Jong-Su Jeon

List of Publications by Year
in descending order

75 papers	3,179 citations	147566 31 h-index	161609 54 g-index
78 all docs	78 docs citations	78 times ranked	1371 citing authors

#	Article	IF	Citations
1	Failure mode and effects analysis of RC members based on machine-learning-based SHapley Additive exPlanations (SHAP) approach. Engineering Structures, 2020, 219, 110927.	2.6	354
2	Classification of failure mode and prediction of shear strength for reinforced concrete beam-column joints using machine learning techniques. Engineering Structures, 2018, 160, 85-94.	2.6	205
3	Artificial neural network based multi-dimensional fragility development of skewed concrete bridge classes. Engineering Structures, 2018, 162, 166-176.	2.6	170
4	Data-driven machine-learning-based seismic failure mode identification of reinforced concrete shear walls. Engineering Structures, 2020, 208, 110331.	2.6	170
5	Machine Learningâ€“Based Failure Mode Recognition of Circular Reinforced Concrete Bridge Columns: Comparative Study. Journal of Structural Engineering, 2019, 145, .	1.7	158
6	Rapid seismic damage evaluation of bridge portfolios using machine learning techniques. Engineering Structures, 2019, 201, 109785.	2.6	113
7	Critical uncertainty parameters influencing seismic performance of bridges using Lasso regression. Earthquake Engineering and Structural Dynamics, 2018, 47, 784-801.	2.5	111
8	Framework of aftershock fragility assessmentâ€“case studies: older California reinforced concrete building frames. Earthquake Engineering and Structural Dynamics, 2015, 44, 2617-2636.	2.5	91
9	Fragility curves for non-ductile reinforced concrete frames that exhibit different component response mechanisms. Engineering Structures, 2015, 85, 127-143.	2.6	91
10	Statistical models for shear strength of RC beamâ€column joints using machineâ€learning techniques. Earthquake Engineering and Structural Dynamics, 2014, 43, 2075-2095.	2.5	83
11	Stripeâ€based fragility analysis of multispan concrete bridge classes using machine learning techniques. Earthquake Engineering and Structural Dynamics, 2019, 48, 1238-1255.	2.5	80
12	Optimal Intensity Measures in Probabilistic Seismic Demand Models of Cable-Stayed Bridges Subjected to Pulse-Like Ground Motions. Journal of Bridge Engineering, 2019, 24, .	1.4	75
13	ANCOVA-based grouping of bridge classes for seismic fragility assessment. Engineering Structures, 2016, 123, 379-394.	2.6	66
14	Automated Damage Index Estimation of Reinforced Concrete Columns for Post-Earthquake Evaluations. Journal of Structural Engineering, 2015, 141, .	1.7	64
15	Impact of Spatial Variability Parameters on Seismic Fragilities of a Cable-Stayed Bridge Subjected to Differential Support Motions. Journal of Bridge Engineering, 2017, 22, .	1.4	63
16	Machine-learning interpretability techniques for seismic performance assessment of infrastructure systems. Engineering Structures, 2022, 250, 112883.	2.6	61
17	Seismic fragility of lightly reinforced concrete frames with masonry infills. Earthquake Engineering and Structural Dynamics, 2015, 44, 1783-1803.	2.5	58
18	Parameterized Seismic Fragility Curves for Curved Multi-frame Concrete Box-Girder Bridges Using Bayesian Parameter Estimation. Journal of Earthquake Engineering, 2019, 23, 954-979.	1.4	57

