> , 309-310, 544-547	5.3	2
20	Low Temperature Plasticity and Failure of a Bulk Cu50Zr35Ti8Hf5Ni2 Metallic Glass. <i>Materials Science Forum</i> , <b>1996</b> , 225-227, 107-112	0.4	2
19	Comparison of different dislocation representations of the yield strength of a monocrystal. <i>Soviet Physics Journal (English Translation of Izvestiia Vysshykh Uchebnykh Zavedenii, Fizika)</i> , <b>1984</b> , 27, 493-498		2
18	Conchoidal Fracture of Zr- and Mg-Based Amorphous Glass. <i>Materials Science Forum</i> , <b>2017</b> , 891, 504-508	30.4	1
17	Failure of Zr50Ti16.5Cu15Ni18.5 amorphous metallic ribbon. Strength of Materials, 2008, 40, 20-23	0.6	1

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16	Influence of Thermal Treatment of Ni-P Melt on Structure of Amorphous Alloys. <i>European Physical Journal D</i> , <b>2004</b> , 54, 133-136		1
15	Anomalies of Mechanical and Physical Properties of the Fe83B17 Eutectic Metallic Glass and their Connection with the Peculiarities of Nanoclusterous Structure. <i>Materials Science Forum</i> , <b>2000</b> , 343-346, 43-48	0.4	1
14	On Causes of High Local Plasticity of a Bulk Cu50Zr35Ti8Hf5Ni2 Amorphous Alloy during Low Temperature Shear Failure under Compression. <i>Key Engineering Materials</i> , <b>1995</b> , 97-98, 103-108	0.4	1
13	Equal channel angular pressing at temperatures of 77-575 K of Titanium Grade 2: Microstructure and mechanical properties. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2014</b> , 63, 012071	0.4	1
12	Temperature Dependent Yield Strength, Strain Hardening and Failure of the CoCrFeNiMnVx High Entropy Alloys. <i>Materials Science Forum</i> , <b>2017</b> , 891, 438-443	0.4	
11	Fragmentation of Co-Fe-Ta-B Soft Magnetic Amorphous Alloy. <i>Acta Physica Polonica A</i> , <b>2015</b> , 127, 558-5	<b>60</b> 6	
10	Generation of Nanoscale Stripes at Failure of Amorphous Metals. <i>Key Engineering Materials</i> , <b>2015</b> , 662, 221-224	0.4	
9	Deformation and Failure of Ultrafine-Grained Cu at Subambient Temperature. <i>Materials Science Forum</i> , <b>2017</b> , 891, 249-253	0.4	
8	Structure and properties of nanostructured Cobalt processed by high pressure torsion at temperatures of 300 and 77 K. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2014</b> , 63, 01210	<del>3</del> ·4	
7	Local Deformation of Microsized Amorphous Powder at Low Temperatures. <i>Key Engineering Materials</i> , <b>2013</b> , 586, 210-213	0.4	
6	Low Temperature Failure of Fe76Ni2Si9B13 Compacted from Amorphous Glass Powder. <i>Key Engineering Materials</i> , <b>2009</b> , 409, 358-361	0.4	
5	Strength and Plasticity of Ultra-Fine Grained Zirconium at Low Temperatures. <i>Materials Science Forum</i> , <b>2008</b> , 584-586, 452-457	0.4	
4	Effect of compositional order upon ductile shear failure and structural relaxation of Fe(80🛘)NixB20 metallic glass ribbons. <i>Materials Science &amp; amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2003</b> , 355, 88-95	5.3	
3	Temperature dependence for the compressive strength of materials prepared by impact compression of rapidly quenched powders. <i>Combustion, Explosion and Shock Waves</i> , <b>1989</b> , 24, 499-502	1	
2	Physical-Mechanical Properties of the 54.6Nil 1Fe BOCr B.5Nb D.5Ti D.4C and 58Nil 1Fe BOCr D.5Nb D.5Ti Alloys in the Low-Temperature Region. <i>Metallofizika I Noveishie Tekhnologii</i> , <b>2018</b> , 40, 1051-1067	0.5	
1	Low Temperature Failure of Al90Fe7Ta3Amorphous Alloys. <i>Acta Physica Polonica A</i> , <b>2010</b> , 118, 823-824	0.6	