Anders Ekberg

List of Publications by Year
in descending order

62 papers	1,693 citations	331670 21 h-index	302126 39 g-index
68 all docs	68 docs citations	68 times ranked	739 citing authors

#	Article	IF	Citations
1	Fatigue of railway wheels and rails under rolling contact and thermal loadingâ€"an overview. Wear, 2005, 258, 1288-1300.	3.1	251
2	An engineering model for prediction of rolling contact fatigue of railway wheels. Fatigue and Fracture of Engineering Materials and Structures, 2002, 25, 899-909.	3.4	202
3	Wheel/rail rolling contact fatigue â€" Probe, predict, prevent. Wear, 2014, 314, 2-12.	3.1	132
4	Anisotropy and rolling contact fatigue of railway wheels. International Journal of Fatigue, 2001, 23, 29-43.	5.7	77
5	Fatigue initiation in railway wheelsâ€"a numerical study of the influence of defects. Wear, 2002, 253, 26-34.	3.1	55
6	Subsurface initiated rolling contact fatigue of railway wheels as generated by rail corrugation. International Journal of Solids and Structures, 2007, 44, 7975-7987.	2.7	50
7	Prediction of dynamic trainâ€"track interaction and subsequent material deterioration in the presence of insulated rail joints. Vehicle System Dynamics, 2006, 44, 718-729.	3.7	49
8	Rolling contact fatigue, wear and broken rail derailments. Wear, 2016, 366-367, 249-257.	3.1	49
9	Influence of Short-Pitch Wheel/Rail Corrugation on Rolling Contact Fatigue of Railway Wheels. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2005, 219, 177-187.	2.0	48
10	A FATIGUE LIFE MODEL FOR GENERAL ROLLING CONTACT WITH APPLICATION TO WHEEL/RAIL DAMAGE. Fatigue and Fracture of Engineering Materials and Structures, 1995, 18, 1189-1199.	3.4	42
11	Effects of imperfections on fatigue initiation in railway wheels. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2000, 214, 45-54.	2.0	40
12	Rolling contact fatigue of railway wheelsâ€"a parametric study. Wear, 1997, 211, 280-288.	3.1	37
13	The detrimental effects of hollow wearâ€"â€"field experiences and numerical simulations. Wear, 2008, 265, 1283-1291.	3.1	36
14	Numerical study of the mechanical deterioration of insulated rail joints. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2009, 223, 265-273.	2.0	34
15	Emissions of particulate matters from railways â€" Emission factors and condition monitoring. Transportation Research, Part D: Transport and Environment, 2010, 15, 240-245.	6.8	31
16	Material defects in rolling contact fatigue of railway wheelsâ€"the influence of defect size. Wear, 2005, 258, 1194-1200.	3.1	28
17	Numerical assessment of the influence of worn wheel tread geometry on rail and wheel deterioration. Wear, 2014, 317, 77-91.	3.1	26
18	Wheel Tread Damage: A Numerical Study of Railway Wheel Tread Plasticity under Thermomechanical Loading. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2010, 224, 435-443.	2.0	25

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19	Predicting crack growth and risks of rail breaks due to wheel flat impacts in heavy haul operations. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2009, 223, 153-161.	2.0	24
20	On-Board Measurements of Particulate Matter Emissions from a Passenger Train. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2011, 225, 99-106.	2.0	24
21	The influence of track geometry irregularities on rolling contact fatigue. Wear, 2014, 314, 78-86.	3.1	23
22	The development of a crack propagation model for railway wheels and rails. Fatigue and Fracture of Engineering Materials and Structures, 2015, 38, 1478-1491.	3.4	22
23	Track Condition Analyser: Identification of Rail Rolling Surface Defects, Likely to Generate Fatigue Damage in Wheels, Using Instrumented Wheelset Measurements. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2011, 225, 1-13.	2.0	19
24	Numerical investigation of crack initiation in rails and wheels affected by martensite spots. International Journal of Fatigue, 2018, 114, 238-251.	5.7	18
25	Evaluation of crack growth direction criteria on mixed-mode fatigue crack growth experiments. International Journal of Fatigue, 2019, 129, 105075.	5.7	18
26	Numerical evaluation of the material response of a railway wheel under thermomechanical braking conditions. Wear, 2014, 314, 181-188.	3.1	17
27	A numerical study of the influence of lateral geometry irregularities on mechanical deterioration of freight tracks. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2012, 226, 575-586.	2.0	16
28	Identifying the root causes of damage on the wheels of heavy haul locomotives and its mitigation. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2014, 228, 663-672.	2.0	16
29	Fatigue of railway wheels. , 2009, , 211-244.		15
30	Busseihydroquinones Aâ€"D from the Roots of <i>Pentas bussei</i>. Journal of Natural Products, 2012, 75, 1299-1304.	3.0	15
31	Thermal cracking of a railway wheel tread due to tread brakingâ€"critical crack sizes and in fluence of repeated thermal cycles. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2013, 227, 10-18.	2.0	14
32	Rolling contact fatigue prediction for rails and comparisons with test rig results. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2010, 224, 303-317.	2.0	13
33	Temperature-dependent evolution of the cyclic yield stress of railway wheel steels. Wear, 2016, 366-367, 378-382.	3.1	13
34	Railway Axle Design: To be Based on Fatigue Initiation or Crack Propagation?. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2010, 224, 445-453.	2.0	12
35	Computational model for low cycle fatigue analysis of lattice materials: Incorporating theory of critical distance with elastoplastic homogenization. European Journal of Mechanics, A/Solids, 2022, 92, 104480.	3.7	12
36	Integrated analysis of dynamic vehicleâ€"track interaction and plasticity induced damage in the presence of squat defects. Wear, 2016, 366-367, 139-145.	3.1	11

