Artur Shugurov

List of Publications by Year
in descending order

68	587	566801 15	676716 22
papers	citations	h-index	g-index

69	69	69	472
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The effect of crystallographic grain orientation of polycrystalline Ti on ploughing under scratch testing. Wear, 2018, 408-409, 214-221.	1.5	45
2	PECVD synthesis, optical and mechanical properties of silicon carbon nitride films. Applied Surface Science, 2015, 339, 102-108.	3.1	40
3	Mechanical properties and tribological behavior of magnetron sputtered TiAlN/TiAl multilayer coatings. Surface and Coatings Technology, 2018, 353, 254-262.	2.2	39
4	Numerical study of atomic scale deformation mechanisms of Ti grains with different crystallographic orientation subjected to scratch testing. Applied Surface Science, 2019, 471, 318-327.	3.1	36
5	Mechanical Properties of Thin Ag Films on a Silicon Substrate Studied Using the Nanoindentation Technique. Physics of the Solid State, 2005, 47, 2055.	0.2	32
6	Mesoscopic Structural States at the Nanoscale in Surface Layers of Titanium and Its Alloy Ti-6Al-4V in Ultrasonic and Electron Beam Treatment. Physical Mesomechanics, 2019, 22, 345-354.	1.0	30
7	Specific features of the determination of the mechanical characteristics of thin films by the nanoindentation technique. Physics of the Solid State, 2008, 50, 1050-1055.	0.2	25
8	Scale invariance of structural transformations in plastically deformed nanostructured solids. Physical Mesomechanics, 2017, 20, 55-68.	1.0	23
9	Study of crack resistance of TiAlN coatings by scratch testing. Physical Mesomechanics, 2017, 20, 185-192.	1.0	19
10	The role of nanoscale strain-induced defects in the sharp increase of low-temperature toughness in low-carbon and low-alloy steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 768, 138491.	2.6	19
11	The Role of Grain Boundaries in Rotational Deformation in Polycrystalline Titanium under Scratch Testing. Physical Mesomechanics, 2019, 22, 365-374.	1.0	19
12	Effect of the nanostructuring of a Cu substrate on the fracture of heat-resistant Si-Al-N coatings during uniaxial tension. Technical Physics, 2012, 57, 779-786.	0.2	18
13	Tuning of mechanical properties of Ti1â^'xAlxN coatings through Ta alloying. Surface and Coatings Technology, 2020, 382, 125219.	2.2	16
14	Mechanisms of Stress Generation in Thin Films and Coatings. Technical Physics, 2020, 65, 1881-1904.	0.2	16
15	Wrinkling of the metalâ€“polymer bilayer: the effect of periodical distribution of stresses and strains. RSC Advances, 2014, 4, 7389.	1.7	15
16	Chemical bonding analysis in Ti1â€“â€“Al Ta N solid solutions. Surface and Coatings Technology, 2020, 395, 125802.	2.2	15
17	Fractal analysis of electromigration-induced changes of surface topography in Au conductor lines. Surface Science, 2003, 524, 191-198.	0.8	14
18	Effect of Nanoscale Mesoscopic Structural States Associated with Lattice Curvature on the Mechanical Behavior of Fe-Cr-Mn Austenitic Steel. Physical Mesomechanics, 2019, 22, 382-391.	1.0	14

#	Article	IF	Citations
19	Mechanisms of periodic deformation of the film-substrate system under compressive stress. Physical Mesomechanics, 2010, 13, 79-87.	1.0	12
20	The effect of phase transformations on the recovery of pulsed electron beam irradiated Ti-6Al-4V titanium alloy during scratching. Journal of Alloys and Compounds, 2019, 795, 275-283.	2.8	11
21	Scaling effects in structural-phase self-organization at the â€œthin film - substrateâ€•interface. Physical Mesomechanics, 2007, 10, 117-128.	1.0	9
22	Sclerometric study of galvanic AuNi and AuCo coatings. Technical Physics Letters, 2011, 37, 223-225.	0.2	9
23	Structural modification of TiAlN coatings by preliminary Ti Ion bombardment of a steel substrate. Technical Physics, 2016, 61, 409-415.	0.2	9
24	Recovery of Scratch Grooves in Ti-6Al-4V Alloy Caused by Reversible Phase Transformations. Metals, 2020, 10, 1332.	1.0	9
25	Molecular dynamics study of dislocation-twin boundary interaction in titanium subjected to scratching. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 800, 140327.	2.6	9
26	The role of stress distribution at the film/barrier interface in formation of copper silicides. Semiconductors, 2010, 44, 116-122.	0.2	8
27	Mechanical and tribological properties of Ti-Al-Ta-N/TiAl and Ti-Al-Ta-N/Ta multilayer coatings deposited by DC magnetron sputtering. Surface and Coatings Technology, 2022, 441, 128582.	2.2	8
28	Deformation Behavior of Wrought and EBAM Ti-6Al-4V under Scratch Testing. Metals, 2021, 11, 1882.	1.0	7
29	Effect of Ta alloying on isothermal oxidation behavior of DC magnetron sputtered Ti1-xAlxN coatings on titanium substrate. Surface and Coatings Technology, 2021, 421, 127488.	2.2	6
30	Microstructure and Mechanical Properties of Titanium Alloys. Metals, 2021, 11, 1617.	1.0	6
31	Fractal analysis of the evolution of friction surfaces of galvanic AuNi coatings. Technical Physics Letters, 2012, 38, 484-487.	0.2	5
32	Effect of local curvature of internal and external interfaces on mass transfer responsible for thin film degradation. Physical Mesomechanics, 2013, 16, 348-354.	1.0	5
33	Wear of electroplated gold-based coatings. Physical Mesomechanics, 2016, 19, 407-419.	1.0	5
34	Effect of local curvature of the coating-substrate interface on deformation and fracture of ceramic coatings under uniaxial tension. Physical Mesomechanics, 2017, 20, 472-479.	1.0	5
35	Multi-level deformation of thin films caused by stressâ€“strain distribution at the film-substrate interface. Procedia Engineering, 2009, 1, 23-26.	1.2	4
36	Effect of the number of layers in Zr-Y-O/Si-Al-N multilayer coatings on their mechanical properties and wear resistance. Journal of Friction and Wear, 2014, 35, 426-433.	0.1	4