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19	Geometric parameters affecting seismic fragilities of curved multi-frame concrete box-girder bridges with integral abutments. Engineering Structures, 2016, 122, 121-143.	2.6	53
20	Bridge classes for regional seismic risk assessment: Improving HAZUS models. Engineering Structures, 2017, 148, 755-766.	2.6	53
21	Machine Vision-Enhanced Postearthquake Inspection. Journal of Computing in Civil Engineering, 2013, 27, 622-634.	2.5	51
22	An innovative seismic bracing system based on a superelastic shape memory alloy ring. Smart Materials and Structures, 2016, 25, 055030.	1.8	51
23	Damage assessment of older highway bridges subjected to three-dimensional ground motions: Characterization of shearâ€“axial force interaction on seismic fragilities. Engineering Structures, 2015, 87, 47-57.	2.6	49
24	Explainable machine learning models for punching shear strength estimation of flat slabs without transverse reinforcement. Journal of Building Engineering, 2021, 39, 102300.	1.6	49
25	Dataâ€driven rapid damage evaluation for lifeâ€cycle seismic assessment of regional reinforced concrete bridges. Earthquake Engineering and Structural Dynamics, 2022, 51, 2730-2751.	2.5	49
26	A new experimental investigation into the effects of reinforcing mortar beams with superelastic SMA fibers on controlling and closing cracks. Composites Part B: Engineering, 2018, 137, 140-152.	5.9	47
27	Risk assessment for a long-span cable-stayed bridge subjected to multiple support excitations. Engineering Structures, 2018, 176, 220-230.	2.6	41
28	Machine learning-based approaches for seismic demand and collapse of ductile reinforced concrete building frames. Journal of Building Engineering, 2021, 34, 101905.	1.6	41
29	Ground Motion-Dependent Rapid Damage Assessment of Structures Based on Wavelet Transform and Image Analysis Techniques. Journal of Structural Engineering, 2020, 146, .	1.7	35
30	Seismic fragility analysis of a buried gas pipeline based on nonlinear time-history analysis. International Journal of Steel Structures, 2016, 16, 231-242.	0.6	34
31	External jacket of FRP wire for confining concrete and its advantages. Engineering Structures, 2013, 56, 555-566.	2.6	33
32	Seismic fragility assessment of long-span cable-stayed bridges in China. Advances in Structural Engineering, 2016, 19, 1797-1812.	1.2	32
33	Postâ€repair effect of column jackets on aftershock fragilities of damaged RC bridges subjected to successive earthquakes. Earthquake Engineering and Structural Dynamics, 2016, 45, 1149-1168.	2.5	31
34	Performanceâ€based grouping methods of bridge classes for regional seismic risk assessment: Application of <scp>ANOVA</scp>, <scp>ANCOVA</scp>, and nonâ€parametric approaches. Earthquake Engineering and Structural Dynamics, 2017, 46, 2587-2602.	2.5	27
35	Skew Adjustment Factors for Fragilities of California Box-Girder Bridges Subjected to near-Fault and Far-Field Ground Motions. Journal of Bridge Engineering, 2019, 24, .	1.4	25
36	Regional Seismic Risk Assessment of Infrastructure Systems through Machine Learning: Active Learning Approach. Journal of Structural Engineering, 2020, 146, .	1.7	25

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37	Probabilistic Seismic Vulnerability Assessment of Tall Horizontally Curved Concrete Bridges in California. Journal of Performance of Constructed Facilities, 2018, 32, .	1.0	23
38	Effect of steel wrapping jackets on the bond strength of concrete and the lateral performance of circular RC columns. Engineering Structures, 2013, 48, 43-54.	2.6	22
39	Earthquake-induced sloshing effects on the hydrodynamic pressure response of rigid cylindrical liquid storage tanks using CFD simulation. Engineering Structures, 2019, 197, 109376.	2.6	22
40	Bond behavior of steel deformed bars embedded in concrete confined by FRP wire jackets. Construction and Building Materials, 2014, 68, 716-725.	3.2	19
41	Active Reinforcing Fiber of Cementitious Materials Using Crimped NiTi SMA Fiber for Crack-Bridging and Pullout Resistance. Materials, 2020, 13, 3845.	1.3	19
42	Evaluation of economic losses and collapse safety of steel moment frame buildings designed for risk categories II and IV. Engineering Structures, 2019, 201, 109830.	2.6	18
43	Seismic fragility curves for California concrete bridges with flared two-column bents. Bulletin of Earthquake Engineering, 2019, 17, 4299-4319.	2.3	18
44	Vibration tests of precompressed rubber springs and a flag-shaped smart damper. Engineering Structures, 2017, 132, 372-382.	2.6	16
45	Multi-hazard assessment and mitigation for seismically-deficient RC building frames using artificial neural network models. Engineering Structures, 2020, 207, 110204.	2.6	13
46	Estimation of economic seismic loss of steel moment-frame buildings using a machine learning algorithm. Engineering Structures, 2022, 254, 113877.	2.6	13
47	Seismic mobile shaker testing of full-scale RC building frames with high-strength NSM-FRP hybrid retrofit system. Composite Structures, 2019, 226, 111207.	3.1	12
48	Self-centering and damping devices using SMA dual rings. Smart Materials and Structures, 2019, 28, 085005.	1.8	12
49	Bridge fragilities to network fragilities in seismic scenarios: An integrated approach. Engineering Structures, 2021, 237, 112212.	2.6	12
50	Seismic response prediction and modeling considerations for curved and skewed concrete box-girder bridges. Earthquake and Structures, 2015, 9, 1153-1179.	1.0	12
51	Seismic damage state predictions of reinforced concrete structures using stacked long short-term memory neural networks. Journal of Building Engineering, 2022, 46, 103737.	1.6	12
52	Retrofit scheme of FRP jacketing system for blast damage mitigation of non-ductile RC building frames. Composite Structures, 2019, 228, 111328.	3.1	11
53	Quantifying the effects of longâ€duration earthquake ground motions on the financial losses of steel moment resisting frame buildings of varying design risk category. Earthquake Engineering and Structural Dynamics, 2021, 50, 1451-1468.	2.5	11
54	Enabling shape memory effect wires for acting like superelastic wires in terms of showing recentering capacity in mortar beams. Construction and Building Materials, 2022, 319, 126047.	3.2	11

