

# Hadi Khabbaz

## List of Publications by Year in descending order

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130  
papers

3,119  
citations

201674

27  
h-index

168389

53  
g-index

136  
all docs

136  
docs citations

136  
times ranked

2168  
citing authors

#	ARTICLE	IF	CITATIONS
1	A unique relationship for $\bar{\sigma}_v$ for the determination of the shear strength of unsaturated soils. <i>Geotechnique</i> , 1998, 48, 681-687.	4.0	612
2	Removal of pharmaceuticals and endocrine disrupting compounds in a water recycling process using reverse osmosis systems. <i>Separation and Purification Technology</i> , 2011, 77, 60-67.	7.9	138
3	Mechanical characteristics of soft clay treated with fibre and cement. <i>Geosynthetics International</i> , 2012, 19, 252-262.	2.9	123
4	Constriction-Based Retention Criterion for Granular Filter Design. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2007, 133, 266-276.	3.0	120
5	Behaviour of Expansive Soils Stabilized with Hydrated Lime and Bagasse Fibres. <i>Procedia Engineering</i> , 2016, 143, 658-665.	1.2	115
6	A constitutive model for cemented clays capturing cementation degradation. <i>International Journal of Plasticity</i> , 2014, 56, 1-18.	8.8	106
7	Enhancing mechanical performance of rubberised concrete pavements with sodium hydroxide treatment. <i>Materials and Structures/Materiaux Et Constructions</i> , 2016, 49, 813-827.	3.1	104
8	Numerical modeling of vacuum preloading and field applications. <i>Canadian Geotechnical Journal</i> , 2004, 41, 1098-1110.	2.8	103
9	In-depth assessment of Crumb Rubber Concrete (CRC) prepared by water-soaking treatment method for rigid pavements. <i>Construction and Building Materials</i> , 2014, 71, 456-471.	7.2	93
10	Predicting the Erosion Rate of Chemically Treated Soil Using a Process Simulation Apparatus for Internal Crack Erosion. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2008, 134, 837-844.	3.0	89
11	Small-strain properties of soft clay treated with fibre and cement. <i>Geosynthetics International</i> , 2013, 20, 286-300.	2.9	88
12	Remediation of Expansive Soils Using Agricultural Waste Bagasse Ash. <i>Procedia Engineering</i> , 2016, 143, 1368-1375.	1.2	67
13	Shrinkage performance of Crumb Rubber Concrete (CRC) prepared by water-soaking treatment method for rigid pavements. <i>Cement and Concrete Composites</i> , 2015, 62, 106-116.	10.7	65
14	Analytical solution to axisymmetric consolidation in unsaturated soils with linearly depth-dependent initial conditions. <i>Computers and Geotechnics</i> , 2016, 74, 102-121.	4.7	62
15	Numerical optimization applying trust-region reflective least squares algorithm with constraints to optimize the non-linear creep parameters of soft soil. <i>Applied Mathematical Modelling</i> , 2017, 41, 236-256.	4.2	59
16	Viscous Behaviour of Soft Clay and Inducing Factors. <i>Geotechnical and Geological Engineering</i> , 2012, 30, 1069-1083.	1.7	55
17	Shrinkage Properties of Soft Clay Treated with Cement and Geofibers. <i>Geotechnical and Geological Engineering</i> , 2013, 31, 1421-1435.	1.7	49
18	Numerical optimisation to obtain elastic viscoplastic model parameters for soft clay. <i>International Journal of Plasticity</i> , 2015, 65, 1-21.	8.8	48

