Juan Carlos De la Llera

List of Publications by Year
in descending order

83	1,806	236925 25	330143 37
papers	citations	h-index	g-index

84	84	84	1398
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Non-linear modeling of seismic isolation systems made of recycled tire-rubber. Soil Dynamics and Earthquake Engineering, 2016, 85, 134-145.	3.8	72
2	Accidental torsion in buildings due to base rotational excitation. Earthquake Engineering and Structural Dynamics, 1994, 23, 1003-1021.	4.4	70
3	Modelling aspects of structures isolated with the frictional pendulum system. Earthquake Engineering and Structural Dynamics, 1998, 27, 845-867.	4.4	69
4	The role of dyking and fault control in the rapid onset of eruption at ChaitÃ©n volcano, Chile. Nature, 2011, 478, 374-377.	27.8	65
5	A bidirectional and homogeneous tuned mass damper: A new device for passive control of vibrations. Engineering Structures, 2007, 29, 1548-1560.	5.3	58
6	Physical model for dynamic analysis of structures with FPS isolators. Earthquake Engineering and Structural Dynamics, 2003, 32, 1157-1184.	4.4	54
7	Validation of an agent-based building evacuation model with a school drill. Transportation Research Part C: Emerging Technologies, 2018, 97, 82-95.	7.6	53
8	Risk and Resilience Assessment With Component Criticality Ranking of Electric Power Systems Subject to Earthquakes. IEEE Systems Journal, 2020, 14, 2837-2848.	4.6	52
9	Accidental torsion in buildings due to stiffness uncertainty. Earthquake Engineering and Structural Dynamics, 1994, 23, 117-136.	4.4	45
10	Coseismic slip and afterslip of the 2015 M_w 8.3 Illapel (Chile) earthquake determined from continuous GPS data. Geophysical Research Letters, 2016, 43, 10,710.	4.0	44
11	Estimation of Accidental Torsion Effects for Seismic Design of Buildings. Journal of Structural Engineering, 1995, 121, 102-114.	3.4	43
12	An Updated Recurrence Model for Chilean Subduction Seismicity and Statistical Validation of Its Poisson Nature. Bulletin of the Seismological Society of America, 2019, 109, 66-74.	2.3	41
13	Evaluation of Code Accidentalâ€Torsion Provisions from Building Records. Journal of Structural Engineering, 1994, 120, 597-616.	3.4	40
14	Torsional balance of plan-asymmetric structures with frictional dampers: analytical results. Earthquake Engineering and Structural Dynamics, 2005, 34, 1089-1108.	4.4	40
15	A Functional Loss Assessment of a Hospital System in the BÃo-BÃo Province. Earthquake Spectra, 2012, 28, 473-502.	3.1	40
16	Analysis and interpretation of the seismic response of RC buildings in ConcepciÃ³n during the February 27, 2010, Chile earthquake. Bulletin of Earthquake Engineering, 2013, 11, 69-91.	4.1	40
17	Earthquake behavior of structures with copper energy dissipators. Earthquake Engineering and Structural Dynamics, 2004, 33, 329-358.	4.4	38
18	Response of Reinforced Concrete Buildings in ConcepciÃ³n during the Maule Earthquake. Earthquake Spectra, 2012, 28, 257-280.	3.1	38

