Jose V Lemos

List of Publications by Year
in descending order

63 papers	2,698 citations	304602 22 h-index	189801 50 g-index
66 all docs	66 docs citations	66 times ranked	1529 citing authors

#	Article	IF	Citations
1	Formulation of a three-dimensional distinct element model—Part II. Mechanical calculations for motion and interaction of a system composed of many polyhedral blocks. International Journal of Rock Mechanics and Mining Sciences, 1988, 25, 117-125.	0.3	455
2	Discrete Element Modeling of Masonry Structures. International Journal of Architectural Heritage, 2007, 1, 190-213.	1.7	404
3	Numerical prediction of the earthquake response of classical columns using the distinct element method. Earthquake Engineering and Structural Dynamics, 2002, 31, 1699-1717.	2.5	167
4	On the dynamics of rocking motion of single rigid‐block structures. Earthquake Engineering and Structural Dynamics, 2007, 36, 2383-2399.	2.5	160
5	Numerical study of the seismic behaviour of a part of the Parthenon Pronaos. Earthquake Engineering and Structural Dynamics, 2003, 32, 2063-2084.	2.5	154
6	A detailed micro-modelling approach for the structural analysis of masonry assemblages. Computers and Structures, 2018, 206, 66-81.	2.4	91
7	Hybrid discrete element/finite element method for fracture analysis. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 4579-4593.	3.4	86
8	Seismic Behavior of Blocky Masonry Structures. Earthquake Spectra, 2000, 16, 337-365.	1.6	74
9	Simulation of the in-plane structural behavior of unreinforced masonry walls and buildings using DEM. Structures, 2020, 27, 2274-2287.	1.7	67
10	Discrete Element Modeling of the Seismic Behavior of Masonry Construction. Buildings, 2019, 9, 43.	1.4	64
11	The effect of skew angle on the mechanical behaviour of masonry arches. Mechanics Research Communications, 2014, 61, 53-59.	1.0	61
12	Discrete element modeling of a scaled masonry structure and its validation. Engineering Structures, 2016, 126, 224-236.	2.6	54
13	A discrete approach for modelling backfill material in masonry arch bridges. Computers and Structures, 2019, 224, 106108.	2.4	50
14	Micromechanical Modelling of Stress Waves in Rock and Rock Fractures. Rock Mechanics and Rock Engineering, 2010, 43, 741-761.	2.6	45
15	Dynamic monitoring of a concrete arch dam during the first filling of the reservoir. Engineering Structures, 2018, 174, 548-560.	2.6	45
16	Influence of aggregate deformation and contact behaviour on discrete particle modelling of fracture of concrete. Engineering Fracture Mechanics, 2008, 75, 1569-1586.	2.0	43
17	Numerical Modeling of Historic Masonry Structures. Advances in Civil and Industrial Engineering Book Series, 2015, , 213-256.	0.2	41
18	Procedure for contact detection in discrete element analysis. Advances in Engineering Software, 2001, 32, 409-415.	1.8	38

#	ARTICLE	IF	CITATIONS
19	Discontinuum analysis of the fracture mechanism in masonry prisms and wallettes via discrete element method. Meccanica, 2020, 55, 505-523.	1.2	38
20	Vibration-based damage detection of a concrete arch dam. Engineering Structures, 2021, 235, 112032.	2.6	36
21	A DEM based tool for the safety analysis of masonry gravity dams. Engineering Structures, 2014, 59, 248-260.	2.6	32
22	Modeling tensile crack propagation in concrete gravity dams via crack-path-field and strain injection techniques. Engineering Fracture Mechanics, 2016, 154, 288-310.	2.0	32
23	A generalized rigid particle contact model for fracture analysis. International Journal for Numerical and Analytical Methods in Geomechanics, 2005, 29, 269-285.	1.7	23
24	Safety Analysis of the Left Bank Excavation Slopes of Baihetan Arch Dam Foundation Using a Discrete Element Model. Rock Mechanics and Rock Engineering, 2018, 51, 2597-2615.	2.6	23
25	Seismic Performance of Historical Buildings Based on Discrete Element Method: An Adobe Church. Journal of Earthquake Engineering, 2020, 24, 1270-1289.	1.4	22
26	In-plane structural performance of dry-joint stone masonry Walls: A spatial and non-spatial stochastic discontinuum analysis. Engineering Structures, 2021, 242, 112620.	2.6	22
27	Simulation of Shake Table Tests on Out-Of-Plane Masonry Buildings. Part (V): Discrete Element Approach. International Journal of Architectural Heritage, 0, , 1-8.	1.7	21
28	Numerical procedures for the analysis of collapse mechanisms of masonry structures using discrete element modelling. Engineering Structures, 2021, 246, 113047.	2.6	21
29	Contact representation in rigid block models of masonry. International Journal of Masonry Research and Innovation, 2017, 2, 321.	0.3	19
30	A Discrete Element Model for Masonry Vaults Strengthened with Externally Bonded Reinforcement. International Journal of Architectural Heritage, 2021, 15, 1959-1972.	1.7	19
31	3-D nonlinear behavior of an obelisk subjected to the Lorca May 11, 2011 strong motion record. Engineering Failure Analysis, 2015, 58, 212-228.	1.8	18
32	3D stability analysis of gravity dams on sloped rock foundations using the limit equilibrium method. Computers and Geotechnics, 2012, 44, 147-156.	2.3	17
33	Hydromechanical Analysis of Masonry Gravity Dams and their Foundations. Rock Mechanics and Rock Engineering, 2013, 46, 327-339.	2.6	16
34	Tensile Fracture Mechanism of Masonry Wallettes Parallel to Bed Joints: A Stochastic Discontinuum Analysis. Modelling, 2020, 1, 78-93.	0.8	16
35	Stress wave propagation test and numerical modelling of an underground complex. International Journal of Rock Mechanics and Minings Sciences, 2014, 72, 26-36.	2.6	15
36	Block modelling of rock masses. European Journal of Environmental and Civil Engineering, 2008, 12, 915-949.	1.0	13

