

Wanming Zhai

List of Publications by Year in descending order

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184
papers

7,054
citations

61984

43
h-index

76900

74
g-index

187
all docs

187
docs citations

187
times ranked

1945
citing authors

#	ARTICLE	IF	CITATIONS
1	Fundamentals of vehicle-track coupled dynamics. <i>Vehicle System Dynamics</i> , 2009, 47, 1349-1376.	3.7	638
2	High-speed train-track-bridge dynamic interactions Part I: theoretical model and numerical simulation. <i>International Journal of Rail Transportation</i> , 2013, 1, 3-24.	2.7	310
3	A Detailed Model for Investigating Vertical Interaction between Railway Vehicle and Track. <i>Vehicle System Dynamics</i> , 1994, 23, 603-615.	3.7	281
4	Train-track-bridge dynamic interaction: a state-of-the-art review. <i>Vehicle System Dynamics</i> , 2019, 57, 984-1027.	3.7	268
5	Modelling and experiment of railway ballast vibrations. <i>Journal of Sound and Vibration</i> , 2004, 270, 673-683.	3.9	242
6	Experimental investigation into ground vibrations induced by very high speed trains on a non-ballasted track. <i>Soil Dynamics and Earthquake Engineering</i> , 2015, 72, 24-36.	3.8	173
7	High-speed train-track-bridge dynamic interactions Part II: experimental validation and engineering application. <i>International Journal of Rail Transportation</i> , 2013, 1, 25-41.	2.7	142
8	Improved analytical calculation model of spur gear mesh excitations with tooth profile deviations. <i>Mechanism and Machine Theory</i> , 2020, 149, 103838.	4.5	138
9	A New Wheel/Rail Spatially Dynamic Coupling Model and its Verification. <i>Vehicle System Dynamics</i> , 2004, 41, 301-322.	3.7	135
10	Experimental investigation on vibration behaviour of a CRH train at speed of 350 km/h. <i>International Journal of Rail Transportation</i> , 2015, 3, 1-16.	2.7	135
11	Prediction and mitigation of train-induced vibrations of large-scale building constructed on subway tunnel. <i>Science of the Total Environment</i> , 2019, 668, 485-499.	8.0	131
12	Vibration feature evolution of locomotive with tooth root crack propagation of gear transmission system. <i>Mechanical Systems and Signal Processing</i> , 2019, 115, 29-44.	8.0	124
13	Prediction of high-speed train induced ground vibration based on train-track-ground system model. <i>Earthquake Engineering and Engineering Vibration</i> , 2010, 9, 545-554.	2.3	95
14	Analytical model for mesh stiffness calculation of spur gear pair with non-uniformly distributed tooth root crack. <i>Engineering Failure Analysis</i> , 2016, 66, 502-514.	4.0	93
15	Mechanical property and damage evolution of concrete interface of ballastless track in high-speed railway: Experiment and simulation. <i>Construction and Building Materials</i> , 2018, 187, 460-473.	7.2	93
16	Skidding dynamic performance of rolling bearing with cage flexibility under accelerating conditions. <i>Mechanical Systems and Signal Processing</i> , 2021, 150, 107257.	8.0	85
17	Improved analytical methods for calculation of gear tooth fillet-foundation stiffness with tooth root crack. <i>Engineering Failure Analysis</i> , 2017, 82, 72-81.	4.0	84
18	Dynamic investigation of a locomotive with effect of gear transmissions under tractive conditions. <i>Journal of Sound and Vibration</i> , 2017, 408, 220-233.	3.9	80

