Colin Cole

List of Publications by Year
in descending order

104 papers	2,330 citations	218677 26 h-index	276875 41 g-index
104 all docs	104 docs citations	104 times ranked	994 citing authors

#	ARTICLE	IF	CITATIONS
1	Freight train air brake models. International Journal of Rail Transportation, 2023, 11, 1-49.	2.7	52
2	Curving resistance from wheel-rail interface. Vehicle System Dynamics, 2022, 60, 1018-1036.	3.7	10
3	Development and computational performance improvement of the wheel-rail coupling for heavy haul locomotive traction studies. Vehicle System Dynamics, 2022, 60, 156-183.	3.7	14
4	Identify severe track geometry defect combinations for maintenance planning. International Journal of Rail Transportation, 2022, 10, 95-113.	2.7	5
5	Wheel flat analogue fault detector verification study under dynamic testing conditions using a scaled bogie test rig. International Journal of Rail Transportation, 2022, 10, 177-194.	2.7	9
6	Dynamic performance of locomotive electric drive system under excitation from gear transmission and wheel-rail interaction. Vehicle System Dynamics, 2022, 60, 1806-1828.	3.7	26
7	Determining the critical speed for hunting of three-piece freight bogies: practice versus simulation approaches. Vehicle System Dynamics, 2022, 60, 3314-3335.	3.7	7
8	Problems, assumptions and solutions in locomotive design, traction and operational studies. Railway Engineering Science, 2022, 30, 265-288.	4.4	21
9	Introduction of Rail Cleaning Effect into Locomotive Traction Study Based on Tribometer Measurements. , 2022, , .		1
10	Adaptive simulation and integration method for wheel-rail contact problems in locomotive traction studies. Vehicle System Dynamics, 2022, 60, 4206-4225.	3.7	2
11	Prediction of rail surface damage in locomotive traction operations using laboratory-field measured and calibrated data. Engineering Failure Analysis, 2022, 135, 106165.	4.0	22
12	Parallel co-simulation of locomotive wheel wear and rolling contact fatigue in a heavy haul train operational environment. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2021, 235, 166-178.	2.0	9
13	Railway track longitudinal force model. Vehicle System Dynamics, 2021, 59, 155-170.	3.7	11
14	Rail Freight Vehicles. , 2021, , 423-435.		0
15	Implications of Lateral Coupler Forces for Rail Vehicle Curving Resistance. Journal of Computational and Nonlinear Dynamics, 2021, 16, .	1.2	5
16	Optimization and Simulation of Dynamic Performance of Production–Inventory Systems with Multivariable Controls. Mathematics, 2021, 9, 568.	2.2	6
17	Dynamic response feature of electromechanical coupled drive subsystem in a locomotive excited by wheel flat. Engineering Failure Analysis, 2021, 122, 105248.	4.0	28
18	A review on design and testing methodologies of modern freight train draft gear system. Railway Engineering Science, 2021, 29, 127-151.	4.4	6

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19	MODELLING RAIL THERMAL DIFFERENTIALS DUE TO BENDING AND DEFECTS. Transport, 2021, 36, 134-146.	1.2	0
20	Analysis of positioning of wayside charging stations for hybrid locomotive consists in heavy haul train operations. Railway Engineering Science, 2021, 29, 285-298.	4.4	6
21	Preface to special issue on hybrid and hydrogen technologies for railway operations. Railway Engineering Science, 2021, 29, 211.	4.4	1
22	A review of hydrogen technologies and engineering solutions for railway vehicle design and operations. Railway Engineering Science, 2021, 29, 212-232.	4.4	36
23	Parallel computing in railway research. International Journal of Rail Transportation, 2020, 8, 111-134.	2.7	35
24	Assessing wagon pack sizes in longitudinal train dynamics simulations. Australian Journal of Mechanical Engineering, 2020, 18, 277-287.	2.1	4
25	Parallel computing of wheel-rail contact. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2020, 234, 1109-1116.	2.0	4
26	Research on the compression stability mechanism and its optimisation of coupler with arc surface contact. Vehicle System Dynamics, 2020, 58, 1553-1574.	3.7	8
27	Train braking simulation with wheel-rail adhesion model. Vehicle System Dynamics, 2020, 58, 1226-1241.	3.7	16
28	Wheel flat detectability for Y25 railway freight wagon using vehicle component acceleration signals. Vehicle System Dynamics, 2020, 58, 1893-1913.	3.7	17
29	Ultra-Low Power Sensor Node for On-Board Railway Wagon Monitoring. IEEE Sensors Journal, 2020, 20, 15185-15192.	4.7	8
30	Train energy simulation with locomotive adhesion model. Railway Engineering Science, 2020, 28, 75-84.	4.4	16
31	Preface to special issue on parallel computing and co-simulation in railway research. International Journal of Rail Transportation, 2020, 8, 109-110.	2.7	0
32	Locomotive Adhesion Controlâ€‰+â€‰Rail Friction Field Measurementsâ€‰=â€‰?. Lecture Notes in Mechanical Engineering, 2020, , 433-441.	0.4	5
33	Simulation of Track-Locomotive Interactions in the Longitudinal Direction. Lecture Notes in Mechanical Engineering, 2020, , 769-774.	0.4	0
34	A co-simulation approach for heavy haul long distance locomotive-track simulation studies. Vehicle System Dynamics, 2019, 57, 1363-1380.	3.7	30
35	Friction measurement and creep force modelling methodology for locomotive track damage studies. Wear, 2019, 432-433, 202932.	3.1	15
36	Traction modelling in train dynamics. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2019, 233, 382-395.	2.0	13

