

Akbar A Javadi

List of Publications by Year in descending order

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Version: 2024-02-01

126
papers

2,968
citations

159525

30
h-index

206029

48
g-index

128
all docs

128
docs citations

128
times ranked

2103
citing authors

#	ARTICLE	IF	CITATIONS
1	Evaluation of liquefaction induced lateral displacements using genetic programming. <i>Computers and Geotechnics</i> , 2006, 33, 222-233.	2.3	136
2	A new genetic programming model for predicting settlement of shallow foundations. <i>Canadian Geotechnical Journal</i> , 2007, 44, 1462-1473.	1.4	98
3	A Cost-Effective Method to Control Seawater Intrusion in Coastal Aquifers. <i>Water Resources Management</i> , 2011, 25, 2755-2780.	1.9	98
4	Management of Seawater Intrusion in Coastal Aquifers: A Review. <i>Water (Switzerland)</i> , 2019, 11, 2467.	1.2	97
5	Triaxial tests of sand reinforced with 3D inclusions. <i>Geotextiles and Geomembranes</i> , 2006, 24, 201-209.	2.3	94
6	Modeling Groundwater Flow and Seawater Intrusion in the Coastal Aquifer of Wadi Ham, UAE. <i>Water Resources Management</i> , 2012, 26, 751-774.	1.9	85
7	Incorporating the concept of equivalent freshwater head in successive horizontal simulations of seawater intrusion in the Nile Delta aquifer, Egypt. <i>Journal of Hydrology</i> , 2012, 464-465, 186-198.	2.3	74
8	An evolutionary based approach for assessment of earthquake-induced soil liquefaction and lateral displacement. <i>Engineering Applications of Artificial Intelligence</i> , 2011, 24, 142-153.	4.3	70
9	A surrogate model for simulationâ€œoptimization of aquifer systems subjected to seawater intrusion. <i>Journal of Hydrology</i> , 2015, 523, 542-554.	2.3	68
10	Predicting resilient modulus of flexible pavement foundation using extreme gradient boosting based optimised models. <i>International Journal of Pavement Engineering</i> , 2023, 24, .	2.2	65
11	Finite difference approach for consolidation with variable compressibility and permeability. <i>Computers and Geotechnics</i> , 2007, 34, 41-52.	2.3	64
12	Mechanical Behavior of a Clay Soil Reinforced with Nylon Fibers. <i>Geotechnical and Geological Engineering</i> , 2011, 29, 899-908.	0.8	62
13	Stabilised expansive soil behaviour during wetting and drying. <i>International Journal of Pavement Engineering</i> , 2013, 14, 418-427.	2.2	60
14	Multi-objective Optimization of Different Management Scenarios to Control Seawater Intrusion in Coastal Aquifers. <i>Water Resources Management</i> , 2015, 29, 1843-1857.	1.9	60
15	Evaluation of liquefaction potential based on CPT results using evolutionary polynomial regression. <i>Computers and Geotechnics</i> , 2010, 37, 82-92.	2.3	58
16	Literature review of baseline study for risk analysis â€œ The landfill leachate case. <i>Environment International</i> , 2014, 63, 149-162.	4.8	58
17	A new approach to modeling the behavior of frozen soils. <i>Engineering Geology</i> , 2018, 246, 82-90.	2.9	58
18	Analysing the performance of liquid cooling designs in cylindrical lithium-ion batteries. <i>Journal of Energy Storage</i> , 2021, 33, 100913.	3.9	58

