H P Hong

List of Publications by Year in descending order

138 papers	3,250 citations	159525 30 h-index	189801 50 g-index
139 all docs	139 docs citations	139 times ranked	1822 citing authors

#	Article	IF	Citations
1	On the Estimation of Power Spectral Density and Lagged Coherence of Time Transformed Nonstationary Seismic Ground Motions and Their Use to Simulate Synthetic Records. Journal of Earthquake Engineering, 2022, 26, 3554-3571.	1.4	3
2	Simulating nonstationary non-Gaussian vector process based on continuous wavelet transform. Mechanical Systems and Signal Processing, 2022, 165, 108340.	4.4	24
3	Modeling Nonstationary Non-Gaussian Hurricane Wind Velocity and Gust Factor. Journal of Structural Engineering, 2022, 148, .	1.7	12
4	Impact of Annual Maximum Wind Speed in Mixed Wind Climates on Wind Hazard for Mainland China. Natural Hazards Review, 2022, 23, .	0.8	7
5	Decomposing seismic accelerograms with optimized window and its application for generating artificial fully non-Gaussian and nonstationary ground motion time histories. Soil Dynamics and Earthquake Engineering, 2022, 154, 107124.	1.9	8
6	Estimating and mapping snow hazard based on at-site analysis and regional approaches. Natural Hazards, 2022, 111, 2459-2485.	1.6	4
7	Stochastic modelling of the pulse-like near-fault ground motions with time-frequency representation. Journal of Seismology, 2022, 26, 387-414.	0.6	2
8	On the Gaussian and Nongaussian Characteristics of Nonstationary Seismic Ground Motions. Journal of Structural Engineering, 2022, 148, .	1.7	2
9	Sensitivity of typhoon wind hazard in coastal region to the track modelling and the considered historical best track database. Journal of Wind Engineering and Industrial Aerodynamics, 2022, 226, 105000.	1.7	7
10	Simulating Nonhomogeneous Non-Gaussian Field by Using Iterative Rank-Dependent Reordering versus Translation Process-Based Procedure. Mathematical Problems in Engineering, 2022, 2022, 1-18.	0.6	1
11	Development of a Relation between Return Period Values of Annual Maximum Snow Load and Snow Depth and Its Implication in Structural Reliability for Northeastern China. Journal of Structural Engineering, 2022, 148, .	1.7	1
12	Generation of spectrum-compatible ground motion records based on time-frequency decomposition. Soil Dynamics and Earthquake Engineering, 2022, 161, 107359.	1.9	0
13	Estimation of model parameters of dependent processes constructed using LÃ©vy Copulas. Communications in Statistics Part B: Simulation and Computation, 2021, 50, 691-707.	0.6	1
14	A timeâ€frequency dependent coherence model for seismic ground motions. Earthquake Engineering and Structural Dynamics, 2021, 50, 955-973.	2.5	7
15	Response and first passage probability of linear elastic SDOF systems subjected to nonstationary stochastic excitation modelled through S-transform. Structural Safety, 2021, 88, 102007.	2.8	24
16	Analysis of the Duration of High Winds During Landfalling Hurricanes. Frontiers in Built Environment, 2021, 7, .	1.2	4
17	Simulating nonstationary and nonâ€Gaussian vector ground motions with timeâ€and frequencyâ€dependent lagged coherence. Earthquake Engineering and Structural Dynamics, 2021, 50, 2421-2441.	2.5	8
18	Simulation of Nonstationary and Nonhomogeneous Wind Velocity Field by Using Frequencyâ€“Wavenumber Spectrum. Frontiers in Built Environment, 2021, 7, .	1.2	1

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19	Modelling and simulating thunderstorm/downburst winds using S-transform and discrete orthonormal S-transform. Journal of Wind Engineering and Industrial Aerodynamics, 2021, 212, 104598.	1.7	9
20	Erratum for â€œTimeâ€“Frequency Spectral Representation Models to Simulate Nonstationary Processes and Their Use to Generate Ground Motionsâ€•by H. P. Hong and X. Z. Cui. Journal of Engineering Mechanics - ASCE, 2021, 147, .	1.6	1
