

Zheng Lu

List of Publications by Year in descending order

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Version: 2024-02-01

70
papers

1,798
citations

279798

23
h-index

289244

40
g-index

72
all docs

72
docs citations

72
times ranked

880
citing authors

#	ARTICLE	IF	CITATIONS
1	Particle impact dampers: Past, present, and future. <i>Structural Control and Health Monitoring</i> , 2018, 25, e2058.	4.0	151
2	Experimental and analytical study on the performance of particle tuned mass dampers under seismic excitation. <i>Earthquake Engineering and Structural Dynamics</i> , 2017, 46, 697-714.	4.4	129
3	An experimental study of vibration control of wind-excited high-rise buildings using particle tuned mass dampers. <i>Smart Structures and Systems</i> , 2016, 18, 93-115.	1.9	87
4	Optimization design and experimental verification of track nonlinear energy sink for vibration control under seismic excitation. <i>Structural Control and Health Monitoring</i> , 2017, 24, e2033.	4.0	80
5	Experimental parametric study on wind-induced vibration control of particle tuned mass damper on a benchmark high-rise building. <i>Structural Design of Tall and Special Buildings</i> , 2017, 26, e1359.	1.9	70
6	Shaking table test and numerical simulation of an RC frameâ€‘core tube structure for earthquakeâ€‘induced collapse. <i>Earthquake Engineering and Structural Dynamics</i> , 2016, 45, 1537-1556.	4.4	69
7	Shaking table test of the effects of multiâ€‘unit particle dampers attached to an MDOF system under earthquake excitation. <i>Earthquake Engineering and Structural Dynamics</i> , 2012, 41, 987-1000.	4.4	66
8	An equivalent method for optimization of particle tuned mass damper based on experimental parametric study. <i>Journal of Sound and Vibration</i> , 2018, 419, 571-584.	3.9	62
9	Study on self-adjustable tuned mass damper with variable mass. <i>Structural Control and Health Monitoring</i> , 2018, 25, e2114.	4.0	57
10	Discrete element method simulation and experimental validation of particle damper system. <i>Engineering Computations</i> , 2014, 31, 810-823.	1.4	52
11	Homographyâ€‘based structural displacement measurement for large structures using unmanned aerial vehicles. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2021, 36, 1114-1128.	9.8	52
12	Seismic fragility assessment of a super tall building with hybrid control strategy using IDA method. <i>Soil Dynamics and Earthquake Engineering</i> , 2019, 123, 278-291.	3.8	47
13	A review of the diagrid structural system for tall buildings. <i>Structural Design of Tall and Special Buildings</i> , 2018, 27, e1445.	1.9	46
14	Shaking table test on vibration control effects of a monopile offshore wind turbine with a tuned mass damper. <i>Wind Energy</i> , 2018, 21, 1309-1328.	4.2	46
15	Theoretical study and experimental validation on the energy dissipation mechanism of particle dampers. <i>Structural Control and Health Monitoring</i> , 2018, 25, e2125.	4.0	43
16	Experimental investigation on dynamic characterization and seismic control performance of a TLPD system. <i>Structural Design of Tall and Special Buildings</i> , 2017, 26, e1350.	1.9	39
17	Experimental study on seismic performance of Tâ€‘shaped partly precast reinforced concrete shear wall with grouting sleeves. <i>Structural Design of Tall and Special Buildings</i> , 2019, 28, e1632.	1.9	35
18	Experimental Study and Numerical Simulation of a Laminated Reinforced Concrete Shear Wall with a Vertical Seam. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 629.	2.5	34

