Sebastian Stichel

List of Publications by Year
in descending order

74 papers	1,498 citations	361296 20 h-index	377752 34 g-index
76 all docs	76 docs citations	76 times ranked	736 citing authors

#	Article	IF	Citations
1	Modelling of suspension components in a rail vehicle dynamics context. Vehicle System Dynamics, 2011, 49, 1021-1072.	2.2	186
2	The results of the pantographâ€“catenary interaction benchmark. Vehicle System Dynamics, 2015, 53, 412-435.	2.2	161
3	Active suspension in railway vehicles: a literature survey. Railway Engineering Science, 2020, 28, 3-35.	2.7	63
4	Dynamics of railway freight vehicles. Vehicle System Dynamics, 2015, 53, 995-1033.	2.2	57
5	Active lateral secondary suspension with<i>H</i>_{âˆž}control to improve ride comfort: simulations on a full-scale model. Vehicle System Dynamics, 2011, 49, 1409-1422.	2.2	42
6	Identification of system damping in railway catenary wire systems from full-scale measurements. Engineering Structures, 2016, 113, 71-78.	2.6	39
7	Correlation of track irregularities and vehicle responses based on measured data. Vehicle System Dynamics, 2018, 56, 967-981.	2.2	37
8	Variation in predicting pantographâ€“catenary interaction contact forces, numerical simulations and field measurements. Vehicle System Dynamics, 2017, 55, 1265-1282.	2.2	34
9	Dynamics of a High-Speed Rail Vehicle Negotiating Curves at Unsteady Crosswind. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2010, 224, 567-579.	1.3	32
10	Wheel life prediction model â€“ an alternative to the FASTSIM algorithm for RCF. Vehicle System Dynamics, 2018, 56, 1051-1071.	2.2	32
11	High-speed trains automatic operation with protection constraints: a resilient nonlinear gain-based feedback control approach. IEEE/CAA Journal of Automatica Sinica, 2019, 6, 992-999.	8.5	30
12	Measurements and simulations of rail vehicle dynamics with respect to overturning risk. Vehicle System Dynamics, 2010, 48, 97-112.	2.2	27
13	Adoption of different pantographsâ€™ preloads to improve multiple collection and speed up existing lines. Vehicle System Dynamics, 2012, 50, 403-418.	2.2	27
14	The use of dynamic response to evaluate and improve the optimization of existing soft railway catenary systems for higher speeds. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2016, 230, 1388-1396.	1.3	26
15	Limit Cycle Behaviour and Chaotic Motions of Two-Axle Freight Wagons with Friction Damping. Multibody System Dynamics, 2002, 8, 243-255.	1.7	25
16	On freight wagon dynamics and track deterioration. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 1999, 213, 243-254.	1.3	24
17	Ride Comfort Improvements in a High-Speed Train with Active Secondary Suspension. Journal of Mechanical Systems for Transportation and Logistics, 2010, 3, 206-215.	0.2	24
18	Quasi-static modelling of wheel-rail reactions due to crosswind effects for various types of high-speed rolling stock. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2004, 218, 133-148.	1.3	23

