

# Li-zhong Jiang

## List of Publications by Year in descending order

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Version: 2024-02-01

122  
papers

2,248  
citations

236612

25  
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315357

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122  
docs citations

122  
times ranked

832  
citing authors

#	ARTICLE	IF	CITATIONS
1	Probability analysis of train-bridge coupled system considering track irregularities and parameter uncertainty. <i>Mechanics Based Design of Structures and Machines</i> , 2023, 51, 2918-2935.	3.4	17
2	Safety and comfort assessment of a train passing over an earthquake-damaged bridge based on a probability model. <i>Structure and Infrastructure Engineering</i> , 2023, 19, 525-536.	2.0	16
3	Parameter optimization analysis of plane friction coupling effect. <i>Mechanics Based Design of Structures and Machines</i> , 2023, 51, 4467-4490.	3.4	3
4	Component Damage and Failure Sequence of Track-bridge System for High-speed Railway under Seismic Action. <i>Journal of Earthquake Engineering</i> , 2023, 27, 656-678.	1.4	20
5	Seismic-Induced Geometric Irregularity of Rail Alignment under Transverse Random Earthquake. <i>Journal of Earthquake Engineering</i> , 2023, 27, 575-596.	1.4	12
6	An efficient simplified model for high-speed railway simply supported bridge under earthquakes. <i>Structure and Infrastructure Engineering</i> , 2023, 19, 1811-1825.	2.0	4
7	Dynamic response analysis of multi-span bridge-track structure system under moving loads. <i>Mechanics Based Design of Structures and Machines</i> , 2023, 51, 5669-5687.	3.4	4
8	Uneven settlement threshold of continuous beam pier based on analytic mapping relationship. <i>Structure and Infrastructure Engineering</i> , 2023, 19, 1190-1204.	2.0	6
9	Study on the dynamic response correction factor of a coupled high-speed train-track-bridge system under near-fault earthquakes. <i>Mechanics Based Design of Structures and Machines</i> , 2022, 50, 3303-3321.	3.4	32
10	Seismic Responses of a High-speed Railway (HSR) Bridge and Track Simulation under Longitudinal Earthquakes. <i>Journal of Earthquake Engineering</i> , 2022, 26, 4449-4470.	1.4	27
11	Effects of foundation settlement on comfort of riding on high-speed train-track-bridge coupled systems. <i>Mechanics Based Design of Structures and Machines</i> , 2022, 50, 2760-2778.	3.4	15
12	Bond properties of 500MPa steel bars in engineered cementitious composites. <i>Proceedings of the Institution of Civil Engineers: Structures and Buildings</i> , 2022, 175, 230-243.	0.4	1
13	Velocity pulse effects of near-fault earthquakes on a high-speed railway vehicle-ballastless track-benchmark bridge system. <i>Vehicle System Dynamics</i> , 2022, 60, 2963-2987.	2.2	12
14	Lateral girder displacement effect on the safety and comfortability of the high-speed rail train operation. <i>Vehicle System Dynamics</i> , 2022, 60, 3215-3239.	2.2	20
15	The Influence of Nonhomogeneous Interlayer Stiffness on Dynamic Response of Orbit-Girder System under Moving Load. <i>International Journal of Structural Stability and Dynamics</i> , 2022, 22, .	1.5	9
16	Bending and free vibration and analysis of laminated plates on Winkler foundations based on meshless layerwise theory. <i>Mechanics of Advanced Materials and Structures</i> , 2022, 29, 6168-6187.	1.5	6
17	A semi-online spatial wheel-rail contact detection method. <i>International Journal of Rail Transportation</i> , 2022, 10, 730-748.	1.8	2
18	Assessment of optimal ground motion intensity measure for high-speed railway girder bridge (HRGB) based on spectral acceleration. <i>Engineering Structures</i> , 2022, 252, 113728.	2.6	26

