Jian Zhang

List of Publications by Year
in descending order

75 papers	2,688 citations	159358 30 h-index	189595 50 g-index
75 all docs	75 docs citations	75 times ranked	1536 citing authors

#	Article	IF	Citations
1	Numerical study on the seismic performance of precast UHPC bridge columns considering the buckling behavior of replaceable energy dissipaters. Structure and Infrastructure Engineering, 2022, 18, 230-248.	2.0	2
2	Seismic fragility of approach backfill differential settlement for statewide bridges in California. Soil Dynamics and Earthquake Engineering, 2022, 153, 107049.	1.9	6
3	A machine-learning-based model for predicting the effective stiffness of precast concrete columns. Engineering Structures, 2022, 260, 114224.	2.6	10
4	Experimental study on a novel UHPC grout-filled pipe sleeve with mechanical interlocking for large-diameter deformed bars. Engineering Structures, 2021, 226, 111358.	2.6	25
5	Cost-Effective UHPC for Accelerated Bridge Construction: Material Properties, Structural Elements, and Structural Applications. Journal of Bridge Engineering, 2021, 26, .	1.4	45
6	Performance-based seismic design and optimization of damper devices for cable-stayed bridge. Engineering Structures, 2021, 237, 112043.	2.6	22
7	UHPC grout-filled pipe sleeve with bolts for large-diameter deformed bars: Analytical model on the tensile resistance and design method. Engineering Structures, 2021, 245, 112851.	2.6	4
8	Seismic response of a Reduced-scale continuous girder bridge with rocking Columns: Experiment and analysis. Engineering Structures, 2021, 248, 113265.	2.6	12
9	Energy dissipation and selfâ€centering capacities of posttensioning precast segmental ultraâ€high performance concrete bridge columns. Structural Concrete, 2020, 21, 517-532.	1.5	15
10	A simplified method to assess seismic behavior of reinforced concrete columns. Structural Concrete, 2020, 21, 151-168.	1.5	11
11	Effects of fault rupture on seismic responses of fault-crossing simply-supported highway bridges. Engineering Structures, 2020, 206, 110104.	2.6	34
12	Experimental verification of an accessible geographically distributed realâ€time hybrid simulation platform. Structural Control and Health Monitoring, 2020, 27, e2483.	1.9	7
13	Multiple-variable frequency pendulum isolator with high-performance materials. Smart Materials and Structures, 2020, 29, 075002.	1.8	19
14	Numerical study on seismic behavior of precast bridge columns with large-diameter bars and UHPC grout considering the bar-slip effect. Bulletin of Earthquake Engineering, 2020, 18, 4963-4984.	2.3	7
15	Modeling seismic behavior of precast segmental UHPC bridge columns in a simplified method. Bulletin of Earthquake Engineering, 2020, 18, 3317-3349.	2.3	10
16	Design criterion for the self-centering capacity of precast segmental UHPC bridge columns with unbonded post-tensioning tendons. Engineering Structures, 2019, 200, 109706.	2.6	19
17	Lateral Behavior of Precast Segmental UHPC Bridge Columns Based on the Equivalent Plastic-Hinge Model. Journal of Bridge Engineering, 2019, 24, .	1.4	40
18	Feasible region of post-tensioning force for precast segmental post-tensioned UHPC bridge columns. Engineering Structures, 2019, 200, 109685.	2.6	3

