Mark Jaksa

List of Publications by Year
in descending order

71 papers	2,368 citations	218381 26 h-index	223531 46 g-index
71 all docs	71 docs citations	71 times ranked	1611 citing authors

#	Article	IF	Citations
1	Data Division for Developing Neural Networks Applied to Geotechnical Engineering. Journal of Computing in Civil Engineering, 2004, 18, 105-114.	2.5	262
2	Predicting Settlement of Shallow Foundations using Neural Networks. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2002, 128, 785-793.	1.5	244
3	ANN-based model for predicting the bearing capacity of strip footing on multi-layered cohesive soil. Computers and Geotechnics, 2009, 36, 503-516.	2.3	125
4	Prediction of pile settlement using artificial neural networks based on standard penetration test data. Computers and Geotechnics, 2009, 36, 1125-1133.	2.3	99
5	Swellâ€“compression characteristics of a fiberâ€“reinforced expansive soil. Geotextiles and Geomembranes, 2018, 46, 183-189.	2.3	85
6	Recent Advances and Future Challenges for Artificial Neural Systems in Geotechnical Engineering Applications. Advances in Artificial Neural Systems, 2009, 2009, 1-9.	1.0	84
7	Inaccuracies Associated with Estimating Random Measurement Errors. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 1997, 123, 393-401.	1.5	83
8	Load-settlement behavior modeling of single piles using artificial neural networks and CPT data. Computers and Geotechnics, 2017, 89, 9-21.	2.3	83
9	Prediction of ultimate axial load-carrying capacity of piles using a support vector machine based on CPT data. Computers and Geotechnics, 2014, 55, 91-102.	2.3	72
10	Application of Slagâ€“Cement and Fly Ash for Strength Development in Cemented Paste Backfills. Minerals (Basel, Switzerland), 2019, 9, 22.	0.8	69
11	Towards reliable and effective site investigations. Geotechnique, 2005, 55, 109-121.	2.2	65
12	Neural network prediction of pullout capacity of marquee ground anchors. Computers and Geotechnics, 2005, 32, 153-163.	2.3	58
13	A transfer coefficient method for rock slope toppling. Canadian Geotechnical Journal, 2009, 46, 1-9.	1.4	50
14	A sulphonated oil for stabilisation of expansive soils. International Journal of Pavement Engineering, 2019, 20, 1285-1298.	2.2	44
15	Improved analytical solution for toppling stability analysis of rock slopes. International Journal of Rock Mechanics and Minings Sciences, 2008, 45, 1361-1372.	2.6	43
16	Settlement prediction of shallow foundations on granular soils using B-spline neurofuzzy models. Computers and Geotechnics, 2003, 30, 637-647.	2.3	42
17	Identification of sample path smoothness in soil spatial variability. Structural Safety, 2019, 81, 101870.	2.8	42
18	Application of artificial neural networks for predicting the impact of rolling dynamic compaction using dynamic cone penetrometer test results. Journal of Rock Mechanics and Geotechnical Engineering, 2017, 9, 340-349.	3.7	38

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19	An experimental study of the active arching effect in soil using the digital image correlation technique. Computers and Geotechnics, 2019, 108, 183-196.	2.3	36
20	Assessing the influence of root reinforcement on slope stability by finite elements. International Journal of Geo-Engineering, 2015, 6, 1.	0.9	35
21	Pullout capacity of small ground anchors by direct cone penetration test methods and neural networks. Canadian Geotechnical Journal, 2006, 43, 626-637.	1.4	34
22	Swellâ€"Shrinkâ€"Consolidation Behavior of Rubberâ€"Reinforced Expansive Soils. Geotechnical Testing Journal, 2019, 42, 761-788.	0.5	34
23	Engineering Reactive Clay Systems by Ground Rubber Replacement and Polyacrylamide Treatment. Polymers, 2019, 11, 1675.	2.0	33
24	Mechanical Performance of Jute Fiber-Reinforced Micaceous Clay Composites Treated with Ground-Granulated Blast-Furnace Slag. Materials, 2019, 12, 576.	1.3	33
25	Three-dimensional modeling of geocell-reinforced straight and curved ballast embankments. Computers and Geotechnics, 2018, 102, 53-65.	2.3	32
26	Improved Geotechnical Behavior of an Expansive Soil Amended with Tire-Derived Aggregates Having Different Gradations. Minerals (Basel, Switzerland), 2020, 10, 923.	0.8	31
27	Influence of river level fluctuations and climate on riverbank stability. Computers and Geotechnics, 2015, 63, 83-98.	2.3	29
28	Strength Development and Strain Localization Behavior of Cemented Paste Backfills Using Portland Cement and Fly Ash. Materials, 2019, 12, 3282.	1.3	26
29	Random Field Modeling of CPT Data. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2000, 126, 1212-1216.	1.5	24
30	Consistency limits and compaction characteristics of clay soils containing rubber waste. Proceedings of the Institution of Civil Engineers: Geotechnical Engineering, 2019, 172, 174-188.	0.9	24
31	Effect of sample location on the reliability based design of pad foundations. Georisk, 2007, 1, 155-166.	2.6	23
32	Neural network based stochastic design charts for settlement prediction. Canadian Geotechnical Journal, 2005, 42, 110-120.	1.4	22
33	Toppling mechanisms of rock slopes considering stabilization from the underlying rock mass. International Journal of Rock Mechanics and Minings Sciences, 2010, 47, 348-354.	2.6	20
34	Failure mechanisms of geocell walls and junctions. Geotextiles and Geomembranes, 2019, 47, 104-120.	2.3	20
35	Estimating bedrock depth in the case of regolith sites using ambient noise analysis. Engineering Geology, 2018, 243, 145-159.	2.9	19
36	Tyre rubber and expansive soils: two hazards, one solution. Proceedings of Institution of Civil Engineers: Construction Materials, 2020, , 1-17.	0.7	19