21	An algorithm to simulate nonstationary and non-Gaussian stochastic processes. Journal of Infrastructure Preservation and Resilience, 2021, 2, 17.	1.5	15
22	Development of a simple equivalent tornado wind profile for structural design and evaluation. Journal of Wind Engineering and Industrial Aerodynamics, 2021, 213, 104602.	1.7	3
23	Tornado wind hazard mapping and equivalent tornado design wind profile for Canada. Structural Safety, 2021, 91, 102078.	2.8	4
24	Projecting Sets of Ground-Motion Models and Their Use to Evaluate Seismic Hazard and Uniform Hazard Spectrum for Mainland China. Natural Hazards Review, 2021, 22, .	0.8	2
25	A model to simulate multidimensional nonstationary and non-Gaussian fields based on S-transform. Mechanical Systems and Signal Processing, 2021, 159, 107789.	4.4	17
26	Calibration of the design wind load and snow load considering the historical climate statistics and climate change effects. Structural Safety, 2021, 93, 102135.	2.8	16
27	Reliability and fragility assessment of offshore floating wind turbine subjected to tropical cyclone hazard. Structural Safety, 2021, 93, 102138.	2.8	12
28	Statistical Assessment of Spatial Tornado Occurrences in Canada: Modelling and Estimation. Journal of Applied Meteorology and Climatology, 2021, , .	0.6	1
29	Responses and capacity curves of mid- and high-rise wood buildings subjected to seismic excitations. Canadian Journal of Civil Engineering, 2020, 47, 63-76.	0.7	10
30	Effect of spatially correlated initial geometric imperfection on reliability of spherical latticed shell considering global instability. Structural Safety, 2020, 82, 101895.	2.8	10
31	Stability-based damage assessment and rapid post-disaster quantification of a latticed shell subjected to earthquake loading. Engineering Structures, 2020, 206, 110020.	2.6	2
32	Use of Spectrum-matched versus Scaled Records to Evaluate Seismic Responses of a Latticed Shell. Journal of Earthquake Engineering, 2020, , 1-15.	1.4	2
33	Timeâ€“Frequency Spectral Representation Models to Simulate Nonstationary Processes and Their Use to Generate Ground Motions. Journal of Engineering Mechanics - ASCE, 2020, 146, 04020106.	1.6	26
34	Seismic hazard assessment for mainland China based on spatially smoothed seismicity. Journal of Seismology, 2020, 24, 613-633.	0.6	5
35	Comparison of seismic responses of a reticulated dome under stochastic uniform and spatially correlated and coherent multiple-support excitation for a scenario seismic event. International Journal of Space Structures, 2020, 35, 113-125.	0.3	0
36	Conditional Simulation of Spatially Varying Multicomponent Nonstationary Ground Motions: Bias and Ill Condition. Journal of Engineering Mechanics - ASCE, 2020, 146, 04019129.	1.6	5

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37	Reliability and fragility assessment of mid- and high-rise wood buildings subjected to seismic excitation. Structure and Infrastructure Engineering, 2020, 16, 1683-1697.	2.0	4
38	On the joint tropical cyclone wind and wave hazard. Structural Safety, 2020, 84, 101917.	2.8	8
39	Validation of fatigue design wind loads for natural wind gusts and for truck-induced wind gusts using full-scale measurements. Journal of Wind Engineering and Industrial Aerodynamics, 2020, 198, 104084.	1.7	1
40	Reliability and fragility assessment of the mid- and high-rise wood buildings subjected to bidirectional seismic excitation. Engineering Structures, 2019, 201, 109734.	2.6	9
41	Reliability of stability of single-layer latticed shells with spatially correlated initial geometric imperfection modeled using conditional autoregressive model. Engineering Structures, 2019, 201, 109787.	2.6	2