#	ARTICLE	IF	CITATIONS
19	Prediction of RCF and wear evolution of iron-ore locomotive wheels. Wear, 2015, 338-339, 62-72.	1.5	23
20	Improving crosswind stability of fast rail vehicles using active secondary suspension. Vehicle System Dynamics, 2014, 52, 909-921.	2.2	22
21	Prediction of rail surface damage in locomotive traction operations using laboratory-field measured and calibrated data. Engineering Failure Analysis, 2022, 135, 106165.	1.8	22
22	Problems, assumptions and solutions in locomotive design, traction and operational studies. Railway Engineering Science, 2022, 30, 265-288.	2.7	21
23	New simulation model for freight wagons with UIC link suspension. Vehicle System Dynamics, 2008, 46, 695-704.	2.2	20
24	On-track tests of active vertical suspension on a passenger train. Vehicle System Dynamics, 2015, 53, 798-811.	2.2	20
25	Rail vehicle response to lateral carbody excitations imitating crosswind. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2015, 229, 34-47.	1.3	20
26	Analysing the correlation between vehicle responses and track irregularities using dynamic simulations and measurements. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2020, 234, 170-182.	1.3	20
27	Vehicle dynamics of a high-speed passenger car due to aerodynamics inside tunnels. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2007, 221, 527-545.	1.3	19
28	Multi-functional design of a composite high-speed train body structure. Structural and Multidisciplinary Optimization, 2014, 50, 475-488.	1.7	19
29	A wireless railway catenary structural monitoring system: Full-scale case study. Case Studies in Structural Engineering, 2016, 6, 22-30.	1.6	19
30	Orthotropic Models of Corrugated Sheets in Finite Element Analysis. ISRN Mechanical Engineering, 2011, 2011, 1-9.	0.9	18
31	CaPaSIM statement of methods. Vehicle System Dynamics, 2015, 53, 341-346.	2.2	17
32	Wheel wear prediction on a high-speed train in China. Vehicle System Dynamics, 2020, 58, 1839-1858.	2.2	17
33	On the implementation of an auxiliary pantograph for speed increase on existing lines. Vehicle System Dynamics, 2016, 54, 1077-1097.	2.2	16
34	Implications of the operation of multiple pantographs on the soft catenary systems in Sweden. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2016, 230, 971-983.	1.3	16
35	Influence of AC system design on the realisation of tractive efforts by high adhesion locomotives. Vehicle System Dynamics, 2017, 55, 1241-1264.	2.2	16
36	Long term rail surface damage considering maintenance interventions. Wear, 2020, 460-461, 203462.	1.5	16

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37	Modelling and Simulation of Freight Wagon with Special attention to the Prediction of Track Damage. International Journal of Railway Technology, 2014, 3, 1-36.	0.3	14
38	Influence of switches and crossings on wheel profile evolution in freight vehicles. Vehicle System Dynamics, 2014, 52, 317-337.	2.2	13
39	How to Improve the Running behaviour of Freight Wagons with UIC-Link Suspension. Vehicle System Dynamics, 1999, 33, 394-405.	2.2	12
40	Wheelset curving guidance using<i>H</i>_{âˆž}control. Vehicle System Dynamics, 2018, 56, 461-484.	2.2	12
41	Wheel damage on the Swedish iron ore line investigated via multibody simulation. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2014, 228, 652-662.	1.3	11
42	Substitution of corrugated sheets in a railway vehicle's body structure by a multiple-requirement based selection process. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2014, 228, 143-157.	1.3	11
43	Green Train: concept and technology overview. International Journal of Rail Transportation, 2014, 2, 2-16.	1.8	11
44	Study on active wheelset steering from the perspective of wheel wear evolution. Vehicle System Dynamics, 2022, 60, 906-929.	2.2	11
45	Rail RCF damage quantification and comparison for different damage models. Railway Engineering Science, 2022, 30, 23-40.	2.7	11
46	Improved curving performance of an innovative two-axle vehicle: a reasonable feedforward active steering approach. Vehicle System Dynamics, 2022, 60, 516-539.	2.2	10
47	Vehicle running instability detection algorithm (<i>VRIDA</i>): A signal based onboard diagnostic method for detecting hunting instability of rail vehicles. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2022, 236, 262-274.	1.3	10
48	Experimental and theoretical analysis of freight wagon link suspension. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2006, 220, 361-372.	1.3	9
49	On integrated wheel and track damage prediction using vehicleâ€“track dynamic simulations. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2017, 231, 775-785.	1.3	9
50	Application of tuned-mass system on railway catenary to improve dynamic performance. Engineering Structures, 2018, 165, 349-358.	2.6	9
51	Direct Covariance Analysis for the Calculation of Creepages and Creep-Forces for Various Bogies on Straight Track with Random Irregularities. Vehicle System Dynamics, 1994, 23, 237-251.	2.2	8
52	Bogies towards higher speed on existing tracks. International Journal of Rail Transportation, 2014, 2, 40-49.	1.8	8
53	Tolerable longitudinal forces for freight trains in tight S-curves using three-dimensional multi-body simulations. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2020, 234, 454-467.	1.3	8
54	Assessment of running gear performance in relation to rolling contact fatigue of wheels and rails based on stochastic simulations. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2020, 234, 405-416.	1.3	8

