Shiling Pei

List of Publications by Year
in descending order

91	2,074	218677 26	265206 42
papers	citations	h-index	g-index

91	91	91	1013
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experimental Seismic Response of a Full-Scale Six-Story Light-Frame Wood Building. Journal of Structural Engineering, 2010, 136, 1262-1272.	3.4	119
2	Cross-Laminated Timber for Seismic Regions: Progress and Challenges for Research and Implementation. Journal of Structural Engineering, 2016, 142, .	3.4	100
3	Experimental Investigation of Self-Centering Cross-Laminated Timber Walls. Journal of Structural Engineering, 2017, 143, .	3.4	96
4	Experimental Seismic Response of a Resilient 2-Story Mass-Timber Building with Post-Tensioned Rocking Walls. Journal of Structural Engineering, 2019, 145, .	3.4	86
5	Simplified Direct Displacement Design of Six-Story Woodframe Building and Pretest Seismic Performance Assessment. Journal of Structural Engineering, 2010, 136, 813-825.	3.4	75
6	Approximate R-Factor for Cross-Laminated Timber Walls in Multistory Buildings. Journal of Architectural Engineering, 2013, 19, 245-255.	1.6	73
7	Evolutionary Parameter Hysteretic Model for Wood Shear Walls. Journal of Structural Engineering, 2007, 133, 1118-1129.	3.4	65
8	Analytical and Experimental Lateral-Load Response of Self-Centering Posttensioned CLT Walls. Journal of Structural Engineering, 2017, 143, .	3.4	63
9	Experimental seismic behavior of a two-story CLT platform building. Engineering Structures, 2019, 183, 408-422.	5.3	61
10	Methodology for earthquake-induced loss estimation: An application to woodframe buildings. Structural Safety, 2009, 31, 31-42.	5.3	60
11	Making the Case for Improved Structural Design: Tornado Outbreaks of 2011. Leadership and Management in Engineering, 2012, 12, 254-270.	0.3	59
12	Dual-Objective-Based Tornado Design Philosophy. Journal of Structural Engineering, 2013, 139, 251-263.	3.4	59
13	Effect of vertical ground motion on earthquake-induced derailment of railway vehicles over simply-supported bridges. Journal of Sound and Vibration, 2016, 383, 277-294.	3.9	55
14	Systematic experimental investigation to support the development of seismic performance factors for cross laminated timber shear wall systems. Engineering Structures, 2018, 172, 392-404.	5.3	52
15	Structure-borne noise of railway composite bridge: Numerical simulation and experimental validation. Journal of Sound and Vibration, 2015, 353, 378-394.	3.9	46
16	Analytical study on seismic force modification factors for cross-laminated timber buildings. Canadian Journal of Civil Engineering, 2013, 40, 887-896.	1.3	45
17	Theoretical and Experimental Studies of the Internal Force Transfer Mechanism of Perfobond Rib Shear Connector Group. Journal of Bridge Engineering, 2017, 22, .	2.9	44
18	Coupled shearâ€bending formulation for seismic analysis of stacked wood shear wall systems. Earthquake Engineering and Structural Dynamics, 2009, 38, 1631-1647.	4.4	43

