Mahdi Taiebat

List of Publications by Year
in descending order

59 papers	1,882 citations	304743 22 h-index	265206 42 g-index
63 all docs	63 docs citations	63 times ranked	936 citing authors

#	Article	IF	Citations
1	SANISAND-MSf: a sand plasticity model with memory surface and semifluidised state. Geotechnique, 2022, 72, 227-246.	4.0	41
2	Evolution of granular media under constant-volume multidirectional cyclic shearing. Acta Geotechnica, 2022, 17, 779-802.	5.7	10
3	Liquefaction of granular materials in constant-volume cyclic shearing: Transition between solid-like and fluid-like states. Computers and Geotechnics, 2022, 148, 104800.	4.7	15
4	Evolution of granular materials under isochoric cyclic simple shearing. Physical Review E, 2021, 103, 032904.	2.1	16
5	Numerical modeling of soil liquefaction and lateral spreading using the SANISAND-Sf model in the LEAP experiments. Soil Dynamics and Earthquake Engineering, 2021, 143, 106613.	3.8	19
6	Geometrical network of granular materials under isochoric cyclic shearing. EPJ Web of Conferences, 2021, 249, 11004.	0.3	2
7	Convergence of rotational hardening with bounds in clay plasticity. Geotechnique Letters, 2020, 10, 16-19.	1.2	11
8	Modeling cyclic shearing of sands in the semifluidized state. International Journal for Numerical and Analytical Methods in Geomechanics, 2020, 44, 371-388.	3.3	53
9	Strategies for numerical simulation of cast-in-place piles under axial loading. Computers and Geotechnics, 2020, 125, 103656.	4.7	12
10	Application of a SANISAND Model for Numerical Simulations of the LEAP 2017 Experiments. , 2020, , 595-610.		5
11	Multidirectional cyclic shearing of clays and sands: Evaluation of two bounding surface plasticity models. Soil Dynamics and Earthquake Engineering, 2019, 124, 230-258.	3.8	17
12	Impact of bidirectional seismic shearing on the volumetric response of sand deposits. Soil Dynamics and Earthquake Engineering, 2019, 125, 105665.	3.8	21
13	Effects of size polydispersity on random close-packed configurations of spherical particles. Physical Review E, 2019, 100, 042906.	2.1	26
14	Reply to the discussion by Chugh on â€œFramework to assess Newmark-type simplified methods for evaluation of earthquake-induced deformation of embankmentsâ€• Canadian Geotechnical Journal, 2018, 55, 603-606.	2.8	0
15	Corrigendum: Framework to assess Newmark-type simplified methods for evaluation of earthquake-induced deformation of embankments. Canadian Geotechnical Journal, 2018, 55, 607-607.	2.8	0
16	Numerical analysis of Ballina test embankment on a soft structured clay foundation. Computers and Geotechnics, 2018, 93, 61-74.	4.7	24
17	PRENOLIN: International Benchmark on 1D Nonlinear Siteâ€Response Analysisâ€"Validation Phase Exercise. Bulletin of the Seismological Society of America, 2018, , .	2.3	26
18	Evaluation of p-y springs for nonlinear static and seismic soil-pile interaction analysis under lateral loading. Soil Dynamics and Earthquake Engineering, 2018, 115, 438-447.	3.8	27

#	Article	IF	Citations
19	Site Response in a Layered Liquefiable Deposit: Evaluation of Different Numerical Tools and Methodologies with Centrifuge Experimental Results. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, .	3.0	108
20	Effects of layered liquefiable deposits on the seismic response of an underground structure. Soil Dynamics and Earthquake Engineering, 2018, 113, 124-135.	3.8	38
21	An Investigation on the Effect of Bidirectional Seismic Loading on Volumetric Strain and Surface Settlement of Sand Deposits. , 2018, , .		1
22	Capabilities and Limitations of Different Numerical Tools in Capturing Seismic Site Performance in a Layered Liquefiable Site. , 2018, , .		0
23	Cyclic Shearing Response of Granular Material in the Semi-Fluidized Regime. , 2018, , .		3
24	A Zero Elastic Range Hypoplasticity Model for Sand. Lecture Notes in Applied and Computational Mechanics, 2017, , 237-256.	2.2	0
25	Seismic Performance of a Layered Liquefiable Site: Validation of Numerical Simulations Using Centrifuge Modeling. , 2017, , .		4
26	Effect of particle size distribution on 3D packings of spherical particles. EPJ Web of Conferences, 2017, 140, 02030.	0.3	10
27	Validation of a New Elastoplastic Constitutive Model Dedicated to the Cyclic Behaviour of Brittle Rock Materials. Rock Mechanics and Rock Engineering, 2017, 50, 2677-2694.	5.4	38
28	Framework to assess Newmark-type simplified methods for evaluation of earthquake-induced deformation of embankments. Canadian Geotechnical Journal, 2017, 54, 392-404.	2.8	14
29	International Benchmark on Numerical Simulations for 1D, Nonlinear Site Response (PRENOLIN): Verification Phase Based on Canonical Cases. Bulletin of the Seismological Society of America, 2016, 106, 2112-2135.	2.3	91
30	Evaluation of substructuring method for seismic soil-structure interaction analysis of bridges. Soil Dynamics and Earthquake Engineering, 2016, 90, 112-127.	3.8	26
31	SANISAND-Z: zero elastic range sand plasticity model. Geotechnique, 2016, 66, 999-1013.	4.0	136
32	Load distribution in large pile groups under static and dynamic loading. Bulletin of Earthquake Engineering, 2016, 14, 1461-1474.	4.1	4
33	A viscoplastic SANICLAY model for natural soft soils. Computers and Geotechnics, 2016, 73, 128-141.	4.7	43
34	On validation of fully coupled behavior of porous media using centrifuge test results. Coupled Systems Mechanics, 2015, 4, 37-65.	0.4	11
35	Solution verification procedures for modeling and simulation of fully coupled porous media: static and dynamic behavior. Coupled Systems Mechanics, 2015, 4, 67-98.	0.4	14
36	Sand strength for back-analysis of pull-out tests at large displacement. Geotechnique, 2014, 64, 320-324.	4.0	12

