Jens WahlstrÃ¶m

List of Publications by Year
in descending order

51 papers	1,147 citations	394286 19 h-index	414303 32 g-index
52 all docs	52 docs citations	52 times ranked	477 citing authors

#	Article	IF	Citations
1	Characterization of ultrafine particles from hardfacing coated brake rotors. Friction, 2023, 11, 125-140.	3.4	3
2	Simulation of thermal and mechanical performance of laser cladded disc brake rotors. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2022, 236, 3-14.	1.0	8
3	A Mesoscopic Simulation Approach Based on Metal Fibre Characterization Data to Evaluate Brake Friction Performance. Lubricants, 2022, 10, 34.	1.2	2
4	An Experimental Study of Forced Vibration Influence on Disc Brake Drag Torque in Heavy Commercial Road Vehicles. Tribology in Industry, 2022, 44, 123-131.	0.5	1
5	A Brake System Coefficient of Friction Estimation Using 3D Friction Maps. Lubricants, 2022, 10, 134.	1.2	1
6	Influence of manufacturing error tolerances on contact pressure in gears. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2021, 235, 5173-5185.	1.1	3
7	A finite element analysis (FEA) approach to simulate the coefficient of friction of a brake system starting from material friction characterization. Friction, 2021, 9, 191-200.	3.4	16
8	Gear tolerancing for simultaneous optimization of transmission error and contact pressure. Results in Engineering, 2021, 9, 100195.	2.2	9
9	Laser Cladding Treatment for Refurbishing Disc Brake Rotors: Environmental and Tribological Analysis. Tribology Letters, 2021, 69, 1.	1.2	12
10	Input Parameters for Airborne Brake Wear Emission Simulations: A Comprehensive Review. Atmosphere, 2021, 12, 871.	1.0	19
11	Tribology and Airborne Particle Emission of Laser-Cladded Fe-Based Coatings versus Non-Asbestos Organic and Low-Metallic Brake Materials. Metals, 2021, 11, 1703.	1.0	8
12	A proposed driving cycle for brake emissions investigation for test stand. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2020, 234, 122-135.	1.1	21
13	Friction, wear and airborne particle emission from Cu-free brake materials. Tribology International, 2020, 141, 105959.	3.0	50
14	Airborne Wear Particle Emissions Produced during the Dyno Bench Tests with a Slag Containing Semi-Metallic Brake Pads. Atmosphere, 2020, 11, 1220.	1.0	10
15	Special Issue Editorial: Study of Brake Wear Particle Emissions. Atmosphere, 2020, 11, 1359.	1.0	2
16	Recycling of worn out brake pads â€' impact on tribology and environment. Scientific Reports, 2020, 10, 8369.	1.6	11
17	A Comparison of Airborne Particles Generated from Disk Brake Contacts: Induction Versus Frictional Heating. Tribology Letters, 2020, 68, 1.	1.2	18
18	A Study of the Effect of Brake Pad Scorching on Tribology and Airborne Particle Emissions. Atmosphere, 2020, 11, 488.	1.0	10