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19	Numerical model of large spatial deflections of bundled conductors in electrical substations. <i>International Journal of Mechanics and Materials in Design</i> , 2022, 18, 223-242.	1.7	5
20	The influence of trains on the seismic response of simply-supported beam bridges with different pier heights expressed through an impact factor. <i>Bulletin of Earthquake Engineering</i> , 2022, 20, 2795-2814.	2.3	8
21	Running Safety of High-Speed Railway Train on Bridge During Earthquake Considering Uncertainty Parameters of Bridge. <i>International Journal of Structural Stability and Dynamics</i> , 2022, 22, .	1.5	7
22	Effect of simulation accuracy of shear keys shear state on seismic response of friction pendulum bearing. <i>Structures</i> , 2022, 39, 1189-1203.	1.7	5
23	Effects of Spatial Variation of Ground Motion (SVGM) on Seismic Vulnerability of Ultra-high Tower and Multi-tower Cable-stayed Bridges. <i>Journal of Earthquake Engineering</i> , 2022, 26, 8495-8524.	1.4	9
24	Distortional Buckling Analysis of I-Steel Concrete Composite Beams Subjected to Hogging Moment. <i>International Journal of Steel Structures</i> , 2022, 22, 864-879.	0.6	2
25	Seismic Damage Assessment and Shaking-Table Test Validation of Midrise Cold-Formed Steel Composite Shear Wall Buildings. <i>Journal of Structural Engineering</i> , 2022, 148, .	1.7	8
26	Track structural damage index for high-speed railway girder bridges considering residual deformations due to earthquake. <i>Bulletin of Earthquake Engineering</i> , 2022, 20, 6587-6609.	2.3	12
27	Effects of near-fault pulse-type ground motions on high-speed railway simply supported bridge and pulse parameter analysis. <i>Bulletin of Earthquake Engineering</i> , 2022, 20, 6167-6192.	2.3	5
28	Study on the restoring force model for the high-speed railway CRTS III Slab Ballastless Track. <i>Archives of Civil and Mechanical Engineering</i> , 2022, 22, .	1.9	4
29	Analytical evaluation of lateral rail unevenness on high-speed railway bridge after transversal seismic shaking. <i>Engineering Structures</i> , 2022, 267, 114614.	2.6	7
30	Mega-earthquake response of benchmark high-speed rail bridge piers based on shaking table tests. <i>Engineering Failure Analysis</i> , 2022, 140, 106608.	1.8	6
31	A near-fault vertical scenario earthquakes-based generic simulation framework for elastoplastic seismic analysis of light rail vehicle-viaduct system. <i>Vehicle System Dynamics</i> , 2021, 59, 949-973.	2.2	15
32	System-based probabilistic evaluation of longitudinal seismic control for a cable-stayed bridge with three super-tall towers. <i>Engineering Structures</i> , 2021, 229, 111586.	2.6	24
33	Analytical investigation on the geometry of longitudinal continuous track in high-speed rail corresponding to lateral bridge deformation. <i>Construction and Building Materials</i> , 2021, 268, 121064.	3.2	30
34	Stochastic finite element method based on point estimate and Karhunen-Loève expansion. <i>Archive of Applied Mechanics</i> , 2021, 91, 1257-1271.	1.2	11
35	Effects of horizontal ground motion incident angle on the seismic risk assessment of a high-speed railway continuous bridge. <i>Archives of Civil and Mechanical Engineering</i> , 2021, 21, 1.	1.9	25
36	A Numerically Scaled Spring-Friction System and Validation by Shaking Table Test. <i>International Journal of Structural Stability and Dynamics</i> , 2021, 21, 2150092.	1.5	4

