Chengbiao Cai

List of Publications by Year in Descending Order

34 papers	1,502 citations	17 h-index	37 g-index
37 ext. papers	1,823 ext. citations	3.4 avg, IF	4.92 L-index

#	Paper	IF	Citations
34	Experimental investigation on dynamic performance evolution of double-block ballastless track under high-cycle train loads. *Engineering Structures*, **2022**, 254, 113872	4.7	1
33	Cohesive zone modeling of fatigue crack propagation in slab track interface under cyclic temperature load. *Engineering Failure Analysis*, **2022**, 134, 106028	3.2	1
32	Dynamic interaction analysis of suspended monorail vehicle and bridge subject to crosswinds. *Mechanical Systems and Signal Processing*, **2021**, 156, 107707	7.8	6
31	Sensor deploying for damage identification of vibration isolator in floating-slab track using deep residual network. *Measurement: Journal of the International Measurement Confederation*, **2021**, 183, 109801	4.6	1
30	Mechanical characteristic variation of ballastless track in high-speed railway: effect of train–track interaction and environment loads. *Railway Engineering Science*, **2020**, 28, 408-423	4.5	18
29	Improvement on Curve Negotiation Performance of Suspended Monorail Vehicle Considering Flexible Guideway. *International Journal of Structural Stability and Dynamics*, **2020**, 20, 2050057	1.9	4
28	An improved dynamic model of suspended monorail train-bridge system considering a tyre model with patch contact. *Mechanical Systems and Signal Processing*, **2020**, 144, 106865	7.8	15
27	Impact coefficient analysis of track beams due to moving suspended monorail vehicles. *Vehicle System Dynamics*, **2020**, 1-17	2.8	3
26	Experimental and numerical analysis on concrete interface damage of ballastless track using different cohesive models. *Construction and Building Materials*, **2020**, 263, 120859	6.7	8
25	Full-scale multi-functional test platform for investigating mechanical performance of track–subgrade systems of high-speed railways. *Railway Engineering Science*, **2020**, 28, 213-231	4.5	17
24	Key parameter selection of suspended monorail system based on vehicle–bridge dynamical interaction analysis. *Vehicle System Dynamics*, **2020**, 58, 339-356	2.8	13
23	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	1.4	6
22	Dynamic interaction of suspension-type monorail vehicle and bridge: Numerical simulation and experiment. *Mechanical Systems and Signal Processing*, **2019**, 118, 388-407	7.8	46
21	Mechanical property and damage evolution of concrete interface of ballastless track in high-speed railway: Experiment and simulation. *Construction and Building Materials*, **2018**, 187, 460-473	6.7	59
20	DYNAMIC PERFORMANCE OF LOW VIBRATION SLAB TRACK ON SHARED HIGH-SPEED PASSENGER AND FREIGHT RAILWAY. *Transport*, **2018**, 33, 669-678	1.4	3
19	Experimental study on dynamic performance of typical nonballasted track systems using a full-scale test rig. *Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit*, **2017**, 231, 470-481	1.4	18
18	Application of dynamic vibration absorbers in designing a vibration isolation track at low-frequency domain. *Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit*, **2017**, 231, 546-557	1.4	18

17	Influence of Wheel Eccentricity on Vertical Vibration of Suspended Monorail Vehicle: Experiment and Simulation. *Shock and Vibration*, **2017**, 2017, 1-10	1.1	5
16	Development of a Vibration Attenuation Track at Low Frequencies for Urban Rail Transit. *Computer-Aided Civil and Infrastructure Engineering*, **2017**, 32, 713-726	8.4	52
15	Interface Damage Assessment of Railway Slab Track Based on Reliability Techniques and Vehicle-Track Interactions. *Journal of Transportation Engineering*, **2016**, 142, 04016041		30
14	Safety threshold of high-speed railway pier settlement based on train-track-bridge dynamic interaction. *Science China Technological Sciences*, **2015**, 58, 202-210	3.5	46
13	Low-frequency vibration control of floating slab tracks using dynamic vibration absorbers. *Vehicle System Dynamics*, **2015**, 53, 1296-1314	2.8	47
12	A nonlinear and fractional derivative viscoelastic model for rail pads in the dynamic analysis of coupled vehicle–slab track systems. *Journal of Sound and Vibration*, **2015**, 335, 304-320	3.9	68
11	A frequency and amplitude dependent model of rail pads for the dynamic analysis of train-track interaction. *Science China Technological Sciences*, **2015**, 58, 191-201	3.5	13
10	Stress intensity factors evaluation for through-transverse crack in slab track system under vehicle dynamic load. *Engineering Failure Analysis*, **2014**, 46, 219-237	3.2	32
9	Damage evolution and dynamic response of cement asphalt mortar layer of slab track under vehicle dynamic load. *Science China Technological Sciences*, **2014**, 57, 1883-1894	3.5	45
8	Interface damage and its effect on vibrations of slab track under temperature and vehicle dynamic loads. *International Journal of Non-Linear Mechanics*, **2014**, 58, 222-232	2.8	119
7	Dynamic analysis of CRTS III slab track-subgrade system under impact load. *Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica*, **2014**, 44, 722-728	1.3	4
6	High-speed train–track–bridge dynamic interactions – Part II: experimental validation and engineering application. *International Journal of Rail Transportation*, **2013**, 1, 25-41	2.1	109
5	High-speed train–track–bridge dynamic interactions – Part I: theoretical model and numerical simulation. *International Journal of Rail Transportation*, **2013**, 1, 3-24	2.1	235
4	Fatigue Life Prediction of CRTS I Ballastless Slab Track **2011**,		2
3	Fundamentals of vehicle–track coupled dynamics. *Vehicle System Dynamics*, **2009**, 47, 1349-1376	2.8	454
2	Coupled vibration analysis of suspended monorail train and curved bridge considering nonlinear wheel-track contact relation. *Vehicle System Dynamics*,1-28	2.8	3
1	Experimental Investigation on Coupled Vibration Features of Suspended Monorail Train–Bridge System under Constant Speed and Braking Conditions. *International Journal of Structural Stability and Dynamics*,2150177	1.9	1