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19	A Multi-Scale Simulation Approach to Investigate Local Contact Temperatures for Commercial Cu-Full and Cu-Free Brake Pads. Lubricants, 2019, 7, 80.	1.2	5
20	A pin-on-disc study on the tribology of cast iron, sinter and composite railway brake blocks at low temperatures. Wear, 2019, 424-425, 48-52.	1.5	21
21	An FEA approach to simulate disc brake wear and airborne particle emissions. Tribology International, 2019, 138, 90-98.	3.0	33
22	A Test Stand Study on the Volatile Emissions of a Passenger Car Brake Assembly. Atmosphere, 2019, 10, 263.	1.0	30
23	A pin-on-disc tribometer study of friction at low contact pressures and sliding speeds for a disc brake material combination. Results in Engineering, 2019, 4, 100051.	2.2	8
24	Towards a two-part train traffic emissions factor model for airborne wear particles. Transportation Research, Part D: Transport and Environment, 2019, 67, 67-76.	3.2	6
25	A comparison of airborne wear particle emission models based on metro station measurements. Proceedings Conference BALTTRIB'2007, 2019, 1, 150-157.	0.0	1
26	Simulation of Contact Area and Pressure Dependence of Initial Surface Roughness for Cermet-Coated Discs Used in Disc Brakes. Tribology in Industry, 2019, 41, 1-13.	0.5	8
27	Scaling effects of measuring disc brake airborne particulate matter emissions â€“ A comparison of a pin-on-disc tribometer and an inertia dynamometer bench under dragging conditions. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2018, 232, 1538-1547.	1.0	11
28	A concept for reducing PM 10 emissions for car brakes by 50%. Wear, 2018, 396-397, 135-145.	1.5	68
29	On the influence of car brake system parameters on particulate matter emissions. Wear, 2018, 396-397, 67-74.	1.5	52
30	A Friction, Wear and Emission Tribometer Study of Non-Asbestos Organic Pins Sliding Against AlSiC MMC Discs. Tribology in Industry, 2018, 40, 274-282.	0.5	13
31	A pin-on-disc tribometer study of disc brake contact pairs with respect to wear and airborne particle emissions. Wear, 2017, 384-385, 124-130.	1.5	66
32	On the running-in of brake pads and discs for dyno bench tests. Tribology International, 2017, 115, 424-431.	3.0	35
33	Towards the ranking of airborne particle emissions from car brakes â€“ a system approach. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2017, 231, 781-797.	1.1	35
34	Contact Pressure and Sliding Velocity Maps of the Friction, Wear and Emission from a Low-Metallic/Cast-Iron Disc Brake Contact Pair. Tribology in Industry, 2017, 39, 460-470.	0.5	24
35	A Factorial Design to Numerically Study the Effects of Brake Pad Properties on Friction and Wear Emissions. Advances in Tribology, 2016, 2016, 1-10.	2.1	14
36	Towards a test stand for standardized measurements of the brake emissions. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2016, 230, 1521-1528.	1.1	37

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37	A comparison of measured and simulated friction, wear, and particle emission of disc brakes. Tribology International, 2015, 92, 503-511.	3.0	37
38	A field study of airborne particle emissions from automotive disc brakes. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2015, 229, 747-757.	1.1	28
39	Towards a cellular automaton to simulate friction, wear, and particle emission of disc brakes. Wear, 2014, 313, 75-82.	1.5	12
40	A Pin-on-Disc Study Focusing on How Different Load Levels Affect the Concentration and Size Distribution of Airborne Wear Particles from the Disc Brake Materials. Tribology Letters, 2012, 46, 195-204.	1.2	48
41	The Tribological Efficiency and the Mechanism of Action of Nano-Porous Composition Base Brake Lining Materials. AIP Conference Proceedings, 2011, , .	0.3	0
42	A pin-on-disc investigation of novel nanoporous composite-based and conventional brake pad materials focussing on airborne wear particles. Tribology International, 2011, 44, 1838-1843.	3.0	29
43	A study of airborne wear particles generated from organic railway brake pads and brake discs. Wear, 2011, 273, 93-99.	1.5	52
44	A Cellular Automaton Approach to Numerically Simulate the Contact Situation in Disc Brakes. Tribology Letters, 2011, 42, 253-262.	1.2	15
45	Ultrafine Particle Formation from Wear. International Journal of Ventilation, 2010, 9, 83-88.	0.2	3
46	Size, Shape, and Elemental Composition of Airborne Wear Particles from Disc Brake Materials. Tribology Letters, 2010, 38, 15-24.	1.2	86
47	A pin-on-disc simulation of airborne wear particles from disc brakes. Wear, 2010, 268, 763-769.	1.5	94
48	Airborne wear particles from passenger car disc brakes: A comparison of measurements from field tests, a disc brake assembly test stand, and a pin-on-disc machine. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2010, 224, 179-188.	1.0	33
49	A disc brake test stand for measurement of airborne wear particles. Lubrication Science, 2009, 21, 241-252.	0.9	27
50	Simulation of Airborne Wear Particles from Disc Brakes. , 0, , .		11
51	Reducing scrapping of gears by assessment of tip contact threshold torque. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 0, , 135065012110662.	1.0	1