

Kai-Ming Bi

List of Publications by Year in descending order

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119
papers

4,198
citations

109311

35
h-index

138468

58
g-index

119
all docs

119
docs citations

119
times ranked

1581
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural response of modular buildings – An overview. Journal of Building Engineering, 2018, 16, 45-56.	3.4	226
2	Using multiple tuned mass dampers to control offshore wind turbine vibrations under multiple hazards. Engineering Structures, 2017, 141, 303-315.	5.3	166
3	Modelling and simulation of spatially varying earthquake ground motions at sites with varying conditions. Probabilistic Engineering Mechanics, 2012, 29, 92-104.	2.7	157
4	Inerter-based structural vibration control: A state-of-the-art review. Engineering Structures, 2021, 243, 112655.	5.3	139
5	Review of bolted inter-module connections in modular steel buildings. Journal of Building Engineering, 2019, 23, 207-219.	3.4	136
6	Using tuned mass damper inerter to mitigate vortex-induced vibration of long-span bridges: Analytical study. Engineering Structures, 2019, 182, 101-111.	5.3	121
7	A state-of-the-art review on the vibration mitigation of wind turbines. Renewable and Sustainable Energy Reviews, 2020, 121, 109710.	16.4	110
8	Dynamic analyses of operating offshore wind turbines including soil-structure interaction. Engineering Structures, 2018, 157, 42-62.	5.3	105
9	Seismic fragility analyses of sea-crossing cable-stayed bridges subjected to multi-support ground motions on offshore sites. Engineering Structures, 2018, 165, 441-456.	5.3	104
10	Numerical simulation of pounding damage to bridge structures under spatially varying ground motions. Engineering Structures, 2013, 46, 62-76.	5.3	99
11	Numerical study on the seismic performance of precast segmental concrete columns under cyclic loading. Engineering Structures, 2017, 148, 373-386.	5.3	93
12	Performance of an innovative self-centering buckling restrained brace for mitigating seismic responses of bridge structures with double-column piers. Engineering Structures, 2017, 148, 47-62.	5.3	92
13	Using pipe-in-pipe systems for subsea pipeline vibration control. Engineering Structures, 2016, 109, 75-84.	5.3	85
14	Numerical research on seismic response characteristics of shallow buried rectangular underground structure. Soil Dynamics and Earthquake Engineering, 2019, 116, 242-252.	3.8	74
15	Influence of ground motion spatial variation, site condition and SSI on the required separation distances of bridge structures to avoid seismic pounding. Earthquake Engineering and Structural Dynamics, 2011, 40, 1027-1043.	4.4	69
16	New interlocking inter-module connection for modular steel buildings: Experimental and numerical studies. Engineering Structures, 2019, 198, 109465.	5.3	69
17	Shear behaviour of post-tensioned inter-module connection for modular steel buildings. Journal of Constructional Steel Research, 2019, 162, 105707.	3.9	66
18	Theoretical modeling and numerical simulation of seismic motions at seafloor. Soil Dynamics and Earthquake Engineering, 2015, 77, 220-225.	3.8	58

