Weichiang Pang

List of Publications by Year
in descending order

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44 papers	860 citations	430874 18 h-index	501196 28 g-index
44 all docs	44 docs citations	44 times ranked	515 citing authors

#	Article	IF	Citations
1	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
2	A novel analytical model for wind field simulation under typhoon boundary layer considering multi-field correlation and height-dependency. Journal of Wind Engineering and Industrial Aerodynamics, 2018, 175, 77-89.	3.9	64
3	Hurricane risk assessment of offshore wind turbines. Renewable Energy, 2018, 125, 234-249.	8.9	55
4	Toward a refined estimation of typhoon wind hazards: Parametric modeling and upstream terrain effects. Journal of Wind Engineering and Industrial Aerodynamics, 2021, 209, 104460.	3.9	47
5	Performance of Light-Frame Wood Residential Construction Subjected to Earthquakes in Regions of Moderate Seismicity. Journal of Structural Engineering, 2008, 134, 1353-1363.	3.4	42
6	Building envelope failure assessment framework for residential communities subjected to hurricanes. Engineering Structures, 2013, 51, 245-258.	5.3	39
7	Corotational Model for Cyclic Analysis of Light-Frame Wood Shear Walls and Diaphragms. Journal of Structural Engineering, 2013, 139, 1303-1317.	3.4	39
8	Wind-Uplift Capacity of Residential Wood Roof-Sheathing Panels Retrofitted with Insulating Foam Adhesive. Journal of Architectural Engineering, 2011, 17, 144-154.	1.6	36
9	Mapping joint hurricane wind and surge hazards for Charleston, South Carolina. Natural Hazards, 2014, 74, 375-403.	3.4	34
10	Experimental Study on Effects of Ground Roughness on Flow Characteristics of Tornado-Like Vortices. Boundary-Layer Meteorology, 2017, 162, 319-339.	2.3	31
11	Extreme Typhoon Wind Speed Mapping for Coastal Region of China: Geographically Weighted Regressionâ€“Based Circular Subregion Algorithm. Journal of Structural Engineering, 2021, 147, .	3.4	31
12	Three-dimensional probabilistic wind-borne debris trajectory model for building envelope impact risk assessment. Journal of Wind Engineering and Industrial Aerodynamics, 2012, 102, 22-35.	3.9	29
13	Fault-Tree Model for Risk Assessment of Bridge Failure: Case Study for Segmental Box Girder Bridges. Journal of Infrastructure Systems, 2013, 19, 326-334.	1.8	29
14	Estimation of Pavement and Bridge Damage Costs Caused by Overweight Trucks. Transportation Research Record, 2014, 2411, 62-71.	1.9	24
15	Tropical-cyclone-wind-induced flutter failure analysis of long-span bridges. Engineering Failure Analysis, 2022, 132, 105933.	4.0	24
16	Performance-Based Seismic Design of Midrise Woodframe Buildings. Journal of Structural Engineering, 2013, 139, 1294-1302.	3.4	23
17	Seismic Fragility Analysis and Retrofit of Conventional Residential Wood-Frame Structures in the Central United States. Journal of Structural Engineering, 2009, 135, 262-271.	3.4	19
18	Collapse Testing and Analysis of a Light-Frame Wood Garage Wall. Journal of Structural Engineering, 2012, 138, 492-501.	3.4	19