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19	Bioengineering ground improvement considering root water uptake model. <i>Ecological Engineering</i> , 2010, 36, 222-229.	3.6	46
20	An effective stress based numerical model for hydro-mechanical analysis in unsaturated porous media. <i>Computational Mechanics</i> , 2000, 26, 174-184.	4.0	43
21	Soil creep effects on ground lateral deformation and pore water pressure under embankments. <i>Geomechanics and Geoengineering</i> , 2013, 8, 107-124.	1.8	42
22	Performance of laterally loaded piles considering soil and interface parameters. <i>Geomechanics and Engineering</i> , 2014, 7, 495-524.	0.9	38
23	Estimation of maximum scour depths at upstream of front and rear piers for two in-line circular columns. <i>Environmental Fluid Mechanics</i> , 2018, 18, 537-550.	1.6	37
24	Modelling the erosion rate of chemically stabilized soil incorporating tensile force " deformation characteristics. <i>Canadian Geotechnical Journal</i> , 2009, 46, 57-68.	2.8	36
25	Development of a Constitutive Model to Predict the Behavior of Cement-Treated Clay during Cementation Degradation: C3 Model. <i>International Journal of Geomechanics</i> , 2017, 17, .	2.7	36
26	Analytical study for double-layer geosynthetic reinforced load transfer platform on column improved soft soil. <i>Geotextiles and Geomembranes</i> , 2017, 45, 508-536.	4.6	34
27	Assessment of the Elastic-Viscoplastic Behavior of Soft Soils Improved with Vertical Drains Capturing Reduced Shear Strength of a Disturbed Zone. <i>International Journal of Geomechanics</i> , 2016, 16, .	2.7	31
28	Improving engineering characteristics of expansive soils using industry waste as a sustainable application for reuse of bagasse ash. <i>Transportation Geotechnics</i> , 2021, 31, 100637.	4.5	30
29	Experimental and Numerical Investigations to Evaluate Two-Dimensional Modeling of Vertical Drain-Assisted Preloading. <i>International Journal of Geomechanics</i> , 2016, 16, .	2.7	29
30	Parametric studies on bioengineering effects of tree root-based suction on ground behaviour. <i>Ecological Engineering</i> , 2009, 35, 1415-1426.	3.6	27
31	Experimental study of flow structure around two in-line bridge piers. <i>Water Management</i> , 2018, 171, 311-327.	1.2	22
32	Comparison of rectangular and circular bored twin tunnels in weak ground. <i>Underground Space (China)</i> , 2019, 4, 328-339.	7.5	22
33	Field study and numerical modelling for a road embankment built on soft soil improved with concrete injected columns and geosynthetics reinforced platform. <i>Geotextiles and Geomembranes</i> , 2021, 49, 804-824.	4.6	22
34	Impacts of Drying-Wetting and Loading-Unloading Cycles on Small Strain Shear Modulus of Unsaturated Soils. <i>International Journal of Geomechanics</i> , 2019, 19, .	2.7	20
35	Effect of constructing twin tunnels under a building supported by pile foundations in the Sydney central business district. <i>Underground Space (China)</i> , 2019, 4, 261-276.	7.5	19
36	Interpretation of Dynamic Pile Load Testing for Open-Ended Tubular Piles Using Finite-Element Method. <i>International Journal of Geomechanics</i> , 2020, 20, 04019169.	2.7	18