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19	An evolutionary-based data mining technique for assessment of civil engineering systems. Engineering Computations, 2008, 25, 500-517.	0.7	57
20	A new approach for prediction of the stability of soil and rock slopes. Engineering Computations, 2010, 27, 878-893.	0.7	54
21	Consolidation behavior of two fine-grained soils contaminated by glycerol and ethanol. Engineering Geology, 2014, 178, 102-108.	2.9	49
22	Critical state for overconsolidated unsaturated silty soil. Canadian Geotechnical Journal, 2008, 45, 408-420.	1.4	48
23	Simulation of seawater intrusion in the Nile Delta aquifer under the conditions of climate change. Hydrology Research, 2016, 47, 1198-1210.	1.1	48
24	Effect of Resin on the Strength of Soil-Cement Mixture. Journal of Materials in Civil Engineering, 2011, 23, 969-976.	1.3	46
25	Experimental and Numerical Study on Velocity Fields and Water Surface Profile in a Strongly-Curved 90° Open Channel Bend. Engineering Applications of Computational Fluid Mechanics, 2014, 8, 447-461.	1.5	44
26	A simulation-optimization model to control seawater intrusion in coastal aquifers using abstraction/recharge wells. International Journal for Numerical and Analytical Methods in Geomechanics, 2012, 36, 1757-1779.	1.7	41
27	Finite element modeling of contaminant transport in soils including the effect of chemical reactions. Journal of Hazardous Materials, 2007, 143, 690-701.	6.5	40
28	Effect of compaction pressure on consolidation behaviour of unsaturated silty soil. Canadian Geotechnical Journal, 2004, 41, 540-550.	1.4	38
29	Effect of Cement on Treatment of a Clay Soil Contaminated with Glycerol. Journal of Materials in Civil Engineering, 2016, 28, .	1.3	36
30	Effect of Freezing on Stress-Strain Characteristics of Granular and Cohesive Soils. Journal of Cold Regions Engineering - ASCE, 2020, 34, .	0.5	34
31	A Study on the Mechanical Behavior of a Fiber-Clay Composite with Natural Fiber. Geotechnical and Geological Engineering, 2013, 31, 501-510.	0.8	33
32	Lateral load bearing capacity modelling of piles in cohesive soils in undrained conditions: An intelligent evolutionary approach. Applied Soft Computing Journal, 2014, 24, 822-828.	4.1	33
33	EPR-based material modelling of soils considering volume changes. Computers and Geosciences, 2012, 48, 73-85.	2.0	31
34	Quantitative and Qualitative Assessment of Seawater Intrusion in Wadi Ham under Different Pumping Scenarios. Journal of Hydrologic Engineering - ASCE, 2014, 19, 855-866.	0.8	30
35	Modelling mechanical behaviour of rubber concrete using evolutionary polynomial regression. Engineering Computations, 2011, 28, 492-507.	0.7	29
36	Smart energy solution for an optimised sustainable hospital in the green city of NEOM. Sustainable Energy Technologies and Assessments, 2019, 35, 32-40.	1.7	29

