

Sergei Glavatskih

List of Publications by Year in descending order

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54
papers

1,602
citations

236833

25
h-index

315616

38
g-index

55
all docs

55
docs citations

55
times ranked

1088
citing authors

#	ARTICLE	IF	CITATIONS
1	Boron in Tribology: From Borates to Ionic Liquids. Tribology Letters, 2013, 51, 281-301.	1.2	152
2	Novel halogen-free chelated orthoborate- α -phosphonium ionic liquids: synthesis and tribophysical properties. Physical Chemistry Chemical Physics, 2011, 13, 12865.	1.3	147
3	Pressure Buildup Mechanism in a Textured Inlet of a Hydrodynamic Contact. Journal of Tribology, 2008, 130, .	1.0	62
4	Halogen-free pyrrolidinium bis(mandelato)borate ionic liquids: some physicochemical properties and lubrication performance as additives to polyethylene glycol. RSC Advances, 2014, 4, 30617-30623.	1.7	59
5	Atomistic Insight into Orthoborate-Based Ionic Liquids: Force Field Development and Evaluation. Journal of Physical Chemistry B, 2014, 118, 8711-8723.	1.2	57
6	A cavitation algorithm for arbitrary lubricant compressibility. Tribology International, 2007, 40, 1294-1300.	3.0	55
7	Tribotronics- α -Towards active tribology. Tribology International, 2008, 41, 934-939.	3.0	54
8	Interfacial Antiwear and Physicochemical Properties of Alkylborate-dithiophosphates. ACS Applied Materials & Interfaces, 2011, 3, 956-968.	4.0	48
9	Nonlinear dynamic behaviour of vertical and horizontal rotors in compliant liner tilting pad journal bearings: Some design considerations. Tribology International, 2015, 82, 142-152.	3.0	42
10	Tribology of polypropylene and Li-complex greases with ZDDP and MoDTC additives. Tribology International, 2018, 118, 189-195.	3.0	41
11	Interfacial structuring of non-halogenated imidazolium ionic liquids at charged surfaces: effect of alkyl chain length. Physical Chemistry Chemical Physics, 2020, 22, 8450-8460.	1.3	41
12	Synthesis, Physicochemical, and Tribological Characterization of α -Di-n-octoxyboron- α -O, α -O- α -di-n-octyldithiophosphate. ACS Applied Materials & Interfaces, 2009, 1, 2835-2842.	4.0	39
13	A comparative linear and nonlinear dynamic analysis of compliant cylindrical journal bearings. Mechanism and Machine Theory, 2013, 64, 80-92.	2.7	39
14	Halogen-free chelated orthoborate ionic liquids and organic ionic plastic crystals. Journal of Materials Chemistry, 2012, 22, 6928.	6.7	38
15	Atomistic Insight into Tetraalkylphosphonium-Bis(oxalato)borate Ionic Liquid/Water Mixtures. I. Local Microscopic Structure. Journal of Physical Chemistry B, 2015, 119, 5251-5264.	1.2	38
16	THD analysis of compliant journal bearings considering liner deformation. Tribology International, 2011, 44, 1629-1641.	3.0	36
17	Rough surface flow factors in full film lubrication based on a homogenization technique. Tribology International, 2007, 40, 1025-1034.	3.0	35
18	Electro-responsivity of ionic liquid boundary layers in a polar solvent revealed by neutron reflectance. Journal of Chemical Physics, 2018, 148, 193806.	1.2	33