#	Article	IF	Citations
19	Effect of wind and wave directionality on the structural performance of nonâ€operational offshore wind turbines supported by jackets during hurricanes. Wind Energy, 2017, 20, 289-303.	4.2	18
20	Performance-Based Procedure for Direct Displacement Design of Engineered Wood-Frame Structures. Journal of Structural Engineering, 2010, 136, 978-988.	3.4	17
21	Optimization of Resilient Biofuel Infrastructure Systems under Natural Hazards. Journal of Energy Engineering - ASCE, 2014, 140, 04013017.	1.9	17
22	Experimental Study on Tornado-Induced Wind Pressures on a Cubic Building with Openings. Journal of Structural Engineering, 2018, 144, .	3.4	16
23	Reliability Assessment of Electrical Grids Subjected to Wind Hazards and Ice Accretion with Concurrent Wind. Journal of Structural Engineering, 2020, 146, .	3.4	15
24	Basic Structure System Rating of Postâ€“Super Typhoon Haiyan Structures in Tacloban and East Guiuan, Philippines. Journal of Performance of Constructed Facilities, 2016, 30, 04016033.	2.0	13
25	Fragility analysis of the roof structure of low-rise buildings subjected toÂtornado vortices. Journal of Wind Engineering and Industrial Aerodynamics, 2019, 189, 45-55.	3.9	13
26	Wind-wave prediction equations for probabilistic offshore hurricane hazard analysis. Natural Hazards, 2016, 83, 541-562.	3.4	11
27	Retrofit of a soft-story woodframe building using SMA devices with full-scale hybrid test verification. Engineering Structures, 2014, 80, 469-485.	5.3	10
28	Predicting Culvert Deterioration Using Physical and Environmental Time-Independent Variables. Journal of Pipeline Systems Engineering and Practice, 2019, 10, .	1.6	10
29	Optimal Retrofit Scheme for Highway Network under Seismic Hazards. International Journal of Transportation Science and Technology, 2014, 3, 109-128.	3.6	8
30	Experimental and Numerical Characterization of Monotonic and Cyclic Performance of Cross-Laminated Timber Dowel-Type Connections. Journal of Structural Engineering, 2021, 147, .	3.4	8
31	Development of a hybrid simulation controller for fullâ€scale experimental investigation of seismic retrofits for softâ€story woodframe buildings. Earthquake Engineering and Structural Dynamics, 2016, 45, 1233-1249.	4.4	7
32	ASCE Hurricane Haiyan Disaster Investigation in the Philippines. Journal of Performance of Constructed Facilities, 2015, 29, 02514003.	2.0	5
33	Selection of hazard-consistent hurricane scenarios for regional combined hurricane wind and flood loss estimation. Natural Hazards, 2018, 91, 671-696.	3.4	5
34	Performance-Based Seismic Design of Six-Story Woodframe Structure. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2008, 18, 179-185.	0.8	4
35	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
36	Full-Scale Experimental Verification of Soft-Story-Only Retrofits of Wood-Frame Buildings using Hybrid Testing. Journal of Earthquake Engineering, 2015, 19, 410-430.	2.5	4

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37	Development of a windborne debris impact fragility curve for Cross-Laminated Timber using experimental testing. Journal of Wind Engineering and Industrial Aerodynamics, 2019, 190, 143-150.	3.9	4
38	A Framework to Model the Wind-Induced Losses in Buildings during Hurricanes. Wind, 2022, 2, 87-112.	1.5	3
39	Application of Energy Dissipation Devices for Seismic Protection of Soft-Story Wood-Frame Buildings in Accordance with FEMA Guidelines. Journal of Structural Engineering, 2016, 142, .	3.4	2
40	Rethinking Treatment of Irreparability in the Context of Performance-Based Earthquake Engineering. , 2019, , .		2
41	A new approach to assessing reparability for seismic risk assessment of buildings. Earthquake Spectra, 2021, 37, 284-303.	3.1	2
42	Tornado Hazard Assessment of Residential Structures Built Using Cross-Laminated Timber and Light-Frame Wood Construction in the US. Natural Hazards Review, 2021, 22, .	1.5	2
43	Full-Scale Experimental Investigation of Second-Story Collapse Behavior in a Woodframe Building with an Over-Retrofitted First Story. Journal of Performance of Constructed Facilities, 2016, 30, 04015004.	2.0	0
44	Wind-Borne Debris Impact Risk Modeling. , 2018, , 67-82.		0