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19	Fragility Analysis of a Self-Anchored Suspension Bridge Based on Structural Health Monitoring Data. Advances in Civil Engineering, 2019, 2019, 1-19.	0.4	5
20	Large-scale quasi-static testing of precast bridge column with pocket connections using noncontact lap-spliced bars and UHPC grout. Bulletin of Earthquake Engineering, 2019, 17, 5021-5044.	2.3	33
21	Experimental study on damage-controllable rocking walls with resilient corners. Magazine of Concrete Research, 2019, 71, 1113-1129.	0.9	20
22	Seismic fragilities of singleâ€ƈolumn highway bridges with rocking columnâ€ƒooting. Earthquake Engineering and Structural Dynamics, 2019, 48, 843-864.	2.5	50
23	Post-Yielding Behavior of Hinge-Supported Wall with Buckling-Restrained Braces in Base. Journal of Earthquake and Tsunami, 2019, 13, .	0.7	2
24	Seismic responses of bridges with rocking columnâ€ƒoundation: A dimensionless regression analysis. Earthquake Engineering and Structural Dynamics, 2019, 48, 152-170.	2.5	26
25	An explicit analytical model for seismic performance of an unbonded post-tensioned precast segmental rocking hollow pier. Engineering Structures, 2018, 161, 176-191.	2.6	29
26	Optimal design of isolation devices for mid-rise steel moment frames using performance based methodology. Bulletin of Earthquake Engineering, 2018, 16, 4315-4338.	2.3	16
27	Seismic behavior of precast segmental UHPC bridge columns with replaceable external cover plates and internal dissipaters. Engineering Structures, 2018, 177, 540-555.	2.6	76
28	Dimensional Estimation of Residual-Drift Demands for Bilinear Bridges under Near-Fault Ground Motions. Journal of Bridge Engineering, 2018, 23, .	1.4	7
29	Cyclic loading test of self-centering precast segmental unbonded posttensioned UHPFRC bridge columns. Bulletin of Earthquake Engineering, 2018, 16, 5227-5255.	2.3	69
30	Effectiveness evaluation and optimal design of nonlinear viscous dampers for inelastic structures under pulseâ€type ground motions. Earthquake Engineering and Structural Dynamics, 2018, 47, 2802-2820.	2.5	17
31	Design and Optimization of Seismic Isolation and Damping Devices for Highway Bridges Based on Probabilistic Repair Cost Ratio. Journal of Structural Engineering, 2018, 144, .	1.7	34
32	Simplified Drift Demand Prediction of Bridges under Liquefaction-Induced Lateral Spreading. Journal of Bridge Engineering, 2018, 23, .	1.4	15
33	Optimum seismic design of a power plant building with pendulum tuned mass damper system by its heavy suspended buckets. Engineering Structures, 2017, 136, 114-132.	2.6	33
34	Seismic responses of super-span cable-stayed bridges induced by ground motions in different sites relative to fault rupture considering soil-structure interaction. Soil Dynamics and Earthquake Engineering, 2017, 101, 295-310.	1.9	35
35	Buckling mechanism and global stability design method of buckling-restrained braces. Journal of Constructional Steel Research, 2017, 138, 473-487.	1.7	13
36	Optimal Design of Seismic Protective Devices for Highway Bridges Using Performance-Based Methodology and Multiobjective Genetic Optimization. Journal of Bridge Engineering, 2017, 22, .	1.4	32

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37	Experimental study on concrete columns reinforced by hybrid steel-fiber reinforced polymer (FRP) bars under horizontal cyclic loading. Construction and Building Materials, 2017, 130, 202-211.	3.2	67
38	Effects of Near-Fault Motions and Artificial Pulse-Type Ground Motions on Super-Span Cable-Stayed Bridge Systems. Journal of Bridge Engineering, 2017, 22, .	1.4	65
39	Dimensional Analysis of Inelastic Structures with Negative Stiffness and Supplemental Damping Devices. Journal of Structural Engineering, 2017, 143, .	1.7	25
40	Development and validation of pâ€y modeling approach for seismic response predictions of highway bridges. Earthquake Engineering and Structural Dynamics, 2017, 46, 585-604.	2.5	19
41	Evaluating the Effectiveness and Optimal Design of Isolation Bearings and Fluid Dampers for a Highway Bridge Using a Fragility Function Method and Genetic Optimization. , 2016, , .		0
42	Study on seismic retrofit of structures using SPSW systems and LYP steel material. Earthquake and Structures, 2016, 10, 1-23.	1.0	5
43	Probabilistic assessment of structures with SPSW systems and LYP steel infill plates using fragility function method. Engineering Structures, 2015, 85, 195-205.	2.6	25
44	Buckling and yielding behavior of unstiffened slender, moderate, and stocky low yield point steel plates. Thin-Walled Structures, 2015, 88, 105-118.	2.7	24
45	Seismic design and behavior of low yield point steel plate shear walls. International Journal of Steel Structures, 2015, 15, 135-151.	0.6	22
46	Structural performance of unstiffened low yield point steel plate shear walls. Journal of Constructional Steel Research, 2015, 112, 40-53.	1.7	59
47	Special Issue on Recent Advances in Seismic Design, Analysis, and Protection of Highway Bridges. Journal of Bridge Engineering, 2014, 19, .	1.4	0
48	Nonlinear Behavior and Simulation of Concrete Columns Reinforced by Steel-FRP Composite Bars. Journal of Bridge Engineering, 2014, 19, 220-234.	1.4	33
49	Optimization Method and Experimental Study on the Shear Strength of Externally Prestressed Concrete Beams. Advances in Structural Engineering, 2014, 17, 607-615.	1.2	7
50	Effects of Pounding and Skewness on Seismic Responses of Typical Multispan Highway Bridges Using the Fragility Function Method. Journal of Bridge Engineering, 2013, 18, 499-515.	1.4	59
51	ELASTIC DISTORTIONAL BUCKLING OF SINGLY SYMMETRIC I-SHAPED FLEXURAL MEMBERS WITH SLENDER WEBS. International Journal of Structural Stability and Dynamics, 2012, 12, 359-376.	1.5	3
52	Optimal Nonlinear Damping for Inelastic Structures Using Dimensional Analysis. , 2012, , .		8
53	Axialâ€“shearâ€“flexure interaction hysteretic model for RC columns under combined actions. Engineering Structures, 2012, 34, 548-563.	2.6	32
54	Hysteretic shearâ€“flexure interaction model of reinforced concrete columns for seismic response assessment of bridges. Earthquake Engineering and Structural Dynamics, 2011, 40, 315-337.	2.5	59