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55	Phenomenological hysteretic model for superelastic NiTi shape memory alloys accounting for functional degradation. Earthquake Engineering and Structural Dynamics, 2022, 51, 277-309.	2.5	10
56	Mainshock-aftershâ€‹ock response analyses of FRP-jacketed columns in existing RC building frames. Engineering Structures, 2018, 165, 315-330.	2.6	9
57	Adjustment Factors to Account for the Effect of Bridge Deck Horizontal Curvature on the Seismic Response of Concrete Box-Girder Bridges in California. Earthquake Spectra, 2018, 34, 893-914.	1.6	8
58	Model parameter prediction of lumped plasticity model for nonlinear simulation of circular reinforced concrete columns. Engineering Structures, 2021, 245, 112820.	2.6	8
59	Estimating the plastic hinge length of rectangular concrete columns reinforced with NiTi superelastic shape memory alloys. Engineering Structures, 2022, 252, 113641.	2.6	8
60	Active action of prestressing on direct tensile behavior of mortar reinforced with NiTi SMA crimped fibers. Composite Structures, 2022, 281, 115119.	3.1	8
61	Machine Learningâ€“Based Seismic Reliability Assessment of Bridge Networks. Journal of Structural Engineering, 2022, 148, .	1.7	8
62	Experimental investigation on the performance of flexural displacement recovery using crimped shape memory alloy fibers. Construction and Building Materials, 2021, 306, 124908.	3.2	7
63	Investigation of MRS and SMA Dampers Effects on Bridge Seismic Resistance Employing Analytical Models. International Journal of Steel Structures, 2018, 18, 1325-1335.	0.6	6
64	Adaptive hysteretic model for reinforced concrete columns including variations in axial force and shear span length. Earthquake Engineering and Structural Dynamics, 2021, 50, 4001-4031.	2.5	6
65	Assessment of probabilistic seismic performance of RC columns jacketed by FRP winding wires using analytical models. Engineering Structures, 2018, 171, 629-646.	2.6	5
66	Post-fire damage assessment of Korean bridges using thermalâ€“structure interaction fire analysis. Magazine of Concrete Research, 2018, 70, 938-953.	0.9	4
67	Seismic damage mitigation strategy using an FRP column jacketing system in gravity-designed reinforced concrete building frames. Composite Structures, 2022, 279, 114700.	3.1	4
68	Drift limit state predictions of rectangular reinforced concrete columns with superelastic shape memory alloy rebars. Journal of Building Engineering, 2022, 54, 104546.	1.6	3
69	Model development and seismic performance evaluation of rectangular reinforced concrete columns with short lap splices in existing building frames. Engineering Structures, 2021, 245, 112922.	2.6	2
70	Probabilistic residual deformation prediction model for rectangular reinforced concrete columns. Earthquake Engineering and Structural Dynamics, 2022, 51, 1994-2015.	2.5	2
71	Damage Potential of a Domestic Metropolitan Railway Bridge subjected to 2016 Gyeongju Earthquake. Journal of the Earthquake Engineering Society of Korea, 2016, 20, 461-472.	0.1	1
72	Aftershock Fragility Assessment of Damaged RC Bridge Piers Repaired with CFRP Jackets under Successive Seismic Events. Journal of the Earthquake Engineering Society of Korea, 2018, 22, 271-280.	0.1	1

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73	Full-Scale Shaker Testing of Non-Ductile RC Frame Structure Retrofitted Using High-Strength Near Surface Mounted Rebars and Carbon FRP Sheets. Journal of the Earthquake Engineering Society of Korea, 2019, 23, 43-54.	0.1	1
74	Seismic Fragilities of Curved Concrete Bridges via Bayesian Parameter Estimation Method. , 0, , .		0
75	Hysteretic Model for Superelastic NiTi Shape Memory Alloys. Journal of Korean Society of Steel Construction, 2021, 33, 373-381.	0.2	0