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37	Dynamic response limit of high-speed railway bridge under earthquake considering running safety performance of train. <i>Journal of Central South University</i> , 2021, 28, 968-980.	1.2	43
38	Study on the influence of trains on the seismic response of high-speed railway structure under lateral uncertain earthquakes. <i>Bulletin of Earthquake Engineering</i> , 2021, 19, 2971-2992.	2.3	46
39	Two-Step Unconditionally Stable Noniterative Dissipative Displacement Method for Analysis of Nonlinear Structural Dynamics Problems. <i>Shock and Vibration</i> , 2021, 2021, 1-27.	0.3	0
40	Modular composite building in urgent emergency engineering projects: A case study of accelerated design and construction of Wuhan Thunder God Mountain/Leishenshan hospital to COVID-19 pandemic. <i>Automation in Construction</i> , 2021, 124, 103555.	4.8	85
41	Running test on high-speed railway track-simply supported girder bridge systems under seismic action. <i>Bulletin of Earthquake Engineering</i> , 2021, 19, 3779-3802.	2.3	21
42	An efficient computing strategy based on the unconditionally stable explicit algorithm for the nonlinear train-track-bridge system under an earthquake. <i>Soil Dynamics and Earthquake Engineering</i> , 2021, 145, 106718.	1.9	10
43	Cyclic Tests and Numerical Analyses on Bolt-Connected Precast Reinforced Concrete Deep Beams. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 5356.	1.3	1
44	Creep Effect on the Dynamic Response of Train-Track-Continuous Bridge System. <i>International Journal of Structural Stability and Dynamics</i> , 2021, 21, 2150139.	1.5	12
45	Dynamic Analysis of Multi-layer Beam Structure of Rail Track System Under a Moving Load Based on Mode Decomposition. <i>Journal of Vibration Engineering and Technologies</i> , 2021, 9, 1463-1481.	1.3	8
46	An Efficient Model for Train-Track-Bridge-Coupled System under Seismic Excitation. <i>Shock and Vibration</i> , 2021, 2021, 1-14.	0.3	5
47	Seismic behavior and damage assessment of mid-rise cold-formed steel-framed buildings with normal and reinforced beam-column joints. <i>Archives of Civil and Mechanical Engineering</i> , 2021, 21, 1.	1.9	5
48	Stochastic Transverse Earthquake-Induced Damage Track Irregularity Spectrum Considering the Uncertainty of Track-Bridge System. <i>International Journal of Structural Stability and Dynamics</i> , 2021, 21, .	1.5	8
49	Interface friction effects on scaling a vertical spring-viscous damper isolation system in a shaking table test. <i>Structures</i> , 2021, 33, 1878-1891.	1.7	2
50	Influence on the seismic isolation performance of friction pendulum system when XY shear keys are sheared asynchronously. <i>Structures</i> , 2021, 33, 1908-1922.	1.7	8
51	Errors of structural seismic responses caused by frequency filtering based on seismic wave synthesis. <i>Soil Dynamics and Earthquake Engineering</i> , 2021, 149, 106862.	1.9	5
52	Running Safety Assessment of Trains on Bridges under Earthquakes Based on Spectral Intensity Theory. <i>International Journal of Structural Stability and Dynamics</i> , 2021, 21, .	1.5	9
53	Mapping Relation between Rail and Bridge Deformation Considering Nonlinear Contact of Interlayer. <i>Materials</i> , 2021, 14, 6653.	1.3	7
54	Optical fiber sensing technology for full-scale condition monitoring of pavement layers. <i>Road Materials and Pavement Design</i> , 2020, 21, 1258-1273.	2.0	32