42	Solution and validation of a three dimensional tropical cyclone boundary layer wind field model. Journal of Wind Engineering and Industrial Aerodynamics, 2019, 193, 103973.	1.7	24
43	Site, local, and regional earthquake ground motion characterization and application. Advances in Structural Engineering, 2017, 20, 34-50.	1.2	1
44	New Perspective on Application of First-Order Reliability Method for Estimating System Reliability. Journal of Engineering Mechanics - ASCE, 2017, 143, .	1.6	18
45	Use of residual drift for post-earthquake damage assessment of RC buildings. Engineering Structures, 2017, 147, 242-255.	2.6	22
46	Reliability of lattice dome with and without the effect of using small number of ground motion records in seismic design. Engineering Structures, 2017, 151, 381-390.	2.6	8
47	Using remote sensing information to estimate snow hazard and extreme snow load in China. Natural Hazards, 2017, 89, 1-17.	1.6	10
48	Reliability of Tower and Tower-Line Systems under Spatiotemporally Varying Wind or Earthquake Loads. Journal of Structural Engineering, 2017, 143, .	1.7	30
49	Sensitivity of system reliability of corroding pipelines to modeling of stochastic growth of corrosion defects. Reliability Engineering and System Safety, 2017, 167, 428-438.	5.1	39
50	Sample size effect on the reliability and calibration of design wind load. Structure and Infrastructure Engineering, 2016, 12, 752-764.	2.0	14
51	Typhoon Wind Hazard Estimation and Mapping for Coastal Region in Mainland China. Natural Hazards Review, 2016, 17, .	0.8	54
52	Modeling of Nonstationary Winds and Its Applications. Journal of Engineering Mechanics - ASCE, 2016, 142, .	1.6	31
53	Extreme snow hazard and ground snow load for China. Natural Hazards, 2016, 84, 2095-2120.	1.6	25
54	Nonlinear inelastic responses of transmission tower-line system under downburst wind. Engineering Structures, 2016, 123, 490-500.	2.6	37

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55	Typhoon wind hazard estimation for China using an empirical track model. Natural Hazards, 2016, 82, 1009-1029.	1.6	66
56	Assessment of Spatial Coherency Using Tri-directional Ground Motions. Journal of Earthquake Engineering, 2016, 20, 773-794.	1.4	19
57	Estimating fatigue design load for overhead steel sign support structures under truck-induced wind pressure. Canadian Journal of Civil Engineering, 2016, 43, 279-286.	0.7	6
58	Seismic hazard estimation: directly using observations versus applying seismic hazard model. Natural Hazards, 2016, 80, 639-655.	1.6	6
59	Seismic design and importance factor: Benefit/cost for overall service time versus per unit service time. Structural Safety, 2016, 58, 40-51.	2.8	10
60	Comparison of Spatial Interpolation Methods for Extreme Wind Speeds over Canada. Journal of Computing in Civil Engineering, 2015, 29, .	2.5	10
61	Geographically Varying Ground-Motion Prediction Using Records from Historical Events. Seismological Research Letters, 2015, 86, 948-967.	0.8	3
62	Sensitivity Analysis of the Effectiveness of Tuned Mass Dampers to Reduce the Wind-Induced Torsional Responses. Latin American Journal of Solids and Structures, 2015, 12, 2520-2538.	0.6	10
63	Estimating the extreme wind speed for regions in China using surface wind observations and reanalysis data. Journal of Wind Engineering and Industrial Aerodynamics, 2015, 143, 19-33.	1.7	27
64	Simulation of Horizontal Ground Motions with Spatial Coherency in Two Orthogonal Horizontal Directions. Journal of Earthquake Engineering, 2015, 19, 752-769.	1.4	13
65	Snow hazard estimation and mapping for a province in northeast China. Natural Hazards, 2015, 77, 543-558.	1.6	13
66	Observations on a Hurricane Wind Hazard Model Used to Map Extreme Hurricane Wind Speed. Journal of Structural Engineering, 2015, 141, .	1.7	46