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19	Long-term prediction of track geometry degradation in high-speed vehicle“ballastless track system due to differential subgrade settlement. <i>Soil Dynamics and Earthquake Engineering</i> , 2018, 113, 1-11.	3.8	80
20	Analysis of vertical dynamic wheel/rail interaction caused by polygonal wheels on high-speed trains. <i>Wear</i> , 2014, 314, 282-290.	3.1	79
21	An improved dynamic model of spur gear transmission considering coupling effect between gear neighboring teeth. <i>Nonlinear Dynamics</i> , 2021, 106, 339-357.	5.2	75
22	A novel model for determining the amplitude-wavelength limits of track irregularities accompanied by a reliability assessment in railway vehicle-track dynamics. <i>Mechanical Systems and Signal Processing</i> , 2017, 86, 260-277.	8.0	73
23	A locomotive“track coupled vertical dynamics model with gear transmissions. <i>Vehicle System Dynamics</i> , 2017, 55, 244-267.	3.7	73
24	Wear Problems of High-Speed Wheel/Rail Systems: Observations, Causes, and Countermeasures in China. <i>Applied Mechanics Reviews</i> , 2020, 72, .	10.1	72
25	Development of a Vibration Attenuation Track at Low Frequencies for Urban Rail Transit. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2017, 32, 713-726.	9.8	71
26	Safety threshold of high-speed railway pier settlement based on train-track-bridge dynamic interaction. <i>Science China Technological Sciences</i> , 2015, 58, 202-210.	4.0	70
27	Dynamic Behavior Analysis of High-Speed Railway Ballast under Moving Vehicle Loads Using Discrete Element Method. <i>International Journal of Geomechanics</i> , 2017, 17, .	2.7	68
28	A probabilistic model for track random irregularities in vehicle/track coupled dynamics. <i>Applied Mathematical Modelling</i> , 2017, 51, 145-158.	4.2	66
29	Dynamic stress analysis of rail joint with height difference defect using finite element method. <i>Engineering Failure Analysis</i> , 2007, 14, 1488-1499.	4.0	65
30	Dynamic interaction of suspension-type monorail vehicle and bridge: Numerical simulation and experiment. <i>Mechanical Systems and Signal Processing</i> , 2019, 118, 388-407.	8.0	64
31	Calibration for discrete element modelling of railway ballast: A review. <i>Transportation Geotechnics</i> , 2020, 23, 100341.	4.5	63
32	Reducing rail side wear on heavy-haul railway curves based on wheel“rail dynamic interaction. <i>Vehicle System Dynamics</i> , 2014, 52, 440-454.	3.7	59
33	A two-level adaptive chirp mode decomposition method for the railway wheel flat detection under variable-speed conditions. <i>Journal of Sound and Vibration</i> , 2021, 498, 115963.	3.9	59
34	Stochastic analysis model for vehicle-track coupled systems subject to earthquakes and track random irregularities. <i>Journal of Sound and Vibration</i> , 2017, 407, 209-225.	3.9	57
35	Establishment and validation of a locomotive“track coupled spatial dynamics model considering dynamic effect of gear transmissions. <i>Mechanical Systems and Signal Processing</i> , 2019, 119, 328-345.	8.0	57
36	Establishment and verification of three-dimensional dynamic model for heavy-haul train“track coupled system. <i>Vehicle System Dynamics</i> , 2016, 54, 1511-1537.	3.7	56

