Sonia E Ruiz

List of Publications by Year
in descending order

77 papers	917 citations	567144 15 h-index	501076 28 g-index
82 all docs	82 docs citations	82 times ranked	605 citing authors

#	Article	IF	Citations
1	Influence of Higher Modes of Vibration on the Seismic Response of Buildings with Linear and Nonlinear Viscous Dampers. Journal of Earthquake Engineering, 2022, 26, 3914-3937.	1.4	5
2	Development an Artificial Neural Network Model for Estimating Cost of R/C Building by Using Life-Cycle Cost Function: Case Study of Mexico City. Advances in Civil Engineering, 2022, 2022, 1-15.	0.4	1
3	Optimal design of buildings under wind and earthquake, considering cumulative damage. Journal of Building Engineering, 2022, 56, 104760.	1.6	3
4	Use of Artificial Neural Networks and Response Surface Methodology for Evaluating the Reliability Index of Steel Wind Towers. Advances in Civil Engineering, 2022, 2022, 1-15.	0.4	3
5	Influence of spectral acceleration correlation models on conditional mean spectra and probabilistic seismic hazard analysis. Earthquake Engineering and Structural Dynamics, 2021, 50, 309-328.	2.5	6
6	BRB retrofit of mid-rise soft-first-story RC moment-frame buildings with masonry infill in upper stories. Journal of Building Engineering, 2021, 38, 101783.	1.6	5
7	Optimal load factors for earthquake-resistant design of buildings located at different types of soils. Journal of Building Engineering, 2021, 34, 102026.	1.6	4
8	Enhanced Seismic Structural Reliability on Reinforced Concrete Buildings by Using Buckling Restrained Braces. Shock and Vibration, 2021, 2021, 1-12.	0.3	4
9	Reliability-based strength modification factor for seismic design spectra considering structural degradation. Natural Hazards and Earth System Sciences, 2021, 21, 1445-1460.	1.5	2
10	Structural reliability of reinforced concrete buildings under earthquakes and corrosion effects. Engineering Structures, 2021, 237, 112161.	2.6	20
11	Comparing Hysteretic Energy and Ductility Uniform Annual Failure Rate Spectra for Traditional and a Spectral Shape-Based Intensity Measure. Advances in Civil Engineering, 2021, 2021, 1-17.	0.4	1
12	Reliability analysis of steel buildings considering the flexibility of the connections of the GFs. Structures, 2020, 27, 2170-2181.	1.7	7
13	Capacity and Demand Factors changing over time. Application to wind turbine steel towers. Engineering Structures, 2020, 206, 110156.	2.6	2
14	Improving the Structural Reliability of Steel Frames Using Posttensioned Connections. Advances in Civil Engineering, 2019, 2019, 1-10.	0.4	13
15	FACTORES DE AMPLIFICACIÃ“N DE RESISTENCIA PARA EL DISEÃ‘O DE ESTRUCTURAS CON ASIMETRÃA EN FLUENCIA. Revista De IngenierÃa SÃsmica, 2019, , 48-81.	0.1	0
16	Reliability-based Strength Amplification Factors for Structures with Asymmetric Yielding. Journal of Earthquake Engineering, 2018, 22, 36-62.	1.4	1
17	Seismic response and energy dissipation of 3D complex steel buildings considering the influence of interior semi-rigid connections: low- medium- and high-rise. Bulletin of Earthquake Engineering, 2018, 16, 5557-5590.	2.3	5
18	Review of Guidelines for Seismic Design of Structures with Damping Systems. Open Civil Engineering Journal, 2018, 12, 195-204.	0.4	4