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19	Preliminary Study on the Damping Effect of a Lateral Damping Buffer under a Debris Flow Load. Applied Sciences (Switzerland), 2017, 7, 201.	2.5	32
20	Studies on Seismic Performance of Precast Concrete Columns with Grouted Splice Sleeve. Applied Sciences (Switzerland), 2017, 7, 571.	2.5	32
21	Application of an Artificial Fish Swarm Algorithm in an Optimum Tuned Mass Damper Design for a Pedestrian Bridge. Applied Sciences (Switzerland), 2018, 8, 175.	2.5	32
22	Performance-based seismic analysis on a super high-rise building with improved viscously damped outrigger system. Structural Control and Health Monitoring, 2018, 25, e2190.	4.0	29
23	Shaking table test and numerical simulation of a superimposed reinforced concrete shear wall structure. Structural Design of Tall and Special Buildings, 2018, 27, e1412.	1.9	28
24	Studies on Pounding Response Considering Structure-Soil-Structure Interaction under Seismic Loads. Sustainability, 2017, 9, 2219.	3.2	24
25	Numerical analysis of a shaking table test on dynamic structure-soil-structure interaction under earthquake excitations. Structural Design of Tall and Special Buildings, 2017, 26, e1382.	1.9	23
26	Experimental study on seismic performance of L-shaped insulated concrete sandwich shear wall with a horizontal seam. Structural Design of Tall and Special Buildings, 2019, 28, e1551.	1.9	23
27	Experimental study of L-shaped precast RC shear walls with middle cast-in-situ joint. Structural Design of Tall and Special Buildings, 2018, 27, e1457.	1.9	21
28	Large-scale shaking table test on pile-soil-structure interaction on soft soils. Structural Design of Tall and Special Buildings, 2019, 28, e1679.	1.9	21
29	Studies on damping behavior of vertically mixed structures with upper steel and lower concrete substructures. Structural Design of Tall and Special Buildings, 2017, 26, e1392.	1.9	20
30	Comparative Studies on Structures with a Tuned Mass Damper and a Particle Damper. Journal of Aerospace Engineering, 2018, 31, .	1.4	19
31	Base Pounding Model and Response Analysis of Base-Isolated Structures under Earthquake Excitation. Applied Sciences (Switzerland), 2017, 7, 1238.	2.5	18
32	Study on Adaptive-Passive and Semi-Active Eddy Current Tuned Mass Damper with Variable Damping. Sustainability, 2018, 10, 99.	3.2	18
33	Influence of soil-structure interaction on performance of a super tall building using a new eddy-current tuned mass damper. Structural Design of Tall and Special Buildings, 2018, 27, e1501.	1.9	15
34	Shaking table test and theoretical analysis of the pile-soil-structure interaction at a liquefiable site. Structural Design of Tall and Special Buildings, 2018, 27, e1513.	1.9	15
35	Experimental study on seismic performance of L-shaped partly precast reinforced concrete shear wall with cast-in-situ boundary elements. Structural Design of Tall and Special Buildings, 2019, 28, e1602.	1.9	15
36	Shaking table tests and numerical analysis of an over-track multi-tower building. Structure and Infrastructure Engineering, 2019, 15, 230-243.	3.7	15

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37	Effectiveness of particle tuned mass damper devices for pile-supported multi-story frames under seismic excitations. <i>Structural Control and Health Monitoring</i> , 2020, 27, e2627.	4.0	14
38	Experimental Study on the Performance of Polyurethane-Steel Sandwich Structure under Debris Flow. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 1018.	2.5	13
39	Shaking table test and numerical simulation on vibration control effects of TMD with different mass ratios on a super high-rise structure. <i>Structural Design of Tall and Special Buildings</i> , 2018, 27, e1470.	1.9	13
40	Comparison Study of Vibration Control Effects between Suspended Tuned Mass Damper and Particle Damper. <i>Shock and Vibration</i> , 2014, 2014, 1-7.	0.6	12
41	Numerical Simulation and In-Situ Measurement of Ground-Borne Vibration Due to Subway System. <i>Sustainability</i> , 2018, 10, 2439.	3.2	12
42	Dispersion, Workability and Mechanical Properties of Different Steel-Microfiber-Reinforced Concretes with Low Fiber Content. <i>Sustainability</i> , 2018, 10, 2335.	3.2	11
43	Experimental Comparison of Dynamic Behavior of Structures with a Particle Damper and a Tuned Mass Damper. <i>Journal of Structural Engineering</i> , 2018, 144, .	3.4	11
44	Shaking table test and numerical simulation on a vertical hybrid structure under seismic excitation. <i>Structural Design of Tall and Special Buildings</i> , 2018, 27, e1497.	1.9	11
45	Experimental Investigation of the Seismic Behavior of Low-Yield-Point Corrugated Steel Plate Dampers. <i>Journal of Structural Engineering</i> , 2021, 147, .	3.4	11
46	Study on Dynamic Response of Novel Masonry Structures Impacted by Debris Flow. <i>Sustainability</i> , 2017, 9, 1122.	3.2	10
47	Studies on passive flexible protection to resist landslides caused by the May 12, 2008, Wenchuan earthquake. <i>Structural Design of Tall and Special Buildings</i> , 2017, 26, e1372.	1.9	9
48	Responses of Liquefiable Soils in Pile Group Foundations of Tall Buildings from Shaking Table Tests. <i>Journal of Asian Architecture and Building Engineering</i> , 2016, 15, 311-318.	2.0	8
49	Discrete element method-based collapse simulation, validation and application to frame structures. <i>Structure and Infrastructure Engineering</i> , 2018, 14, 538-549.	3.7	8
50	Experimental Study on Performance of Frame Structure Strengthened with Foamed Aluminum under Debris Flow Impact. <i>Journal of Performance of Constructed Facilities</i> , 2020, 34, .	2.0	8
51	Visual inertial structural acceleration measurement. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2022, 37, 1146-1159.	9.8	8
52	Time-Frequency Energy Distribution of Ground Motion and Its Effect on the Dynamic Response of Nonlinear Structures. <i>Sustainability</i> , 2019, 11, 702.	3.2	7
53	Analytical and experimental studies on particle damper used for tremor suppression. <i>JVC/Journal of Vibration and Control</i> , 2021, 27, 2887-2897.	2.6	7
54	Experimental study on seismic performance of precast hollow shear walls. <i>Structural Design of Tall and Special Buildings</i> , 2021, 30, e1856.	1.9	7