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37	Train-track coupled dynamics analysis: system spatial variation on geometry, physics and mechanics. <i>Railway Engineering Science</i> , 2020, 28, 36-53.	4.4	56
38	Locomotive dynamic performance under traction/braking conditions considering effect of gear transmissions. <i>Vehicle System Dynamics</i> , 2018, 56, 1097-1117.	3.7	54
39	Impact vibration behavior of railway vehicles: a state-of-the-art overview. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2021, 37, 1193-1221.	3.4	54
40	A three-dimensional model for train-track-bridge dynamic interactions with hypothesis of wheel-rail rigid contact. <i>Mechanical Systems and Signal Processing</i> , 2019, 132, 471-489.	8.0	50
41	A three-dimensional dynamic model for train-track interactions. <i>Applied Mathematical Modelling</i> , 2019, 76, 443-465.	4.2	50
42	A new model for temporal-spatial stochastic analysis of vehicle-track coupled systems. <i>Vehicle System Dynamics</i> , 2017, 55, 427-448.	3.7	48
43	Importance of load frequency in applying cyclic loads to investigate ballast deformation under high-speed train loads. <i>Soil Dynamics and Earthquake Engineering</i> , 2019, 120, 28-38.	3.8	48
44	Train/Track/Bridge Dynamic Interactions: Simulation and Applications. <i>Vehicle System Dynamics</i> , 2002, 37, 653-665.	3.7	45
45	Study on lateral dynamic characteristics of vehicle/turnout system. <i>Vehicle System Dynamics</i> , 2005, 43, 285-303.	3.7	44
46	Interface Damage Assessment of Railway Slab Track Based on Reliability Techniques and Vehicle-Track Interactions. <i>Journal of Transportation Engineering</i> , 2016, 142, .	0.9	44
47	Study on the safe value of multi-pier settlement for simply supported girder bridges in high-speed railways. <i>Structure and Infrastructure Engineering</i> , 2018, 14, 400-410.	3.7	44
48	Analysis of structural stresses of tracks and vehicle dynamic responses in train-track-bridge system with pier settlement. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2018, 232, 421-434.	2.0	42
49	PSD of ballastless track irregularities of high-speed railway. <i>Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica</i> , 2014, 44, 687-696.	0.5	41
50	Wheel/rail dynamic interaction due to excitation of rail corrugation in high-speed railway. <i>Science China Technological Sciences</i> , 2015, 58, 226-235.	4.0	40
51	Mesh stiffness evaluation of an internal spur gear pair with tooth profile shift. <i>Science China Technological Sciences</i> , 2016, 59, 1328-1339.	4.0	39
52	A coupled model for train-track-bridge stochastic analysis with consideration of spatial variation and temporal evolution. <i>Applied Mathematical Modelling</i> , 2018, 63, 709-731.	4.2	39
53	Lateral Hunting Stability of Railway Vehicles Running on Elastic Track Structures. <i>Journal of Computational and Nonlinear Dynamics</i> , 2010, 5, .	1.2	38
54	Full-scale multi-functional test platform for investigating mechanical performance of track-subgrade systems of high-speed railways. <i>Railway Engineering Science</i> , 2020, 28, 213-231.	4.4	36

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55	Wheel-rail dynamic interaction due to rail weld irregularity in high-speed railways. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2018, 232, 249-261.	2.0	35
56	Vibration characteristics of railway locomotive induced by gear tooth root crack fault under transient conditions. Engineering Failure Analysis, 2020, 108, 104285.	4.0	34
57	An advanced train-slab track spatially coupled dynamics model: Theoretical methodologies and numerical applications. Journal of Sound and Vibration, 2021, 501, 116059.	3.9	34
58	Effect of Differential Ballast Settlement on Dynamic Response of Vehicle-Track Coupled Systems. International Journal of Structural Stability and Dynamics, 2018, 18, 1850091.	2.4	33
59	Wheel/rail dynamic interaction induced by polygonal wear of locomotive wheels. Vehicle System Dynamics, 2022, 60, 211-235.	3.7	33
60	Dynamics of high-speed train in crosswinds based on an air-train-track interaction model. Wind and Structures, an International Journal, 2015, 20, 143-168.	0.8	33
61	A robust non-Hertzian contact method for wheel-rail normal contact analysis. Vehicle System Dynamics, 2018, 56, 1899-1921.	3.7	32
62	TMD design for seismic vibration control of high-pier bridges in Sichuan-Tibet Railway and its influence on running trains. Vehicle System Dynamics, 2019, 57, 207-225.	3.7	32
63	Theoretical method of determining pier settlement limit value for China's high-speed railway bridges considering complete factors. Engineering Structures, 2020, 209, 109998.	5.3	32
64	An advanced vehicle-slab track interaction model considering rail random irregularities. JVC/Journal of Vibration and Control, 2018, 24, 4592-4603.	2.6	31
65	Characteristic and mechanism of structural acoustic radiation for box girder bridge in urban rail transit. Science of the Total Environment, 2018, 627, 1303-1314.	8.0	30
66	Lateral interactions of trains and tracks on small-radius curves: simulation and experiment. Vehicle System Dynamics, 2006, 44, 520-530.	3.7	29
67	An efficient model for vehicle-slab track coupled dynamic analysis considering multiple slab cracks. Construction and Building Materials, 2019, 215, 557-568.	7.2	29
68	Development of a track dynamics model using Mindlin plate theory and its application to coupled vehicle-floating slab track systems. Mechanical Systems and Signal Processing, 2020, 140, 106641.	8.0	29
69	Vibration-based damage detection of rail fastener clip using convolutional neural network: Experiment and simulation. Engineering Failure Analysis, 2021, 119, 104906.	4.0	29
70	Analysis of vibration reduction characteristics and applicability of steel-spring floating-slab track. Journal of Modern Transportation, 2011, 19, 215-222.	2.5	28
71	On use of characteristic wavelengths of track irregularities to predict track portions with deteriorated wheel/rail forces. Mechanical Systems and Signal Processing, 2018, 104, 264-278.	8.0	28
72	Dynamic response feature of electromechanical coupled drive subsystem in a locomotive excited by wheel flat. Engineering Failure Analysis, 2021, 122, 105248.	4.0	28