67	Influence of number of records and scaling on the statistics of seismic demand for lattice structure. Thin-Walled Structures, 2015, 87, 115-126.	2.7	16
68	Use of historical best track data to estimate typhoon wind hazard at selected sites in China. Natural Hazards, 2015, 76, 1395-1414.	1.6	50
69	Effect of human error on the reliability of roof panel under uplift wind pressure. Structural Safety, 2015, 52, 54-65.	2.8	15
70	Application of Spatially Correlated and Coherent Records of Scenario Event to Estimate Seismic Loss of a Portfolio of Buildings. Earthquake Spectra, 2015, 31, 2047-2068.	1.6	12
71	Basis for recommending an update of wind velocity pressures in Canadian design codes. Canadian Journal of Civil Engineering, 2014, 41, 206-221.	0.7	31
72	Use of Neural network to predict the peak ground accelerations and pseudo spectral accelerations for Mexican Inslab and Interplate Earthquakes. Geofisica International, 2014, 53, 39-57.	0.2	8

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73	Optimal condition-based maintenance decisions for systems with dependent stochastic degradation of components. Reliability Engineering and System Safety, 2014, 121, 276-288.	5.1	114
74	Analysis of extreme ground snow loads for Canada using snow depth records. Natural Hazards, 2014, 73, 355-371.	1.6	32
75	Estimating extreme wind speed based on regional frequency analysis. Structural Safety, 2014, 47, 67-77.	2.8	23
76	Reliability consideration for fatigue design of sign, luminaire, and traffic signal support structures under wind load. Journal of Wind Engineering and Industrial Aerodynamics, 2014, 126, 60-74.	1.7	13
77	Effect of support flexibility on seismic responses of a reticulated dome under spatially correlated and coherent excitations. Thin-Walled Structures, 2014, 82, 343-351.	2.7	18
78	Assessment of Coherency for Bidirectional Horizontal Ground Motions and Its Application for Simulating Records at Multiple Stations. Bulletin of the Seismological Society of America, 2014, 104, 2491-2502.	1.1	19
79	Plotting positions and approximating first two moments of order statistics for Gumbel distribution: estimating quantiles of wind speed. Wind and Structures, an International Journal, 2014, 19, 371-387.	0.8	13
80	Torsional Responses under Bidirectional Seismic Excitations: Effect of Instantaneous Load Eccentricities. Journal of Structural Engineering, 2013, 139, 133-143.	1.7	10
81	Discussion on â€œPlotting positions for fitting distributions and extreme value analysisâ€• Canadian Journal of Civil Engineering, 2013, 40, 1019-1021.	0.7	6
82	Effect of wind direction on the response and capacity surface of a transmission tower. Engineering Structures, 2013, 57, 493-501.	2.6	54
83	Selection of regressand for fitting the extreme value distributions using the ordinary, weighted and generalized least-squares methods. Reliability Engineering and System Safety, 2013, 118, 71-80.	5.1	6
84	Performance of the generalized least-squares method for the Gumbel distribution and its application to annual maximum wind speeds. Journal of Wind Engineering and Industrial Aerodynamics, 2013, 119, 121-132.	1.7	64
85	Simulation of Multiple-Station Ground Motions Using Stochastic Point-Source Method with Spatial Coherency and Correlation Characteristics. Bulletin of the Seismological Society of America, 2013, 103, 1912-1921.	1.1	19
86	Probabilistic characterization of roof panel uplift capacity under wind loading. Canadian Journal of Civil Engineering, 2012, 39, 1285-1296.	0.7	20
87	Effectiveness of using tuned-mass dampers in reducing seismic risk. Structure and Infrastructure Engineering, 2012, 8, 141-156.	2.0	13
88	Intraevent Spatial Correlation Characteristics of Stochastic Finite-Fault Simulations. Bulletin of the Seismological Society of America, 2012, 102, 1740-1747.	1.1	12