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37	Evaluation of additional confinement for three-dimensional geoinclusions under general stress state. <i>Canadian Geotechnical Journal</i> , 2020, 57, 453-461.	2.8	17
38	Analyzing consolidation data to predict smear zone characteristics induced by vertical drain installation for soft soil improvement. <i>Geomechanics and Engineering</i> , 2014, 7, 105-131.	0.9	17
39	Trial Embankment Analysis to Predict Smear Zone Characteristics Induced by Prefabricated Vertical Drain Installation. <i>Geotechnical and Geological Engineering</i> , 2014, 32, 1187-1210.	1.7	16
40	Influence of particle contact models on soil response of poorly graded sand during cavity expansion in discrete element simulation. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , 2018, 10, 1154-1170.	8.1	16
41	Numerical study on deformation characteristics of fibre-reinforced load-transfer platform and columns-supported embankments. <i>Canadian Geotechnical Journal</i> , 2021, 58, 328-350.	2.8	16
42	Influence of fly ash and quicklime addition on behaviour of municipal solid wastes. <i>Journal of Soils and Sediments</i> , 2013, 13, 1201-1212.	3.0	15
43	Analytical Evaluation of Ballasted Track Substructure Response under Repeated Train Loads. <i>International Journal of Geomechanics</i> , 2020, 20, .	2.7	15
44	Numerical Assessment of Fibre Inclusion in a Load Transfer Platform for Pile-Supported Embankments over Soft Soil. , 2016, , .		14
45	Mixed hardening hyper-viscoplasticity model for soils incorporating non-linear creep rate $\dot{\epsilon}$ H-creep model. <i>International Journal of Plasticity</i> , 2019, 120, 88-114.	8.8	14
46	Performance comparison of a MSW settlement prediction model in Tehran landfill. <i>Journal of Environmental Management</i> , 2020, 254, 109809.	7.8	14
47	A critical review on granular dam filter behaviour $\hat{\epsilon}$ from particle sizes to constriction-based design criteria. <i>Geomechanics and Geoengineering</i> , 2008, 3, 279-290.	1.8	13
48	Analytical Solution to Analyze LTP on Column-Improved Soft Soil Considering Soil Nonlinearity. <i>International Journal of Geomechanics</i> , 2017, 17, 04016082.	2.7	13
49	Analytical Solution to One-Dimensional Consolidation in Unsaturated Soil Deposit Incorporating Time-Dependent Diurnal Temperature Variation. <i>International Journal of Geomechanics</i> , 2018, 18, .	2.7	13
50	Shear Strength Behaviour of Bagasse Fibre Reinforced Expansive Soil. , 2019, , .		12
51	Numerical Analysis on the Performance of Fibre Reinforced Load Transfer Platform and Deep Mixing Columns Supported Embankments. <i>Sustainable Civil Infrastructures</i> , 2018, , 157-169.	0.2	12
52	Random Field Reliability Analysis for Time-Dependent Behaviour of Soft Soils Considering Spatial Variability of Elastic Visco-Plastic Parameters. <i>Reliability Engineering and System Safety</i> , 2022, 219, 108254.	8.9	12
53	Modelling of unsaturated ground behaviour influenced by vegetation transpiration. <i>Geomechanics and Geoengineering</i> , 2014, 9, 187-207.	1.8	11
54	Predicting the Behaviour of Fibre Reinforced Cement Treated Clay. <i>Procedia Engineering</i> , 2016, 143, 153-160.	1.2	11