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37	Study of the Effects of Vent Configuration on Mono-Span Greenhouse Ventilation Using Computational Fluid Dynamics. <i>Sustainability</i> , 2020, 12, 986.	1.6	29
38	Towards a Sustainable Greenhouse: Review of Trends and Emerging Practices in Analysing Greenhouse Ventilation Requirements to Sustain Maximum Agricultural Yield. <i>Sustainability</i> , 2020, 12, 2794.	1.6	28
39	Improving piping resistance using randomly distributed fibers. <i>Geotextiles and Geomembranes</i> , 2014, 42, 15-24.	2.3	27
40	Assessing impacts of sea level rise on seawater intrusion in a coastal aquifer with sloped shoreline boundary. <i>Journal of Hydro-Environment Research</i> , 2016, 11, 29-41.	1.0	27
41	Management of saltwater intrusion in coastal aquifers using different wells systems: a case study of the Nile Delta aquifer in Egypt. <i>Hydrogeology Journal</i> , 2021, 29, 1767-1783.	0.9	27
42	Impact of sea level rise and over-pumping on seawater intrusion in coastal aquifers. <i>Journal of Water and Climate Change</i> , 2011, 2, 19-28.	1.2	26
43	Stochastic finite element modelling of water flow in variably saturated heterogeneous soils. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2011, 35, 1389-1408.	1.7	25
44	Three Dimensional Simulation of Seawater Intrusion in a Regional Coastal Aquifer in UAE. <i>Procedia Engineering</i> , 2015, 119, 1153-1160.	1.2	24
45	Effect of pore water chemistry on the behaviour of a kaolin-bentonite mixture during drying and wetting cycles. <i>European Journal of Environmental and Civil Engineering</i> , 2020, 24, 895-914.	1.0	23
46	Optimization of the hydrodynamic performance of a vertical Axis tidal (VAT) turbine using CFD-Taguchi approach. <i>Energy Conversion and Management</i> , 2020, 222, 113235.	4.4	23
47	Numerical implementation of EPR-based material models in finite element analysis. <i>Computers and Structures</i> , 2013, 118, 100-108.	2.4	22
48	An EPR-based self-learning approach to material modelling. <i>Computers and Structures</i> , 2014, 137, 63-71.	2.4	22
49	Effect of thermal history on the properties of bentonite. <i>Environmental Earth Sciences</i> , 2016, 75, 1.	1.3	22
50	Analysis of behaviour of soils under cyclic loading using EPR-based finite element method. <i>Finite Elements in Analysis and Design</i> , 2012, 58, 53-65.	1.7	21
51	Availability and Feasibility of Water Desalination as a Non-Conventional Resource for Agricultural Irrigation in the MENA Region: A Review. <i>Sustainability</i> , 2020, 12, 7592.	1.6	21
52	Development of a conceptual framework of holistic risk assessment of Landfill as a particular type of contaminated land. <i>Science of the Total Environment</i> , 2016, 569-570, 815-829.	3.9	19
53	An evolutionary modelling approach to predicting stress-strain behaviour of saturated granular soils. <i>Engineering Computations</i> , 2018, 35, 2931-2952.	0.7	19
54	Modelling seawater intrusion in the Pingtung coastal aquifer in Taiwan, under the influence of sea-level rise and changing abstraction regime. <i>Hydrogeology Journal</i> , 2020, 28, 2085-2103.	0.9	19

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55	Numerical study of soil heterogeneity effects on contaminant transport in unsaturated soil (model) Tj ETQq1 1 0.784314 rgBT /Overlo Geomechanics, 2013, 37, 278-298.	1.7	16
56	Developing constitutive models from EPRâ€¢based selfâ€¢learning finite element analysis. International Journal for Numerical and Analytical Methods in Geomechanics, 2018, 42, 401-417.	1.7	16
57	A three-dimensional finite element analysis of the human hip. Journal of Medical Engineering and Technology, 2018, 42, 546-552.	0.8	16
58	Analysis of the thermal efficiency of a compound parabolic Integrated Collector Storage solar water heater in Kerman, Iran. Sustainable Energy Technologies and Assessments, 2019, 36, 100564.	1.7	16
59	Stochastic Finite-Element Approach to Quantify and Reduce Uncertainty in Pollutant Transport Modeling. Journal of Hazardous, Toxic, and Radioactive Waste, 2011, 15, 208-215.	1.2	14
60	An Analytical Approach to Probabilistic Modeling of Liquefaction Based on Shear Wave Velocity. Iranian Journal of Science and Technology - Transactions of Civil Engineering, 2019, 43, 263-275.	1.0	14
61	Mechanical and Leaching Behavior of a Stabilized and Solidified Anthracene-Contaminated Soil. Journal of Environmental Engineering, ASCE, 2018, 144, .	0.7	13
62	Effects of Class C and Class F Fly Ash on Mechanical and Microstructural Behavior of Clay Soilâ€¢A Comparative Study. Materials, 2022, 15, 1845.	1.3	13
63	An evolutionary approach to modelling the thermomechanical behaviour of unsaturated soils. International Journal for Numerical and Analytical Methods in Geomechanics, 2015, 39, 539-557.	1.7	12
64	Stabilization and Solidification of a Clay Soil Contaminated with MTBE. Journal of Environmental Engineering, ASCE, 2017, 143, .	0.7	12
65	Roscoe and Hvorslev Surfaces for Unsaturated Silty Soil. International Journal of Geomechanics, 2014, 14, 230-238.	1.3	11
66	Land-Use and Legislation-Based Methodology for the Implementation of Sustainable Drainage Systems in the Semi-Arid Region of Brazil. Sustainability, 2020, 12, 661.	1.6	11
67	Mathematical Models to Control Saltwater Intrusion in Coastal Aquifers. , 2008, , .		10
68	Numerical Modeling of Contaminant Transport through Soils: Case Study. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2008, 134, 214-230.	1.5	10
69	Identification of coupling parameters between shear strength behaviour of compacted soils and chemicalâ€¢s effects with an evolutionary-based data mining technique. Computers and Geotechnics, 2013, 48, 107-116.	2.3	10
70	Strength of a clay soil and soilâ€¢cement mixture with resin. Proceedings of the Institution of Civil Engineers: Ground Improvement, 2013, 166, 108-114.	0.7	10
71	Assessment of different agents for stabilisation of a clay soil. International Journal of Pavement Engineering, 2022, 23, 160-170.	2.2	10
72	Optimization of a Horizontal Axis Tidal (HAT) turbine for powering a Reverse Osmosis (RO) desalination system using Computational Fluid Dynamics (CFD) and Taguchi method. Energy Conversion and Management, 2021, 231, 113833.	4.4	10