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55	Experimental Investigation on the Seismic Behavior of the Semi-Rigid One-Way Straight Mortise-Tenon Joint of a Historical Timber Building. <i>International Journal of Architectural Heritage</i> , 2020, 14, 1135-1147.	1.7	15
56	Improved Analytical Method to Investigate the Dynamic Characteristics of Composite Box Beam with Corrugated Webs. <i>International Journal of Steel Structures</i> , 2020, 20, 194-206.	0.6	11
57	Mapping the relationship between the structural deformation of a simply supported beam bridge and rail deformation in high-speed railways. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2020, 234, 1081-1092.	1.3	14
58	Evaluation of optimal ground motion intensity measures and seismic fragility analysis of a multi-pylon cable-stayed bridge with super-high piers in Mountainous Areas. <i>Soil Dynamics and Earthquake Engineering</i> , 2020, 129, 105945.	1.9	68
59	Simplified calculation modeling method of multi-span bridges on high-speed railways under earthquake condition. <i>Bulletin of Earthquake Engineering</i> , 2020, 18, 2303-2328.	2.3	28
60	Sensitivity and dynamic analysis of train-bridge coupled system with multiple random factors. <i>Engineering Structures</i> , 2020, 221, 111083.	2.6	59
61	Applicability analysis of high-speed railway system under the action of near-fault ground motion. <i>Soil Dynamics and Earthquake Engineering</i> , 2020, 139, 106289.	1.9	53
62	Parametric study on the Multangular-Pyramid Concave Friction System (MPCFS) for seismic isolation. <i>Frontiers of Structural and Civil Engineering</i> , 2020, 14, 1152-1165.	1.2	0
63	Dynamic effect of heavy-haul train on seismic response of railway cable-stayed bridge. <i>Journal of Central South University</i> , 2020, 27, 1939-1955.	1.2	14
64	Experimental investigation on shear steel bars in CRTS II slab ballastless track under low-cyclic reciprocating load. <i>Construction and Building Materials</i> , 2020, 255, 119425.	3.2	32
65	A simplified method for fundamental period prediction of steel frames with steel plate shear walls. <i>Structural Design of Tall and Special Buildings</i> , 2020, 29, e1718.	0.9	4
66	Shear Lag Effect and Accordion Effect on Dynamic Characteristics of Composite Box Girder Bridge with Corrugated Steel Webs. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4346.	1.3	6
67	Study of bridge-subgrade longitudinal constraint range for high-speed railway simply-supported beam bridge with CRTSII ballastless track under earthquake excitation. <i>Construction and Building Materials</i> , 2020, 241, 118026.	3.2	33
68	Seismic damage features of high-speed railway simply supported bridge-track system under near-fault earthquake. <i>Advances in Structural Engineering</i> , 2020, 23, 1573-1586.	1.2	32
69	Stochastic Analysis of Train-Bridge System Using the Karhunen-Loève Expansion and the Point Estimate Method. <i>International Journal of Structural Stability and Dynamics</i> , 2020, 20, 2050025.	1.5	44
70	Nonlinear random seismic analysis of 3D high-speed railway track-bridge system based on OpenSEES. <i>Structures</i> , 2020, 24, 87-98.	1.7	17
71	Running safety assessment of a train traversing a three-tower cable-stayed bridge under spatially varying ground motion. <i>Railway Engineering Science</i> , 2020, 28, 184-198.	2.7	41
72	Simplified seismic model of CRTS II ballastless track structure on high-speed railway bridges in China. <i>Engineering Structures</i> , 2020, 211, 110453.	2.6	36