#	ARTICLE	IF	CITATIONS
19	Novel Alkylborateâ€“Dithiocarbamate Lubricant Additives: Synthesis and Tribophysical Characterization. Tribology Letters, 2012, 45, 67-78.	1.2	30
20	3D thermohydrodynamic analysis of a textured slider. Tribology International, 2009, 42, 1487-1495.	3.0	29
21	Weighing the surface charge of an ionic liquid. Nanoscale, 2015, 7, 16039-16045.	2.8	28
22	Acceleration of diffusion in ethylammonium nitrate ionic liquid confined between parallel glass plates. Physical Chemistry Chemical Physics, 2017, 19, 25853-25858.	1.3	28
23	The effect of the cation alkyl chain length on density and diffusion in dialkylpyrrolidinium bis(mandelato)borate ionic liquids. Physical Chemistry Chemical Physics, 2014, 16, 26798-26805.	1.3	27
24	Atomistic Insight into Tetraalkylphosphonium Bis(oxalato)borate Ionic Liquid/Water Mixtures. 2. Volumetric and Dynamic Properties. Journal of Physical Chemistry B, 2016, 120, 7446-7455.	1.2	27
25	NMR self-diffusion study of a phosphonium bis(mandelato)borate ionic liquid. Physical Chemistry Chemical Physics, 2013, 15, 9281.	1.3	25
26	Solvation structures of water in trihexyltetradecylphosphonium-orthoborate ionic liquids. Journal of Chemical Physics, 2016, 145, .	1.2	25
27	Electro-Responsive Surface Composition and Kinetics of an Ionic Liquid in a Polar Oil. Langmuir, 2019, 35, 15692-15700.	1.6	25
28	Influence of pad compliance on nonlinear dynamic characteristics of tilting pad journal bearings. Tribology International, 2013, 57, 46-53.	3.0	24
29	Dynamic characteristics of compliant journal bearings considering thermal effects. Tribology International, 2016, 94, 288-305.	3.0	24
30	Steady State Performance Characteristics of a Tilting Pad Thrust Bearing. Journal of Tribology, 2001, 123, 608-615.	1.0	23
31	Self-diffusion of phosphonium Bis(Salicylato)Borate ionic liquid in pores of Vycor porous glass. Microporous and Mesoporous Materials, 2016, 230, 128-134.	2.2	23
32	Non-halogenated Ionic Liquid Dramatically Enhances Tribological Performance of Biodegradable Oils. Frontiers in Chemistry, 2019, 7, 98.	1.8	21
33	Structure and dynamics elucidation of ionic liquids using multidimensional Laplace NMR. Chemical Communications, 2017, 53, 11056-11059.	2.2	19
34	Rheology of phosphonium ionic liquids: a molecular dynamics and experimental study. Physical Chemistry Chemical Physics, 2018, 20, 10193-10203.	1.3	19
35	Effect of shaft roughness and pressure on friction of polymer bearings in water. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2014, 228, 371-381.	1.0	17
36	Transition anionic complex in trihexyl(tetradecyl)phosphonium-bis(oxalato)borate ionic liquid â€“ revisited. Physical Chemistry Chemical Physics, 2021, 23, 6190-6203.	1.3	17

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37	Self-diffusion and interactions in mixtures of imidazolium bis(mandelato)borate ionic liquids with polyethylene glycol: ^1H NMR study. <i>Magnetic Resonance in Chemistry</i> , 2015, 53, 493-497.	1.1	16
38	Tribological Performance of Non-halogenated Phosphonium Ionic Liquids as Additives to Polypropylene and Lithium-Complex Greases. <i>Tribology Letters</i> , 2020, 68, 1.	1.2	16
39	Electroresponsive structuring and friction of a non-halogenated ionic liquid in a polar solvent: effect of concentration. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 19162-19171.	1.3	16
40	The effect of anion architecture on the lubrication chemistry of phosphonium orthoborate ionic liquids. <i>Scientific Reports</i> , 2021, 11, 24021.	1.6	13
41	Dynamic characteristics of polymer faced tilting pad journal bearings. <i>Tribology International</i> , 2014, 74, 20-27.	3.0	12
42	Micro- to Nano- and from Surface to Bulk: Influence of Halogen-Free Ionic Liquid Architecture and Dissociation on Green Oil Lubricity. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 13606-13617.	3.2	12
43	Anomalous Interfacial Structuring of a Non-Halogenated Ionic Liquid: Effect of Substrate and Temperature. <i>Colloids and Interfaces</i> , 2018, 2, 60.	0.9	11
44	Boundary lubricity of phosphonium bisoxalatoborate ionic liquids. <i>Tribology International</i> , 2021, 161, 107075.	3.0	11
45	Greases for electric vehicle motors: thickener effect and energy saving potential. <i>Tribology International</i> , 2022, 167, 107400.	3.0	11
46	On the critical amplitude in oscillating rolling element bearings. <i>Tribology International</i> , 2021, 163, 107154.	3.0	9
47	Effect of water on the electroresponsive structuring and friction in dilute and concentrated ionic liquid lubricant mixtures. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 28191-28201.	1.3	8
48	Wear in wind turbine pitch bearings – A comparative design study. <i>Wind Energy</i> , 2022, 25, 700-718.	1.9	6
49	Extending performance limits of turbine oils. <i>Tribology International</i> , 2014, 69, 52-60.	3.0	5
50	Diffusion of Ions in Phosphonium Orthoborate Ionic Liquids Studied by ^1H and ^{11}B Pulsed Field Gradient NMR. <i>Frontiers in Chemistry</i> , 2020, 8, 119.	1.8	4
51	Steady state and dynamic characteristics for guide bearings of a hydro-electric unit. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2014, 228, 836-848.	1.0	3
52	Influence of electric potential on the apparent viscosity of an ionic liquid: facts and artifacts. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 26609-26615.	1.3	2
53	SPECIAL ISSUE ON NORDTRIB: THE NORDIC SYMPOSIUM ON TRIBOLOGY 2010. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2011, 225, 563-564.	1.0	0
54	Journal Vibration: Influence of Compliant Bearing Design. , 2012, , .		0