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55	Inelastic displacement demand of bridge columns considering shearâ€“flexure interaction. Earthquake Engineering and Structural Dynamics, 2011, 40, 731-748.	2.5	14
56	Probabilistic seismic demand analysis of a slender RC shear wall considering soilâ€“structure interaction effects. Engineering Structures, 2011, 33, 218-229.	2.6	76
57	Response spectrum-oriented pulse identification and magnitude scaling of forward directivity pulses in near-fault ground motions. Soil Dynamics and Earthquake Engineering, 2011, 31, 59-76.	1.9	60
58	Fragility Functions for Bridges in Liquefaction-Induced Lateral Spreads. Earthquake Spectra, 2011, 27, 683-717.	1.6	33
59	Benchmark structural control problem for a seismically excited highway bridge-Part I: Phase I Problem definition. Structural Control and Health Monitoring, 2009, 16, 509-529.	1.9	87
60	Dimensional analysis of structures with translating and rocking foundations under near-fault ground motions. Soil Dynamics and Earthquake Engineering, 2009, 29, 1330-1346.	1.9	48
61	Evaluating effectiveness and optimum design of isolation devices for highway bridges using the fragility function method. Engineering Structures, 2009, 31, 1648-1660.	2.6	281
62	Seismic response simulations of bridges considering shear-flexural interaction of columns. Structural Engineering and Mechanics, 2009, 31, 545-566.	1.0	13
63	Effects of structural characterizations on fragility functions of bridges subject to seismic shaking and lateral spreading. Earthquake Engineering and Engineering Vibration, 2008, 7, 369-382.	1.1	55
64	Sensitivity Study of an Older-Vintage Bridge Subjected to Lateral Spreading. , 2008, , .		4
65	Finite Element Modeling of Shallow Foundations on Nonlinear Soil Medium. , 2007, , 1.		5
66	Seismic Response Analysis of a Highway Overcrossing Equipped with Elastomeric Bearings and Fluid Dampers. Journal of Structural Engineering, 2004, 130, 830-845.	1.7	56
67	Structural Characterization of Modern Highway Overcrossingsâ€”Case Study. Journal of Structural Engineering, 2004, 130, 846-860.	1.7	18
68	Kinematic response functions and dynamic stiffnesses of bridge embankments. Earthquake Engineering and Structural Dynamics, 2002, 31, 1933-1966.	2.5	73
69	Seismic response analysis of highway overcrossings including soil-structure interaction. Earthquake Engineering and Structural Dynamics, 2002, 31, 1967-1991.	2.5	80
70	Rocking Response of Free-Standing Blocks under Cycloidal Pulses. Journal of Engineering Mechanics - ASCE, 2001, 127, 473-483.	1.6	314
71	Rocking Response of Anchored Blocks under Pulse-Type Motions. Journal of Engineering Mechanics - ASCE, 2001, 127, 484-493.	1.6	95
72	Comment on "Estimates of the Ground Accelerations at Point Reyes Station during the 1906 San Francisco Earthquake" by A. Anooshehpoor, T. H. Heaton, B. Shi, and J. N. Brune. Bulletin of the Seismological Society of America, 2000, 90, 1342-1348.	1.1	10

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73	Time-domain viscoelastic analysis of earth structures. Earthquake Engineering and Structural Dynamics, 2000, 29, 745-768.	2.5	42
74	Timeâ€domain viscoelastic analysis of earth structures. Earthquake Engineering and Structural Dynamics, 2000, 29, 745-768.	2.5	3
75	Evaluation of Dynamic Earth Pressure Cells for Subgrade. Transportation Research Record, 1997, 1596, 1-6.	1.0	6