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19	Inelastic Behavior of Asymmetric Multistory Buildings. Journal of Structural Engineering, 1996, 122, 597-606.	3.4	37
20	A comparative study of concentrated plasticity models in dynamic analysis of building structures. Earthquake Engineering and Structural Dynamics, 2005, 34, 1005-1026.	4.4	35
21	Analytical model of structures with frictional pendulum isolators. Earthquake Engineering and Structural Dynamics, 2002, 31, 305-332.	4.4	34
22	Multiphysics behavior of a magneto-rheological damper and experimental validation. Engineering Structures, 2014, 69, 194-205.	5.3	34
23	Torsional balance of plan asymmetric structures with viscoelastic dampers. Engineering Structures, 2007, 29, 914-932.	5.3	32
24	Study of the damage of reinforced concrete shear walls during the 2010 Chile earthquake. Earthquake Engineering and Structural Dynamics, 2016, 45, 1621-1641.	4.4	30
25	Earthquake damage assessment for deterministic scenarios in Iquique, Chile. Natural Hazards, 2018, 92, 1433-1461.	3.4	28
26	Using accidental eccentricity in code-specified static and dynamic analyses of buildings. Earthquake Engineering and Structural Dynamics, 1994, 23, 947-967.	4.4	26
27	Torsional balance as new design criterion for asymmetric structures with energy dissipation devices. Earthquake Engineering and Structural Dynamics, 2009, 38, 1421-1440.	4.4	24
28	Tall building vibration control using a TMâ€MR damper assembly. Earthquake Engineering and Structural Dynamics, 2011, 40, 339-354.	4.4	24
29	Data collection after the 2010 Maule earthquake in Chile. Bulletin of Earthquake Engineering, 2017, 15, 555-588.	4.1	24
30	Comparative assessment of nonlinear static and dynamic methods for analysing building response under sequential earthquake and tsunami. Earthquake Engineering and Structural Dynamics, 2019, 48, 867-887.	4.4	24
31	Modeling the Impact of Earthquake-Induced Debris on Tsunami Evacuation Times of Coastal Cities. Earthquake Spectra, 2019, 35, 137-158.	3.1	24
32	A regularized fiber element model for reinforced concrete shear walls. Earthquake Engineering and Structural Dynamics, 2016, 45, 2063-2083.	4.4	22
33	Accidental torsion due to overturning in nominally symmetric structures isolated with the FPS. Earthquake Engineering and Structural Dynamics, 2003, 32, 919-948.	4.4	21
34	Baseâ€“structure interaction of linearly isolated structures with lateralâ€“torsional coupling. Engineering Structures, 2008, 30, 110-125.	5.3	21
35	Analysis, testing, and implementation of seismic isolation of buildings in Chile. Earthquake Engineering and Structural Dynamics, 2004, 33, 543-574.	4.4	20
36	Linear isolation of stainless steel legged thin-walled tanks. Engineering Structures, 2007, 29, 1596-1611.	5.3	19

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37	Seismic Risk Assessment of an Emergency Department of a Chilean Hospital Using a Patient-Oriented Performance Model. Earthquake Spectra, 2019, 35, 489-512.	3.1	19
38	Torsional balance of plan-asymmetric structures with frictional dampers: experimental results. Earthquake Engineering and Structural Dynamics, 2006, 35, 1875-1898.	4.4	18
39	Seismic damage and fragility assessment of ancient masonry churches located in central Chile. Bulletin of Earthquake Engineering, 2020, 18, 3433-3457.	4.1	18
40	An experimental study of nominally symmetric and asymmetric structures isolated with the FPS. Earthquake Engineering and Structural Dynamics, 2003, 32, 891-918.	4.4	17
41	Preliminary Assessment on Seismic Vulnerability of Masonry Churches in Central Chile. International Journal of Architectural Heritage, 2020, 14, 829-848.	3.1	17
42	Accidental Torsion in Buildings: Analysis versus Earthquake Motions. Journal of Structural Engineering, 2001, 127, 475-481.	3.4	16
43	Three-Dimensional Inelastic Response of an RC Building during the Northridge Earthquake. Journal of Structural Engineering, 2001, 127, 482-489.	3.4	16
44	Torsional balance of seismically isolated asymmetric structures. Engineering Structures, 2013, 46, 703-717.	5.3	16
45	Analysis, design and testing of an hourglass-shaped copper energy dissipation device. Engineering Structures, 2014, 79, 309-321.	5.3	15
46	Epistemic uncertainty in the seismic response of RC free-plan buildings. Engineering Structures, 2017, 141, 687-702.	5.3	15
47	Analysis of a kinematic self-centring seismic isolator. Earthquake Engineering and Structural Dynamics, 2006, 35, 1533-1561.	4.4	14
48	A probabilistic seismic hazard assessment of southern Peru and Northern Chile. Engineering Geology, 2020, 271, 105585.	6.3	14
49	Earthquake risk assessment of buildings accounting for human evacuation. Earthquake Engineering and Structural Dynamics, 2017, 46, 561-583.	4.4	13
50	Data-driven estimation of interdependencies and restoration of infrastructure systems. Reliability Engineering and System Safety, 2019, 181, 167-180.	8.9	13
51	Correlations of spectral accelerations in the Chilean subduction zone. Earthquake Spectra, 2020, 36, 788-805.	3.1	13
52	Fullâ€scale shaking table test and numerical modeling of a 3000â€liter legged storage tank isolated with a vertical rocking isolation system. Earthquake Engineering and Structural Dynamics, 2022, 51, 1563-1585.	4.4	13
53	Tall building vibration control using a TMâ€MR damper assembly: Experimental results and implementation. Earthquake Engineering and Structural Dynamics, 2011, 40, 257-271.	4.4	12
54	A macro-element model for inelastic building analysis. Earthquake Engineering and Structural Dynamics, 2000, 29, 1725-1757.	4.4	10