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37	Answer to the Letter to the Editor from M. Ciavarella and H. Maitournam. Fatigue and Fracture of Engineering Materials and Structures, 2004, 27, 527-528.	3.4	10
38	Bainitic steel grade for solid wheels: metallurgical, mechanical, and in-service testing. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2009, 223, 163-171.	2.0	10
39	Acceptance criterion for rail roughness level spectrum based on assessment of rolling contact fatigue and rolling noise. Wear, 2011, 271, 319-327.	3.1	9
40	A simplified index for evaluating subsurface initiated rolling contact fatigue from field measurements. Wear, 2011, 271, 120-124.	3.1	9
41	Estimation of gauge corner and flange root degradation from rail, wheel and track geometries. Wear, 2016, 366-367, 294-302.	3.1	9
42	Optimisation of slab track design considering dynamic trainâ€“track interaction and environmental impact. Engineering Structures, 2022, 254, 113749.	5.3	9
43	Stress gradient effects in surface initiated rolling contact fatigue of rails and wheels. Wear, 2016, 366-367, 188-193.	3.1	8
44	Rolling contact fatigue assessment of repair rail welds. Wear, 2019, 436-437, 203030.	3.1	8
45	Numerical assessment of the loading of rolling contact fatigue cracks close to rail surface irregularities. Fatigue and Fracture of Engineering Materials and Structures, 2020, 43, 947-954.	3.4	8
46	Numerical evaluation of the transient response due to non-smooth rolling contact using an arbitrary Lagrangianâ€“Eulerian formulation. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2012, 226, 36-45.	1.8	7
47	A numerical investigation of elastoplastic deformation of cracks in tubular specimens subjected to combined torsional and axial loading. International Journal of Fatigue, 2016, 91, 171-182.	5.7	7
48	Influence of plastic deformations on growth of subsurface rolling contact fatigue cracks in railway wheels. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2006, 220, 461-473.	2.0	6
49	Finite element analysis of transient thermomechanical rolling contact using an efficient arbitrary Lagrangianâ€“Eulerian description. Computational Mechanics, 2014, 54, 389-405.	4.0	5
50	Multiscale modelling of trainâ€“track interaction phenomena with focus on contact mechanics. Wear, 2019, 430-431, 393-400.	3.1	5
51	Probability of instant rail break induced by wheelâ€“rail impact loading using field test data. International Journal of Rail Transportation, 2022, 10, 1-23.	2.7	5
52	Railway wheelset fatigue life estimation based on field tests. Fatigue and Fracture of Engineering Materials and Structures, 2022, 45, 2443-2456.	3.4	5
53	Finite element modelling of frictional thermomechanical rolling/sliding contact using an arbitrary Lagrangianâ€“Eulerian formulation. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2015, 229, 870-880.	1.8	4
54	Mechanical deterioration of wheels and rails under winter conditions â€“ mechanisms and consequences. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2019, 233, 640-648.	2.0	4

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55	Numerical predictions of crack growth direction in a railhead under contact, bending and thermal loads. Engineering Fracture Mechanics, 2022, 261, 108218.	4.3	4
56	Evaluation of mixed-mode crack growth direction criteria under rolling contact conditions. Wear, 2020, 448-449, 203184.	3.1	3
57	Application of a semianalytical strain assessment and multiaxial fatigue analysis to compare rolling contact fatigue in twinâ€disk and fullâ€scale wheel/rail contact conditions. Fatigue and Fracture of Engineering Materials and Structures, 0, , .	3.4	3
58	A method for in-field railhead crack detection using digital image correlation. International Journal of Rail Transportation, 2022, 10, 675-694.	2.7	3
59	Results to Exemplify the Joint EU Project INNOTRACK â€" Innovative Track Systems. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2010, 224, 361-368.	2.0	2
60	Influence of Short Thermal Cracks on the Material Behaviour of a Railway Wheel Subjected to Repeated Rolling. Advanced Materials Research, 0, 891-892, 1139-1145.	0.3	2
61	A design tool for railway wheels incorporating damage models and dynamic simulations. , 2005, , .		0
62	A Design Tool for Railway Wheels Incorporating Damage Models and Dynamic Simulations. , 2005, , .		0