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55	Shaking table test and numerical simulation of the vibration control performance of a tuned mass damper on a transmission tower. <i>Structure and Infrastructure Engineering</i> , 2020, , 1-15.	3.7	6
56	Vibration Analysis of Coupled Multilayer Structures with Discrete Connections for Noise Prediction. <i>International Journal of Structural Stability and Dynamics</i> , 2020, 20, 2050051.	2.4	6
57	Study on Feasibility of Photovoltaic Power to Grid Parity in China Based on LCOE. <i>Sustainability</i> , 2021, 13, 12762.	3.2	6
58	Shaking Table Test and Parameter Analysis on Vibration Control of a New Damping System (PDAL). <i>Buildings</i> , 2022, 12, 896.	3.1	5
59	Experimental and numerical study on vibration control effects of a compound mass damper. <i>Structural Design of Tall and Special Buildings</i> , 2018, 27, e1511.	1.9	4
60	Studies on Energy Dissipation Mechanism of an Innovative Viscous Damper Filled with Oil and Silt. <i>Sustainability</i> , 2018, 10, 1777.	3.2	4
61	Experimental Study and Numerical Simulation on Hybrid Coupled Shear Wall with Replaceable Coupling Beams. <i>Sustainability</i> , 2019, 11, 867.	3.2	4
62	Experimental and analytical studies of the dynamic behavior of particle dampers prepared with waste cement-based materials. <i>Structural Concrete</i> , 2022, 23, 4038-4057.	3.1	3
63	Parametric Study on Dynamic Response of FRP Masonry Structures under the Impacts of Debris Flow. <i>Shock and Vibration</i> , 2018, 2018, 1-20.	0.6	2
64	Seismic Performance of a New Type of Fabricated Tie-Column. <i>Sustainability</i> , 2018, 10, 1716.	3.2	2
65	Studies on the damping mechanism of shape memory alloy-spring tuned vibration absorber attached to a multi-degree-of-freedom structure. <i>JVC/Journal of Vibration and Control</i> , 2022, 28, 2666-2677.	2.6	2
66	Experimental and Numerical Study of the Performance of Self-Centering Frame Structures Subjected to Debris-Flow Impacts. <i>Journal of Structural Engineering</i> , 2021, 147, .	3.4	2
67	An improved design method of a tuned mass damper for an in-service footbridge. <i>AIP Conference Proceedings</i> , 2018, , .	0.4	1
68	Study on the influence of structural nonlinearity on the performance of multiunit impact damper. <i>JVC/Journal of Vibration and Control</i> , 2021, 27, 197-207.	2.6	1
69	Horizontal deformation and construction analysis of frame“eccentric core tube structure. <i>Structural Design of Tall and Special Buildings</i> , 0, , .	1.9	1
70	Multi-objective optimization and seismic performance verification of multiple tuned impact dampers for nonlinear benchmark building. <i>Structures</i> , 2022, 41, 1672-1686.	3.6	1