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37	Seismic site classification based on constrained modeling of measured HVSR curve in regolith sites. Soil Dynamics and Earthquake Engineering, 2018, 110, 244-261.	1.9	18
38	Towards reliable and effective site investigations. Geotechnique, 2005, 55, 109-121.	2.2	18
39	Failure mechanism and bearing capacity of vertically loaded pile with partially-screwed shaft: Experiment and simulations. Computers and Geotechnics, 2020, 118, 103337.	2.3	17
40	Inaccuracies Associated with Estimating Random Measurement Errors. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 1999, 125, 79-80.	1.5	16
41	Three-Dimensional Discrete-Element Modeling of Geocell-Reinforced Ballast Considering Breakage. International Journal of Geomechanics, 2020, 20, .	1.3	16
42	Mechanical behavior of micaceous clays. Journal of Rock Mechanics and Geotechnical Engineering, 2019, 11, 1044-1054.	3.7	15
43	A method for generating virtual soil profiles with complex, multi-layer stratigraphy. Georisk, 2019, 13, 154-163.	2.6	14
44	Passive arching in rubberized sand backfills. Canadian Geotechnical Journal, 2020, 57, 549-567.	1.4	14
45	Measuring the Risk of Geotechnical Site Investigations. , 2007, , 1.		12
46	A dimensional description of the unconfined compressive strength of artificially cemented fine-grained soils. Journal of Adhesion Science and Technology, 2020, 34, 1679-1703.	1.4	12
47	Improved Shear Strength Performance of Compacted Rubberized Clays Treated with Sodium Alginate Biopolymer. Polymers, 2021, 13, 764.	2.0	12
48	Intelligent Computing for Predicting Axial Capacity of Drilled Shafts. , 2009, , .		10
49	Modelling the Spatial Variability of the Undrained Shear Strength of Clay Soils Using Geostatistics. Quantitative Geology and Geostatistics, 1997, , 1284-1295.	0.1	10
50	Estimating near surface shear wave velocity using the SPAC method at a site exhibiting low to high impedance contrast. Soil Dynamics and Earthquake Engineering, 2019, 122, 16-38.	1.9	9
51	Optimal Testing Locations in Geotechnical Site Investigations through the Application of a Genetic Algorithm. Geosciences (Switzerland), 2020, 10, 265.	1.0	9
52	Editorial for Special Issue â€œApplications of Artificial Intelligence and Machine Learning in Geotechnical Engineeringâ€. Geosciences (Switzerland), 2021, 11, 399.	1.0	9
53	Predicting the effectiveness of rolling dynamic compaction using genetic programming. Proceedings of the Institution of Civil Engineers: Ground Improvement, 2017, 170, 193-207.	0.7	8
54	Experimental analysis of rolling dynamic compaction using transparent soils and particle image velocimetry. Canadian Geotechnical Journal, 2022, 59, 254-271.	1.4	8

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55	Assessing Soil Correlation Distances and Fractal Behavior. , 2013, , .		7
56	Passive noise datasets at regolith sites. Data in Brief, 2018, 20, 735-747.	0.5	6
57	Experiments and dimensional analysis of contaminated clay soils. Environmental Geotechnics, 2019, 6, 434-449.	1.3	6
58	Examining the kinematics and energy of the four-sided impact roller. Proceedings of the Institution of Civil Engineers: Ground Improvement, 2019, 172, 297-304.	0.7	6
59	Depth of influence of rolling dynamic compaction. Proceedings of the Institution of Civil Engineers: Ground Improvement, 2021, 174, 85-94.	0.7	6
60	Effect of borehole location on pile performance. Georisk, 2020, , 1-16.	2.6	5
61	Closure to â€œPredicting Settlement of Shallow Foundations Using Neural Networksâ€•by Mohamed A. Shahin, Holger R. Maier, and Mark B. Jaksa. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2003, 129, 1175-1177.	1.5	4
62	Discrete element modelling of the 4-sided impact roller. Computers and Geotechnics, 2021, 137, 104250.	2.3	4
63	Prediction of Pile Settlement Using Artificial Neural Networks Based on Cone Penetration Test Data. , 2010, , .		3
64	Discussion: Towards reliable and effective site investigations. Geotechnique, 2005, 55, 625-626.	2.2	2
65	The Influence of Site Investigation Scope on Pile Design in Multi-Layered, 2D Variable Ground. , 2017, , .		2
66	Characterising site investigation performance in multiple-layer soils and soil lenses. Georisk, 2021, 15, 196-208.	2.6	2
67	Limit State and Creep Behaviour of High-Density Polyethylene Geocell. International Journal of Geosynthetics and Ground Engineering, 2021, 7, 1.	0.9	2
68	An Improved Statistically Based Technique for Evaluating the CPT Friction Ratio. Geotechnical Testing Journal, 2002, 25, 61-69.	0.5	2
69	Closure to â€œInaccuracies Associated with Estimating Random Measurement Errorsâ€•by Mark B. Jaksa, Peter I. Brooker, and William S. Kaggwa. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 1999, 125, 81-81.	1.5	1
70	Investigating the effectiveness of Rolling Dynamic Compaction (RDC) using Discrete Element Method (DEM). Granular Matter, 2021, 23, 1.	1.1	1
71	A Field-Based Study of the Effectiveness of Rolling Dynamic Compaction. , 2015, , 429-452.		0