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73	An integrated socio-environmental framework for mapping hazard-specific vulnerability and exposure in urban areas. <i>Urban Water Journal</i> , 2021, 18, 530-543.	1.0	10
74	Place-Based Citizen Science for Assessing Risk Perception and Coping Capacity of Households Affected by Multiple Hazards. <i>Sustainability</i> , 2021, 13, 302.	1.6	10
75	TiO ₂ and SiO ₂ Nanoparticles Combined with Surfactants Mitigate the Toxicity of Cd ²⁺ to Wheat Seedlings. <i>Water, Air, and Soil Pollution</i> , 2019, 230, 1.	1.1	9
76	Effect of Two Organic Chemical Fluids on the Mechanical Properties of an Expansive Clay Soil. <i>Journal of Testing and Evaluation</i> , 2020, 48, 20170623.	0.4	9
77	A Zero-Liquid Discharge Model for a Transient Solar-Powered Desalination System for Greenhouse. <i>Water (Switzerland)</i> , 2020, 12, 1440.	1.2	9
78	Stress Distribution of the Tibiofemoral Joint in a Healthy Versus Osteoarthritis Knee Model Using Image-Based Three-Dimensional Finite Element Analysis. <i>Journal of Medical and Biological Engineering</i> , 2020, 40, 409-418.	1.0	9
79	Removal of MTBE from a clay soil using electrokinetic technique. <i>Environmental Technology (United Kingdom)</i> 11(12) 1431-1440	1.2	8
80	Surface Stabilization of Soils Susceptible to Wind Erosion Using Volcanic Ash-Based Geopolymer. <i>Journal of Materials in Civil Engineering</i> , 2021, 33, .	1.3	8
81	Analysis of Inlet Configurations on the Microclimate Conditions of a Novel Standalone Agricultural Greenhouse for Egypt Using Computational Fluid Dynamics. <i>Sustainability</i> , 2021, 13, 1446.	1.6	8
82	A cost-effective method to protect the coastal regions from sea level rise. A case study: northern coasts of Egypt. <i>Journal of Water and Climate Change</i> , 2016, 7, 114-127.	1.2	7
83	Analysing the Material Suitability and Concentration Ratio of a Solar-Powered Parabolic trough Collector (PTC) Using Computational Fluid Dynamics. <i>Energies</i> , 2020, 13, 5479.	1.6	7
84	Experimental and CFD Analysis of Impact of Surface Roughness on Hydrodynamic Performance of a Darrieus Hydro (DH) Turbine. <i>Energies</i> , 2020, 13, 928.	1.6	7
85	Understanding the NEEDS for ACTING: An integrated framework for applying nature-based solutions in Brazil. <i>Water Science and Technology</i> , 2022, 85, 987-1010.	1.2	7
86	Air losses in compressed air tunnelling: a prediction model. <i>Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics</i> , 2016, 169, 140-147.	0.4	6
87	Coupled three-dimensional modelling of groundwater-surface water interactions for management of seawater intrusion in Pingtung Plain, Taiwan. <i>Journal of Hydrology: Regional Studies</i> , 2021, 36, 100850.	1.0	6
88	Experimental investigation on a combination of soil electrokinetic consolidation and remediation of drained water using composite nanofiber-based electrodes. <i>Science of the Total Environment</i> , 2022, 836, 155562.	3.9	6
89	Probabilistic evaluation of seismic liquefaction potential in field conditions. <i>Engineering Computations</i> , 2011, 28, 675-700.	0.7	5
90	Comparison Between Analytical and Numerical Methods in Evaluating the Pollution Transport in Porous Media. <i>Geotechnical and Geological Engineering</i> , 2013, 31, 93-101.	0.8	5

