

Francesca Casini

List of Publications by Year in descending order

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Version: 2024-02-01

47
papers

727
citations

566801

15
h-index

552369

26
g-index

52
all docs

52
docs citations

52
times ranked

714
citing authors

#	ARTICLE	IF	CITATIONS
1	Consequences on water retention properties of double-porosity features in a compacted silt. <i>Acta Geotechnica</i> , 2012, 7, 139-150.	2.9	82
2	Breakage of an artificial crushable material under loading. <i>Granular Matter</i> , 2013, 15, 661-673.	1.1	73
3	Benchmark of constitutive models for unsaturated soils. <i>Geotechnique</i> , 2011, 61, 283-302.	2.2	68
4	Soil moisture monitoring for climate research: Evaluation of a low-cost sensor in the framework of the Swiss Soil Moisture Experiment (SwissSMEX) campaign. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	56
5	Artificial ground freezing of a volcanic ash: laboratory tests and modelling. <i>Environmental Geotechnics</i> , 2016, 3, 141-154.	1.3	48
6	Deformation induced by wetting: a simple model. <i>Canadian Geotechnical Journal</i> , 2012, 49, 954-960.	1.4	42
7	Hydromechanical behaviour of a silty sand from a steep slope triggered by artificial rainfall: from unsaturated to saturated conditions. <i>Canadian Geotechnical Journal</i> , 2013, 50, 28-40.	1.4	36
8	A laboratory investigation on an undisturbed silty sand from a slope prone to landsliding. <i>Granular Matter</i> , 2010, 12, 303-316.	1.1	26
9	Multi-scale morphological descriptors from the fractal analysis of particle contour. <i>Acta Geotechnica</i> , 2020, 15, 1067-1080.	2.9	26
10	Breakage mechanisms of highly porous particles in 1D compression revealed by X-ray tomography. <i>Geotechnique Letters</i> , 2018, 8, 155-160.	0.6	25
11	Experimental observation on laterally loaded pile in unsaturated silty soil. <i>Canadian Geotechnical Journal</i> , 2019, 56, 1545-1556.	1.4	23
12	Hydro-mechanical analysis of a surficial landslide triggered by artificial rainfall: the Ruedlingen field experiment. <i>Geotechnique</i> , 2021, 71, 96-109.	2.2	23
13	Hydro-mechanical response of collapsible soils under different infiltration events. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2015, 39, 1212-1234.	1.7	20
14	Linking micro grainsize polydispersity to macro porosity. <i>International Journal of Solids and Structures</i> , 2020, 187, 75-84.	1.3	17
15	Explicit formulation of at-rest coefficient and its role in calibrating elasto-plastic models for unsaturated soils. <i>Computers and Geotechnics</i> , 2016, 71, 56-68.	2.3	16
16	Hydromechanical behavior of an embankment during inundation. <i>Canadian Geotechnical Journal</i> , 2017, 54, 348-358.	1.4	13
17	Weibull Distribution to Describe Grading Evolution of Materials with Crushable Grains. <i>Procedia Engineering</i> , 2016, 158, 75-80.	1.2	12
18	Grain morphology and strength dilatancy of sands. <i>Geotechnique Letters</i> , 2019, 9, 245-253.	0.6	12

