

Klaus Six

List of Publications by Year in descending order

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41
papers

716
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516710

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times ranked

412
citing authors

#	ARTICLE	IF	CITATIONS
1	A whole system model framework to predict damage in turnouts. <i>Vehicle System Dynamics</i> , 2023, 61, 871-891.	3.7	7
2	Rail RCF damage quantification and comparison for different damage models. <i>Railway Engineering Science</i> , 2022, 30, 23-40.	4.4	11
3	DEM modelling of railway ballast using the Conical Damage Model: a comprehensive parametrisation strategy. <i>Granular Matter</i> , 2022, 24, 40.	2.2	5
4	Iron Oxide and Water Paste Rheology and Its Effect on Low Adhesion in the Wheel/Rail Interface. <i>Tribology Letters</i> , 2022, 70, 1.	2.6	6
5	Reproducing rolling contact fatigue relevant loading conditions of railway operation on a test rig. <i>Tribology - Materials, Surfaces and Interfaces</i> , 2021, 15, 127-137.	1.4	1
6	The development of a high pressure torsion test methodology for simulating wheel/rail contacts. <i>Tribology International</i> , 2021, 156, 106842.	5.9	19
7	Challenges and progress in the understanding and modelling of the wheel-rail creep forces. <i>Vehicle System Dynamics</i> , 2021, 59, 1026-1068.	3.7	35
8	A new approach for modelling mild and severe wear in wheel-rail contacts. <i>Wear</i> , 2021, 476, 203761.	3.1	17
9	Modelling of Frictional Conditions in the Wheel-Rail Interface Due to Application of Top-of-Rail Products. <i>Lubricants</i> , 2021, 9, 100.	2.9	11
10	Full-scale testing of low adhesion effects with small amounts of water in the wheel/rail interface. <i>Tribology International</i> , 2020, 141, 105907.	5.9	25
11	Vehicle tests showing how the weather in autumn influences the wheel-rail traction characteristics. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2020, 234, 426-435.	2.0	9
12	Assessment of running gear performance in relation to rolling contact fatigue of wheels and rails based on stochastic simulations. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2020, 234, 405-416.	2.0	8
13	Friction and wear in railway ballast stone interfaces. <i>Tribology International</i> , 2020, 151, 106498.	5.9	8
14	Simple particle shapes for DEM simulations of railway ballast: influence of shape descriptors on packing behaviour. <i>Granular Matter</i> , 2020, 22, 43.	2.2	46
15	Improved modelling of trains braking under low adhesion conditions. <i>Tribology - Materials, Surfaces and Interfaces</i> , 2020, 14, 131-141.	1.4	2
16	Shape analysis of railway ballast stones: curvature-based calculation of particle angularity. <i>Scientific Reports</i> , 2020, 10, 6045.	3.3	16
17	Rolling contact fatigue behaviour of rails: Wedge model predictions in T-Gamma world. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2020, 234, 1335-1345.	2.0	3
18	Wheel/Rail Creep Force Model for Wayside Application of Top-of-Rail Products Incorporating Carry-On and Consumption Effects. <i>Lecture Notes in Mechanical Engineering</i> , 2020, , 669-677.	0.4	1

#	ARTICLE	IF	CITATIONS
19	Prediction of Maximum Torsional Wheel-Set Axle Vibrations Considering Non-linear Adhesion Characteristics. Lecture Notes in Mechanical Engineering, 2020, , 970-976.	0.4	1
20	Simulation and experiment based investigations of squat formation mechanisms. Wear, 2019, 440-441, 203093.	3.1	4
21	Micro-mechanical investigation of railway ballast behavior under cyclic loading in a box test using DEM: effects of elastic layers and ballast types. Granular Matter, 2019, 21, 106.	2.2	29
22	Advanced maintenance strategies for improved squat mitigation. Wear, 2019, 436-437, 203034.	3.1	8
23	Assessing the impact of small amounts of water and iron oxides on adhesion in the wheel/rail interface using High Pressure Torsion testing. Tribology International, 2019, 135, 55-64.	5.9	26
24	Comparison of two different types of railway ballast in compression and direct shear tests: experimental results and DEM model validation. Granular Matter, 2018, 20, 70.	2.2	32
25	Wheel-rail creep force model for predicting water induced low adhesion phenomena. Tribology International, 2017, 109, 409-415.	5.9	36
26	Friction phenomena and their impact on the shear behaviour of granular material. Computational Particle Mechanics, 2017, 4, 23-34.	3.0	19
27	Plasticity in wheel-rail contact and its implications on vehicle-track interaction. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2017, 231, 558-569.	2.0	13
28	Parametrisation of a DEM model for railway ballast under different load cases. Granular Matter, 2017, 19, 64.	2.2	29
29	Modeling wear and rolling contact fatigue: Parametric study and experimental results. Wear, 2016, 366-367, 71-77.	3.1	15
30	Development of white etching layers on rails: simulations and experiments. Wear, 2016, 366-367, 116-122.	3.1	41
31	Modeling surface rolling contact fatigue crack initiation taking severe plastic shear deformation into account. Wear, 2016, 352-353, 136-145.	3.1	43
32	On the effect of stress dependent interparticle friction in direct shear tests. Powder Technology, 2016, 294, 211-220.	4.2	27
33	Classification and Consideration of Plasticity Phenomena in Wheel-Rail Contact Modelling. International Journal of Railway Technology, 2016, 5, 55-77.	0.3	5
34	Physical processes in wheel-rail contact and its implications on vehicle-track interaction. Vehicle System Dynamics, 2015, 53, 635-650.	3.7	34
35	Third body layer experimental results and a model describing its influence on the traction coefficient. Wear, 2014, 314, 148-154.	3.1	47
36	An approximate model to predict near-surface ratcheting of rails under high traction coefficients. Wear, 2014, 314, 28-35.	3.1	13

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37	Automated Measurement of Near-Surface Plastic Shear Strain. <i>International Journal of Railway Technology</i> , 2014, 3, 1-16.	0.3	5
38	Friction in wheel-rail contact: A model comprising interfacial fluids, surface roughness and temperature. <i>Wear</i> , 2011, 271, 2-12.	3.1	42
39	The influence of the wheelsets' relative kinematics of railway vehicles on wheel/rail wear in curved track. <i>Vehicle System Dynamics</i> , 2008, 46, 403-414.	3.7	10
40	An efficient physical-based method for predicting the long-term evolution of vertical railway track geometries. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 0, , 095440972110248.	2.0	6
41	A new hybrid approach to predict worn wheel profile shapes. <i>Vehicle System Dynamics</i> , 0, , 1-17.	3.7	1