

Marcus Björning

List of Publications by Year in descending order

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34
papers

841
citations

516681

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501174

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36
all docs

36
docs citations

36
times ranked

521
citing authors

#	ARTICLE	IF	CITATIONS
1	Boundary and elastohydrodynamic lubrication studies of glycerol aqueous solutions as green lubricants. Tribology International, 2014, 69, 39-45.	5.9	83
2	Friction Reduction in Elastohydrodynamic Contacts by Thin-Layer Thermal Insulation. Tribology Letters, 2014, 53, 477-486.	2.6	75
3	Towards the true prediction of EHL friction. Tribology International, 2013, 66, 19-26.	5.9	68
4	Film thickness in a ball-on-disc contact lubricated with greases, bleed oils and base oils. Tribology International, 2012, 53, 53-60.	5.9	56
5	Effect of humidity and counterface material on the friction and wear of carbon fiber reinforced PTFE composites. Tribology International, 2021, 157, 106869.	5.9	46
6	The Influence of DLC Coating on EHL Friction Coefficient. Tribology Letters, 2012, 47, 285-294.	2.6	44
7	Elastohydrodynamic lubrication friction mapping – the influence of lubricant, roughness, speed, and slide-to-roll ratio. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2011, 225, 671-681.	1.8	40
8	Fuel consumption and friction benefits of low viscosity engine oils for heavy duty applications. Tribology International, 2017, 110, 23-34.	5.9	37
9	DLC and Glycerol: Superlubricity in Rolling/Sliding Elastohydrodynamic Lubrication. Tribology Letters, 2019, 67, 1.	2.6	36
10	The Effect of DLC Coating Thickness on Elastohydrodynamic Friction. Tribology Letters, 2014, 55, 353-362.	2.6	33
11	EHL Properties of Polyalkylene Glycols and Their Aqueous Solutions. Tribology Letters, 2012, 45, 379-385.	2.6	30
12	Mapping of the lubrication regimes in rough surface EHL contacts. Tribology International, 2019, 131, 637-651.	5.9	30
13	Micro-pitting and wear assessment of engine oils operating under boundary lubrication conditions. Tribology International, 2019, 129, 338-346.	5.9	25
14	The correlation between gear contact friction and ball on disc friction measurements. Tribology International, 2015, 83, 114-119.	5.9	23
15	Topography transformations due to running-in of rolling-sliding non-conformal contacts. Tribology International, 2020, 144, 106126.	5.9	19
16	Elastohydrodynamic Performance of a Bio-Based, Non-Corrosive Ionic Liquid. Applied Sciences (Switzerland), 2017, 7, 996.	2.5	17
17	Controllable superlubricity achieved with mixtures of green ionic liquid and glycerol aqueous solution via humidity. Journal of Molecular Liquids, 2022, 345, 117860.	4.9	16
18	A New Film Parameter for Rough Surface EHL Contacts with Anisotropic and Isotropic Structures. Tribology Letters, 2021, 69, 1.	2.6	15

#	ARTICLE	IF	CITATIONS
19	Controllable Friction of Green Ionic Liquids via Environmental Humidity. <i>Advanced Engineering Materials</i> , 2020, 22, 1901253.	3.5	14
20	Performance and mechanisms of silicate tribofilm in heavily loaded rolling/sliding non-conformal contacts. <i>Tribology International</i> , 2018, 123, 130-141.	5.9	13
21	Low degree of freedom approach for predicting friction in elastohydrodynamically lubricated contacts. <i>Tribology International</i> , 2016, 94, 560-570.	5.9	12
22	Micro-Pitting and Wear Assessment of PAO vs Mineral-Based Engine Oil Operating under Mixed Lubrication Conditions: Effects of Lambda, Roughness Lay and Sliding Direction. <i>Lubricants</i> , 2019, 7, 42.	2.9	11
23	Controlling friction in Ionic Liquid/Glycerol Aqueous Solution lubricated contacts by adjusting CO ₂ and water content. <i>Tribology International</i> , 2021, 161, 107070.	5.9	10
24	Micropitting performance of glycerol-based lubricants under rolling-sliding contact conditions. <i>Tribology International</i> , 2022, 167, 107348.	5.9	10
25	Novel Intrinsic Self-Healing Poly-Silicone-Urea with Super-Low Ice Adhesion Strength. <i>Small</i> , 2022, 18, e2200532.	10.0	10
26	Traction formula for rolling-sliding contacts in consideration of roughness under low slide to roll ratios. <i>Tribology International</i> , 2016, 104, 263-271.	5.9	9
27	Lubricant film formation in rough surface non-conformal conjunctions subjected to GPa pressures and high slide-to-roll ratios. <i>Scientific Reports</i> , 2020, 10, 22250.	3.3	9
28	A Computational Fluid Dynamics Study on Shearing Mechanisms in Thermal Elastohydrodynamic Line Contacts. <i>Lubricants</i> , 2019, 7, 69.	2.9	9
29	Effect of roughness on the running-in behavior and tribofilm formation of carbon fiber reinforced PTFE composite in trace moisture environment. <i>Wear</i> , 2022, 500-501, 204367.	3.1	7
30	A smart friction control strategy enabled by CO ₂ absorption and desorption. <i>Scientific Reports</i> , 2019, 9, 13262.	3.3	6
31	Precise control of operating conditions in tribotesting with respect to trace humidity and contact temperature. <i>MethodsX</i> , 2021, 8, 101362.	1.6	6
32	A Numerical Model for Solving Three-Dimensional Rolling Contact Problems with Elastic Coating Layers. <i>Tribology Letters</i> , 2021, 69, 1.	2.6	6
33	Application of an inclined, spinning ball-on-rotating disc apparatus to simulate railway wheel and rail contact problems. <i>Wear</i> , 2017, 374-375, 46-53.	3.1	5
34	The effect of ageing on elastohydrodynamic friction in heavy-duty diesel engine oils. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2017, 231, 708-715.	1.8	5