Mario Ordaz

List of Publications by Year
in descending order

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108 papers	2,435 citations	185998 28 h-index	253896 43 g-index
109 all docs	109 docs citations	109 times ranked	1473 citing authors

#	ARTICLE	IF	CITATIONS
1	The Mexico Earthquake of September 19, 1985â€"A Study of Amplification of Seismic Waves in the Valley of Mexico with Respect to a Hill Zone Site. Earthquake Spectra, 1988, 4, 653-673.	1.6	196
2	Inslab Earthquakes of Central Mexico: Peak Ground-Motion Parameters and Response Spectra. Bulletin of the Seismological Society of America, 2005, 95, 2272-2282.	1.1	112
3	Exact computation of input-energy spectra from Fourier amplitude spectra. Earthquake Engineering and Structural Dynamics, 2003, 32, 597-605.	2.5	90
4	Estimation of strength-reduction factors for elastoplastic systems: a new approach. Earthquake Engineering and Structural Dynamics, 1998, 27, 889-901.	2.5	72
5	Inslab Earthquakes of Central Mexico: Q, Source Spectra, and Stress Drop. Bulletin of the Seismological Society of America, 2004, 94, 789-802.	1.1	70
6	Spectral Ratios for Mexico City from Free-Field Recordings. Earthquake Spectra, 1999, 15, 273-295.	1.6	68
7	Earthquake hazard in Mexico City: Observations versus computations. Bulletin of the Seismological Society of America, 1999, 89, 1379-1383.	1.1	62
8	Estimation of Ground Motion for Bhuj (26 January 2001; Mw 7.6) and for Future Earthquakes in India. Bulletin of the Seismological Society of America, 2003, 93, 353-370.	1.1	58
9	Is there truly a â€œhardâ€•rock site in the Valley of Mexico?. Geophysical Research Letters, 1995, 22, 481-484.	1.5	53
10	Deadly Intraslab Mexico Earthquake of 19 September 2017 (MwÂ7.1): Ground Motion and Damage Pattern in Mexico City. Seismological Research Letters, 2018, 89, 2193-2203.	0.8	53
11	A Preliminary Report on the Tehuacan, Mexico Earthquake of June 15, 1999 (Mw = 7.0). Seismological Research Letters, 1999, 70, 489-504.	0.8	50
12	The Mexico Earthquake of September 19, 1985â€"Design Spectra for Mexico's Federal District. Earthquake Spectra, 1989, 5, 273-291.	1.6	49
13	Strong ground-motion relations for Mexican interplate earthquakes. Journal of Seismology, 2010, 14, 769-785.	0.6	49
14	Probabilistic earthquake risk assessment using CAPRA: application to the city of Barcelona, Spain. Natural Hazards, 2013, 69, 59-84.	1.6	49
15	CRISIS2008: A Flexible Tool to Perform Probabilistic Seismic Hazard Assessment. Seismological Research Letters, 2013, 84, 495-504.	0.8	48
16	Bayesian Attenuation Regressions: an Application to Mexico City. Geophysical Journal International, 1994, 117, 335-344.	1.0	46
17	Global risk assessment: A fully probabilistic seismic and tropical cyclone wind risk assessment. International Journal of Disaster Risk Reduction, 2014, 10, 461-476.	1.8	41
18	A Preliminary Report on the Tecoman, Mexico Earthquake of 22 January 2003 (Mw 7.4) and Its Effects. Seismological Research Letters, 2003, 74, 279-289.	0.8	40

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19	A New Seismic Intensity Parameter to Estimate Damage in Buried Pipelines due to Seismic Wave Propagation. Journal of Earthquake Engineering, 2007, 11, 773-786.	1.4	38
20	Updated Seismic Design Guidelines for Model Building Code of Mexico. Earthquake Spectra, 2009, 25, 869-898.	1.6	38
21	The great Mexican earthquake of 19 June 1858: Expected ground motions and damage in Mexico City from a similar future event. Bulletin of the Seismological Society of America, 1996, 86, 1655-1666.	1.1	38