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73	Vibration feature of spur gear transmission with non-uniform depth distribution of tooth root crack along tooth width. <i>Engineering Failure Analysis</i> , 2021, 129, 105713.	4.0	28
74	Dynamic interaction between rail vehicles and vibration-attenuating slab tracks. <i>Construction and Building Materials</i> , 2020, 258, 119545.	7.2	27
75	Progress on wheel-rail dynamic performance of railway curve negotiation. <i>Journal of Traffic and Transportation Engineering (English Edition)</i> , 2014, 1, 209-220.	4.2	26
76	Experimental study on dynamic performance of typical nonballasted track systems using a full-scale test rig. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2017, 231, 470-481.	2.0	26
77	Prediction of rail non-uniform wear – Influence of track random irregularity. <i>Wear</i> , 2019, 420-421, 235-244.	3.1	26
78	A novel dynamics model for railway ballastless track with medium-thick slabs. <i>Applied Mathematical Modelling</i> , 2020, 78, 907-931.	4.2	26
79	Discrete element modelling of railway ballast performance considering particle shape and rolling resistance. <i>Railway Engineering Science</i> , 2020, 28, 382-407.	4.4	26
80	Dynamic performance of locomotive electric drive system under excitation from gear transmission and wheel-rail interaction. <i>Vehicle System Dynamics</i> , 2022, 60, 1806-1828.	3.7	26
81	Vehicle–track–tunnel dynamic interaction: a finite/infinite element modelling method. <i>Railway Engineering Science</i> , 2021, 29, 109-126.	4.4	26
82	High efficient dynamic analysis of vehicle–track–subgrade vertical interaction based on Green function method. <i>Vehicle System Dynamics</i> , 2020, 58, 1076-1100.	3.7	25
83	An improved dynamic model of suspended monorail train-bridge system considering a tyre model with patch contact. <i>Mechanical Systems and Signal Processing</i> , 2020, 144, 106865.	8.0	25
84	Application of dynamic vibration absorbers in designing a vibration isolation track at low-frequency domain. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2017, 231, 546-557.	2.0	24
85	Probabilistic assessment of railway vehicle-curved track systems considering track random irregularities. <i>Vehicle System Dynamics</i> , 2018, 56, 1552-1576.	3.7	24
86	A simplified model for solving wheel-rail non-Hertzian normal contact problem under the influence of yaw angle. <i>International Journal of Mechanical Sciences</i> , 2020, 174, 105554.	6.7	23
87	Experimental study on ground vibration induced by double-line subway trains and road traffic. <i>Transportation Geotechnics</i> , 2021, 29, 100564.	4.5	23
88	Dynamic interaction between heavy-haul train and track structure due to increasing axle load. <i>Australian Journal of Structural Engineering</i> , 2017, 18, 190-203.	1.1	22
89	On effects of track random irregularities on random vibrations of vehicle–track interactions. <i>Probabilistic Engineering Mechanics</i> , 2017, 50, 25-35.	2.7	22
90	Dynamic investigation of traction motor bearing in a locomotive under excitation from track random geometry irregularity. <i>International Journal of Rail Transportation</i> , 2022, 10, 72-94.	2.7	22