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19	Wind-induced vibration control for buildings equipped with non-linear fluid viscous dampers. Vibroengineering PROCEDIA, 2018, 21, 119-124.	0.3	1
20	Direct Displacement-Based Design for Buildings with Hysteretic Dampers, using Best Combinations of Stiffness and Strength Ratios. Journal of Earthquake Engineering, 2017, 21, 752-775.	1.4	12
21	A new ground motion intensity measure I. Soil Dynamics and Earthquake Engineering, 2017, 99, 97-107.	1.9	34
22	Reliability-based optimal load factors for seismic design of buildings. Engineering Structures, 2017, 151, 527-539.	2.6	24
23	On the Seismic Design of Structures with Tilting Located within a Seismic Region. Applied Sciences (Switzerland), 2017, 7, 1146.	1.3	3
24	Reliability-based optimal load factors for seismic design of buildings. , 2017, 151, 527-527.		1
25	Seismic response of complex 3D steel buildings with welded and post-tensioned connections. Earthquake and Structures, 2016, 11, 217-243.	1.0	3
26	Demands and distribution of hysteretic energy in moment resistant self-centering steel frames. Steel and Composite Structures, 2016, 20, 1155-1171.	1.3	16
27	Reliability over time of wind turbines steel towers subjected to fatigue. Wind and Structures, an International Journal, 2016, 23, 75-90.	0.8	4
28	Probabilistic seismic response transformation factors between SDOF and MDOF systems using artificial neural networks. Journal of Vibroengineering, 2016, 18, 2248-2262.	0.5	5
29	Time-Dependent Confidence Factor for Structures with Cumulative Damage. Earthquake Spectra, 2015, 31, 441-461.	1.6	10
30	Estimation of Cyclic Interstory Drift Capacity of Steel Framed Structures and Future Applications for Seismic Design. Scientific World Journal, The, 2014, 2014, 1-9.	0.8	0
31	Non-Gaussian Stochastic Equivalent Linearization Method for Inelastic Nonlinear Systems with Softening Behaviour, under Seismic Ground Motions. Mathematical Problems in Engineering, 2014, 2014, 1-16.	0.6	4
32	An Efficient Approach to Obtain Optimal Load Factors for Structural Design. Scientific World Journal, The, 2014, 2014, 1-9.	0.8	1
33	Ductility and Strength Reduction Factors for Degrading Structures Considering Cumulative Damage. Scientific World Journal, The, 2014, 2014, 1-7.	0.8	2
34	Reduction Factors for Seismic Design Spectra for Structures with Viscous Energy Dampers. Journal of Earthquake Engineering, 2014, 18, 323-349.	1.4	17
35	On the Use of Vector-Valued Intensity Measure to Predict Peak and Cumulative Demands of Steel Frames under Narrow-Band Motions. Applied Mechanics and Materials, 2014, 595, 137-142.	0.2	2
36	Evaluation of the Response of Posttensioned Steel Frames with Energy Dissipators Using Equivalent Single-Degree-of-Freedom Systems. Advances in Materials Science and Engineering, 2014, 2014, 1-10.	1.0	3

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37	Influence of structural deterioration over time on the optimal time interval for inspection and maintenance of structures. Engineering Structures, 2014, 61, 22-30.	2.6	12
38	A New Spectral Shape-Based Record Selection Approach Using<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="M1"><mml:mrow><mml:msub><mml:mrow><mml:mi>N</mml:mi></mml:mrow><mml:mrow><mml:mi>p</mml:mi></mml:mrow> Genetic Algorithms. Mathematical Problems in Engineering, 2013, 2013, 1-9.	0.6	11
39	Time Intervals for Maintenance of Offshore Structures Based on Multiobjective Optimization. Mathematical Problems in Engineering, 2013, 2013, 1-15.	0.6	7
40	Reduction of Maximum and Residual Drifts on Posttensioned Steel Frames with Semirigid Connections. Advances in Materials Science and Engineering, 2013, 2013, 1-11.	1.0	10
41	Response transformation factors for deterministic-based and reliability-based seismic design. Structural Engineering and Mechanics, 2013, 46, 755-773.	1.0	4
42	Prediction of Inelastic Response Spectra Using Artificial Neural Networks. Mathematical Problems in Engineering, 2012, 2012, 1-15.	0.6	14
43	Simplified closed-form expressions for the mean failure rate of structures considering structural deterioration. Structure and Infrastructure Engineering, 2012, 8, 483-496.	2.0	10
44	Comparing vector-valued intensity measures for fragility analysis of steel frames in the case of narrow-band ground motions. Engineering Structures, 2012, 45, 472-480.	2.6	74
45	Estimation of the risk amplification in steel buildings subject to seismic actions using Monte Carlo simulation. , 2012, , 95-102.		0
46	Hysteretic model for steel energy absorbers and evaluation of a seismic design strategy using minimal-damage performance objectives. , 2012, , 867-874.		0
47	Behavior of self-centering buckling-restrained braces. , 2012, , 705-710.		0
48	Evaluation of Structural Reliability of Steel Frames: Interstory Drift versus Plastic Hysteretic Energy. Earthquake Spectra, 2011, 27, 661-682.	1.6	33
49	Accidental Eccentricity of Story Shear for Low-Rise Office Buildings. Journal of Structural Engineering, 2011, 137, 513-520.	1.7	9
50	Probabilities of Exceeding Different Limit States for Buildings Subjected to Narrow-Band Ground Motions. Earthquake Spectra, 2010, 26, 825-840.	1.6	5
51	Energy-based damage index for steel structures. Steel and Composite Structures, 2010, 10, 331-348.	1.3	49
52	Energy-based damage model for MDOF steel structures. , 2009, , .		0
53	Reliability-based evaluation of steel structures using energy concepts. Engineering Structures, 2008, 30, 1745-1759.	2.6	46
54	Design Approach Based on UAFR Spectra for Structures with Displacement-Dependent Dissipating Elements. Earthquake Spectra, 2007, 23, 417-439.	1.6	5