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37	Onboard Condition Monitoring Sensors, Systems and Techniques for Freight Railway Vehicles: A Review. IEEE Sensors Journal, 2019, 19, 4-24.	4.7	114
38	Model to estimate infrastructure damage costs for different train types. Australian Journal of Mechanical Engineering, 2019, 17, 219-231.	2.1	4
39	The influence of vehicle system dynamics on rail foot heat transfer. Australian Journal of Mechanical Engineering, 2018, 16, 126-138.	2.1	6
40	Parallel Co-Simulation Method for Railway Vehicle-Track Dynamics. Journal of Computational and Nonlinear Dynamics, 2018, 13, .	1.2	22
41	Bolster spring fault detection strategy for heavy haul wagons. Vehicle System Dynamics, 2018, 56, 1604-1621.	3.7	12
42	Feasibility in assessing the dipped rail joint defects through dynamic response of heavy haul locomotive. Journal of Modern Transportation, 2018, 26, 96-106.	2.5	8
43	Challenges and Solutions for Integrating Simulation into a Transportation Device. Lecture Notes in Computer Science, 2018, , 317-330.	1.3	2
44	Methodology to optimize wedge suspensions of three-piece bogies of railway vehicles. JVC/Journal of Vibration and Control, 2018, 24, 565-581.	2.6	19
45	Parallel multiobjective optimisations of draft gear designs. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2018, 232, 744-758.	2.0	13
46	Comparison of locomotive energy storage systems for heavy-haul operation. International Journal of Rail Transportation, 2018, 6, 1-15.	2.7	20
47	WHEEL–RAIL WEAR INVESTIGATION ON A HEAVY HAUL BALLOON LOOP TRACK THROUGH SIMULATIONS OF SLOW SPEED WAGON DYNAMICS. Transport, 2018, 33, 843-852.	1.2	5
48	International benchmarking of longitudinal train dynamics simulators: results. Vehicle System Dynamics, 2018, 56, 343-365.	3.7	50
49	Preload on draft gear in freight trains. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2018, 232, 1615-1624.	2.0	7
50	Practical Modelling and Simulation of Polymer Draft Gear Connections. , 2018, , .		4
51	Heavy Haul Locomotive Traction Performance under the Implications of In-Train Forces. , 2018, , .		0
52	Advanced Co-Simulation Technique for the Study of Heavy Haul Train and Locomotive Dynamics Behavior. , 2018, , .		0
53	Emerging rail vehicle design and simulation in train operational environment. Australian Journal of Mechanical Engineering, 2018, 16, 83-83.	2.1	0
54	Implementation of a wheel–rail temperature model for locomotive traction studies. International Journal of Rail Transportation, 2017, 5, 1-15.	2.7	14

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55	Longitudinal train dynamics. Vehicle System Dynamics, 2017, 55, 449-449.	3.7	8
56	International benchmarking of longitudinal train dynamics simulators: benchmarking questions. Vehicle System Dynamics, 2017, 55, 450-463.	3.7	32
57	Rail Passenger Vehicle Crashworthiness Simulations Using Multibody Dynamics Approaches. Journal of Computational and Nonlinear Dynamics, 2017, 12, .	1.2	10
58	Parallel Computing Scheme for Three-Dimensional Long Train System Dynamics. Journal of Computational and Nonlinear Dynamics, 2017, 12, .	1.2	20
59	Railway Air Brake Model and Parallel Computing Scheme. Journal of Computational and Nonlinear Dynamics, 2017, 12, .	1.2	19
60	Modelling, simulation and applications of longitudinal train dynamics. Vehicle System Dynamics, 2017, 55, 1498-1571.	3.7	85
61	A signal-based fault detection and classification method for heavy haul wagons. Vehicle System Dynamics, 2017, 55, 1807-1822.	3.7	5
62	Influence of AC system design on the realisation of tractive efforts by high adhesion locomotives. Vehicle System Dynamics, 2017, 55, 1241-1264.	3.7	16
63	An overview: modern techniques for railway vehicle on-board health monitoring systems. Vehicle System Dynamics, 2017, 55, 1045-1070.	3.7	123
64	Examining longitudinal train dynamics in ore car tipplers. Vehicle System Dynamics, 2017, 55, 534-551.	3.7	10
65	Simulated Comparison of Energy Storage Systems for Heavy Haul Locomotives. , 2017, , .		1
66	Locomotive Studies Utilizing Multibody and Train Dynamics. , 2017, , .		3
67	Rail Cleaning Process and its Influence on Locomotive Performance. , 2017, , .		2
68	Modelling polymer draft gears. Vehicle System Dynamics, 2016, 54, 1208-1225.	3.7	30
69	Applications of particle swarm optimization in the railway domain. International Journal of Rail Transportation, 2016, 4, 167-190.	2.7	48
70	Longitudinal train dynamics: an overview. Vehicle System Dynamics, 2016, 54, 1688-1714.	3.7	134
71	Parallel Computing Enables Whole-Trip Train Dynamics Optimizations. Journal of Computational and Nonlinear Dynamics, 2016, 11, .	1.2	18
72	Application of flywheel energy storage for heavy haul locomotives. Applied Energy, 2015, 157, 607-618.	10.1	51