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91	A hybrid methodology for predicting train-induced vibration on sensitive equipment in far-field buildings. <i>Transportation Geotechnics</i> , 2021, 31, 100682.	4.5	22
92	Exact closed-form solution for free vibration of Euler-Bernoulli and Timoshenko beams with intermediate elastic supports. <i>International Journal of Mechanical Sciences</i> , 2022, 213, 106842.	6.7	22
93	Investigation of track settlement and ballast degradation in the high-speed railway using a full-scale laboratory test. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2019, 233, 869-881.	2.0	21
94	Dynamic modelling of traction motor bearings in locomotive-track spatially coupled dynamics system. <i>Vehicle System Dynamics</i> , 2022, 60, 2686-2715.	3.7	21
95	Key parameter selection of suspended monorail system based on vehicle-bridge dynamical interaction analysis. <i>Vehicle System Dynamics</i> , 2020, 58, 339-356.	3.7	20
96	Mapping relationship between pier settlement and rail deformation of high-speed railways-part (II): The longitudinal connected ballastless track system. <i>Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica</i> , 2014, 44, 778-785.	0.5	20
97	Study on effect of wheel polygonal wear on high-speed vehicle-track-subgrade vertical interactions. <i>Wear</i> , 2019, 432-433, 102914.	3.1	19
98	Extended applications of track irregularity probabilistic model and vehicle-slab track coupled model on dynamics of railway systems. <i>Vehicle System Dynamics</i> , 2017, 55, 1686-1706.	3.7	18
99	An unsupervised method based on convolutional variational auto-encoder and anomaly detection algorithms for light rail squat localization. <i>Construction and Building Materials</i> , 2021, 313, 125563.	7.2	18
100	Pre-cracking development of weld-induced squats due to plastic deformation: Five-year field monitoring and numerical analysis. <i>International Journal of Fatigue</i> , 2019, 127, 431-444.	5.7	17
101	Formulation of curved beam vibrations and its extended application to train-track spatial interactions. <i>Mechanical Systems and Signal Processing</i> , 2022, 165, 108393.	8.0	17
102	Surface wear evolution of traction motor bearings in vibration environment of a locomotive during operation. <i>Science China Technological Sciences</i> , 2022, 65, 920-931.	4.0	17
103	Collision derailments on bridges containing ballastless slab tracks. <i>Engineering Failure Analysis</i> , 2019, 105, 869-882.	4.0	16
104	Dynamic interaction analysis of suspended monorail vehicle and bridge subject to crosswinds. <i>Mechanical Systems and Signal Processing</i> , 2021, 156, 107707.	8.0	16
105	Dynamic performance comparison of different types of ballastless tracks using vehicle-track-subgrade coupled dynamics model. <i>Engineering Structures</i> , 2021, 249, 113390.	5.3	16
106	Theoretical modelling of a vehicle-slab track coupled dynamics system considering longitudinal vibrations and interface interactions. <i>Vehicle System Dynamics</i> , 2020, , 1-22.	3.7	15
107	Theoretical and experimental study on vibration reduction and frequency tuning of a new damped-sleeper track. <i>Construction and Building Materials</i> , 2022, 336, 127420.	7.2	15
108	Mechanism of self-excited torsional vibration of locomotive driving system. <i>Frontiers of Mechanical Engineering in China</i> , 2010, 5, 465-469.	0.4	14