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19	Experimental investigation of spatially varying effect of ground motions on bridge pounding. <i>Earthquake Engineering and Structural Dynamics</i> , 2012, 41, 1959-1976.	4.4	57
20	Mitigation of heave response of semi-submersible platform (SSP) using tuned heave plate inerter (THPI). <i>Engineering Structures</i> , 2018, 177, 357-373.	5.3	57
21	Seismic performances of precast segmental column under bidirectional earthquake motions: Shake table test and numerical evaluation. <i>Engineering Structures</i> , 2019, 187, 314-328.	5.3	56
22	Effect of inter-module connection stiffness on structural response of a modular steel building subjected to wind and earthquake load. <i>Engineering Structures</i> , 2020, 213, 110628.	5.3	55
23	Development of a novel deformation-amplified shape memory alloy-friction damper for mitigating seismic responses of RC frame buildings. <i>Engineering Structures</i> , 2020, 216, 110751.	5.3	53
24	Influence of irregular topography and random soil properties on coherency loss of spatial seismic ground motions. <i>Earthquake Engineering and Structural Dynamics</i> , 2011, 40, 1045-1061.	4.4	51
25	Effectiveness of using rubber bumper and restrainer on mitigating pounding and unseating damage of bridge structures subjected to spatially varying ground motions. <i>Engineering Structures</i> , 2014, 79, 195-210.	5.3	51
26	Target-free vision-based technique for vibration measurements of structures subjected to out-of-plane movements. <i>Engineering Structures</i> , 2019, 190, 210-222.	5.3	47
27	Modeling and Simulation of Spatially Correlated Ground Motions at Multiple Onshore and Offshore Sites. <i>Journal of Earthquake Engineering</i> , 2017, 21, 359-383.	2.5	45
28	Devices for protecting bridge superstructure from pounding and unseating damages: an overview. <i>Structure and Infrastructure Engineering</i> , 2017, 13, 313-330.	3.7	45
29	Experimental study of precast segmental columns with unbonded tendons under cyclic loading. <i>Advances in Structural Engineering</i> , 2018, 21, 319-334.	2.4	45
30	Hysteretic performance of RC double-column bridge piers with self-centering buckling-restrained braces. <i>Bulletin of Earthquake Engineering</i> , 2019, 17, 3255-3281.	4.1	44
31	Influence of earthquake ground motion modelling on the dynamic responses of offshore wind turbines. <i>Soil Dynamics and Earthquake Engineering</i> , 2019, 121, 151-167.	3.8	42
32	Effect of abutment excitation on bridge pounding. <i>Engineering Structures</i> , 2013, 54, 57-68.	5.3	40
33	Seismic Fragility Analysis of Reinforced Concrete Bridges with Chloride Induced Corrosion Subjected to Spatially Varying Ground Motions. <i>International Journal of Structural Stability and Dynamics</i> , 2016, 16, 1550010.	2.4	40
34	Cyclic test and numerical study of precast segmental concrete columns with BFRP and TEED. <i>Bulletin of Earthquake Engineering</i> , 2019, 17, 3475-3494.	4.1	40
35	Experimental and numerical studies of the seismic behavior of a steel-concrete composite rigid-frame bridge subjected to the surface rupture at a thrust fault. <i>Engineering Structures</i> , 2020, 205, 110105.	5.3	38
36	Seismic evaluation of precast bridge columns with built-in elastomeric pads. <i>Soil Dynamics and Earthquake Engineering</i> , 2020, 128, 105868.	3.8	37

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37	STATE-OF-THE-ART REVIEW ON SEISMIC INDUCED POUNDING RESPONSE OF BRIDGE STRUCTURES. Journal of Earthquake and Tsunami, 2013, 07, 1350019.	1.3	33
38	Modelling of shear keys in bridge structures under seismic loads. Soil Dynamics and Earthquake Engineering, 2015, 74, 56-68.	3.8	33
39	Experimental and numerical investigations on the seismic behavior of bridge piers with vertical unbonded prestressing strands. Bulletin of Earthquake Engineering, 2016, 14, 501-527.	4.1	33
40	Numerical studies on the seismic responses of bridge structures with precast segmental columns. Engineering Structures, 2017, 151, 568-583.	5.3	33
41	Effectiveness of using pipe-in-pipe (PIP) concept to reduce vortex-induced vibrations (VIV): Three-dimensional two-way FSI analysis. Ocean Engineering, 2018, 148, 263-276.	4.3	33
42	3D FEM Analysis of Pounding Response of Bridge Structures at a Canyon Site to Spatially Varying Ground Motions. Advances in Structural Engineering, 2013, 16, 619-640.	2.4	32
43	Performance evaluation of inerter-based dampers for vortex-induced vibration control of long-span bridges: A comparative study. Structural Control and Health Monitoring, 2020, 27, e2529.	4.0	32
44	FBG force-testing ring for bridge cable force monitoring and temperature compensation. Sensors and Actuators A: Physical, 2015, 223, 105-113.	4.1	31
45	Seismic performance of precast concrete-filled circular tube segmental column under biaxial lateral cyclic loadings. Bulletin of Earthquake Engineering, 2019, 17, 271-296.	4.1	31
46	Seismic Performance of Steel-Concrete Composite Rigid-Frame Bridge: Shake Table Test and Numerical Simulation. Journal of Bridge Engineering, 2020, 25, .	2.9	31
47	Numerical simulation on the effectiveness of using viscoelastic materials to mitigate seismic induced vibrations of above-ground pipelines. Engineering Structures, 2016, 123, 1-14.	5.3	30
48	Fragility analyses of offshore wind turbines subjected to aerodynamic and sea wave loadings. Renewable Energy, 2020, 160, 1269-1282.	8.9	29
49	Performance of Bridges Isolated with Sliding-Lead Rubber Bearings Subjected to Near-Fault Earthquakes. International Journal of Structural Stability and Dynamics, 2020, 20, 2050023.	2.4	28
50	Domino-type progressive collapse analysis of a multi-span simply-supported bridge: A case study. Engineering Structures, 2015, 90, 172-182.	5.3	27
51	Experimental and numerical study of the slip factor for G350-steel bolted connections. Journal of Constructional Steel Research, 2019, 158, 576-590.	3.9	27
52	Numerical study of the seismic performance and damage mitigation of steel-concrete composite rigid-frame bridge subjected to across-fault ground motions. Bulletin of Earthquake Engineering, 2020, 18, 6687-6714.	4.1	27
53	Stress Wave Mitigation Properties of Dual-meta Panels against Blast Loads. International Journal of Impact Engineering, 2021, 154, 103877.	5.0	27
54	Experimental study on relative displacement responses of bridge frames subjected to spatially varying ground motion and its mitigation using superelastic SMA restrainers. Soil Dynamics and Earthquake Engineering, 2018, 109, 76-88.	3.8	26

