David O Prevatt

List of Publications by Year
in descending order

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66 papers	1,044 citations	516710 16 h-index	454955 30 g-index
68 all docs	68 docs citations	68 times ranked	536 citing authors

#	Article	IF	Citations
1	A comparison of methods to estimate peak wind loads on buildings. Journal of Wind Engineering and Industrial Aerodynamics, 2014, 126, 11-23.	3.9	99
2	Probabilistic modeling of wind pressure on low-rise buildings. Journal of Wind Engineering and Industrial Aerodynamics, 2013, 114, 18-26.	3.9	90
3	Making the Case for Improved Structural Design: Tornado Outbreaks of 2011. Leadership and Management in Engineering, 2012, 12, 254-270.	0.3	59
4	Dual-Objective-Based Tornado Design Philosophy. Journal of Structural Engineering, 2013, 139, 251-263.	3.4	59
5	The Florida Coastal Monitoring Program (FCMP): A review. Journal of Wind Engineering and Industrial Aerodynamics, 2011, 99, 979-995.	3.9	52
6	Field measurement and wind tunnel simulation of hurricane wind loads on a single family dwelling. Engineering Structures, 2009, 31, 2265-2274.	5.3	51
7	Statistical and analytical models for roof components in existing light-framed wood structures. Engineering Structures, 2009, 31, 2607-2616.	5.3	49
8	Comparison of two methods of near-surface wind speed estimation in the 22 May, 2011 Joplin, Missouri Tornado. Journal of Wind Engineering and Industrial Aerodynamics, 2015, 138, 87-97.	3.9	39
9	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
10	Residential Damage Patterns Following the 2011 Tuscaloosa, AL and Joplin, MO Tornadoes. Journal of Disaster Research, 2013, 8, 1061-1067.	0.7	35
11	Empirical Approach to Evaluating the Tornado Fragility of Residential Structures. Journal of Structural Engineering, 2017, 143, .	3.4	32
12	Hurricanes Irma and Maria post-event survey in US Virgin Islands. Coastal Engineering Journal, 2019, 61, 121-134.	1.9	30
13	Modeling System Effects and Structural Load Paths in a Wood-Framed Structure. Journal of Architectural Engineering, 2011, 17, 134-143.	1.6	29
14	Engineering Perspectives on Reducing Hurricane Damage to Housing in CARICOM Caribbean Islands. Natural Hazards Review, 2010, 11, 140-150.	1.5	27
15	Database-assisted design methodology to predict wind-induced structural behavior of a light-framed wood building. Engineering Structures, 2011, 33, 674-684.	5.3	25
16	Hurricane Michael in the Area of Mexico Beach, Florida. Journal of Waterway, Port, Coastal and Ocean Engineering, 2020, 146, .	1.2	21
17	Building Damage Observations and EF Classifications from the Tuscaloosa, AL, and Joplin, MO, Tornadoes. , 2012, , .		17
18	Automation and New Capabilities in the University of Florida NHERI Boundary Layer Wind Tunnel. Frontiers in Built Environment, 2020, 6, .	2.3	15

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19	Tornado-Induced and Straight-Line Wind Loads on a Low-Rise Building With Consideration of Internal Pressure. Frontiers in Built Environment, 2020, 6, .	2.3	15
20	StEER: A Community-Centered Approach to Assessing the Performance of the Built Environment after Natural Hazard Events. Frontiers in Built Environment, 2021, 7, .	2.3	15
21	Probabilistic procedure for wood-frame roof sheathing panel debris impact to windows in hurricanes. Engineering Structures, 2012, 35, 178-187.	5.3	14
22	An estimate of tornado loads on a wood-frame building using database-assisted design methodology. Journal of Wind Engineering and Industrial Aerodynamics, 2015, 138, 27-35.	3.9	14
23	An Engineering-Based Approach to Predict Tornado-Induced Damage. , 2016, , 311-335.		13
24	Overview of Damage Observed in Regional Construction during the Passage of Hurricane Irma over the State of Florida. , 2018, , .		12
25	On the Job versus Graduate School Training of Forensic Engineersâ€"An Instructor and Professional Engineerâ€™s View. Journal of Performance of Constructed Facilities, 2010, 24, 78-86.	2.0	11
26	The influence of unsealing on the wind resistance of asphalt shingles. Journal of Wind Engineering and Industrial Aerodynamics, 2014, 130, 30-40.	3.9	11
27	Field reconnaissance and overview of the impact of Hurricane Matthew on Haitiâ€™s Tiburon Peninsula. Natural Hazards, 2018, 94, 627-653.	3.4	11
28	Improving the cyclone-resistance of traditional Caribbean house construction through rational structural design criteria. Journal of Wind Engineering and Industrial Aerodynamics, 1994, 52, 305-319.	3.9	10
29	GIS for the Geo-Referenced Analysis and Rapid Dissemination of Forensic Evidence Collected in the Aftermath of the Tuscaloosa Tornado. , 2012, , .		10
30	Using instrumented small-scale models to study structural load paths in wood-framed buildings. Engineering Structures, 2013, 54, 47-56.	5.3	10
31	Epistemic Uncertainties in Fragility Functions Derived from Post-Disaster Damage Assessments. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2018, 4, 04018015.	1.7	10
32	Linking Building Attributes and Tornado Vulnerability Using a Logistic Regression Model. Natural Hazards Review, 2018, 19, 04018017.	1.5	10
33	Wind Uplift Behavior of Mechanically Attached Single-Ply Roofing Systems: The Need for Correction Factors in Standardized Tests. Journal of Structural Engineering, 2008, 134, 489-498.	3.4	8
34	Wind Tunnel Studies on Sawtooth and Monosloped Roofs. Journal of Structural Engineering, 2010, 136, 1161-1171.	3.4	8
35	What Do We Learn from Wind Uplift Tests of Roof Systems?. , 2010, , .		6
36	Wind Uplift Resistance of Artificially and Naturally Aged Asphalt Shingles. Journal of Architectural Engineering, 2014, 20, .	1.6	6