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19	A procedure for the direct determination of Bishop's α parameter from changes in pore size distribution. <i>Geotechnique</i> , 2017, 67, 631-636.	2.2	11
20	Modelling Landslides Induced by Rainfall: A Coupled Approach. <i>Procedia Earth and Planetary Science</i> , 2014, 9, 222-228.	0.6	8
21	Compressibility of Undisturbed Silt Loam Soil—Measurements and Simulations. <i>Vadose Zone Journal</i> , 2015, 14, 1-11.	1.3	8
22	Unsaturated Hydraulic Conductivity of a Silty Sand with the Instantaneous Profile Method. , 2012, , 215-220.		8
23	Some Remarks on Bimodality Effects of the Hydraulic Properties on Shear Strength of Unsaturated Soils. <i>Vadose Zone Journal</i> , 2015, 14, 1-12.	1.3	7
24	Numerical modelling of the response of an unsaturated silty soil under wetting and gravitational loading processes. <i>E3S Web of Conferences</i> , 2020, 195, 02012.	0.2	7
25	Comparison between the in situ and laboratory water retention curves for a silty sand. , 2010, , 423-428.		7
26	Numerical Study of Laterally Loaded Pile in Unsaturated Soils. <i>Lecture Notes in Civil Engineering</i> , 2020, , 713-722.	0.3	5
27	Interpretation of the Behaviour of Compacted Soils Using Cam-Clay Extended to Unsaturated Conditions. , 2007, , 29-36.		5
28	Contour fractal analysis of grains. <i>EPJ Web of Conferences</i> , 2017, 140, 05008.	0.1	4
29	Coupled phenomena induced by freezing in a granular material. , 2013, , 467-473.		4
30	Physical modelling of piles under lateral loading in unsaturated soils. <i>E3S Web of Conferences</i> , 2020, 195, 01021.	0.2	4
31	A Numerical Model to Study the Response of Piles under Lateral Loading in Unsaturated Soils. <i>Geosciences (Switzerland)</i> , 2022, 12, 1.	1.0	4
32	DISCUSSION: Estimating hydraulic conductivity from piezocone soundings. J. C. CHAI, P. M. A. AGUNG, T. HINO, Y. IGAYA and J. P. CARTER (2011). <i>Geotechnique</i> , No. 8, 699–708, http://dx.doi.org/10.1680/geot.10.P.009 . <i>Geotechnique</i> , 2012, 62, 955-956.	2.2	3
33	The Hydromechanical Interplay in the Simplified Three-Dimensional Limit Equilibrium Analyses of Unsaturated Slope Stability. <i>Geosciences (Switzerland)</i> , 2021, 11, 73.	1.0	3
34	Mechanical characterisation of lacustrine clay by interpreting spatial variability in CPTU measurements. , 2011, , 2965-2973.		3
35	Modeling rainfall infiltration through coarse and fine-grained unsaturated geomaterials. , 2014, , 521-528.		3
36	A Microstructural Model on the Link Between Change in Pore Size Distribution and Wetting Induced Deformation in a Compacted Silt. , 2013, , .		2

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37	Coupled Processes During Rainfall: An Experimental Investigation on a Silty Sand. , 2013, , .		2
38	Shear strength of an unsaturated silty sand. , 2010, , 211-216.		2
39	The Effects of Hydraulic Properties of Bedrock on the Stability of Slopes. , 2012, , 343-349.		1
40	Modelling of imbibition process in an embankment scale model. E3S Web of Conferences, 2016, 9, 16009.	0.2	0
41	Infiltration-induced Slope Instability: a multi-scale approach. E3S Web of Conferences, 2016, 9, 04005.	0.2	0
42	Fundamentals of the Hydromechanical Behavior of Multiphase Granular Materials. , 2016, , 461-486.		0
43	A Poromechanical Framework to Model Soil Fabric Evolution and Its Effect on Material Hydromechanical Response. , 2017, , .		0
44	Modeling Gravity-Driven Segregation in Porous Media by a Phase Field Approach to Unsaturated Poromechanics. , 2017, , .		0
45	Packing density of bi-disperse mixtures under one-dimensional compression. EPJ Web of Conferences, 2021, 249, 07012.	0.1	0
46	A fractal analysis method to characterise rock joint morphology. IOP Conference Series: Earth and Environmental Science, 2021, 833, 012067.	0.2	0
47	Some Notes on Granular Mixtures with Finite, Discrete Fractal Distribution. Periodica Polytechnica: Civil Engineering, 0, , .	0.6	0