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55	A nonlinear model for multilayered rubber isolators based on a co-rotational formulation. Engineering Structures, 2017, 131, 1-13.	5.3	10
56	Seismic resilience assessment and adaptation of the Northern Chilean power system. , 2017, , .		10
57	Sensitivity analysis and uncertainty quantification of a seismic risk model for road networks. Computer-Aided Civil and Infrastructure Engineering, 2022, 37, 516-530.	9.8	10
58	Seismic Vulnerability Assessment of the Yungayâ€™s Historic Urban Center in Santiago, Chile. Journal of Earthquake Engineering, 2023, 27, 1821-1848.	2.5	10
59	Development of a long-stroke MR damper for a building with tuned masses. Smart Materials and Structures, 2016, 25, 105006.	3.5	9
60	Damage and sensitivity analysis of a reinforced concrete wall building during the 2010, Chile earthquake. Engineering Structures, 2021, 240, 112093.	5.3	9
61	Three-dimensional nonlinear response history analyses for earthquake damage assessment: A reinforced concrete wall building case study. Earthquake Spectra, 2021, 37, 235-261.	3.1	8
62	Experimental analysis of large capacity MR dampers with short- and long-stroke. Smart Materials and Structures, 2014, 23, 125028.	3.5	7
63	Design and implementation of an alternative admission program to engineering: Talent and Inclusion. Studies in Higher Education, 2018, 43, 1454-1467.	4.5	6
64	A Consistently Processed Strong-Motion Database for Chilean Earthquakes. Seismological Research Letters, 2022, 93, 2700-2718.	1.9	6
65	Optimized friction pendulum and precast-prestressed pile to base-isolate a Chilean masonry house. Bulletin of Earthquake Engineering, 2010, 8, 1019-1036.	4.1	5
66	Enhancement of long period components of recorded and synthetic ground motions using InSAR. Soil Dynamics and Earthquake Engineering, 2011, 31, 817-829.	3.8	5
67	An empirical model for preliminary seismic response estimation of free-plan nominally symmetric buildings using ANFIS. Engineering Structures, 2012, 37, 36-49.	5.3	5
68	A simplified model for the analysis of free plan buildings using a wide-column model. Engineering Structures, 2013, 56, 738-748.	5.3	5
69	The effect of spectral shape on damping modification factors. Earthquake Spectra, 2020, 36, 2086-2111.	3.1	4
70	Uncertainty on measurement of elastomeric isolators effective properties. Measurement: Journal of the International Measurement Confederation, 2021, 180, 109511.	5.0	4
71	Three-dimensional behavior of a spherical self-centering precast prestressed pile isolator. Earthquake Engineering and Structural Dynamics, 2009, 38, 541-564.	4.4	3
72	Experimental behavior and design of a new kinematic isolator. Engineering Structures, 2010, 32, 508-522.	5.3	3

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73	Seismic Vulnerability of Wine Barrel Stacks. Earthquake Spectra, 2016, 32, 2495-2511.	3.1	3
74	Torsion control in structures isolated with the triple friction pendulum system. Engineering Structures, 2020, 216, 110503.	5.3	3
75	Epistemic uncertainty in probabilistic estimates of seismic risk resulting from multiple hazard models. Natural Hazards, 2021, 108, 3203-3227.	3.4	3
76	Simulation of Pulse-Like Ground Motions during the 2015 MwÂ8.3 Illapel Earthquake with a New Source Model Using Corrected Empirical Greenâ€™s Functions. Seismological Research Letters, 2022, 93, 76-90.	1.9	3
77	Rupture parameter sensitivity of low frequency ground motion response spectra using synthetic scenarios in North Chile. Bulletin of Earthquake Engineering, 2021, 19, 4833-4864.	4.1	2
78	A simplified and versatile element model for elastomeric seismic isolation bearings. Earthquake Spectra, 0, , 875529302110309.	3.1	2
79	Comparative Qualitative and Quantitative Analyses of the Seismic Performance of Water Networks during the Maule 2010, Christchurch 2010â€“2011, and Tohoku 2011 Earthquakes. Journal of Water Resources Planning and Management - ASCE, 2022, 148, .	2.6	2
80	A physical model for dynamic analysis of wine barrel stacks. Earthquake Engineering and Structural Dynamics, 2010, 39, 1063-1081.	4.4	1
81	A design procedure for buildings equipped with energy dissipation devices using nonclassical damping and isoâ€performance curves. Earthquake Engineering and Structural Dynamics, 2019, 48, 210-231.	4.4	1
82	Modelling aspects of structures isolated with the frictional pendulum system. , 1998, 27, 845.		1
83	Earthquake defence and the price of a telescope. Nature, 2010, 465, 31-31.	27.8	0