#	Article	IF	Citations
19	Modeling the impact of corrosion on seismic performance of multi-span simply-supported bridges. Construction and Building Materials, 2018, 185, 193-205.	7.2	43
20	Full-Scale Shake Table Testing of Cross-Laminated Timber Rocking Shear Walls with Replaceable Components. Journal of Structural Engineering, 2019, 145, .	3.4	39
21	Three-Dimensional Seismic Response of a Full-Scale Light-Frame Wood Building: Numerical Study. Journal of Structural Engineering, 2010, 136, 56-65.	3.4	38
22	Pres-Lam Buildings: State-of-the-Art. Journal of Structural Engineering, 2020, 146, .	3.4	36
23	Shake table testing of a full-scale seven-story steelâ€"wood apartment building. Engineering Structures, 2011, 33, 757-766.	5.3	34
24	Seismic Performance Factors for Cross-Laminated Timber Shear Wall Systems in the United States. Journal of Structural Engineering, 2020, 146, .	3.4	32
25	Seismic Numerical Modeling of a Six-Story Light-Frame Wood Building: Comparison with Experiments. Journal of Earthquake Engineering, 2011, 15, 924-941.	2.5	29
26	Experimental Study of Collapse Limits for Wood Frame Shear Walls. Journal of Structural Engineering, 2013, 139, 1489-1497.	3.4	26
27	Probabilistic evaluation approach for nonlinear vehicleâ€"bridge dynamic performances. Journal of Sound and Vibration, 2015, 339, 143-156.	3.9	25
28	Direct displacement design of tall cross laminated timber platform buildings with inter-story isolation. Engineering Structures, 2018, 167, 740-749.	5.3	24
29	Performance-Based Seismic Design of Midrise Woodframe Buildings. Journal of Structural Engineering, 2013, 139, 1294-1302.	3.4	23
30	Structure Moisture Monitoring of an 8-Story Mass Timber Building in the Pacific Northwest. Journal of Architectural Engineering, 2019, 25, .	1.6	23
31	Fatigue Performance Analysis of Damaged Steel Beams Strengthened with Prestressed Unbonded CFRP Plates. Journal of Bridge Engineering, 2018, 23, .	2.9	22
32	Small scale tests on the performance of adhesives used in cross laminated timber (CLT) at elevated temperatures. International Journal of Adhesion and Adhesives, 2019, 95, 102436.	2.9	22
33	Energy Consumption Analysis of Multistory Cross-Laminated Timber Residential Buildings: A Comparative Study. Journal of Architectural Engineering, 2016, 22, .	1.6	21
34	Vehicle-induced random vibration of railway bridges: a spectral approach. International Journal of Rail Transportation, 2017, 5, 191-212.	2.7	20
35	Collapse Testing and Analysis of a Light-Frame Wood Garage Wall. Journal of Structural Engineering, 2012, 138, 492-501.	3.4	19
36	Fatigue assessment and stress analysis of cope-hole details in welded joints of steel truss bridge. International Journal of Fatigue, 2017, 100, 136-147.	5.7	19

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37	Force Modification Factors for CLT Structures for NBCC. , 2014, , 543-553.		19
38	An integrated explicitâ€"implicit algorithm for vehicleâ€"railâ€"bridge dynamic simulations. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2018, 232, 1895-1913.	2.0	17
39	Shake-Table Experimental Testing and Performance of Topped and Untopped Cross-Laminated Timber Diaphragms. Journal of Structural Engineering, 2021, 147, .	3.4	15
40	Damage Assessment of a Full-Scale Six-Story Wood-Frame Building Following Triaxial Shake Table Tests. Journal of Performance of Constructed Facilities, 2012, 26, 17-25.	2.0	14
41	Performance-Based Seismic Design of Wood Frame Buildings Using a Probabilistic System Identification Concept. Journal of Structural Engineering, 2008, 134, 240-247.	3.4	13
42	Efficient evaluation of bridge deformation for running safety of railway vehicles using simplified models. Advances in Structural Engineering, 2020, 23, 454-467.	2.4	13
43	Optimizing displacement-based seismic design of mass timber rocking walls using genetic algorithm. Engineering Structures, 2021, 229, 111603.	5.3	13
44	System Identification of UCSD-NHERI Shake-Table Test of Two-Story Structure with Cross-Laminated Timber Rocking Walls. Journal of Structural Engineering, 2021, 147, .	3.4	13
45	Experimental seismic behavior of a five-storey double-midply wood shear wall in a full scale building. Canadian Journal of Civil Engineering, 2010, 37, 1261-1269.	1.3	11
46	Effect of Plan Configuration on Seismic Performance of Single-Story Wood-Frame Dwellings. Natural Hazards Review, 2012, 13, 24-33.	1.5	11
47	Seismic Design of Cross-Laminated Timber Platform Buildings Using a Coupled Shearwall Concept. Journal of Architectural Engineering, 2017, 23, .	1.6	11
48	Lateral behavior of panelized CLT walls: A pushover analysis based on minimal resistance assumption. Engineering Structures, 2019, 191, 469-478.	5.3	11
49	Probabilistic assessment of vehicle derailment based on optimal ground motion intensity measure. Vehicle System Dynamics, 2020, , 1-22.	3.7	11
50	Simplified Dynamic Model for Postâ€tensioned Crossâ€laminated Timber Rocking Walls. Earthquake Engineering and Structural Dynamics, 2021, 50, 845-862.	4.4	11
51	Performance of a Woodframe Structure during Full-Scale Shake-Table Tests: Drift, Damage, and Effect of Partition Wall. Journal of Performance of Constructed Facilities, 2007, 21, 35-43.	2.0	10
52	Simplified Mechanistic Model for Seismic Response Prediction of Coupled Cross-Laminated Timber Rocking Walls. Journal of Structural Engineering, 2019, 145, .	3.4	10
53	Empirical loss analysis to support definition of seismic performance objectives for woodframe buildings. Structural Safety, 2010, 32, 209-219.	5.3	9
54	Construction and Experimental Seismic Performance of a Full-scale Six-story Light-frame Wood Building. Procedia Engineering, 2011, 14, 1599-1605.	1.2	9