89	Assessment of the wind hazard due to tornado outbreaks in southern Ontario. Journal of Wind Engineering and Industrial Aerodynamics, 2012, 107-108, 28-35.	1.7	6
90	Impact of dependent stochastic defect growth on system reliability of corroding pipelines. International Journal of Pressure Vessels and Piping, 2012, 96-97, 68-77.	1.2	47

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91	Effect of the orientation of records on displacement ductility demand. Canadian Journal of Civil Engineering, 2012, 39, 362-373.	0.7	8
92	Observations on the application of artificial neural network to predicting ground motion measures. Earthquake Science, 2012, 25, 161-175.	0.4	9
93	Reliability assessment of FRP-confined concrete columns designed for buildings. Structure and Infrastructure Engineering, 2011, 7, 243-258.	2.0	19
94	Seismic loss estimation of wood-frame houses in south-western British Columbia. Structural Safety, 2011, 33, 123-135.	2.8	17
95	Reliability of structures with tuned mass dampers under wind-induced motion: a serviceability consideration. Wind and Structures, an International Journal, 2011, 14, 113-131.	0.8	9
96	Characteristics of horizontal ground motion measures along principal directions. Earthquake Engineering and Engineering Vibration, 2010, 9, 9-22.	1.1	18
97	Reliability of steel frames designed in accordance with the National Building Code of Canada seismic provisions and its implication in codified design. Engineering Structures, 2010, 32, 1284-1291.	2.6	12
98	Statistics of inelastic responses of hysteretic systems under bidirectional seismic excitations. Engineering Structures, 2010, 32, 2074-2086.	2.6	37
99	Lifecycle costâ€“benefit analysis of isolated buildings. Structural Safety, 2010, 32, 52-63.	2.8	38
100	Influence of spatial inhomogeneity of tornado occurrence on estimated tornado hazard. Canadian Journal of Civil Engineering, 2010, 37, 279-289.	0.7	5
101	Impact of Different Earthquake Types on the Statistics of Ductility Demand. Journal of Structural Engineering, 2010, 136, 770-780.	1.7	14
102	Impact of using updated seismic information on seismic hazard in western Canada. Canadian Journal of Civil Engineering, 2010, 37, 562-575.	0.7	18
103	Assessment of capacity curves for transmission line towers under wind loading. Wind and Structures, an International Journal, 2010, 13, 1-20.	0.8	20
104	Probabilistic Characteristics of Seismic Ductility Demand of SDOF Systems with Bouc-Wen Hysteretic Behavior. Journal of Earthquake Engineering, 2009, 13, 600-622.	1.4	65
105	Deaggregation of seismic loss of spatially distributed buildings. Bulletin of Earthquake Engineering, 2009, 7, 255-272.	2.3	18
106	Orientation effect on ground motion measurement for Mexican subduction earthquakes. Earthquake Engineering and Engineering Vibration, 2009, 8, 1-16.	1.1	17
107	Effect of Spatial Correlation on Estimated Ground-Motion Prediction Equations. Bulletin of the Seismological Society of America, 2009, 99, 928-934.	1.1	51
108	Assessment of tornado hazard for spatially distributed systems in southern Ontario. Journal of Wind Engineering and Industrial Aerodynamics, 2008, 96, 1376-1389.	1.7	14

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109	Application of cumulative prospect theory: Implied seismic design preference. Structural Safety, 2008, 30, 506-516.	2.8	42
110	Implied Preference for Seismic Design Level and Earthquake Insurance. Risk Analysis, 2008, 28, 523-537.	1.5	10
111	Spatial Correlation of Peak Ground Motions and Response Spectra. Bulletin of the Seismological Society of America, 2008, 98, 354-365.	1.1	220
112	Estimation of Seismic Loss for Spatially Distributed Buildings. Earthquake Spectra, 2008, 24, 889-910.	1.6	93