22	Amplification of Seismic Waves in the Central Indo-Gangetic Basin, India. Bulletin of the Seismological Society of America, 2011, 101, 2231-2242.	1.1	37
23	Duration of strong ground motion during Mexican earthquakes in terms of magnitude, distance to the rupture area and dominant site period. Earthquake Engineering and Structural Dynamics, 2001, 30, 653-673.	2.5	35
24	Earthquake Loss Assessment for Integrated Disaster Risk Management. Journal of Earthquake Engineering, 2008, 12, 48-59.	1.4	34
25	On the Forecasting of Ground-Motion Parameters for Probabilistic Seismic Hazard Analysis. Earthquake Spectra, 2011, 27, 1-21.	1.6	34
26	Source study of two small earthquakes of Delhi, India, and estimation of ground motion from future moderate, local events. Journal of Seismology, 2009, 13, 89-105.	0.6	32
27	A Source and Wave Propagation Study of the Copalillo, Mexico, Earthquake of 21 July 2000 (Mw 5.9): Implications for Seismic Hazard in Mexico City from Inslab Earthquakes. Bulletin of the Seismological Society of America, 2002, 92, 1060-1071.	1.1	29
28	Estimation of Probabilistic Seismic Losses and the Public Economic Resilienceâ€"An Approach for a Macroeconomic Impact Evaluation. Journal of Earthquake Engineering, 2008, 12, 60-70.	1.4	29
29	Probabilistic seismic hazard assessment at global level. International Journal of Disaster Risk Reduction, 2014, 10, 419-427.	1.8	29
30	A new approach to probabilistic earthquake-induced tsunami risk assessment. Ocean and Coastal Management, 2016, 119, 68-75.	2.0	28
31	The Mexico Earthquake of September 19, 1985â€"Estimation of Response Spectra in the Lake Bed Zone of the Valley of Mexico. Earthquake Spectra, 1988, 4, 815-834.	1.6	25
32	Source Time Function and Duration of Mexican Earthquakes. Bulletin of the Seismological Society of America, 2000, 90, 468-482.	1.1	25
33	COMPARISON OF METHODS TO PREDICT RESPONSE SPECTRA AT INSTRUMENTED SITES GIVEN THE MAGNITUDE AND DISTANCE OF AN EARTHQUAKE. Journal of Earthquake Engineering, 2006, 10, 887-902.	1.4	25
34	The Seismic Alert System for Mexico City: An Evaluation of Its Performance and a Strategy for Its Improvement. Bulletin of the Seismological Society of America, 2007, 97, 1718-1729.	1.1	25
35	Near-Trench Mexican Earthquakes Have Anomalously Low Peak Accelerations. Bulletin of the Seismological Society of America, 2003, 93, 953-959.	1.1	24
36	Evaluation of the change in dominant periods in the lake-bed zone of Mexico City produced by ground subsidence through the use of site amplification factors. Soil Dynamics and Earthquake Engineering, 2013, 44, 54-66.	1.9	23

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37	Use of seismic data from similar regions. Earthquake Engineering and Structural Dynamics, 1987, 15, 619-634.	2.5	22
38	High-Resolution Seismic Hazard Analysis in a Complex Geological Configuration: The Case of the Sulmona Basin in Central Italy. Earthquake Spectra, 2014, 30, 1801-1824.	1.6	22
39	On the estimation of hysteretic energy demands for SDOF systems. Earthquake Engineering and Structural Dynamics, 2007, 36, 2365-2382.	2.5	21
40	Seismic Loss Estimation and Environmental Issues. Earthquake Spectra, 2015, 31, 1285-1308.	1.6	21
41	The Copala, Guerrero, Mexico Earthquake of September 14, 1995 (Mw=7.4): A Preliminary Report. Seismological Research Letters, 1995, 66, 11-39.	0.8	20
42	Multivariate Bayesian Regression Analysis Applied to Ground-Motion Prediction Equations, Part 2: Numerical Example with Actual Data. Bulletin of the Seismological Society of America, 2010, 100, 1568-1577.	1.1	20
