Andrey I Dmitriev

List of Publications by Citations

34 papers	273 citations	11 h-index	15 g-index
45 ext. papers	411 ext. citations	3.5 avg, IF	3.88 L-index

#	Paper	IF	Citations
34	The Role of Solid Lubricants for Brake Friction Materials. *Lubricants*, **2016**, 4, 5	3.1	40
33	The effect of crystallographic grain orientation of polycrystalline Ti on ploughing under scratch testing. *Wear*, **2018**, 408-409, 214-221	3.5	23
32	Regulating microstructures of interpenetrating polyurethane-epoxy networks towards high-performance water-lubricated bearing materials. *Tribology International*, **2019**, 131, 454-464	4.9	20
31	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	6.7	19
30	Mesoscale modeling of the mechanical and tribological behavior of a polymer matrix composite based on epoxy and 6vol.% silica nanoparticles. *Computational Materials Science*, **2015**, 110, 204-214	3.2	15
29	MD Sliding Simulations of Amorphous Tribofilms Consisting of either SiO2 or Carbon. *Lubricants*, **2016**, 4, 24	3.1	15
28	Modeling of the stress□train behavior of an epoxy-based nanocomposite filled with silica nanoparticles. *Materials and Design*, **2016**, 89, 950-956	8.1	13
27	Numerical Simulation of Mechanically Mixed Layer Formation at Local Contacts of an Automotive Brake System. *Tribology Transactions*, **2008**, 51, 810-816	1.8	13
26	Molecular dynamics sliding simulations of amorphous Ni, Ni-P and nanocrystalline Ni films. *Computational Materials Science*, **2017**, 129, 231-238	3.2	12
25	Universal limiting shape of worn profile under multiple-mode fretting conditions: theory and experimental evidence. *Scientific Reports*, **2016**, 6, 23231	4.9	11
24	Assessment of Sliding Friction of a Nanostructured Solid Lubricant Film by Numerical Simulation with the Method of Movable Cellular Automata (MCA). *Tribology Letters*, **2014**, 54, 257-262	2.8	11
23	Effect of elastic grading on fretting wear. *Scientific Reports*, **2019**, 9, 7791	4.9	8
22	Role of hydrolysable nanoparticles on tribological performance of PPS-steel sliding pair lubricated with sea water. *Tribology International*, **2018**, 127, 147-156	4.9	8
21	Some Considerations on the Role of Third Bodies during Automotive Braking. *SAE International Journal of Passenger Cars - Mechanical Systems*, **2014**, 7, 1287-1294	0.3	8
20	Crystallographic and Geometric Factors in the Shear Development in FCC Single Crystals: Molecular Dynamics Simulation and Experimental Study. *Crystals*, **2020**, 10, 666	2.3	7
19	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	5.3	7
18	Recovery of Scratch Grooves in Ti-6Al-4V Alloy Caused by Reversible Phase Transformations. *Metals* , **2020**, 10, 1332	2.3	5

17	Molecular Dynamics Modeling of the Sliding Performance of an Amorphous Silica Nano-Layer□The Impact of Chosen Interatomic Potentials. *Lubricants*, **2018**, 6, 43	3.1	4
16	Acoustic emission characterization of sliding wear under condition of direct and inverse transformations in low-temperature degradation aged Y-TZP and Y-TZP-AL2O3. *Friction*, **2018**, 6, 323-340	5.6	4
15	VERIFICATION OF RABINOWICZ□CRITERION BY DIRECT MOLECULAR DYNAMICS MODELING. *Facta Universitatis, Series: Mechanical Engineering*, **2019**, 17, 207	3.2	3
14	Transformations of the Microstructure and Phase Compositions of Titanium Alloys during Ultrasonic Impact Treatment. Part I. Commercially Pure Titanium. *Metals*, **2021**, 11, 562	2.3	3
13	Advances in Laser Additive Manufacturing of Ti-Nb Alloys: From Nanostructured Powders to Bulk Objects. *Nanomaterials*, **2021**, 11,	5.4	3
12	Numerical Study and Experimental Validation of Deformation of FCC CuAl Single Crystal Obtained by Additive Manufacturing. *Metals*, **2021**, 11, 582	2.3	3
11	Mass Transfer at Atomic Scale in MD Simulation of Friction Stir Welding. *Key Engineering Materials*, **2016**, 683, 626-631	0.4	3
10	Suppression of wear in dry sliding friction induced by negative thermal expansion. *Physical Review E* , **2020**, 102, 042801	2.4	2
9	Multiscale modeling of low friction sliding behavior of a hybrid epoxy-matrix nanocomposite. *Procedia Structural Integrity*, **2016**, 2, 2347-2354	1	2
8	Potential of different nickel coatings for optimizing the sliding behavior of electrical connectors. *Tribology International*, **2018**, 120, 491-501	4.9	1
7	Effect of adhesion transfer on the surface pattern regularity in nanostructuring burnishing **2016**,		1
6	Stress and strain analysis of steel subsurface layers under nanostructuring burnishing **2015**,		1
5	Calculation of the effective diffusion coefficient for random wear surface migration on different scales. *Physical Mesomechanics*, **2012**, 15, 333-336	1.6	1
4	The effect of ultrasonic impact treatment on deformation and fracture of electron beam additive manufactured Ti-6Al-4V under uniaxial tension. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 832, 142458	5.3	1
3	Analysis of the Quasi-Static and Dynamic Fracture of the Silica Refractory Using the Mesoscale Discrete Element Modelling. *Materials*, **2021**, 14,	3.5	1
2	The final NO-WEAR state due to dual-mode fretting: Numerical prediction and experimental validation. *Wear*, **2020**, 458-459, 203402	3.5	1
1	Transformations of the Microstructure and Phase Compositions of Titanium Alloys during Ultrasonic Impact Treatment Part II: Ti-6Al-4V Titanium Alloy. *Metals*, **2022**, 12, 732	2.3	0