Jens Wahlstrm

List of Publications by Year in Descending Order

46 papers	787 citations	18 h-index	26 g-index
52 ext. papers	956 ext. citations	2.7 avg, IF	4.74 L-index

#	Paper	IF	Citations
46	A Mesoscopic Simulation Approach Based on Metal Fibre Characterization Data to Evaluate Brake Friction Performance. *Lubricants*, **2022**, 10, 34	3.1	0
45	Tribology and Airborne Particle Emission of Laser-Cladded Fe-Based Coatings versus Non-Asbestos Organic and Low-Metallic Brake Materials. *Metals*, **2021**, 11, 1703	2.3	3
44	Gear tolerancing for simultaneous optimization of transmission error and contact pressure. *Results in Engineering*, **2021**, 9, 100195	3.3	1
43	Laser Cladding Treatment for Refurbishing Disc Brake Rotors: Environmental and Tribological Analysis. *Tribology Letters*, **2021**, 69, 1	2.8	7
42	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	5.6	6
41	Input Parameters for Airborne Brake Wear Emission Simulations: A Comprehensive Review. *Atmosphere*, **2021**, 12, 871	2.7	3
40	Recycling of worn out brake pads - impact on tribology and environment. *Scientific Reports*, **2020**, 10, 8369	4.9	5
39	A Comparison of Airborne Particles Generated from Disk Brake Contacts: Induction Versus Frictional Heating. *Tribology Letters*, **2020**, 68, 1	2.8	14
38	A Study of the Effect of Brake Pad Scorching on Tribology and Airborne Particle Emissions. *Atmosphere*, **2020**, 11, 488	2.7	5
37	Airborne Wear Particle Emissions Produced during the Dyno Bench Tests with a Slag Containing Semi-Metallic Brake Pads. *Atmosphere*, **2020**, 11, 1220	2.7	3
36	Influence of manufacturing error tolerances on contact pressure in gears. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, **2020**, 0954406220971671	1.3	0
35	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	1.4	12
34	Friction, wear and airborne particle emission from Cu-free brake materials. *Tribology International*, **2020**, 141, 105959	4.9	28
33	A Multi-Scale Simulation Approach to Investigate Local Contact Temperatures for Commercial Cu-Full and Cu-Free Brake Pads. *Lubricants*, **2019**, 7, 80	3.1	4
32	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	3.5	11
31	An FEA approach to simulate disc brake wear and airborne particle emissions. *Tribology International*, **2019**, 138, 90-98	4.9	18
30	A Test Stand Study on the Volatile Emissions of a Passenger Car Brake Assembly. *Atmosphere*, **2019**, 10, 263	2.7	20

29	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	1.9	4
28	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	3.3	3
27	Towards a two-part train traffic emissions factor model for airborne wear particles. *Transportation Research, Part D: Transport and Environment*, **2019**, 67, 67-76	6.4	2
26	Scaling effects of measuring disc brake airborne particulate matter emissions – 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	1.4	8
25	A concept for reducing PM 10 emissions for car brakes by 50%. *Wear*, **2018**, 396-397, 135-145	3.5	46
24	A Friction, Wear and Emission Tribometer Study of Non-Asbestos Organic Pins Sliding Against AlSiC MMC Discs. *Tribology in Industry*, **2018**, 40, 274-282	1.9	11
23	On the influence of car brake system parameters on particulate matter emissions. *Wear*, **2018**, 396-397, 67-74	3.5	36
22	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	3.5	48
21	On the running-in of brake pads and discs for dyno bench tests. *Tribology International*, **2017**, 115, 424-431	4.9	24
20	Towards the ranking of airborne particle emissions from car brakes – a system approach. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, **2017**, 231, 781-797	1.4	24
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	1.9	16
18	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	1.4	27
17	A Factorial Design to Numerically Study the Effects of Brake Pad Properties on Friction and Wear Emissions. *Advances in Tribology*, **2016**, 2016, 1-10	1.6	10
16	A comparison of measured and simulated friction, wear, and particle emission of disc brakes. *Tribology International*, **2015**, 92, 503-511	4.9	32
15	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	1.4	24
14	Towards a cellular automaton to simulate friction, wear, and particle emission of disc brakes. *Wear*, **2014**, 313, 75-82	3.5	10
13	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	2.8	44
12	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	4.9	20

11	A study of airborne wear particles generated from organic railway brake pads and brake discs. *Wear* , **2011**, 273, 93-99	3.5	41
10	A Cellular Automaton Approach to Numerically Simulate the Contact Situation in Disc Brakes. *Tribology Letters*, **2011**, 42, 253-262	2.8	14
9	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	1.4	29
8	Ultrafine Particle Formation from Wear. *International Journal of Ventilation*, **2010**, 9, 83-88	1.1	2
7	Size, Shape, and Elemental Composition of Airborne Wear Particles from Disc Brake Materials. *Tribology Letters*, **2010**, 38, 15-24	2.8	63
6	A pin-on-disc simulation of airborne wear particles from disc brakes. *Wear*, **2010**, 268, 763-769	3.5	76
5	Simulation of Airborne Wear Particles from Disc Brakes **2009**,		9
4	A disc brake test stand for measurement of airborne wear particles. *Lubrication Science*, **2009**, 21, 241-252	2.3	20
3	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*,135065012110091	1.4	2
2	Reducing scrapping of gears by assessment of tip contact threshold torque. *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*,135065012110662	1.4	0
1	Characterization of ultrafine particles from hardfacing coated brake rotors. *Friction*,1	5.6	1