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73	Scaling errors of a seismic isolation system with a shear key. <i>Soil Dynamics and Earthquake Engineering</i> , 2020, 139, 106382.	1.9	6
74	Earthquake Influence on the Rail Irregularity on High-Speed Railway Bridge. <i>Shock and Vibration</i> , 2020, 2020, 1-16.	0.3	21
75	Application of KLE-PEM for Random Dynamic Analysis of Nonlinear Train-Track-Bridge System. <i>Shock and Vibration</i> , 2020, 2020, 1-10.	0.3	5
76	The seismically induced failure sequence of multiple components of high-speed railway bridges under different earthquake intensities. <i>Journal of Vibroengineering</i> , 2020, 22, 1629-1647.	0.5	1
77	Nonlinear seismic assessment of isolated high-speed railway bridge subjected to near-fault earthquake scenarios. <i>Structure and Infrastructure Engineering</i> , 2019, 15, 1529-1547.	2.0	18
78	The shear pin strength of friction pendulum bearings (FPB) in simply supported railway bridges. <i>Bulletin of Earthquake Engineering</i> , 2019, 17, 6109-6139.	2.3	32
79	Lateral-torsional buckling of box beam with corrugated steel webs. <i>Journal of Central South University</i> , 2019, 26, 1946-1957.	1.2	9
80	Analysis of flexural natural vibrations of thin-walled box beams using higher order beam theory. <i>Structural Design of Tall and Special Buildings</i> , 2019, 28, e1659.	0.9	2
81	Train-bridge system dynamics analysis with uncertain parameters based on new point estimate method. <i>Engineering Structures</i> , 2019, 199, 109454.	2.6	64
82	A Novel Method to Search for the Wheel-Rail Contact Point. <i>International Journal of Structural Stability and Dynamics</i> , 2019, 19, 1950142.	1.5	15
83	A feasible vibration measurement and active control method of reinforced concrete lightweight pier railway bridges for heavy-haul monorail trains. <i>European Journal of Environmental and Civil Engineering</i> , 2019, , 1-19.	1.0	2
84	Dynamic Response Analysis of a Simply Supported Double-Beam System under Successive Moving Loads. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 2162.	1.3	22
85	Effects of friction-based fixed bearings on seismic performance of high-speed railway simply supported girder bridges and experimental validation. <i>Advances in Structural Engineering</i> , 2019, 22, 687-701.	1.2	8
86	Numerical and experimental investigations on the Park-Ang damage index for high-speed railway bridge piers with flexure failures. <i>Engineering Structures</i> , 2019, 201, 109851.	2.6	27
87	A Practical Wheel-Rail Interaction Element for Modeling Vehicle-Track-Bridge Systems. <i>International Journal of Structural Stability and Dynamics</i> , 2019, 19, 1950011.	1.5	23
88	Effects of uncertain characteristic periods of ground motions on seismic vulnerabilities of a continuous track-bridge system of high-speed railway. <i>Bulletin of Earthquake Engineering</i> , 2018, 16, 3739-3769.	2.3	39
89	The Multangular-Pyramid Concave Friction System (MPCFS) for seismic isolation: A preliminary numerical study. <i>Engineering Structures</i> , 2018, 160, 383-394.	2.6	10
90	Numerical investigation on scaling a pure friction isolation system for civil structures in shaking table model tests. <i>International Journal of Non-Linear Mechanics</i> , 2018, 98, 1-12.	1.4	16

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91	Effects of friction-based fixed bearings on the seismic vulnerability of a high-speed railway continuous bridge. <i>Advances in Structural Engineering</i> , 2018, 21, 643-657.	1.2	50
92	Natural vibration analysis of steel-concrete composite box beam using improved finite beam element method. <i>Advances in Structural Engineering</i> , 2018, 21, 918-932.	1.2	8
93	The Impact of the Convex Friction Distribution on the Seismic Response of a Spring-friction Isolation System. <i>KSCE Journal of Civil Engineering</i> , 2018, 22, 1203-1213.	0.9	17
94	Effects of vertical ground motions on seismic vulnerabilities of a continuous track-bridge system of high-speed railway. <i>Soil Dynamics and Earthquake Engineering</i> , 2018, 115, 281-290.	1.9	61
95	An Analytical Study on Dynamic Response of Multiple Simply Supported Beam System Subjected to Moving Loads. <i>Shock and Vibration</i> , 2018, 2018, 1-14.	0.3	163
96	Seismic Isolation Characteristics of a Friction System. <i>Journal of Testing and Evaluation</i> , 2018, 46, 1411-1420.	0.4	14
97	Numerical analysis on longitudinal seismic responses of high-speed railway bridges isolated by friction pendulum bearings. <i>Journal of Vibroengineering</i> , 2018, 20, 1748-1760.	0.5	11
98	Introduction of the convex friction system (CFS) for seismic isolation. <i>Structural Control and Health Monitoring</i> , 2017, 24, e1861.	1.9	10
99	Seismic Response of Rolling Isolation Systems with Concave Friction Distribution. <i>Journal of Earthquake Engineering</i> , 2017, 21, 325-342.	1.4	24
100	Improved finite beam element method for analyzing the flexural natural vibration of thin-walled box girders. <i>Advances in Mechanical Engineering</i> , 2017, 9, 168781401772629.	0.8	2
101	Seismic damage evaluation of high-speed railway bridge components under different intensities of earthquake excitations. <i>Engineering Structures</i> , 2017, 152, 116-128.	2.6	54
102	Improved Finite Beam Element Method to Analyze the Natural Vibration of Steel-Concrete Composite Truss Beam. <i>Shock and Vibration</i> , 2017, 2017, 1-12.	0.3	8
103	Seismic Vulnerability Evaluation of a Three-Span Continuous Beam Railway Bridge. <i>Mathematical Problems in Engineering</i> , 2017, 2017, 1-13.	0.6	10
104	Experimental Study on the Seismic Behaviour of Mortise-Tenon Joints of the Ancient Timbers. <i>Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE)</i> , 2017, 27, 512-519.	0.5	22
105	The impact of the concave distribution of rolling friction coefficient on the seismic isolation performance of a spring-rolling system. <i>International Journal of Non-Linear Mechanics</i> , 2016, 83, 65-77.	1.4	32
106	Effects of friction variability on isolation performance of rolling-spring systems. <i>Journal of Central South University</i> , 2016, 23, 233-239.	1.2	15
107	Elastic Distortional Buckling Analysis of I-Steel Concrete Composite Beam Considering Shear Deformation. <i>International Journal of Structural Stability and Dynamics</i> , 2016, 16, 1550045.	1.5	14
108	Influence of soil-structure interaction (structure-to-soil relative stiffness and mass ratio) on the fundamental period of buildings: experimental observation and analytical verification. <i>Bulletin of Earthquake Engineering</i> , 2016, 14, 139-160.	2.3	23