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55	Long freight trains & long-term rail surface damage â€“ a systems perspective. Vehicle System Dynamics, 0, , 1-24.	2.2	8
56	Fatigue Life Prediction for an S-Train Bogie. Vehicle System Dynamics, 1998, 29, 390-403.	2.2	7
57	Investigation of the risk for rolling contact fatigue on wheels of different passenger trains. Vehicle System Dynamics, 2008, 46, 317-327.	2.2	7
58	Industrial implementation of novel procedures for the prediction of railway wheel surface deterioration. Wear, 2011, 271, 203-209.	1.5	7
59	Proposal for systematic studies of active suspension failures in rail vehicles. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2018, 232, 199-213.	1.3	7
60	Preparation and Execution of On-track Tests with Active Vertical Secondary Suspension. International Journal of Railway Technology, 2015, 4, 29-46.	0.3	7
61	Influence of link suspension characteristics variation on two-axle freight wagon dynamics. Vehicle System Dynamics, 2006, 44, 415-423.	2.2	6
62	On the railhead material damage of insulated rail joints: Is it by ratchetting or alternating plasticity?. International Journal of Fatigue, 2019, 128, 105197.	2.8	6
63	Optimisation of Sandwich Panels for the Load Carrying Structure of High-Speed Rail Vehicles. International Journal of Aerospace and Lightweight Structures (IJALS), 2012, 02, 19.	0.1	6
64	FEA of mechanical behaviour of insulated rail joints due to vertical cyclic wheel loadings. Engineering Failure Analysis, 2022, 133, 105966.	1.8	5
65	Finite difference adaptation of the decomposition of layered composite structures on irregular grid. Journal of Composite Materials, 2014, 48, 2427-2439.	1.2	4
66	A boundary-condition-transfer method for shell-to-solid submodeling and its application in high-speed trains. International Journal of Mechanical Sciences, 2020, 177, 105542.	3.6	4
67	Modelling of rough wheel-rail contact for physical damage calculations. Wear, 2019, 436-437, 202957.	1.5	2
68	Estimating the marginal maintenance cost of different vehicle types on rail infrastructure. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2021, 235, 1191-1202.	1.3	2
69	Gain Scaling for Active Wheelset Steering on Innovative Two-Axle Vehicle. Lecture Notes in Mechanical Engineering, 2020, , 57-66.	0.3	2
70	353620 RIDE COMFORT IMPROVEMENTS IN A HIGH-SPEED TRAIN WITH ACTIVE SECONDARY SUSPENSION(Vehicle,Technical Session). The Proceedings of International Symposium on Seed-up and Service Technology for Railway and Maglev Systems STECH, 2009, 2009, _353620-1_-_353620-7_.	0.0	2
71	On Aerodynamic Load Transfer to the Flexible Carâ€Body of a High Speed Train. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900423.	0.2	0
72	New Methodology to Estimate Costs Caused by Rail Wear and RCF Depending on the Type of Running Gear. Lecture Notes in Mechanical Engineering, 2020, , 727-734.	0.3	0

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73	Wheel Wear Evolution of Solid-Axle Wheelset with Active Steering. , 2022, , .		0
74	Study of the Dynamic Performance of Pantograph at Speeds Close to the Critical Speed on Soft Catenary System. , 2022, , .		0