#	ARTICLE	IF	CITATIONS
109	Calibration and validation of the dynamic response of two slab track models using data from a full-scale test rig. <i>Engineering Structures</i> , 2021, 234, 111980.	5.3	14
110	Effect of noise barrier on aerodynamic performance of high-speed train in crosswind. <i>Wind and Structures, an International Journal</i> , 2015, 20, 509-525.	0.8	14
111	Experimental investigation on dynamic performance evolution of double-block ballastless track under high-cycle train loads. <i>Engineering Structures</i> , 2022, 254, 113872.	5.3	14
112	Quantitative detection of locomotive wheel polygonization under non-stationary conditions by adaptive chirp mode decomposition. <i>Railway Engineering Science</i> , 2022, 30, 129-147.	4.4	14
113	Mechanical characteristics of modern tramcar-embedded track system due to differential subgrade settlement. <i>Australian Journal of Structural Engineering</i> , 2017, 18, 178-189.	1.1	13
114	A model for vehicle-track random interactions on effects of crosswinds and track irregularities. <i>Vehicle System Dynamics</i> , 2019, 57, 444-469.	3.7	13
115	Investigation of the vibration isolation performance of floating slab track with rubber bearings using a stochastic fractional derivative model. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2020, 234, 992-1004.	2.0	13
116	Vehicle-Track Coupled Dynamics Models. , 2020, , 17-149.		13
117	Ground vibration induced by maglev trains running inside tunnel: Numerical modelling and experimental validation. <i>Soil Dynamics and Earthquake Engineering</i> , 2022, 157, 107278.	3.8	13
118	Effect of hollow-worn wheels on the evolution of rail wear. <i>Wear</i> , 2019, 436-437, 203032.	3.1	12
119	Nonlinear Stability of Rail Vehicles Traveling on Vibration-Attenuating Slab Tracks. <i>Journal of Computational and Nonlinear Dynamics</i> , 2020, 15, .	1.2	12
120	Effect of the drive system on locomotive dynamic characteristics using different dynamics models. <i>Science China Technological Sciences</i> , 2019, 62, 308-320.	4.0	11
121	Vibration-based damage detection of rail fastener using fully convolutional networks. <i>Vehicle System Dynamics</i> , 2022, 60, 2191-2210.	3.7	11
122	Dynamic performance evaluation of rail fastening system based on a refined vehicle-track coupled dynamics model. <i>Vehicle System Dynamics</i> , 2022, 60, 2564-2586.	3.7	11
123	Sensor deploying for damage identification of vibration isolator in floating-slab track using deep residual network. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021, 183, 109801.	5.0	11
124	Dynamic effect and safety limits of rail weld irregularity on high-speed railways. <i>Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica</i> , 2014, 44, 697-706.	0.5	11
125	Mechanism of high-speed train carbody shaking due to degradation of wheel-rail contact geometry. <i>International Journal of Rail Transportation</i> , 2023, 11, 289-316.	2.7	11
126	A spectral evolution model for track geometric degradation in train-track long-term dynamics. <i>Vehicle System Dynamics</i> , 2020, 58, 1-27.	3.7	10

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127	DEM Analysis of Ballast Breakage Under Train Loads and Its Effect on Mechanical Behaviour of Railway Track. Springer Proceedings in Physics, 2017, , 1323-1333.	0.2	10
128	é~éÉÿé“è-æj¥ã©æ²%œé™ä,žé’çè1/2”ã*ã1/2ççš,,æ~ã°,ã...³ç³»(ã...):ã•ã...fæçã1/4æ—çÿè1/2”é“ç³»ç»ÿ. Zhongguo Kexue Jishu Kexue/Science	0.6	8
129	Blind Attention Geometric Restraint Neural Network for Single Image Dynamic/Defocus Deblurring. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 8404-8417.	11.3	10
130	A spatial dynamics model for heavy-haul electric locomotives considering the dynamic coupling effect of gear transmissions. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2019, 233, 961-973.	2.0	9
131	Experimental assessment of the dynamic performance of slave control locomotive couplers in 20,000-tonne heavy-haul trains. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2021, 235, 1225-1236.	2.0	9
132	Numerical Investigation on Wheel-Rail Dynamic Vibration Excited by Rail Spalling in High-Speed Railway. Shock and Vibration, 2016, 2016, 1-11.	0.6	8
133	Investigation on Derailment of Empty Wagons of Long Freight Train during Dynamic Braking. Shock and Vibration, 2018, 2018, 1-18.	0.6	8
134	Cross Wind Effects on Vehicle-Track Interactions: A Methodology for Dynamic Model Construction. Journal of Computational and Nonlinear Dynamics, 2019, 14, .	1.2	8
135	Analysis on the features and potential causes of wheel surface damage for heavy-haul locomotives. Engineering Failure Analysis, 2020, 109, 104292.	4.0	8
136	Long-term evolution mechanism of the rail weld irregularity in metro lines based on the wear theory. Wear, 2020, 444-445, 203160.	3.1	8
137	Non-Hertzian contact analysis of heavy-haul locomotive wheel/rail dynamic interactions under changeable friction conditions. Vehicle System Dynamics, 2022, 60, 2167-2189.	3.7	8
138	Static and dynamic effects of train-track-bridge system subject to environment-induced deformation of long-span railway bridge. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2023, 237, 93-103.	2.0	8
139	Improved analytical method for gear body-induced deflections with tooth root crack considering structural coupling effect. Engineering Failure Analysis, 2022, 137, 106400.	4.0	8
140	Experimental investigation on the characteristics of the dynamic rail pad force and its stress distribution in the time and frequency domain. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2020, 234, 201-213.	2.0	7
141	Field measurement of the dynamic responses of a suspended monorail train-bridge system. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2020, 234, 1093-1108.	2.0	7
142	Impact coefficient analysis of track beams due to moving suspended monorail vehicles. Vehicle System Dynamics, 2022, 60, 653-669.	3.7	7
143	Improvement on Curve Negotiation Performance of Suspended Monorail Vehicle Considering Flexible Guideway. International Journal of Structural Stability and Dynamics, 2020, 20, 2050057.	2.4	7
144	Coupled vibration analysis of suspended monorail train and curved bridge considering nonlinear wheel-track contact relation. Vehicle System Dynamics, 2022, 60, 2658-2685.	3.7	7

