

# Weihua Zhang

## List of Publications by Year in descending order

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41  
papers

1,385  
citations

394421

19  
h-index

345221

36  
g-index

44  
all docs

44  
docs citations

44  
times ranked

742  
citing authors

#	ARTICLE	IF	CITATIONS
1	An innovative stepwise time-domain fatigue methodology to integrate damage tolerance into system dynamics. <i>Vehicle System Dynamics</i> , 2023, 61, 550-572.	3.7	5
2	Study on the influence of lateral and local rail deformation on the train-track interaction dynamics. <i>Vehicle System Dynamics</i> , 2022, 60, 670-698.	3.7	5
3	Lateral-vertical coupled active suspension on railway vehicle and optimal control methods. <i>Vehicle System Dynamics</i> , 2022, 60, 258-280.	3.7	4
4	Effect of the strip spacing on the aerodynamic performance of a high-speed double-strip pantograph. <i>Vehicle System Dynamics</i> , 2022, 60, 3358-3374.	3.7	15
5	Optimal frequency band selection using blind and targeted features for spectral coherence-based bearing diagnostics: A comparative study. <i>ISA Transactions</i> , 2022, 127, 395-414.	5.7	24
6	An improved envelope spectrum via candidate fault frequency optimization-gram for bearing fault diagnosis. <i>Journal of Sound and Vibration</i> , 2022, 523, 116746.	3.9	37
7	An adaptive variable-length cable element method for form-finding analysis of railway catenaries in an absolute nodal coordinate formulation. <i>European Journal of Mechanics, A/Solids</i> , 2022, 93, 104545.	3.7	12
8	Effect of track irregularities of high-speed railways on the thermal characteristics of the traction motor bearing. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2021, 235, 22-34.	2.0	15
9	Coupled dynamic behaviour of a transmission system with gear eccentricities for a high-speed train. <i>Vehicle System Dynamics</i> , 2021, 59, 613-634.	3.7	21
10	Stochastic failure process of railway vehicle dampers and the effects on suspension and vehicle dynamics. <i>Vehicle System Dynamics</i> , 2021, 59, 703-718.	3.7	9
11	Improved multiscale weighted-dispersion entropy and its application in fault diagnosis of train bearing. <i>Measurement Science and Technology</i> , 2021, 32, 075002.	2.6	7
12	Effect of unbalanced magnetic pull on the thermal characteristics of traction motor bearing. <i>Industrial Lubrication and Tribology</i> , 2021, 73, 1187-1197.	1.3	2
13	A new nonlinear displacement-dependent parametric model of a high-speed rail pantograph hydraulic damper. <i>Vehicle System Dynamics</i> , 2020, 58, 272-289.	3.7	9
14	Influence of wheel-polygonal wear on the dynamic forces within the axle-box bearing of a high-speed train. <i>Vehicle System Dynamics</i> , 2020, 58, 1385-1406.	3.7	43
15	Analysis of vibration and temperature on the axle box bearing of a high-speed train. <i>Vehicle System Dynamics</i> , 2020, 58, 1605-1628.	3.7	21
16	Experimental research into the low-temperature characteristics of a hydraulic damper and the effect on the dynamics of the pantograph of a high-speed train running in extreme cold weather conditions. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2020, 234, 896-907.	2.0	5
17	Wheel wear analysis of motor and unpowered car of a high-speed train. <i>Wear</i> , 2020, 444-445, 203136.	3.1	11
18	Dynamic characteristics of a high-speed train gearbox in the vehicle-track coupled system excited by wheel defects. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2020, 234, 1210-1226.	2.0	11

#	ARTICLE	IF	CITATIONS
19	Blind deconvolution assisted with periodicity detection techniques and its application to bearing fault feature enhancement. Measurement: Journal of the International Measurement Confederation, 2020, 159, 107804.	5.0	37
20	A New Three-Dimensional Moving Timoshenko Beam Element for Moving Load Problem Analysis. Journal of Vibration and Acoustics, Transactions of the ASME, 2020, 142, .	1.6	10
21	Effect of vehicle vibration environment of high-speed train on dynamic performance of axle box bearing. Vehicle System Dynamics, 2019, 57, 543-563.	3.7	66
22	A novel blind deconvolution method and its application to fault identification. Journal of Sound and Vibration, 2019, 460, 114900.	3.9	56
23	Random Response Analysis of Axle-Box Bearing of a High-Speed Train Excited by Crosswinds and Track Irregularities. IEEE Transactions on Vehicular Technology, 2019, 68, 10607-10617.	6.3	57
24	An improved complementary ensemble empirical mode decomposition with adaptive noise and its application to rolling element bearing fault diagnosis. ISA Transactions, 2019, 91, 218-234.	5.7	115
25	Effect of the nonlinear displacement-dependent characteristics of a hydraulic damper on high-speed rail pantograph dynamics. Nonlinear Dynamics, 2019, 95, 3439-3464.	5.2	12
26	Motor carâ€“track spatial coupled dynamics model of a high-speed train with traction transmission systems. Mechanism and Machine Theory, 2019, 137, 386-403.	4.5	53
27	Investigation on Monitoring System for Pantograph and Catenary Based on Condition-Based Recognition of Pantograph. Shock and Vibration, 2019, 2019, 1-10.	0.6	5
28	A real-time impact detection and diagnosis system of catenary using measured strains by fibre Bragg grating sensors. Vehicle System Dynamics, 2019, 57, 1924-1946.	3.7	10
29	Particle swarm optimization algorithm to solve the deconvolution problem for rolling element bearing fault diagnosis. ISA Transactions, 2019, 90, 244-267.	5.7	74
30	Application of an improved minimum entropy deconvolution method for railway rolling element bearing fault diagnosis. Journal of Sound and Vibration, 2018, 425, 53-69.	3.9	92
31	Influence of pantograph fixing position on aerodynamic characteristics of high-speed trains. Journal of Modern Transportation, 2017, 25, 34-39.	2.5	14
32	Crowd simulation using DC model and density information. Multimedia Tools and Applications, 2016, 75, 5981-5998.	3.9	3
33	&lt;TPL-PCRUN&gt; Statement of methods. Vehicle System Dynamics, 2015, 53, 380-391.	3.7	17
34	The results of the pantographâ€“catenary interaction benchmark. Vehicle System Dynamics, 2015, 53, 412-435.	3.7	161
35	Study on dynamics of coupled systems in high-speed trains. Vehicle System Dynamics, 2013, 51, 966-1016.	3.7	58
36	Pantograph and catenary system with double pantographs for high-speed trains at 350 km/h or higher. Journal of Modern Transportation, 2011, 19, 7-11.	2.5	30

#	ARTICLE	IF	CITATIONS
37	Effect of tangent track buckle on vehicle derailment. Multibody System Dynamics, 2011, 25, 1-41.	2.7	62
38	Investigation on dynamic performance and parameter optimization design of pantograph and catenary system. Finite Elements in Analysis and Design, 2011, 47, 288-295.	3.2	66
39	Evaluation of the coupled dynamical response of a pantograph–catenary system: contact force and stresses. Vehicle System Dynamics, 2006, 44, 645-658.	3.7	35
40	An investigation into structural failures of Chinese high-speed trains. Engineering Failure Analysis, 2006, 13, 427-441.	4.0	17
41	Hybrid Simulation of Dynamics for the Pantograph-Catenary System. Vehicle System Dynamics, 2002, 38, 393-414.	3.7	76