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55	Vehicle-Induced Lateral Vibration of Railway Bridges: An Analytical-Solution Approach. Journal of Bridge Engineering, 2016, 21, .	2.9	9
56	Overview of a Project to Quantify Seismic Performance Factors for Cross Laminated Timber Structures in the United States. RILEM Bookseries, 2014, , 531-541.	0.4	9
57	A procedure for rapid visual screening for seismic safety of wood-frame dwellings with plan irregularity. Engineering Structures, 2012, 36, 351-359.	5.3	8
58	Full-Scale Shake Table Test Damage Data Collection Using Terrestrial Laser-Scanning Techniques. Journal of Structural Engineering, 2021, 147, .	3.4	8
59	Time-to-Functionality Fragilities for Performance Assessment of Buildings. Journal of Structural Engineering, 2021, 147, .	3.4	8
60	Cyclic Response of Precast, Hollow Bridge Columns with Postpour Section and Socket Connection. Journal of Structural Engineering, 2022, 148, .	3.4	8
61	Prescriptive Seismic Design Procedure for Post-Tensioned Mass Timber Rocking Walls. Journal of Structural Engineering, 2022, 148, .	3.4	8
62	Probabilistic evaluation of railway vehicleâ€™s safety on bridges under random earthquake and track irregularity excitations. Engineering Structures, 2022, 266, 114527.	5.3	8
63	Systematic Seismic Design for Manageable Loss in Wood-Framed Buildings. Earthquake Spectra, 2009, 25, 851-868.	3.1	7
64	Influence of structural properties and hazard level on seismic loss estimation for light-frame wood structures. Engineering Structures, 2010, 32, 2183-2191.	5.3	6
65	Uncertainty quantification for seismic responses of bilinear SDOF systems: A semi-closed-form estimation. Soil Dynamics and Earthquake Engineering, 2017, 93, 18-28.	3.8	6
66	Experiment study on fatigue performance of perforated shear connectors. International Journal of Steel Structures, 2017, 17, 957-967.	1.3	6
67	A response spectrum-based indicator for structural damage prediction. Engineering Structures, 2018, 166, 546-555.	5.3	6
68	Energy-based additional damping on bridges to account for vehicle-bridge interaction. Engineering Structures, 2021, 229, 111637.	5.3	6
69	Nonlinear Time-History Analysis of a Six-Story Wood Platform Frame Buildings in Vancouver, British Columbia. Earthquake Spectra, 2012, 28, 621-637.	3.1	5
70	Partially Earth-Anchored Cable Bridge: Ultralong-Span System Suitable for Carbon-Fiber-Reinforced Plastic Cables. Journal of Bridge Engineering, 2016, 21, 06016003.	2.9	5
71	Rocking Behavior of High-Aspect-Ratio Cross-Laminated Timber Shear Walls: Experimental and Numerical Investigation. Journal of Architectural Engineering, 2021, 27, .	1.6	5
72	Experimental investigation and numerical modeling of rocking cross laminated timber walls on a flexible foundation. Earthquake Engineering and Structural Dynamics, 2022, 51, 1697-1717.	4.4	5