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145	Resonance of railway vehicles induced by floating-slab tracks: mechanism and countermeasures. <i>Vehicle System Dynamics</i> , 2022, 60, 4098-4117.	3.7	7
146	Improved Dynamics Model of Locomotive Traction Motor with Elasticity of Rotor Shaft and Supporting Bearings. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2022, 35, .	3.7	7
147	Global Sensitivity Analysis for Vehicle-Track Interactions: Special Attention on Track Irregularities. <i>Journal of Computational and Nonlinear Dynamics</i> , 2018, 13, .	1.2	6
148	High-Speed Train-Track-Bridge Dynamic Interaction considering Wheel-Rail Contact Nonlinearity due to Wheel Hollow Wear. <i>Shock and Vibration</i> , 2019, 2019, 1-18.	0.6	6
149	Dynamic Analysis on the Stiffness Enhancement Measure of the Slab End for a Discontinuous Floating Slab Track. <i>Computing in Science and Engineering</i> , 2019, 21, 51-59.	1.2	6
150	Modeling Slab Track for Vehicle-Track-Coupled Dynamics Analysis Using Spline Function Method. <i>International Journal of Structural Stability and Dynamics</i> , 2020, 20, 2050026.	2.4	5
151	Running safety evaluation of high-speed train subject to the impact of floating ice collision on bridge piers. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 0, , 095440972110100.	2.0	5
152	Numerical Method and Computer Simulation for Analysis of Vehicle-Track Coupled Dynamics. , 2020, , 203-229.		5
153	DYNAMIC PERFORMANCE OF LOW VIBRATION SLAB TRACK ON SHARED HIGH-SPEED PASSENGER AND FREIGHT RAILWAY. <i>Transport</i> , 2018, 33, 669-678.	1.2	5
154	Effect of rotor eccentricity on the dynamic performance of a traction motor and its support bearings in a locomotive. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 0, , 095440972110723.	2.0	5
155	Polygonal wear evolution of locomotive wheels subjected to anti-slip control. <i>Wear</i> , 2022, 500-501, 204348.	3.1	5
156	An Advanced Antislip Control Algorithm for Locomotives Under Complex Friction Conditions. <i>Journal of Computational and Nonlinear Dynamics</i> , 2021, 16, .	1.2	4
157	Dynamic performance of vehicle in high-speed freight EMU equipped with four double-axle bogies. <i>Science China Technological Sciences</i> , 2021, 64, 387-399.	4.0	3
158	Effect of Differential Subgrade Settlement on Dynamic Performance of High-Speed Vehicle and Double-Block Ballastless Track Coupled System. , 2018, , .		2
159	Experimental Investigation on Coupled Vibration Features of Suspended Monorail Train-Bridge System under Constant Speed and Braking Conditions. <i>International Journal of Structural Stability and Dynamics</i> , 2021, 21, .	2.4	2
160	Damage Detection of Rail Fastening System Through Deep Learning and Vehicle-Track Coupled Dynamics. <i>Lecture Notes in Mechanical Engineering</i> , 2020, , 148-153.	0.4	2
161	Theoretical and Experimental Investigation on Nonlinear Lateral Dynamical Behavior of Railway Wagon. <i>Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering</i> , 2008, 44, 138.	0.5	2
162	A Wasserstein generative adversarial network-based approach for real-time track irregularity estimation using vehicle dynamic responses. <i>Vehicle System Dynamics</i> , 2022, 60, 4186-4205.	3.7	2

