

Stefano Utili

List of Publications by Year in descending order

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Version: 2024-02-01

66
papers

2,246
citations

218662

26
h-index

223791

46
g-index

74
all docs

74
docs citations

74
times ranked

1518
citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling shear behavior and strain localization in cemented sands by two-dimensional distinct element method analyses. <i>Computers and Geotechnics</i> , 2011, 38, 14-29.	4.7	170
2	3D DEM investigation of granular column collapse: Evaluation of debris motion and its destructive power. <i>Engineering Geology</i> , 2015, 186, 3-16.	6.3	157
3	Investigation by limit analysis on the stability of slopes with cracks. <i>Geotechnique</i> , 2013, 63, 140-154.	4.0	141
4	DEM analysis of bonded granular geomaterials. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2008, 32, 1997-2031.	3.3	133
5	A new algorithm for contact detection between convex polygonal and polyhedral particles in the discrete element method. <i>Computers and Geotechnics</i> , 2012, 44, 73-82.	4.7	126
6	A combined DEM-FEM numerical method for Shot Peening parameter optimisation. <i>Advances in Engineering Software</i> , 2015, 79, 13-26.	3.8	88
7	Design of geosynthetic-reinforced slopes in cohesive backfills. <i>Geotextiles and Geomembranes</i> , 2017, 45, 627-641.	4.6	83
8	Rockslide and Impulse Wave Modelling in the Vajont Reservoir by DEM-CFD Analyses. <i>Rock Mechanics and Rock Engineering</i> , 2016, 49, 2437-2456.	5.4	81
9	Investigation of rock fragmentation during rockfalls and rock avalanches via 3D discrete element analyses. <i>Journal of Geophysical Research F: Earth Surface</i> , 2017, 122, 678-695.	2.8	81
10	A bond contact model for methane hydrate-bearing sediments with interparticle cementation. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2014, 38, 1823-1854.	3.3	75
11	Investigation of granular batch sedimentation via DEM-CFD coupling. <i>Granular Matter</i> , 2014, 16, 921-932.	2.2	74
12	A new contact detection algorithm for three-dimensional non-spherical particles. <i>Powder Technology</i> , 2013, 248, 94-102.	4.2	72
13	An analytical approach for the sequential excavation of axisymmetric lined tunnels in viscoelastic rock. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2014, 68, 85-106.	5.8	62
14	An investigation on loose cemented granular materials via DEM analyses. <i>Granular Matter</i> , 2013, 15, 65-84.	2.2	59
15	On the stability of fissured slopes subject to seismic action. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2016, 40, 785-806.	3.3	58
16	New insights into the 1963 Vajont slide using 2D and 3D distinct-element method analyses. <i>Geotechnique</i> , 2014, 64, 800-816.	4.0	57
17	Analytical solutions of stresses and displacements for deeply buried twin tunnels in viscoelastic rock. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2017, 93, 13-29.	5.8	57
18	Designing Tunnel Support in Jointed Rock Masses Via the DEM. <i>Rock Mechanics and Rock Engineering</i> , 2015, 48, 603-632.	5.4	54

#	ARTICLE	IF	CITATIONS
19	Analytical Solutions for the Construction of Deeply Buried Circular Tunnels with Two Liners in Rheological Rock. <i>Rock Mechanics and Rock Engineering</i> , 2013, 46, 1481-1498.	5.4	51
20	Field survey of desiccation fissuring of flood embankments. <i>Water Management</i> , 2009, 162, 221-232.	1.2	46
21	Dynamic Fragmentation of Jointed Rock Blocks During Rockslideâ€Avalanches: Insights From Discrete Element Analyses. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 3250-3269.	3.4	44
22	Analytical Solutions for Tunnels of Elliptical Cross-Section in Rheological Rock Accounting for Sequential Excavation. <i>Rock Mechanics and Rock Engineering</i> , 2015, 48, 1997-2029.	5.4	38
23	On the Optimal Profile of a Slope. <i>Soils and Foundations</i> , 2007, 47, 717-729.	3.1	33
24	A new rock slicing method based on linear programming. <i>Computers and Geotechnics</i> , 2015, 65, 12-29.	4.7	30
25	Micromechanical investigation of liquefaction of granular media by cyclic 3D DEM tests. <i>Geotechnique</i> , 2020, 70, 906-915.	4.0	30
26	Investigation into the effect of backpressure on the mechanical behavior of methane-hydrate-bearing sediments via DEM analyses. <i>Computers and Geotechnics</i> , 2015, 69, 551-563.	4.7	29
27	Modeling the evolution of natural cliffs subject to weathering: 2. Discrete element approach. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	26
28	Elongation, flatness and compactness indices to characterise particle form. <i>Powder Technology</i> , 2022, 396, 689-695.	4.2	25
29	SHape Analyser for Particle Engineering (SHAPE): Seamless characterisation and simplification of particle morphology from imaging data. <i>Computer Physics Communications</i> , 2021, 265, 107983.	7.5	23
30	Modeling the evolution of natural cliffs subject to weathering: 1. Limit analysis approach. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	22
31	Reassessing rock mass properties and slope instability triggering conditions in Valles Marineris, Mars. <i>Earth and Planetary Science Letters</i> , 2014, 388, 329-342.	4.4	22
32	Novel Approach for Health Monitoring of Earthen Embankments. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2015, 141, .	3.0	21
33	Chasing a complete understanding of the failure mechanisms and potential hazards of the slow moving Liangshuijing landslide. <i>Engineering Geology</i> , 2021, 281, 105977.	6.3	16
34	CLUMP: A Code Library to generate Universal Multi-sphere Particles. <i>SoftwareX</i> , 2021, 15, 100735.	2.6	15
35	A distinct element method numerical investigation of compaction processes in highly porous cemented granular materials. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2014, 38, 1101-1130.	3.3	14
36	DEM modeling of cantilever retaining excavations: implications for lunar constructions. <i>Engineering Computations</i> , 2016, 33, .	1.4	13