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55	A Comparative Study on Soil Stabilization Relevant to Transport Infrastructure using Bagasse Ash and Stone Dust and Cost Effectiveness. <i>Civil Engineering Journal (Iran)</i> , 2021, 7, 1947-1963.	3.9	11
56	Experimental Investigation on the Compaction and Compressible Properties of Expansive Soil Reinforced with Bagasse Fibre and Lime. <i>Sustainable Civil Infrastructures</i> , 2019, , 64-78.	0.2	10
57	Simplified geotechnical rheological model for simulating viscoelasto�plastic response of ballasted railway substructure. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2021, 45, 2019-2047.	3.3	10
58	Enhancing the Strength Characteristics of Expansive Soil Using Bagasse Fibre. <i>Springer Series in Geomechanics and Geoengineering</i> , 2018, , 792-796.	0.1	9
59	A numerical comparison of installation sequences of plain concrete rigid inclusions. <i>Computers and Geotechnics</i> , 2019, 105, 1-26.	4.7	9
60	Investigating Erosional Behaviour of Chemically Stabilised Erodible Soils. , 2008, , .		8
61	Enhancement of Ballasted Rail Track Performance Using Geosynthetics. , 2011, , .		8
62	Modelling of columns and fibre-reinforced load-transfer platform-supported embankments. <i>Proceedings of the Institution of Civil Engineers: Ground Improvement</i> , 2020, 173, 197-215.	1.0	8
63	Recent advances and past discoveries on tapered pile foundations: a review. <i>Geomechanics and Geoengineering</i> , 2022, 17, 455-484.	1.8	8
64	Analyzing consolidation data to obtain elastic viscoplastic parameters of clay. <i>Geomechanics and Engineering</i> , 2015, 8, 559-594.	0.9	7
65	Influence of Chemical Stabilisation on Permeability of Municipal Solid Wastes. <i>Geotechnical and Geological Engineering</i> , 2015, 33, 455-466.	1.7	7
66	Evaluation of Swelling Behaviour and Soil Water Characteristic Curve of Bagasse Fibre and Lime Stabilised Expansive Soil. , 2018, , .		7
67	A Laboratory Study on Improvement of Railway Ballast using Geosynthetics. , 2004, , 617.		6
68	Assessment of the Internal Shaft Friction of Tubular Piles in Jointed Weak Rock Using the Discrete-Element Method. <i>Journal of Performance of Constructed Facilities</i> , 2019, 33, .	2.0	6
69	Reliability Assessment for Time-Dependent Behaviour of Soft Soils Considering Cross Correlation between Visco-Plastic Model Parameters. <i>Reliability Engineering and System Safety</i> , 2021, 213, 107680.	8.9	6
70	Applications of Recycled Sustainable Materials and By-Products in Soil Stabilization. <i>Sustainable Civil Infrastructures</i> , 2020, , 91-117.	0.2	6
71	Numerical analysis of vertical drains accelerated consolidation considering combined soil disturbance and visco-plastic behaviour. <i>Geomechanics and Engineering</i> , 2015, 8, 187-220.	0.9	6
72	Challenges Associated with Optimisation of Blending, Mixing and Compaction Temperature for Asphalt Mixture Modified with Crumb Rubber Modifier (CRM). <i>Applied Mechanics and Materials</i> , 0, 256-259, 1837-1844.	0.2	5

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73	Mechanical Model to Analyse Multilayer Geosynthetic Reinforced Granular Layer in Column Supported Embankments. <i>Procedia Engineering</i> , 2016, 143, 387-394.	1.2	5
74	Stabilisation of Closed Landfill Sites by Fly Ash Using Deep Mixing Method. , 2012, , .		4
75	Assessment of Surcharging on Strength and Stiffness of Cement Treated Clays. , 2012, , .		4
76	Bridge Pile Response to Lateral Soil Movement Induced by Installation of Controlled Modulus Columns. <i>Procedia Engineering</i> , 2016, 143, 475-482.	1.2	4
77	Protecting bridge piers against local scour using a flow-diversion structure. <i>Water Management</i> , 2018, 171, 271-280.	1.2	4
78	Application of buoyancy-power generator for compressed air energy storage using a fluidâ€air displacement system. <i>Journal of Energy Storage</i> , 2019, 26, 100926.	8.1	4
79	Three dimensional discrete element simulation of cylindrical cavity expansion from zero initial radius in sand. <i>Computers and Geotechnics</i> , 2020, 117, 103230.	4.7	4
80	Parametric Study of Applied Stresses on Infiltration Modular Cells Installed under Roads. <i>Procedia Engineering</i> , 2016, 143, 1325-1332.	1.2	3
81	Analysis of CMC-Supported Embankments Considering Soil Arching. , 2016, , .		3
82	Three-Dimensional Simulation of a Load Transfer Mechanism for Frictional and End Bearing CMC Supported Embankments on Soft Soil. , 2016, , .		3
83	Comparison of Coupled Flow-deformation and Drained Analyses for Road Embankments on CMC Improved Ground. <i>Procedia Engineering</i> , 2016, 143, 462-469.	1.2	3
84	Optimizing flow diversion structure as an effective pier-scour countermeasure. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 0, , 1-14.	1.7	3
85	Predicting the Stability of Riverbank Slope Reinforced with Columns Under Various River Water Conditions. <i>Lecture Notes in Civil Engineering</i> , 2022, , 513-523.	0.4	3
86	One-Dimensional Consolidation of Unsaturated Soil Deposit with Various Initial Conditions. , 2014, , .		2
87	The Role of Native Vegetation in Stabilizing Formation Soil for Transport Corridors. , 2015, , 591-628.		2
88	Impact of Quicklime and Fly Ash on the Geotechnical Properties of Expansive Clay. , 2016, , .		2
89	A Parametric Study of Deep Mixing Columns and Fibre Reinforced Load Transfer Platform Supported Embankments. <i>Sustainable Civil Infrastructures</i> , 2019, , 179-194.	0.2	2
90	Impacts of matric suction equalization on small strain shear modulus of soils during air drying. <i>Canadian Geotechnical Journal</i> , 2020, 57, 1982-1997.	2.8	2