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55	Seismic fragility analysis of pile-supported wharves with the influence of soil permeability. <i>Soil Dynamics and Earthquake Engineering</i> , 2019, 122, 211-227.	3.8	26
56	Mitigation of tower and out-of-plane blade vibrations of offshore monopile wind turbines by using multiple tuned mass dampers. <i>Structure and Infrastructure Engineering</i> , 2019, 15, 269-284.	3.7	26
57	Heave motion mitigation of semi-submersible platform using inerter-based vibration isolation system (IVIS). <i>Engineering Structures</i> , 2020, 219, 110833.	5.3	26
58	Influences of ground motion parameters and structural damping on the optimum design of inerter-based tuned mass dampers. <i>Engineering Structures</i> , 2021, 227, 111422.	5.3	26
59	Using inerter-based control device to mitigate heave and pitch motions of semi-submersible platform in the shallow sea. <i>Engineering Structures</i> , 2020, 207, 110248.	5.3	25
60	Rapid repair techniques for severely earthquake-damaged circular bridge piers with flexural failure mode. <i>Earthquake Engineering and Engineering Vibration</i> , 2017, 16, 415-433.	2.3	23
61	Simulation of multi-support depth-varying earthquake ground motions within heterogeneous onshore and offshore sites. <i>Earthquake Engineering and Engineering Vibration</i> , 2018, 17, 475-490.	2.3	23
62	New interlocking inter-module connection for modular steel buildings: Simplified structural behaviours. <i>Engineering Structures</i> , 2021, 227, 111409.	5.3	23
63	Required separation distance between decks and at abutments of a bridge crossing a canyon site to avoid seismic pounding. <i>Earthquake Engineering and Structural Dynamics</i> , 2010, 39, 303-323.	4.4	22
64	Passive vibration control of cylindrical offshore components using pipe-in-pipe (PIP) concept: An analytical study. <i>Ocean Engineering</i> , 2017, 142, 39-50.	4.3	22
65	A novel rotational inertia damper for amplifying fluid resistance: Experiment and mechanical model. <i>Mechanical Systems and Signal Processing</i> , 2021, 149, 107313.	8.0	22
66	Stochastic seismic response analysis of buried onshore and offshore pipelines. <i>Soil Dynamics and Earthquake Engineering</i> , 2017, 94, 60-65.	3.8	21
67	Three-dimensional vortex-induced vibration of a circular cylinder at subcritical Reynolds numbers with low- Re correction. <i>Marine Structures</i> , 2019, 66, 288-306.	3.8	20
68	Seismic responses of adjacent bridge structures coupled by tuned inerter damper. <i>Engineering Structures</i> , 2021, 243, 112654.	5.3	20
69	Blast resistant enhancement of meta-panels using multiple types of resonators. <i>International Journal of Mechanical Sciences</i> , 2022, 215, 106965.	6.7	20
70	Lateral behaviour of modular steel building with simplified models of new inter-module connections. <i>Engineering Structures</i> , 2021, 236, 112103.	5.3	19
71	A reinvestigation of the spring-mass model for metamaterial bandgap prediction. <i>International Journal of Mechanical Sciences</i> , 2022, 221, 107219.	6.7	19
72	Numerical Studies on the Seismic Performances of RC Two-Column Bent Bridges with Self-Centering Energy Dissipation Braces. <i>Journal of Structural Engineering</i> , 2020, 146, .	3.4	18