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91	Effect of Soil Density and Suction on the Elastic and Plastic Parameters of Unsaturated Silty Soil. <i>International Journal of Geomechanics</i> , 2015, 15, .	1.3	5
92	Electrokinetic Remediation of a Soil Contaminated with Anthracene Using Different Surfactants. <i>Environmental Engineering Science</i> , 2019, 36, 197-206.	0.8	5
93	An experimental study of a gamma-type MTD stirling engine. <i>Case Studies in Thermal Engineering</i> , 2021, 24, 100871.	2.8	5
94	Role of Subgrade Reaction Modulus in Soil-Foundation-Structure Interaction in Concrete Buildings. <i>Buildings</i> , 2022, 12, 540.	1.4	5
95	Model tests on reinforced sloped embankment with denti-strip inclusions under monotonic loading. <i>KSCE Journal of Civil Engineering</i> , 2014, 18, 1342-1350.	0.9	4
96	Properties of sediments deposited in a fluid with different pH. <i>Marine Georesources and Geotechnology</i> , 2019, 37, 643-650.	1.2	4
97	Stabilisation of clay soil with polymers through electrokinetic technique. <i>European Journal of Environmental and Civil Engineering</i> , 2019, , 1-19.	1.0	4
98	Effect of glycerol on the behaviour of an expansive soil during wetting and drying cycles. <i>International Journal of Pavement Engineering</i> , 2021, 22, 1284-1294.	2.2	4
99	Failure-mode analysis of loose deposit slope in Yaan-Kangding Expressway under seismic loading using particle flow code. <i>Granular Matter</i> , 2019, 21, 1.	1.1	4
100	Decarbonisation Using Hybrid Energy Solution: Case Study of Zagazig, Egypt. <i>Energies</i> , 2020, 13, 4680.	1.6	4
101	Effect of forced carbonation on the behaviour of a magnesia-stabilised clay soil. <i>International Journal of Pavement Engineering</i> , 2022, 23, 1691-1705.	2.2	4
102	Stabilisation of a clay soil by ion injection using an electrical field. <i>Proceedings of the Institution of Civil Engineers: Ground Improvement</i> , 2020, , 1-13.	0.7	4
103	Analysing the Influential Parameters on the Monopile Foundation of an Offshore Wind Turbine. <i>Computation</i> , 2021, 9, 71.	1.0	4
104	Effective stress parameter in unsaturated soils: an evolutionary-based prediction model. <i>Proceedings of the Institution of Civil Engineers - Smart Infrastructure and Construction</i> , 2020, 173, 96-105.	1.1	4
105	Analysis of geosynthetic reinforced soil structures with orthogonal anisotropy. <i>Geotechnical and Geological Engineering</i> , 2006, 24, 903-917.	0.8	3
106	Numerical Modeling of Hydraulic Hysteresis in Unsaturated Soils. <i>Transport in Porous Media</i> , 2010, 85, 521-540.	1.2	3
107	Baseline study in environmental risk assessment: Escalating need for computer models to be whole-system approach. <i>Critical Reviews in Environmental Science and Technology</i> , 2017, 47, 289-313.	6.6	3
108	Impact of water and solution of glycerol on the treatment of sediment by cement. <i>International Journal of Pavement Engineering</i> , 2020, 21, 322-335.	2.2	3