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37	Rotational hardening with and without anisotropic fabric at critical state. Geotechnique, 2014, 64, 507-511.	4.0	35
38	Group reduction factors for analysis of laterally loaded pile groups. Canadian Geotechnical Journal, 2014, 51, 758-769.	2.8	40
39	Bounding surface SANICLAY plasticity model for cyclic clay behavior. International Journal for Numerical and Analytical Methods in Geomechanics, 2014, 38, 702-724.	3.3	65
40	Seismic design of basement walls: evaluation of current practice in British Columbia. Canadian Geotechnical Journal, 2014, 51, 1004-1020.	2.8	5
41	Nonlinear dynamic analysis of Meloland Road Overpass using three-dimensional continuum modeling approach. Soil Dynamics and Earthquake Engineering, 2014, 57, 121-132.	3.8	19
42	Other numerical methods. , 2014, , 345-458.		0
43	Bounding surface SANICLAY plasticity model for cyclic clay behavior. , 2014, 38, 702.		1
44	EFFECT OF NEAR-FAULT GROUND MOTIONS ON SEISMIC RESPONSE OF DEEP BASEMENT WALLS. , 2014, , .		0
45	Anatomy of rotational hardening in clay plasticity. Geotechnique, 2013, 63, 1406-1418.	4.0	69
46	Seismic Evaluation of Existing Basement Walls. Computational Methods in Applied Sciences (Springer), 2013, , 177-196.	0.3	2
47	Evaluation of p-y Curves Used in Practice for Seismic Analysis of Soil-Pile Interaction. , 2012, , .		1
48	Evaluation of variation of permeability in liquefiable soil under earthquake loading. Computers and Geotechnics, 2012, 40, 74-88.	4.7	97
49	SANISTEEL: Simple Anisotropic Steel Plasticity Model. Journal of Structural Engineering, 2011, 137, 185-194.	3.4	18
50	Application of an Anisotropic Constitutive Model for Structured Clay to Seismic Slope Stability. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2011, 137, 492-504.	3.0	36
51	A destructuration theory and its application to SANICLAY model. International Journal for Numerical and Analytical Methods in Geomechanics, 2010, 34, 1009-1040.	3.3	71
52	Propagation of seismic waves through liquefied soils. Soil Dynamics and Earthquake Engineering, 2010, 30, 236-257.	3.8	81
53	Simple Yield Surface Expressions Appropriate for Soil Plasticity. International Journal of Geomechanics, 2010, 10, 161-169.	2.7	30
54	Propagation of Seismic Waves through Liquefied Soils. , 2009, , .		1

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55	SANISAND: Simple anisotropic sand plasticity model. International Journal for Numerical and Analytical Methods in Geomechanics, 2008, 32, 915-948.	3.3	272
56	Numerical simulation of fully saturated porous materials. International Journal for Numerical and Analytical Methods in Geomechanics, 2008, 32, 1635-1660.	3.3	70
57	Numerical Simulation of Seismic Ground Motion Isolation Using Fully Coupled Nonlinear Response in Saturated Sands. , 2008, , .		0
58	Modeling and Simulation of Saturated Geomaterials. , 2007, , 1.		2
59	Study of pore pressure variation during liquefaction using two constitutive models for sand. Soil Dynamics and Earthquake Engineering, 2007, 27, 60-72.	3.8	86