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91	Analytical and Numerical Approaches to Attain the Optimum Tapering Angle for Axially-Loaded Bored Piles in Sandy Soils. <i>International Journal of Geomechanics</i> , 2021, 21, .	2.7	2
92	Predicting the Effective Stress Parameter of Unsaturated Soils Using Adaptive Neuro-Fuzzy Inference System. <i>Scientia Iranica</i> , 2018, .	0.4	2
93	EFFECT OF SURCHARGE HEIGHT AND PRELOADING TIME ON LONG-TERM SETTLEMENT OF CLOSED LANDFILLS: A NUMERICAL ANALYSIS. , 2020, , .		2
94	Axial and Lateral Efficiency of Tapered Pile Groups in Sand Using Mathematical and Three-Dimensional Numerical Analyses. <i>Journal of Performance of Constructed Facilities</i> , 2022, 36, .	2.0	2
95	Improving Reinforced Soil Performance Incorporating Vertical Reinforcement. , 2010, , .		1
96	Development of a new poly silicate ferric coagulant and its application to coagulation-membrane filtration hybrid system in wastewater treatment. <i>Desalination and Water Treatment</i> , 2014, 52, 663-669.	1.0	1
97	Environmental geotechnics challenges in Australia. <i>Environmental Geotechnics</i> , 2016, 3, 2-3.	2.3	1
98	Improving Geotechnical Properties of Closed Landfills for Redevelopment Using Chemical Stabilization Techniques. , 2015, , 239-266.		1
99	A Novel Model to Simulate the Behaviour of Cement-Treated Clay under Compression and Shear. , 2016, , .		1
100	Investigating Effects of Particle Scaling for Cavity Expansion Simulation Using Discrete Element Method. , 2018, , 938-946.		1
101	Evaluation of Concrete Bored Piles Behaviour in Saturated Loose and Dense Sand During the Static Load Testing. <i>Sustainable Civil Infrastructures</i> , 2019, , 75-89.	0.2	1
102	Numerical simulation of concrete pile groups' response bored in cemented sand deposit under axial static load testing. <i>E3S Web of Conferences</i> , 2019, 92, 16011.	0.5	1
103	Strength Characteristics of Lime and Bottom Ash Reinforced Expansive Soils. , 2019, , .		1
104	Combined Effects of Bottom Ash and Lime on Behaviour of Expansive Soil. <i>Sustainable Civil Infrastructures</i> , 2019, , 28-44.	0.2	1
105	A comparison between undrained shear strength of clayey soils acquired by "PMT" and laboratory tests. <i>Arabian Journal of Geosciences</i> , 2020, 13, 1.	1.3	1
106	Analytical Solution for Plane Strain Consolidation of Soft Soil Stabilised by Stone Columns. <i>Lecture Notes in Civil Engineering</i> , 2022, , 753-767.	0.4	1
107	Flow Structures Around a Circular Bridge Pier with a Submerged Prism at Upstream. , 0, , .		1
108	Evaluation of Reaction Piles Effect on Test Piles in Static Load Testing Using Three-Dimensional Numerical Analysis. , 2019, , 68-80.		1