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73	Computing Schemes for Longitudinal Train Dynamics: Sequential, Parallel and Hybrid. Journal of Computational and Nonlinear Dynamics, 2015, 10, .	1.2	22
74	Advanced dynamic modelling for friction draft gears. Vehicle System Dynamics, 2015, 53, 475-492.	3.7	49
75	Simplified and advanced modelling of traction control systems of heavy-haul locomotives. Vehicle System Dynamics, 2015, 53, 672-691.	3.7	38
76	Modelling of traction in railway vehicles. Vehicle System Dynamics, 2015, 53, 603-604.	3.7	2
77	Monitoring vertical wheel–rail contact forces based on freight wagon inverse modelling. Advances in Mechanical Engineering, 2015, 7, 168781401558543.	1.6	19
78	Longitudinal dynamics and energy analysis for heavy haul trains. Journal of Modern Transportation, 2014, 22, 127-136.	2.5	46
79	Adhesion estimation and its implementation for traction control of locomotives. International Journal of Rail Transportation, 2014, 2, 187-204.	2.7	36
80	A review of dynamics modelling of friction draft gear. Vehicle System Dynamics, 2014, 52, 733-758.	3.7	76
81	Longitudinal heavy haul train simulations and energy analysis for typical Australian track routes. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2014, 228, 355-366.	2.0	18
82	A review of dynamics modelling of friction wedge suspensions. Vehicle System Dynamics, 2014, 52, 1389-1415.	3.7	34
83	Study on track dynamic forces due to rail short-wavelength dip defects using rail vehicle-track dynamics simulations. Journal of Mechanical Science and Technology, 2013, 27, 629-640.	1.5	29
84	Creep force modelling for rail traction vehicles based on the Fastsim algorithm. Vehicle System Dynamics, 2013, 51, 1765-1783.	3.7	93
85	Assessing the effects of track input on the response of insulated rail joints using field experiments. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2013, 227, 176-187.	2.0	37
86	Hardware-in-the-loop simulations for railway research. Vehicle System Dynamics, 2013, 51, 497-498.	3.7	1
87	Special Issue on work of the Cooperative Research Centre for Rail Innovation, Australia. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2013, 227, 405-406.	2.0	2
88	Conceptual designs of hybrid locomotives for application as heavy haul trains on typical track lines. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2013, 227, 439-452.	2.0	16
89	Investigation of locomotive multibody modelling issues and results assessment based on the locomotive model acceptance procedure. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2013, 227, 453-468.	2.0	24
90	Development of a real-time bogie test rig model based on railway specialised multibody software. Vehicle System Dynamics, 2013, 51, 236-250.	3.7	23

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91	Assessing wagon stability in complex train systems. International Journal of Rail Transportation, 2013, 1, 193-217.	2.7	18
92	Modelling and analysis of the crush zone of a typical Australian passenger train. Vehicle System Dynamics, 2012, 50, 1137-1155.	3.7	40
93	Wagon instability in long trains. Vehicle System Dynamics, 2012, 50, 303-317.	3.7	54
94	Co-simulation of a mechatronic system using Gensys and Simulink. Vehicle System Dynamics, 2012, 50, 495-507.	3.7	31
95	Development of Traction Control for Hauling Locomotives. Journal of System Design and Dynamics, 2011, 5, 1214-1225.	0.3	21
96	The dynamic wheelâ€"rail contact stresses for wagon on various tracks. Wear, 2008, 265, 1549-1555.	3.1	15
97	Grey box-based inverse wagon model to predict wheelâ€"rail contact forces from measured wagon body responses. Vehicle System Dynamics, 2008, 46, 469-479.	3.7	37
98	An inverse railway wagon model and its applications. Vehicle System Dynamics, 2007, 45, 583-605.	3.7	42
99	Longitudinal Train Dynamics. , 2006, , 239-277.		50
100	On the motion of the structure varying multibody systems with two-dimensional dry friction. Journal of Mechanical Science and Technology, 2005, 19, 927-935.	1.5	6
101	Fuzzy Modelling of Wagon Wheel Unloading Due to Longitudinal Impact Forces. , 2005, , .		0
102	Characterising stochastic friction in railway draft gear. Vehicle System Dynamics, 0, , 1-13.	3.7	1
103	Design and Simulation of Rail Vehicles. , 0, , .		84
104	Rail temperature variation under heavy haul operations. Railway Engineering Science, 0, , 1.	4.4	3