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55	Influence of structural capacity uncertainty on seismic reliability of buildings under narrow-band motions. Earthquake Engineering and Structural Dynamics, 2007, 36, 1915-1934.	2.5	22
56	Structural reliability evaluation considering capacity degradation over time. Engineering Structures, 2007, 29, 2183-2192.	2.6	40
57	Seismic Design Method for Reliability-Based Rehabilitation of Buildings. Earthquake Spectra, 2006, 22, 189-214.	1.6	3
58	Design Algorithm Based on Probabilistic Seismic Demands for Buildings Rehabilitated with Hysteretic Energy-Dissipating Devices. Earthquake Spectra, 2004, 20, 503-521.	1.6	5
59	Performance-Based Design Approach for Seismic Rehabilitation of Buildings with Displacement-Dependent Dissipators. Earthquake Spectra, 2001, 17, 531-548.	1.6	6
60	Calibration of the equivalent linearization gaussian approach applied to simple hysteretic systems subjected to narrow band seismic motions. Structural Safety, 2000, 22, 211-231.	2.8	6
61	Influence of ground motion intensity on the effectiveness of tuned mass dampers. Earthquake Engineering and Structural Dynamics, 1999, 28, 1255-1271.	2.5	70
62	Design Live Loads for Classrooms in United States and Mexico. Journal of Structural Engineering, 1997, 123, 1652-1657.	1.7	2
63	Design Live Loads for Office Buildings in Mexico and the United States. Journal of Structural Engineering, 1997, 123, 816-822.	1.7	13
64	Stochastic seismic performance evaluation of tuned liquid column dampers. Earthquake Engineering and Structural Dynamics, 1997, 26, 875-876.	2.5	2
65	STOCHASTIC SEISMIC PERFORMANCE EVALUATION OF TUNED LIQUID COLUMN DAMPERS. Earthquake Engineering and Structural Dynamics, 1996, 25, 1259-1274.	2.5	70
66	Influence of the spatial distribution of energy-dissipating bracing elements on the seismic response of multistorey frames. Earthquake Engineering and Structural Dynamics, 1995, 24, 1511-1525.	2.5	5
67	Reliability of Short and Slender Reinforcedâ€Concrete Columns. Journal of Structural Engineering, 1994, 120, 1850-1865.	1.7	15
68	Influence of intensity of motion on the seismic response of structures with asymmetric force-deformation curves. Earthquake Engineering and Structural Dynamics, 1991, 20, 1-9.	2.5	3
69	Seismic Failure Rates of Multistory Frames. Journal of Structural Engineering, 1989, 115, 268-284.	1.7	46
70	The Mexico Earthquake of September 19, 1985â€"Seismic Response of Asymmetrically Yielding Structures. Earthquake Spectra, 1989, 5, 103-111.	1.6	3
71	The Mexico Earthquake of September 19, 1985â€"The Seismic Performance of Buildings with Weak First Storey. Earthquake Spectra, 1989, 5, 89-102.	1.6	16
72	Discussion of â€œ Evolutionary Kanaiâ€Tajimi Earthquake Models â€•by Y. K. Lin and Yan Yong (August, 1987,) Tj ETQq0 0 0 rgBT /Overl	1.6	0

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73	The Mexico Earthquake of September 19, 1985â€"Nonstationary Models of Seismic Ground Acceleration. Earthquake Spectra, 1988, 4, 551-568.	1.6	51
74	Non-dimensional probabilistic coefficients for laterally loaded piles. Structural Safety, 1986, 4, 41-47.	2.8	3
75	Uncertainty about pâ€y Curves for Piles in Soft Clays. Journal of Geotechcnical Engineering, 1986, 112, 594-607.	0.4	4
76	Reliability index for offshore piles subjected to bending. Structural Safety, 1984, 2, 83-90.	2.8	13
77	Displacement Spectra Damping Factors for Preliminary Design of Structures with Hysteretic Energy-Dissipation Devices. Journal of Earthquake Engineering, 0, , 1-24.	1.4	0