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109	ANCHORED WALL DESIGN: COMPARING THE GLOBAL AND PARTIAL FACTORS OF SAFETY INCORPORATING THE AUSTRALIAN STANDARDS. International Journal of GEOMATE, 2015, , .	0.3	1
110	Impact of Liquid Whey Waste on Strength and Stiffness of Cement Treated Clay. Sustainable Civil Infrastructures, 2019, , 1-10.	0.2	1
111	Numerical and Experimental Study of Tree Influence on the Ground. , 2008, , .		0
112	Stability and Deformation of Sheet Pile Walls for Protecting Riverside Structures in the Mekong River Delta. , 2013, , .		0
113	Long-term Viscoplastic Behaviour of Embankments Built on Improved Soft Soil Using Vertical Drains. , 2013, , .		0
114	Evaluating the Bearing Capacity of a Soil Layer Overlying Rigid Substratum Using a Modified Failure Mechanism Based on Limit State Analysis. Applied Mechanics and Materials, 0, 353-356, 806-814.	0.2	0
115	Modelling Behaviour of Cemented Clay Capturing Cementation Degradation. , 2014, , .		0
116	Elastic Visco-Plastic Behaviour of Soft Soils Improved with Preloading and Vertical Drains. , 2014, , .		0
117	Evaluating Proposed Solutions for Equivalent Plane Strain Modeling of PVD Assisted Preloading. , 2014, , .		0
118	A Parametric Study on Shoring Structures with Multi-Row Anchors in Layered Soil. , 2014, , .		0
119	Review on Thermo-mechanical Approach in the Modelling of Geo-materials Incorporating Non-associated Flow Rules. Procedia Engineering, 2016, 143, 331-338.	1.2	0
120	Installation Effect of Controlled Modulus Columns on Nearby Existing Structures. , 2016, , .		0
121	Investigating Effects of Fracture Aperture and Orientation on the Behaviour of Weak Rock Using Discrete Element Method. , 2018, , 74-81.		0
122	Investigating Effects of Individual Fracture Length on Behaviour of Weak Rock Using Discrete Element Method. Sustainable Civil Infrastructures, 2019, , 46-56.	0.2	0
123	Field Assessment of Gravel Loss on Unsealed Roads in Australia. Frontiers in Built Environment, 2020, 6, .	2.3	0
124	MACHINE LEARNING AIDED STOCHASTIC SLOPE STABILITY ANALYSIS. , 2021, , .		0
125	A trustful transition zone for high-speed rail using stone columns. Australian Journal of Civil Engineering, 0, , 1-11.	1.6	0
126	TSUNAMI AFFECTED COASTAL SOIL DISTURBANCE AND IMPLICATIONS ON RECONSTRUCTION WITH SPECIAL REFERENCE TO LOW-COST DWELLINGS AND RAIL TRACKS. , 2005, , .		0

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127	PERFORMANCE ANALYSIS OF REINFORCED SOIL FOUNDATION STRUCTURES WITH VERTICAL REINFORCEMENT. , 2011, , .		0
128	Impact of Initial In-Situ Stress Field on Soil Response During Cavity Expansion Using Discrete Element Simulation. Sustainable Civil Infrastructures, 2019, , 1-10.	0.2	0
129	Numerical Investigation on the Boiling Stability of Sheet Piles Supported Excavations in Cohesionless Soil. Lecture Notes in Civil Engineering, 2022, , 401-410.	0.4	0
130	A Practical Application Using Industrial Waste for Enhancing the Mechanical Properties of Expansive Soil. Lecture Notes in Civil Engineering, 2022, , 80-88.	0.4	0