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37	Landslide geometry and activity in Villa de la Independencia (Bolivia) revealed by InSAR and seismic noise measurements. <i>Landslides</i> , 2021, 18, 2721-2737.	5.4	13
38	A nodal-integration based particle finite element method (N-PFEM) to model cliff recession. <i>Geomorphology</i> , 2021, 381, 107666.	2.6	12
39	DEM Modelling of Elastic Adhesive Particles with Application to Lunar Soil. , 2012, , .		11
40	A Numerical Investigation of Quasi-static Conditions for Granular Media. Special Publication - Royal Society of Chemistry, 2012, , 187-195.	0.0	7
41	DEM modelling of a jointed rock beam with emphasis on interface properties. <i>Geotechnique Letters</i> , 2015, 5, 49-55.	1.2	7
42	A general analytical solution for the evolution of cliffs accounting for strength degradation, seismic action, formation of tension cracks and seepage. <i>Engineering Geology</i> , 2017, 219, 92-106.	6.3	7
43	Optimal Pitwall Shapes to Increase Financial Return and Decrease Carbon Footprint of Open Pit Mines. <i>Mining, Metallurgy and Exploration</i> , 2022, 39, 335-355.	0.8	7
44	Discussion of "Stability assessment of slopes with cracks using limit analysis" Canadian Geotechnical Journal, 2014, 51, 822-825.	2.8	6
45	DEM simulations of transverse pipe-soil interaction on sand. <i>Geotechnique</i> , 0, , 1-16.	4.0	6
46	DEM analyses of pipe-soil interaction for offshore pipelines on sand. , 2014, , 595-600.		5
47	Geosynthetic-Reinforced Slopes in Cohesive Soils Subject to Seismic Action. <i>Procedia Engineering</i> , 2017, 189, 898-907.	1.2	5
48	A methodology for road cutting design guidelines based on field observations. <i>Engineering Geology</i> , 2022, 307, 106771.	6.3	4
49	Discussion of "Limit analysis of slopes with cracks: Comparisons of results" <i>Engineering Geology</i> , 2015, 197, 306-307.	6.3	3
50	Stability of intact slopes with tensile strength cut-off. <i>Geotechnique</i> , 2019, 69, 1123-1126.	4.0	3
51	Numerical Simulation of the Collapse of Granular Columns Using DEM. Special Publication - Royal Society of Chemistry, 2012, , 133-140.	0.0	3
52	Optimal pitwall profiles to maximise the overall slope angle of open pit mines: the McLaughlin Mine. , 2021, , .		3
53	Analysis Tools for Mass Movement Assessment. , 2015, , 441-465.		2
54	Discussion on "Seismic displacement along a log-spiral failure surface with crack using rock Hoek-Brown failure criterion"™ by Zhao et al. [1]. <i>Soil Dynamics and Earthquake Engineering</i> , 2018, 108, 199-200.	3.8	2

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55	Discussion on "Required unfactored geosynthetic strength of three-dimensional reinforced soil structures comprised of cohesive backfills" by Y. Chen et al., 2018. Geotextiles and Geomembranes, 2019, 47, 140-141.	4.6	2
56	Design of an open-pit gold mine by optimal pitwall profiles. CIM Journal, 0, , 1-20.	0.6	2
57	Design of reinforced cohesive soil walls accounting for wall facing contribution to stability. Geotechnique, 2023, 73, 667-688.	4.0	2
58	A New Rock Slicing Algorithm with Reduced Data Structure for Discrete Element Method Analyses for Rock Mechanics. Springer Proceedings in Physics, 2017, , 863-870.	0.2	1
59	Non-invasive Portable Geophysical Tool to Monitor Water Content in Earthen Long Linear Infrastructures. Procedia Engineering, 2017, 189, 86-93.	1.2	1
60	DEM Triaxial Tests of a Seabed Sand. Special Publication - Royal Society of Chemistry, 2012, , 203-211.	0.0	1
61	Monitoring of earthen long linear embankments by geophysical tools integrated with geotechnical probes. E3S Web of Conferences, 2020, 195, 01031.	0.5	1
62	Geosynthetics layout optimization for reinforced soil slopes subject to cracks. , 2016, , 295-299.		0
63	Dimensionless Stability Charts for $c-\varphi$ Slopes with Tension Cracks Subject to Seismic Action. Springer Series in Geomechanics and Geoengineering, 2018, , 1539-1545.	0.1	0
64	Discussion of "New Perspective on Seismic Slope Stability Analysis" by Changbing Qin and Siau Chen Chian. International Journal of Geomechanics, 2020, 20, 07019007.	2.7	0
65	Analysis tools for mass movement assessment. , 2015, , 479-503.		0
66	Experimental modelling of successive slope failures due to heavy rainfall. , 2016, , 2007-2012.		0