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37	Improvement of Thermal Cycling Resistance of AlxSi1â^'xN Coatings on Cu Substrates by Optimizing Al/Si Ratio. Materials, 2019, 12, 2249.	1.3	3
38	Effect of sulfur and selenium on the surface relief of insulating films and electrical characteristics of metal-insulator-p-GaAs structures. Semiconductors, 2001, 35, 80-85.	0.2	2
39	Elastic deformation of Ti films during alternating bending. Technical Physics, 2010, 55, 1583-1587.	0.2	2
40	The Influence of Nitrogen Partial Pressure on the Composition, Microstructure, and Mechanical Characteristics of Ti1 â€“xâ€“yAlxTĐ°yN Coatings Obtained by Reactive Magnetron Sputtering. Technical Physics Letters, 2019, 45, 418-422.	0.2	2
41	Effect of Ta Content on Scratching Behavior of Ti-Al-Ta-N Coatings on Titanium Substrate. Metals, 2022, 12, 1017.	1.0	2
42	Grain growth and thermal stability of Ag thin films. , 0, , .		1
43	Viscoelastic wrinkling in compression-stressed metal film-polymer sublayer system. Technical Physics Letters, 2011, 37, 896-899.	0.2	1
44	Strain mechanisms in annealed thin copper films on a viscoelastic sublayer. Physical Mesomechanics, 2011, 14, 49-56.	1.0	1
45	Effect of a hard sublayer on contact interaction and wear behavior of electrodeposited gold-based coatings. , 2014, , .		1
46	Mechanisms of stress generation and relaxation in thin films and coatings. AIP Conference Proceedings, 2014, , .	0.3	1
47	The study of crack resistance of TiAlN coatings under mechanical loading and thermal cycle testing. AIP Conference Proceedings, 2015, , .	0.3	1
48	The effect of laser treatment of WC-Co coatings on their failure under thermal cycling. AIP Conference Proceedings, 2016, , .	0.3	1
49	Investigation of adhesive behavior of Ti-Al-N/Ti-Al multilayers by scratch testing. AIP Conference Proceedings, 2018, , .	0.3	1
50	Surface Morphology, Microstructure and Mechanical Properties of Thin Ag Films. Journal of Korean Powder Metallurgy Institute, 2003, 10, 190-194.	0.2	1
51	Fracture toughness and oxidation resistance of Ti-Al-N coatings on stainless steel substrates. AIP Conference Proceedings, 2016, , .	0.3	1
52	Smoothening of thin film surfaces. , 0, , .		0
53	Effect of dopants and interlayers on the growth of thin insulating films. Theoretical and Applied Fracture Mechanics, 2001, 36, 51-56.	2.1	0
54	Electromigration-induced damage of Au conductor lines. , 0, , .		0

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55	Measuring complex for thin films degradation investigations under various external actions. , 0, , .		0
56	The effect of coating/substrate interface curvature on fracture of Si-Al-N coatings subjected to mechanical loading. AIP Conference Proceedings, 2015, , .	0.3	0
57	Improvement of the wear resistance of electroplated Au-Ni coatings by Zr ion bombardment of Ni-B sublayer. AIP Conference Proceedings, 2015, , .	0.3	0
58	Effects of nitrogen and argon ion implantations on surface morphology, microstructure, and mechanical properties of Ti-Al-N coatings. AIP Conference Proceedings, 2017, , .	0.3	0
59	The effect of Al intermediate layer on thermal resistance of EB-PVD yttria-stabilized zirconia coatings on titanium substrate. AIP Conference Proceedings, 2017, , .	0.3	0
60	Scratch testing of polycrystalline titanium. AIP Conference Proceedings, 2018, , .	0.3	0
61	Enhancement of thermal cycling resistance of EB-PVD YSZ and CeO2 thermal barrier coatings by deposition of a Ni-Al bond coat. AIP Conference Proceedings, 2018, , .	0.3	0
62	Numerical study of plastic ploughing of nanosized polycrystalline titanium under scratching. AIP Conference Proceedings, 2018, , .	0.3	0
63	The effect of deposition parameters on microstructure and mechanical properties of Ti-Al-Ta-N coatings. AIP Conference Proceedings, 2018, , .	0.3	0
64	Elastic recovery of nanostructured surface layer of Ti-6Al-4V titanium alloy after scratch-test. Journal of Physics: Conference Series, 2018, 1115, 032056.	0.3	0
65	Effect of microstructure on mechanical properties and deformation behavior of Tiâ€“6Alâ€“4V alloy during scratch testing. AIP Conference Proceedings, 2019, , .	0.3	0
66	Effect of Ta content on fracture of Ti1â€“xâ€“yAlxTayN coatings under uniaxial tension. AIP Conference Proceedings, 2019, , .	0.3	0
67	Investigation of oxidation resistance of Ti1â€“xAlxN/Ti1â€“xAlx multilayers. AIP Conference Proceedings, 2019, , .	0.3	0
68	The Effect of Multilayer Architecture and Ta Alloying on the Mechanical Performance of Ti-Al-N Coatings under Scratching and Uniaxial Tension. Metals, 2021, 11, 1307.	1.0	0