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	A pin-on-disc simulation of airborne wear particles from disc brakes. Wear, 2010, 268, 763-769.	1.5	94
2	Size, Shape, and Elemental Composition of Airborne Wear Particles from Disc Brake Materials. Tribology Letters, 2010, 38, 15-24.	1.2	86
3	A concept for reducing PM 10 emissions for car brakes by 50%. Wear, 2018, 396-397, 135-145.	1.5	68
4	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
5	A study of airborne wear particles generated from organic railway brake pads and brake discs. Wear, 2011, 273, 93-99.	1.5	52
6	On the influence of car brake system parameters on particulate matter emissions. Wear, 2018, 396-397, 67-74.	1.5	52
7	Friction, wear and airborne particle emission from Cu-free brake materials. Tribology International, 2020, 141, 105959.	3.0	50
8	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
9	A comparison of measured and simulated friction, wear, and particle emission of disc brakes. Tribology International, 2015, 92, 503-511.	3.0	37
10	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
11	On the running-in of brake pads and discs for dyno bench tests. Tribology International, 2017, 115, 424-431.	3.0	35
12	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
13	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
14	An FEA approach to simulate disc brake wear and airborne particle emissions. Tribology International, 2019, 138, 90-98.	3.0	33
15	A Test Stand Study on the Volatile Emissions of a Passenger Car Brake Assembly. Atmosphere, 2019, 10, 263.	1.0	30
16	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
17	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
18	A disc brake test stand for measurement of airborne wear particles. Lubrication Science, 2009, 21, 241-252.	0.9	27

#	Article	IF	Citations
19	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
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	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
22	Input Parameters for Airborne Brake Wear Emission Simulations: A Comprehensive Review. Atmosphere, 2021, 12, 871.	1.0	19
23	A Comparison of Airborne Particles Generated from Disk Brake Contacts: Induction Versus Frictional Heating. Tribology Letters, 2020, 68, 1.	1.2	18
24	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
25	A Cellular Automaton Approach to Numerically Simulate the Contact Situation in Disc Brakes. Tribology Letters, 2011, 42, 253-262.	1.2	15
26	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
27	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
28	Towards a cellular automaton to simulate friction, wear, and particle emission of disc brakes. Wear, 2014, 313, 75-82.	1.5	12
29	Laser Cladding Treatment for Refurbishing Disc Brake Rotors: Environmental and Tribological Analysis. Tribology Letters, 2021, 69, 1.	1.2	12
30	Simulation of Airborne Wear Particles from Disc Brakes. , 0, , .		11
31	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
32	Recycling of worn out brake pads â€' impact on tribology and environment. Scientific Reports, 2020, 10, 8369.	1.6	11
33	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
34	A Study of the Effect of Brake Pad Scorching on Tribology and Airborne Particle Emissions. Atmosphere, 2020, 11, 488.	1.0	10
35	Gear tolerancing for simultaneous optimization of transmission error and contact pressure. Results in Engineering, 2021, 9, 100195.	2.2	9
36	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

#	Article	IF	Citations
37	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
38	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
39	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
40	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
41	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
42	Ultrafine Particle Formation from Wear. International Journal of Ventilation, 2010, 9, 83-88.	0.2	3
43	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
44	Characterization of ultrafine particles from hardfacing coated brake rotors. Friction, 2023, 11, 125-140.	3.4	3
45	Special Issue Editorial: Study of Brake Wear Particle Emissions. Atmosphere, 2020, 11, 1359.	1.0	2
46	A Mesoscopic Simulation Approach Based on Metal Fibre Characterization Data to Evaluate Brake Friction Performance. Lubricants, 2022, 10, 34.	1.2	2
47	A comparison of airborne wear particle emission models based on metro station measurements. Proceedings Conference BALTTRIB'2007, 2019, 1, 150-157.	0.0	1
48	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
49	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
50	A Brake System Coefficient of Friction Estimation Using 3D Friction Maps. Lubricants, 2022, 10, 134.	1.2	1
51	The Tribological Efficiency and the Mechanism of Action of Nano-Porous Composition Base Brake Lining Materials. AIP Conference Proceedings, 2011, , .	0.3	0