#	ARTICLE	IF	CITATIONS
163	On the safety threshold of trains running on Sichuan-Tibet Railway bridges under the influence of floating ice. <i>Vehicle System Dynamics</i> , 0, , 1-17.	3.7	2
164	Effect of the combined centre of gravity height on the ride comfort of suspended monorail train under crosswinds. <i>Vehicle System Dynamics</i> , 2023, 61, 1954-1972.	3.7	2
165	Simulation and Analysis for Self-Excited Torsional Vibration of Locomotive Drive System. , 2009, , .		1
166	Inaugural editorial for the International Journal of Rail Transportation. <i>International Journal of Rail Transportation</i> , 2013, 1, 1-2.	2.7	1
167	Analysis on the Dynamic Performance of a High-Speed Train Running on Different Types of Ballastless Track Structures. , 2016, , .		1
168	Track Random Irregularity Analysis for Heavy-Haul Railway. , 2018, , .		1
169	Experimental Validation of Vehicle-Track Coupled Dynamics Models. , 2020, , 259-283.		1
170	Analyses of Metro Train-Induced Vibration of Building Above Subway Tunnel. <i>Lecture Notes in Civil Engineering</i> , 2020, , 653-666.	0.4	1
171	Simulation and Analysis for Stick-Slip Vibration of Locomotive with Hollow-Shaft Drive System. , 2009, , .		0
172	Aerodynamic Forces Acting on High-Speed Train inside Tunnels. , 2009, , .		0
173	Train-Track-Bridge Dynamic Simulation of Reinforced T-Beam on Speed-Up Railway Line. , 2009, , .		0
174	Dynamic Response Analysis of Vertical Vehicle-Track Coupled System in Frequency Domain. , 2011, , .		0
175	Vertical Vibration Characteristics of a Concrete Sleeper with Cracks in a Heavy-Haul Railway. , 2015, , .		0
176	Formulation of Track Irregularities Boundary PSD Based on a 3-D Nonlinear Vehicle-Track Interaction Model. , 2018, , .		0
177	Special issue on "1st International Conference on Rail Transportation". <i>International Journal of Rail Transportation</i> , 2018, 6, 55-56.	2.7	0
178	Effect of Polygonal Wheel on Dynamic Performances of High-Speed Vehicle-Slab Track System. , 2018, , .		0
179	Ground vibrations from high-speed non-ballasted railways: numerical prediction and field experiment. , 2019, , 153-185.		0
180	Vibration Characteristics of Vehicle-Track Coupled System. , 2020, , 299-346.		0

#	ARTICLE	IF	CITATIONS
181	Field Test on Vehicle-Track Coupled System Dynamics. , 2020, , 231-258.		0
182	Practical Applications of the Theory of Vehicle-Track Coupled Dynamics in Engineering. , 2020, , 367-406.		0
183	Reliability Analysis of Rail Fastening System When a Heavy Haul Locomotive Passing Through a Small Radius Curve. Lecture Notes in Mechanical Engineering, 2020, , 328-336.	0.4	0
184	Train and track interactions. , 2022, , 161-181.		0