43	Multivariate Bayesian Regression Analysis Applied to Ground-Motion Prediction Equations, Part 1: Theory and Synthetic Example. Bulletin of the Seismological Society of America, 2010, 100, 1551-1567.	1.1	20
44	Event-based approach for probabilistic agricultural drought risk assessment under rainfed conditions. Natural Hazards, 2015, 76, 1297-1318.	1.6	20
45	Intraslab versus Interplate Earthquakes as Recorded in Mexico City: Implications for Seismic Hazard. Earthquake Spectra, 2015, 31, 795-812.	1.6	20
46	Analysis of the Granada (Spain) earthquake of 24 June, 1984 (M = 5) with emphasis on seismic hazard in the Granada Basin. Tectonophysics, 1996, 257, 253-263.	0.9	19
47	Space-Time Clustering of Large Thrust Earthquakes along the Mexican Subduction Zone: An Evidence of Source Stress Interaction. Bulletin of the Seismological Society of America, 2005, 95, 1856-1864.	1.1	19
48	Seismic Fragility Formulations for Segmented Buried Pipeline Systems Including the Impact of Differential Ground Subsidence. Journal of Pipeline Systems Engineering and Practice, 2010, 1, 141-146.	0.9	19
49	Q of Lg Waves in the Central Mexican Volcanic Belt. Bulletin of the Seismological Society of America, 2007, 97, 1259-1266.	1.1	18
50	Hysteretic Energy Demands for SDOF Systems Subjected to Narrow Band Earthquake Ground Motions. Applications to the Lake Bed Zone of Mexico City. Journal of Earthquake Engineering, 2007, 11, 147-165.	1.4	18
51	Estimation of Ground Motion in Mexico City from a Repeat of the MÂ7.0 Acambay Earthquake of 1912. Bulletin of the Seismological Society of America, 2011, 101, 2015-2028.	1.1	18
52	On the Selection of Ground-Motion Prediction Equations for Probabilistic Seismic-Hazard Analysis. Bulletin of the Seismological Society of America, 2014, 104, 1860-1875.	1.1	18
53	On Uncertainties in Probabilistic Seismic Hazard Analysis. Earthquake Spectra, 2016, 32, 1405-1418.	1.6	18
54	R-CRISIS: 35Âyears of continuous developments and improvements for probabilistic seismic hazard analysis. Bulletin of Earthquake Engineering, 2021, 19, 2797-2816.	2.3	18

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55	A probabilistic approach for seismic risk assessment based on vulnerability functions. Application to Barcelona. Bulletin of Earthquake Engineering, 2019, 17, 1863-1890.	2.3	17
56	A simple source inversion scheme for displacement seismograms recorded at short distances. Journal of Seismology, 2000, 4, 267-284.	0.6	16
57	Influence of subduction zone structure on coastal and inland attenuation in Mexico. Geophysical Journal International, 2009, 179, 215-230.	1.0	16
58	Disaster risk from a macroeconomic perspective: a metric for fiscal vulnerability evaluation. Disasters, 2010, 34, 1064-1083.	1.1	16
59	Event-based approach for probabilistic flood risk assessment. International Journal of River Basin Management, 2014, 12, 377-389.	1.5	15
60	Reduction of matched and unmatched uncertainties for a class of nonlinear perturbed systems via robust control. International Journal of Robust and Nonlinear Control, 2019, 29, 2510-2524.	2.1	15
61	Development and Validation of Software CRISIS to Perform Probabilistic Seismic Hazard Assessment with Emphasis on the Recent CRISIS2015. Computacion Y Sistemas, 2017, 21, .	0.2	14
62	A simple probabilistic model to combine losses arising from the simultaneous occurrence of several hazards. Natural Hazards, 2015, 76, 389-396.	1.6	13
63	Considering the impacts of simultaneous perils. Disaster Prevention and Management, 2019, 28, 823-837.	0.6	13