113	Reliability Evaluation of Earth Slopes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2008, 134, 1700-1705.	1.5	78
114	Tornado hazard assessment for southern Ontario. Canadian Journal of Civil Engineering, 2007, 34, 830-842.	0.7	18
115	Orientation-Dependent Ground-Motion Measure for Seismic-Hazard Assessment. Bulletin of the Seismological Society of America, 2007, 97, 1525-1538.	1.1	62
116	Assessment of ductility demand and reliability of bilinear single-degree-of-freedom systems under earthquake loading. Canadian Journal of Civil Engineering, 2007, 34, 1606-1615.	0.7	28
117	Optimal Scheduling of Replacement and Rehabilitation of Water Distribution Systems. Journal of Infrastructure Systems, 2006, 12, 184-191.	1.0	30
118	Optimal seismic design for limited planning time horizon with detailed seismic hazard information. Structural Safety, 2006, 28, 247-260.	2.8	36
119	A Comparison of Seismic-Hazard and Risk Deaggregation. Bulletin of the Seismological Society of America, 2006, 96, 2021-2039.	1.1	41
120	Optimal Seismic Design Considering Risk Attitude, Societal Tolerable Risk Level, and Life Quality Criterion. Journal of Structural Engineering, 2006, 132, 2027-2035.	1.7	54
121	Seismic hazard analysis: a comparative study. Canadian Journal of Civil Engineering, 2006, 33, 1156-1171.	0.7	30
122	Reliability Of Bilinear SDOF Systems Subjected to Earthquake Loading. , 2006, , 711-721.		2
123	Accumulation of wind induced damage on bilinear SDOF systems. Wind and Structures, an International Journal, 2004, 7, 145-158.	0.8	22
124	Load factor calibration for the proposed 2005 edition of the National Building Code of Canada: Companion-action load combinations. Canadian Journal of Civil Engineering, 2003, 30, 440-448.	0.7	42
125	Load factor calibration for the proposed 2005 edition of the National Building Code of Canada: Statistics of loads and load effects. Canadian Journal of Civil Engineering, 2003, 30, 429-439.	0.7	65
126	Safety and Design of Vertical Breakwaters. HKIE Transactions, 2003, 10, 1-7.	1.9	0

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127	Effect of Reinforcement Corrosion on Reliability of Bridge Girders. Civil Engineering and Environmental Systems, 2002, 19, 67-85.	0.4	8
128	Probabilistic analysis of peak response of MDOF systems with uncertain PSD function. Earthquake Engineering and Structural Dynamics, 2002, 31, 1719-1733.	2.5	9
129	Probabilistic assessment of wind-sensitive structures with uncertain parameters. Journal of Wind Engineering and Industrial Aerodynamics, 2001, 89, 893-910.	1.7	8
130	AN APPROXIMATION TO BIVARIATE AND TRIVARIATE NORMAL INTEGRALS. Civil Engineering and Environmental Systems, 1999, 16, 115-127.	0.4	6
131	Environmental Load Factors for Offshore Structures. Journal of Offshore Mechanics and Arctic Engineering, 1999, 121, 261-267.	0.6	0
132	An efficient point estimate method for probabilistic analysis. Reliability Engineering and System Safety, 1998, 59, 261-267.	5.1	421
133	RELIABILITY BASED OPTIMAL INSPECTION AND MAINTENANCE FOR PIPELINE UNDER CORROSION. Civil Engineering and Environmental Systems, 1997, 14, 313-334.	0.2	20
134	POINT-ESTIMATE MOMENT-BASED RELIABILITY ANALYSIS. Civil Engineering and Environmental Systems, 1996, 13, 281-294.	0.2	50
135	An optimal point estimate method for uncertainty studies1. Applied Mathematical Modelling, 1995, 19, 508-509.	2.2	3
136	Design Criteria for Offshore Structures Under Combined Wind and Wave Loading. Journal of Offshore Mechanics and Arctic Engineering, 1995, 117, 1-11.	0.6	6
137	The Mexico Earthquake of September 19, 1985â€"Model for Generation of Subduction Earthquakes. Earthquake Spectra, 1988, 4, 481-498.	1.6	11
138	A Stochastic Model for Simulating Vertical Pulseless Near-Fault Seismic Ground Motions. Bulletin of the Seismological Society of America, 0, , .	1.1	2