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73	Superelastic CuAlBe wire-based sliding lead rubber bearings for seismic isolation of bridges in cold regions. <i>Engineering Structures</i> , 2021, 247, 113102.	5.3	18
74	Seismic Response of a Concrete Filled Steel Tubular Arch Bridge to Spatially Varying Ground Motions Including Local Site Effect. <i>Advances in Structural Engineering</i> , 2013, 16, 1799-1817.	2.4	17
75	Seismic Response Analysis of Multiple-Frame Bridges with Unseating Restrainers considering Ground Motion Spatial Variation and SSI. <i>Advances in Structural Engineering</i> , 2015, 18, 873-891.	2.4	17
76	Experimental and three-dimensional finite element method studies on pounding responses of bridge structures subjected to spatially varying ground motions. <i>Advances in Structural Engineering</i> , 2017, 20, 105-124.	2.4	17
77	A novel rotational inertia damper for heave motion suppression of semisubmersible platform in the shallow sea. <i>Structural Control and Health Monitoring</i> , 2019, 26, e2368.	4.0	17
78	Simplified structural behaviours of post-tensioned inter-module connection for modular buildings. <i>Journal of Constructional Steel Research</i> , 2020, 175, 106347.	3.9	17
79	Multi-mode vortex-induced vibration control of long-span bridges by using distributed tuned mass damper inerters (DTMDIs). <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2022, 224, 104970.	3.9	16
80	A Bidirectional Pounding Tuned Mass Damper and Its Application to Transmission Tower-Line Systems under Seismic Excitations. <i>International Journal of Structural Stability and Dynamics</i> , 2019, 19, 1950056.	2.4	15
81	Response of a frame structure on a canyon site to spatially varying ground motions. <i>Structural Engineering and Mechanics</i> , 2010, 36, 111-127.	1.0	15
82	Combination of LS-SVM algorithm and JC method for fragility analysis of deep-water high piers subjected to near-field ground motions. <i>Structures</i> , 2020, 24, 282-295.	3.6	14
83	Development of a novel self-centering slip friction brace for enhancing the cyclic behaviors of RC double-column bridge bents. <i>Engineering Structures</i> , 2021, 232, 111838.	5.3	14
84	Model for analytical investigation on meta-lattice truss for low-frequency spatial wave manipulation. <i>Wave Motion</i> , 2021, 103, 102735.	2.0	14
85	A quasi-active negative stiffness damper for structural vibration control under earthquakes. <i>Mechanical Systems and Signal Processing</i> , 2022, 173, 109071.	8.0	14
86	Theoretical Investigation of Bridge Seismic Responses with Pounding under Near-Fault Vertical Ground Motions. <i>Advances in Structural Engineering</i> , 2015, 18, 453-468.	2.4	13
87	Numerical Study of the Seismic Responses of Precast Segmental Column Bridge under Spatially Varying Ground Motions. <i>Journal of Bridge Engineering</i> , 2018, 23, .	2.9	13
88	Analysis on parameter optimization of dampers of long-span double-tower cable-stayed bridges. <i>Structure and Infrastructure Engineering</i> , 2020, 16, 1286-1301.	3.7	13
89	Influence of spatially varying ground motions on the seismic responses of adjacent bridges coupled by a tuned inerter damper. <i>Soil Dynamics and Earthquake Engineering</i> , 2022, 154, 107137.	3.8	12
90	Impact load mitigation of meta-panels with single local resonator. <i>Engineering Structures</i> , 2022, 265, 114528.	5.3	12