64	A note on the fast computation of response spectra estimates. Earthquake Engineering and Structural Dynamics, 1990, 19, 971-976.	2.5	11
65	A simple approximation to the Gaussian distribution. Structural Safety, 1991, 9, 315-318.	2.8	11
66	Site response analysis in the valley of Mexico: Selection of input motion and extent of non-linear soil behaviour. Earthquake Engineering and Structural Dynamics, 1994, 23, 895-908.	2.5	11
67	When probabilistic seismic hazard climbs volcanoes: the Mt.ÂEtna case, Italy â€“ PartÂ2: Computational implementation and first results. Natural Hazards and Earth System Sciences, 2017, 17, 1999-2015.	1.5	11
68	Some Integrals Useful in Probabilistic Seismic Hazard Analysis. Bulletin of the Seismological Society of America, 2004, 94, 1510-1516.	1.1	9
69	A Report on the Atoyac, Mexico, Earthquake of 13 April 2007 (Mw 5.9). Seismological Research Letters, 2007, 78, 635-648.	0.8	9
70	Optimum Earthquake Design Coefficients Based on Probabilistic Seismic Hazard Analyses: Theory and Applications. Earthquake Spectra, 2017, 33, 1455-1474.	1.6	9
71	Maximum Earthquake Magnitude at Fault. Journal of Engineering Mechanics - ASCE, 1990, 116, 204-216.	1.6	8
72	Observed damage in public school buildings during the 2017 Mexico earthquakes. Earthquake Spectra, 2020, 36, 110-129.	1.6	8

#	Article	IF	Citations
73	Title is missing!. Journal of Earthquake Engineering, 2006, 10, 887.	1.4	7
74	Groundâ€Motion Simulation by the Empirical Greenâ€™s Function Method with a Source Defined by Two Corner Frequencies and a Twoâ€Stage Summation Scheme. Bulletin of the Seismological Society of America, 2018, 108, 901-912.	1.1	7
75	Inclusion of site-effects: An approach coherent with contemporary event-based PSHA practices. Soil Dynamics and Earthquake Engineering, 2022, 158, 107286.	1.9	7
76	Evaluation of the Intensity Measure Approach in Performance-Based Earthquake Engineering with Simulated Ground Motions. Bulletin of the Seismological Society of America, 2014, 104, 669-683.	1.1	6
77	Combination rule for critical structural response in soft soil. Engineering Structures, 2015, 82, 1-10.	2.6	6
78	Joint Maximum Likelihood Estimators for Gutenberg-Richter Parameters<i>Î»</i>₀and<i>Î²</i>Using Subcatalogs. Earthquake Spectra, 2018, 34, 301-312.	1.6	6
79	Use of Corrected Sinusoidal Pulses to Estimate Inelastic Demands of Elasto-Perfectly Plastic Oscillators Subjected to Narrow-Band Motions. Journal of Earthquake Engineering, 2007, 11, 303-325.	1.4	5
80	Empirical Green's Functions Modified by Attenuation for Sources Located at Intermediate and Far Distances from the Original Source. Journal of Earthquake Engineering, 2008, 12, 584-595.	1.4	5
81	Mismatch between teleseismic and strong-motion source spectra. Bulletin of the Seismological Society of America, 1992, 82, 1497-1502.	1.1	5
82	Risk caused by the propagation of earthquake losses through the economy. Nature Communications, 2022, 13, .	5.8	5
83	Spectral Attenuation Relations at Soft Sites Based on Existing Attenuation Relations for Rock Sites. Journal of Earthquake Engineering, 2009, 13, 236-251.	1.4	4
84	The 6 September 1997 (Mw 4.5) Coatzacoalcos-Minatitlan, Veracruz, Mexico earthquake: implications for tectonics and seismic hazard of the region. Geofisica International, 2015, 54, e1.	0.2	4
85	Probabilistic Assessment of Seismic Risk of Dwelling Buildings of Barcelona. Implication for theÂCity Resilience. Resilient Cities, 2019, , 229-265.	0.6	4
86	Strong motion seismology in Mexico. Tectonophysics, 1993, 218, 43-57.	0.9	3