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37	Failure Progression Analysis of Observed Residential Structural Damage within a Tornado Wind Field. , 2014, , .		5
38	In Situ Nail Withdrawal Strengths in Wood Roof Structures. Journal of Structural Engineering, 2014, 140, .	3.4	5
39	Wind Uplift Capacity of Foam-Retrofitted Roof Sheathing Panels Subjected to Rainwater Intrusion. Journal of Architectural Engineering, 2014, 20, .	1.6	5
40	Engineering-Based Tornado Damage Assessment: Numerical Tool for Assessing Tornado Vulnerability of Residential Structures. Frontiers in Built Environment, 2020, 6, .	2.3	5
41	Investigation of the Wind Resistance of Asphalt Shingles. , 2012, , .		5
42	Development of Empirically-Based Fragilities of Residential Damage in the 2011 Joplin, Missouri, Tornado. , 2016, , .		4
43	Tornado Damage and Impacts on Nuclear Facilities in the United States. Journal of Wind Engineering, 2015, 40, 91-100.	0.2	4
44	Probabilistic Descriptions of In-Situ Roof to Top Plate Connections in Light Frame Wood Structures. , 2008, , .		3
45	Anchor Bolt Steel Strength in Annular Stand-Off Base Plate Connections. Transportation Research Record, 2014, 2406, 23-31.	1.9	3
46	Impacts of Hurricane Dorian on the Bahamas: field observations of hazard intensity and performance of the built environment. Coastal Engineering Journal, 2022, 64, 3-23.	1.9	3
47	Wind Loads on Single-Family Dwellings in Suburban Terrain: Comparing Field Data and Wind Tunnel Simulation. , 2006, , 1.		2
48	Experimentally Determined Structural Load Paths in a 1/3-Scale Model of Light-Framed Wood, Rectangular Building. , 2010, , .		2
49	Using Tornado Damage Surveys to Improve Laboratory Tornado Simulations. , 2014, , .		2
50	Wind Resistance and Fragility Functions for Wood-Framed Wall Sheathing Panels in Low-Rise Residential Construction. Journal of Structural Engineering, 2020, 146, 04020139.	3.4	2
51	A FIELD STUDY SETUP OF FOUR HOMES HAVING NON-VENTILATED AND SEMI-CONDITIONED SEALED ATTICS. Journal of Green Building, 2016, 11, 1-20.	0.8	2
52	Estimation of Peak Wind Pressure on a Low-Rise Building. , 2012, , .		2
53	External Pressure Coefficients on Saw-Tooth and Mono-Sloped Roofs. , 2006, , 1.		1
54	A vulnerability assessment tool for residential structures and extreme wind events. , 2015, , .		1

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55	Wind Load Design and Performance Testing of Exterior Walls: Current Standards and Future Considerations. , 2003, , 17-41.		1
56	Influence of Edge Restraint on Clip Fastener Loads of Standing Seam Metal Roof Panels. Journal of ASTM International, 2011, 8, 1-16.	0.2	1
57	Dual Objective Design Philosophy for Tornado Engineering. , 2012, , .		1
58	Using a Portable Nail Extractor to Determine Roof Nail Withdrawal Capacity of Existing Residential Structures. , 2010, , .		0
59	Advancing Performance Based Design through Full-Scale Simulation of Wind, Water, and Structural Interaction. , 2010, , .		0
60	Twenty-Five Years of Caribbean Hurricane Disaster Mitigation. , 2010, , 153-161.		0
61	In Situ Nail Withdrawal Strengths in Wood Residential Roofs. , 2012, , .		0
62	Overview and Field Data. , 2018, , 3-17.		0
63	3D Flow Characterization of Simulated Hurricane Wind Flow around a 1/3-Scale Light-Framed Wood Structure Using a 4-Hole Pressure Probe Sensor. , 2010, , .		0
64	Wind Uplift Capacity of Foam-Retrofitted Roof Sheathing Subjected to Water Leaks. , 2012, , .		0
65	Development of empirically-based fragilities of residential damage in the 2011 Joplin, Missouri tornado. , 2015, , .		0
66	Influence of Edge Restraint on Clip Fastener Loads of Standing Seam Metal Roof Panels. , 0, , 180-180-24.		0