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91	Seismic Response Analysis of Transmission Tower-Line System on a Heterogeneous Site to Multi-Component Spatial Ground Motions. <i>Advances in Structural Engineering</i> , 2011, 14, 457-474.	2.4	11
92	On the effectiveness of rotational friction hinge damper to control responses of multi-span simply supported bridge to non-uniform ground motions. <i>Advances in Structural Engineering</i> , 2016, 19, 1575-1591.	2.4	11
93	Performance evaluation of multiple tuned inerter-based dampers for seismic induced structural vibration control. <i>Structural Control and Health Monitoring</i> , 2022, 29, e2860.	4.0	11
94	Passive vibration control of engineering structures based on an innovative column-in-column (CIC) concept. <i>Engineering Structures</i> , 2021, 242, 112599.	5.3	10
95	Seismic system reliability analysis of bridges using the multiplicative dimensional reduction method. <i>Structure and Infrastructure Engineering</i> , 2018, 14, 1455-1469.	3.7	9
96	Simulation of Spatially Varying Seafloor Motions Using Onshore Earthquake Recordings. <i>Journal of Engineering Mechanics - ASCE</i> , 2018, 144, .	2.9	9
97	Multi-scale stochastic dynamic response analysis of offshore risers with lognormal uncertainties. <i>Ocean Engineering</i> , 2019, 189, 106333.	4.3	8
98	Textured pipe-in-pipe system: A compound passive technique for vortex-induced vibration control. <i>Applied Ocean Research</i> , 2020, 95, 102044.	4.1	8
99	Numerical study of using shape memory alloy-based tuned mass dampers to control seismic responses of wind turbine tower. <i>Engineering Structures</i> , 2022, 250, 113452.	5.3	8
100	Vortex-Induced Vibration Control of Long Stay Cables by Using Inerter-Based Dampers. <i>International Journal of Structural Stability and Dynamics</i> , 2022, 22, .	2.4	8
101	Response of reinforced mortar-less interlocking brick wall under seismic loading. <i>Bulletin of Earthquake Engineering</i> , 2022, 20, 6129-6165.	4.1	8
102	Dynamic amplification factors for a system with multiple-degrees-of-freedom. <i>Earthquake Engineering and Engineering Vibration</i> , 2020, 19, 363-375.	2.3	7
103	A Novel Self-centering Braced Double-column Rocking Bent for Seismic Resilience. <i>Journal of Earthquake Engineering</i> , 2023, 27, 1215-1236.	2.5	7
104	Closed-form design formulas of TMDI for suppressing vortex-induced vibration of bridge structures. <i>Structural Control and Health Monitoring</i> , 2022, 29, .	4.0	7
105	Influence of ground motion spatial variations and local soil conditions on the seismic responses of buried segmented pipelines. <i>Structural Engineering and Mechanics</i> , 2012, 44, 663-680.	1.0	6
106	Free and Forced Vibrations of an Undamped Double-Beam System Carrying a Tip Mass with Rotary Inertia. <i>Journal of Engineering Mechanics - ASCE</i> , 2022, 148, .	2.9	6
107	An innovative pendulum-type column-in-column (PCIC) system for structural vibration control induced by seismic ground excitations. <i>Engineering Structures</i> , 2022, 256, 113990.	5.3	6
108	Effectiveness of Using RFHDS Connected PIP System for Subsea Pipeline Vibration Control. <i>International Journal of Structural Stability and Dynamics</i> , 2018, 18, 1840005.	2.4	5

#	ARTICLE	IF	CITATIONS
109	Preface: Recent Advances on Structural Control, Health Monitoring and Applications in Bridge Engineering. <i>International Journal of Structural Stability and Dynamics</i> , 2018, 18, 1802001.	2.4	4
110	Dynamic Analysis of Nonclassically Damped Systems with Linear Behavior Using Load-Dependent Ritz Vectors. <i>International Journal of Structural Stability and Dynamics</i> , 2019, 19, 1950022.	2.4	4
111	An improved multi-mode seismic vibration control method using multiple tuned mass dampers. <i>Advances in Structural Engineering</i> , 2022, 25, 804-819.	2.4	4
112	Ductility Demand Spectra of the Self-Centering Structure Subjected to Near-Fault Pulse-like Ground Motions. <i>Journal of Earthquake Engineering</i> , 2022, 26, 6129-6147.	2.5	3
113	Vortex-induced vibration of a full-diamond textured cylinder at subcritical Reynolds numbers. <i>Marine Structures</i> , 2022, 83, 103193.	3.8	3
114	Numerical studies on the seismic responses of precast segmental columns-supported bridge structures subjected to near-fault ground motions. <i>Advances in Structural Engineering</i> , 2022, 25, 2527-2546.	2.4	3
115	The Strength Reduction Factors for Seismic-Isolated Bridges Characterized by SDOF Bilinear Systems in Far-Fault Areas. <i>Journal of Earthquake Engineering</i> , 2019, 23, 404-421.	2.5	2
116	Wave flume tests of a semi-submersible platform controlled by a novel rotational inertia damper. <i>Ocean Engineering</i> , 2021, 238, 109718.	4.3	2
117	Suppression of Vortex-Induced Vibration and Phase-Averaged Analysis of the Wake Generated by a Circular Cylinder Covered with Helical Grooves. <i>Fluids</i> , 2022, 7, 194.	1.7	2
118	Design Earthquake Ground Motion Prediction for Perth Metropolitan Area with Microtremor Measurements for Site Characterization. <i>Journal of Earthquake Engineering</i> , 2009, 13, 997-1028.	2.5	1
119	Behaviours of column-in-column (CIC) system under axial compression: Experimental and theoretical studies. <i>Journal of Constructional Steel Research</i> , 2022, 192, 107217.	3.9	1