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73	IDA Comparison of IBC-Designed and DDD-Designed Six-Story Light-Frame Wood Buildings. Journal of Performance of Constructed Facilities, 2011, 25, 138-142.	2.0	4
74	Reduction of Vehicle-Induced Vibration of Railway Bridges due to Distribution of Axle Loads through Track. Shock and Vibration, 2018, 2018, 1-14.	0.6	4
75	Stochastic event simulation model for quantitative prediction of road tunnel downtime. Tunnelling and Underground Space Technology, 2021, 116, 104092.	6.2	4
76	Evaluation of Truck Impact Hazards for Interstate Overpasses. Transportation Research Record, 2014, 2402, 1-8.	1.9	3
77	An approach to quantify the influence of ground motion uncertainty on elastoplastic system acceleration in incremental dynamic analysis. Advances in Structural Engineering, 2017, 20, 1744-1756.	2.4	3
78	Experimental Investigation of Seismic Uncertainty Propagation through Shake Table Tests. Journal of Structural Engineering, 2018, 144, 06017009.	3.4	3
79	Tiered Approach to Performance-Based Seismic Design of Wood Frame Buildings. , 2008, , .		2
80	Implementation of Plan Irregularity Rapid Visual Screening Tool for Wood-Frame, Single-Family Dwellings. Journal of Earthquake Engineering, 2013, 17, 497-516.	2.5	2
81	Impact of train-induced vibration on railway cable-stayed bridges fatigue evaluation. Baltic Journal of Road and Bridge Engineering, 2016, 11, 102-110.	0.8	2
82	Carbon Impact and Cost of Mass Timber Beamâ€"Column Gravity Systems. Sustainability, 2021, 13, 12966.	3.2	2
83	A regional perspective on defining seismic performance objectives for woodframe buildings. Structural Safety, 2013, 43, 50-59.	5.3	1
84	Long-Term Moisture Monitoring Results of an Eight-Story Mass Timber Building in the Pacific Northwest. Journal of Architectural Engineering, 2021, 27, 06021002.	1.6	1
85	A Data-Driven Approach for Direct Assessment and Analysis of Traffic Tunnel Resilience. Springer Series in Geomechanics and Geoengineering, 2020, , 168-177.	0.1	1
86	Operational resilience of traffic tunnels: An example case study. , 2019, , 5129-5138.		1
87	A Generalized Artificial Neural Network for Displacement-Based Seismic Design of Mass Timber Rocking Walls. Journal of Earthquake Engineering, 2022, 26, 7921-7932.	2.5	1
88	Variability in Wood-Frame Building Damage using Broad-Band Synthetic Ground Motions: A Comparative Numerical Study with Recorded Motions. Journal of Earthquake Engineering, 2014, 18, 389-406.	2.5	0
89	Validation of the Neeswood PBSD Procedure: Testing of a Full-Scale Six-Story Building at Japan's E-Defense. , 2010, , .		0
90	A Frequency Domain Solution to Vehicle Induced Vibration of Railway Bridges. , 2018, , 745-755.		0

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91	Sensitivity analysis of road tunnel resilience through data-driven stochastic simulation. , 0, , .		0