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109	Lateral Buckling Analysis of the Steel-Concrete Composite Beams in Negative Moment Region. <i>Advances in Materials Science and Engineering</i> , 2015, 2015, 1-8.	1.0	4
110	Experimental study on seismic behaviors of steel-concrete composite frames. <i>Journal of Central South University</i> , 2015, 22, 4396-4413.	1.2	3
111	Experimental investigations of the seismic performance of bridge piers with rounded rectangular cross-sections. <i>Earthquake and Structures</i> , 2014, 7, 463-484.	1.0	46
112	Near-fault directivity pulse-like ground motion effect on high-speed railway bridge. <i>Journal of Central South University</i> , 2014, 21, 2425-2436.	1.2	29
113	Analysis of free vibration characteristic of steel-concrete composite box-girder considering shear lag and slip. <i>Journal of Central South University</i> , 2013, 20, 2570-2577.	1.2	15
114	Prediction of Traffic Volume in Bridge Load Random Process Based on Grey Markov Chain. <i>Journal of Highway and Transportation Research and Development (English Edition)</i> , 2012, 6, 61-65.	0.2	1
115	Closed-form solution to thin-walled box girders considering effects of shear deformation and shear lag. <i>Journal of Central South University</i> , 2012, 19, 2650-2655.	1.2	19
116	Closed-form solution for shear lag effects of steel-concrete composite box beams considering shear deformation and slip. <i>Journal of Central South University</i> , 2012, 19, 2976-2982.	1.2	13
117	Explicit concomitance of implicit method to solve vibration equation. <i>Earthquake Engineering and Engineering Vibration</i> , 2012, 11, 269-272.	1.1	2
118	Numerical Modeling and Simulation on Seismic Performance of High-Speed Railway Bridge System. <i>Noise and Vibration Worldwide</i> , 2011, 42, 15-21.	0.4	5
119	Effects of interface slip and semi-rigid joint on elastic seismic response of steel-concrete composite frames. <i>Central South University</i> , 2010, 17, 1327-1335.	0.5	6
120	Long term behavior of self-compacting reinforced concrete beams. <i>Central South University</i> , 2008, 15, 423-428.	0.5	9
121	Study of resonance condition of railway bridge subjected to train loads with a four-beam system. <i>Mechanics Based Design of Structures and Machines</i> , 0, , 1-21.	3.4	4
122	Research on dynamic response of multi-layer beam system considering random interlayer parameters. <i>JVC/Journal of Vibration and Control</i> , 0, , 107754632110726.	1.5	1