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37	Investigation of the Structural Dynamic Behavior of the Frontinus Gate. Applied Sciences (Switzerland), 2020, 10, 5821.	1.3	13
38	Characterization of the dynamic behavior of a concrete arch dam by means of forced vibration tests and numerical models. Earthquake Engineering and Structural Dynamics, 2020, 49, 679-694.	2.5	13
39	Seismic vulnerability assessment of masonry arch bridges. Structures, 2021, 33, 3311-3323.	1.7	13
40	Analysis of foundation sliding of an arch dam considering the hydromechanical behavior. Frontiers of Structural and Civil Engineering, 2012, 6, 35-43.	1.2	12
41	A 3D generalized rigid particle contact model for rock fracture. Engineering Computations, 2013, 30, 277-300.	0.7	12
42	Nonlinear dynamic response of stone masonry minarets under harmonic excitation. Bulletin of Earthquake Engineering, 2020, 18, 4813-4838.	2.3	12
43	Numerical modelling of borehole water-inflow tests in the foundation of the Alqueva arch dam. Canadian Geotechnical Journal, 2011, 48, 72-88.	1.4	11
44	Modelling the Dynamics of Masonry Structures with Discrete Elements. Open Construction and Building Technology Journal, 2016, 10, 210-219.	0.3	10
45	Discrete Element Bonded-Block Models for Detailed Analysis of Masonry. Infrastructures, 2022, 7, 31.	1.4	10
46	Computational investigations on the combined shear–torsion–bending behavior of dry-joint masonry using DEM. Computational Particle Mechanics, 2023, 10, 249-260.	1.5	10
47	Seismic Analysis of Masonry Gravity Dams Using the Discrete Element Method: Implementation and Application. Journal of Earthquake Engineering, 2016, 20, 157-184.	1.4	9
48	Installation and results from the first 6 months of operation of the dynamic monitoring system of Baixo Sabor arch dam. Procedia Engineering, 2017, 199, 2166-2171.	1.2	9
49	Numerical modeling of the tension stiffening in reinforced concrete members via discontinuum models. Computational Particle Mechanics, 2021, 8, 423-436.	1.5	9
50	Assessment of the Seismic Capacity of Stone Masonry Walls with Block Models. Computational Methods in Applied Sciences (Springer), 2011, , 221-235.	0.1	9
51	The Basis for Masonry Analysis with UDEC and 3DEC. Advances in Civil and Industrial Engineering Book Series, 2016, , 61-89.	0.2	7
52	Masonry Dams: Analysis of the Historical Profiles of Sazilly, Delocre, and Rankine. International Journal of Architectural Heritage, 2012, 6, 19-45.	1.7	5
53	Integrated InSAR and GNSS Monitoring Subsystem for an Arch Dam and Reservoir Banks. Journal of Surveying Engineering, - ASCE, 2021, 147, .	1.0	5
54	A Hybrid Particle/Finite Element Model with Surface Roughness for Stone Masonry Analysis. Applied Mechanics, 2022, 3, 608-627.	0.7	4

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55	Seismic Vulnerability Assessment of a Stone Arch Using Discrete Elements. International Journal of Architectural Heritage, 0, , 1-15.	1.7	3
56	Discrete Element Particle Modelling of Stone Masonry. Advances in Civil and Industrial Engineering Book Series, 2016, , 146-170.	0.2	2
57	Back-analysis of the Collapse of a Tetrastyle Canopy during the April 25, 2015 Nepal Earthquake. International Journal of Architectural Heritage, 0, , 1-13.	1.7	1
58	Modeling of Historical Masonry with Discrete Elements. , 0, , 375-392.		1
59	Numerical Modeling of Historic Masonry Structures. , 2016, , 27-68.		1
60	O desenvolvimento da mecânica das rochas e perspetivas de evolução da investigação e dos domínios de aplicação. Geotecnia, 2021, , 481-508.	0.1	0
61	Fatores de redução para fluência em geocomposto drenante. Geotecnia, 2018, , 51-64.	0.1	0
62	Aplicação de métodos numéricos na interpretação de resultados de medições de tensões em maciços rochosos. Geotecnia, 2018, , 113-140.	0.1	0
63	Arch dam static and dynamic modelling with discrete elements. IOP Conference Series: Earth and Environmental Science, 2021, 861, 072085.	0.2	0