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109	Three dimensional finite element modelling of metatarsal stresses during running. Journal of Medical Engineering and Technology, 2020, 44, 368-377.	0.8	3
110	Treatment of a clay soil deposited in saline water by cement. European Journal of Environmental and Civil Engineering, 2021, 25, 1521-1537.	1.0	3
111	Insights into enhanced electrokinetic remediation of copper-contaminated soil using a novel conductive membrane based on nanoparticles. Environmental Geochemistry and Health, 2022, 44, 1015-1032.	1.8	3
112	ASSESSMENT OF DIFFERENT MANAGEMENT SCENARIOS TO CONTROL SEAWATER INTRUSION IN UNCONFINED COASTAL AQUIFERS. The Journal of the University of Duhok, 2017, 20, 259-275.	0.0	3
113	An EPR Approach to the Modeling of Civil and Geotechnical Engineering Systems. , 2013, , 311-326.		2
114	Investigation on the mechanical properties of gypsum soil. Proceedings of Institution of Civil Engineers: Construction Materials, 2014, 167, 251-257.	0.7	2
115	Control of saltwater intrusion by aquifer storage and recovery. Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics, 2016, 169, 148-155.	0.4	2
116	Stabilization of a clay soil by injection of different ions. Proceedings of the Institution of Civil Engineers: Ground Improvement, 0, , 1-51.	0.7	2
117	Effect of Mono Ethylene Glycol Solution on Mechanical Behavior of a Clay Soil. Journal of Testing and Evaluation, 2020, 48, 938-954.	0.4	2
118	Remediation of a clay soil contaminated with phenanthrene by using MgO and forced carbonation. Journal of Chemical Technology and Biotechnology, 2022, 97, 2636-2647.	1.6	2
119	Variation of Degree of Saturation in Unsaturated Silty Soil. , 2007, , 337-343.		1
120	Patents on Contaminated Land. Recent Patents on Engineering, 2008, 2, 147-156.	0.3	1
121	Analysis of Soil-Compacting Effect Caused by Shield Tunneling Using Three-Dimensional Elastoplastic Solution of Cylindrical Cavity Expansion. Mathematical Problems in Engineering, 2018, 2018, 1-14.	0.6	1
122	A New Evolutionary Approach to Geotechnical and Geo-Environmental Modelling. , 2015, , 483-499.		1
123	Effect of Quality Electrolyte Fluid on Removing MTBE from a Clay Soil Using Electrokinetic Technique. Journal of Environmental Engineering, ASCE, 2018, 144, 04018102.	0.7	0
124	Experimental Analysis and Characterization of High-Purity Aluminum Nanoparticles (Al-NPs) by Electromagnetic Levitation Gas Condensation (ELGC). Nanomaterials, 2020, 10, 2084.	1.9	0
125	Design, fabrication and verification of a novel auxetic microstructure using topology optimization. Bulletin of Materials Science, 2021, 44, 1.	0.8	0
126	Investigation of Structural Behavior of Tapered Ring and Parallel Ring Linings in Tunnels. Soil Mechanics and Foundation Engineering, 2021, 58, 406-410.	0.2	0