87	The Great Sumatra-Andaman Earthquake of 2004: Regional Broadband Seismograms from India. Seismological Research Letters, 2005, 76, 684-692.	0.8	3
88	Damage severity estimation of an elastoplastic single-degree-of-freedom oscillator from its ground and response accelerations. Structural Control and Health Monitoring, 2014, 21, 1-22.	1.9	3
89	An earthquake-event-based method for mapping tsunami hazards. Proceedings of the Institution of Civil Engineers: Maritime Engineering, 2016, 169, 148-162.	1.4	3
90	Modelling correlation between Gutenbergâ€"Richter parameters a and b in PSHA. Bulletin of Earthquake Engineering, 2018, 16, 1829-1846.	2.3	3

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91	Sensitivity Analysis of Seismic Parameters in the Probabilistic Seismic Hazard Assessment (PSHA) for Barcelona Applying the New R-CRISIS. Computacion Y Sistemas, 2018, 22, .	0.2	3
92	Future ground motions in Mexico City. Tectonophysics, 1993, 218, 141-155.	0.9	2
93	66 Advances in seismology with impact on earthquake engineering. International Geophysics, 2003, 81, 1081-1095.	0.6	2
94	Inelastic-Strength Spectra in Probabilistic Seismic-Hazard Analysis. Bulletin of the Seismological Society of America, 2007, 97, 2171-2181.	1.1	2
95	Erratum to Inslab Earthquakes of Central Mexico: Peak Ground-Motion Parameters and Response Spectra. Bulletin of the Seismological Society of America, 2009, 99, 2607-2609.	1.1	2
96	Estimating tsunami potential of earthquakes in the Sumatraâ€"Andaman region based on broadband seismograms in India. Natural Hazards, 2012, 64, 1491-1510.	1.6	2
97	Ultimate uniform bounded-stability of inertial coupling electromechanical system via nonlinear time-varying feedback. International Journal of Control, 2017, 90, 715-728.	1.2	2
98	Comment on â€œDo Directionality Effects Influence Expected Damage? A Case Study of the 2017 Central Mexico Earthquakeâ€•by Luis A. PinzÃ³n, Luis G. Pujades, Sergio A. DÃaz, and Rodrigo E. Alva. Bulletin of the Seismological Society of America, 2020, 110, 387-392.	1.1	2
99	MAPAS DE VELOCIDAD MÃXIMA DEL SUELO PARA LA CIUDAD DE MÃ‰XICO. Revista De IngenierÃa SÃsmica, 2004, , 37.	0.1	2
100	On the use of probability concentrations. Structural Safety, 1988, 5, 317-318.	2.8	1
101	An analytical solution for the Bayesian estimation of ground motion from macroseismic intensity data. Bulletin of Earthquake Engineering, 2018, 16, 2633-2640.	2.3	1
102	Latin American and Caribbean earthquakes in the GEMâ€™s Earthquake Consequences Database (GEMECD). Natural Hazards, 2018, 93, 113-125.	1.6	1
103	Earthquake magnitude exceedance rate and self-similarity. Earthquake Engineering and Structural Dynamics, 1989, 18, 1017-1023.	2.5	0
104	Reply to Authors on â€œAssessment of earthquake damage considering the characteristics of past events in South Americaâ€• Soil Dynamics and Earthquake Engineering, 2018, 104, 154-155.	1.9	0
105	Discussion of â€œJoint Maximum Likelihood Estimators for Gutenberg-Richter Parameters Î»0 and Î² Using Subcatalogsâ€• Earthquake Spectra, 2019, 35, 1059-1059.	1.6	0
106	Drosophila is a Reliable Biomonitor of Water Pollution. , 2001, , 257-299.		0
107	Reply to "Comment on 'Estimation of Ground Motion in Mexico City from a Repeat of the MÂ7.0 Acambay Earthquake of 1912' by S. K. Singh, A. Iglesias, M. Ordaz, X. Perez-Campos, and L. Quintanar" by M. Suter. Bulletin of the Seismological Society of America, 2014, 104, 2565-2566.	1.1	0
108	Propagation of epistemic uncertainty in magnitudeâ€"frequency relations through PSHA using predictive distributions. Earthquake Spectra, 0, , 875529302110552.	1.6	0