Danial Jahed Armaghani

List of Publications by Year
in descending order

194 papers	12,719 citations	16451 64 h-index	33894 99 g-index
197 all docs	197 docs citations	197 times ranked	3422 citing authors

#	Article	IF	Citations
1	Development of hybrid intelligent models for predicting TBM penetration rate in hard rock condition. Tunnelling and Underground Space Technology, 2017, 63, 29-43.	6.2	307
2	Prediction of uniaxial compressive strength of rock samples using hybrid particle swarm optimization-based artificial neural networks. Measurement: Journal of the International Measurement Confederation, 2015, 60, 50-63.	5.0	271
3	Prediction of seismic slope stability through combination of particle swarm optimization and neural network. Engineering With Computers, 2016, 32, 85-97.	6.1	256
4	Feasibility of indirect determination of blast induced ground vibration based on support vector machine. Measurement: Journal of the International Measurement Confederation, 2015, 75, 289-297.	5.0	229
5	Ground vibration prediction in quarry blasting through an artificial neural network optimized by imperialist competitive algorithm. Bulletin of Engineering Geology and the Environment, 2015, 74, 873-886.	3.5	209
6	Optimization of support vector machine through the use of metaheuristic algorithms in forecasting TBM advance rate. Engineering Applications of Artificial Intelligence, 2021, 97, 104015.	8.1	195
7	A comparative study of ANN and ANFIS models for the prediction of cement-based mortar materials compressive strength. Neural Computing and Applications, 2021, 33, 4501-4532.	5.6	194
8	Predicting TBM penetration rate in hard rock condition: A comparative study among six XGB-based metaheuristic techniques. Geoscience Frontiers, 2021, 12, 101091.	8.4	170
9	Blast-induced air and ground vibration prediction: a particle swarm optimization-based artificial neural network approach. Environmental Earth Sciences, 2015, 74, 2799-2817.	2.7	162
10	Prediction of the unconfined compressive strength of soft rocks: a PSO-based ANN approach. Bulletin of Engineering Geology and the Environment, 2015, 74, 745-757.	3.5	162
11	Application of several optimization techniques for estimating TBM advance rate in granitic rocks. Journal of Rock Mechanics and Geotechnical Engineering, 2019, 11, 779-789.	8.1	156
12	Developing a hybrid PSO–ANN model for estimating the ultimate bearing capacity of rock-socketed piles. Neural Computing and Applications, 2017, 28, 391-405.	5.6	155
13	Supervised Machine Learning Techniques to the Prediction of Tunnel Boring Machine Penetration Rate. Applied Sciences (Switzerland), 2019, 9, 3715.	2.5	155
14	An adaptive neuro-fuzzy inference system for predicting unconfined compressive strength and Young's modulus: a study on Main Range granite. Bulletin of Engineering Geology and the Environment, 2015, 74, 1301-1319.	3.5	154
15	Random Forests and Cubist Algorithms for Predicting Shear Strengths of Rockfill Materials. Applied Sciences (Switzerland), 2019, 9, 1621.	2.5	152
16	Prediction and optimization of back-break and rock fragmentation using an artificial neural network and a bee colony algorithm. Bulletin of Engineering Geology and the Environment, 2016, 75, 27-36.	3.5	151
17	Applying various hybrid intelligent systems to evaluate and predict slope stability under static and dynamic conditions. Soft Computing, 2019, 23, 5913-5929.	3.6	151
18	Developing GEP tree-based, neuro-swarm, and whale optimization models for evaluation of bearing capacity of concrete-filled steel tube columns. Engineering With Computers, 2021, 37, 1-19.	6.1	149

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19	Application of PSO to develop a powerful equation for prediction of flyrock due to blasting. Neural Computing and Applications, 2017, 28, 1043-1050.	5.6	147
20	Three hybrid intelligent models in estimating flyrock distance resulting from blasting. Engineering With Computers, 2019, 35, 243-256.	6.1	145
21	Airblast prediction through a hybrid genetic algorithm-ANN model. Neural Computing and Applications, 2018, 29, 619-629.	5.6	138
22	Prediction of the strength and elasticity modulus of granite through an expert artificial neural network. Arabian Journal of Geosciences, 2016, 9, 1.	1.3	136
23	Forecasting blast-induced ground vibration developing a CART model. Engineering With Computers, 2017, 33, 307-316.	6.1	134
24	Feasibility of ANFIS model for prediction of ground vibrations resulting from quarry blasting. Environmental Earth Sciences, 2015, 74, 2845-2860.	2.7	129
25	Estimation of the TBM advance rate under hard rock conditions using XGBoost and Bayesian optimization. Underground Space (China), 2021, 6, 506-515.	7.5	129
26	A combination of the ICA-ANN model to predict air-overpressure resulting from blasting. Engineering With Computers, 2016, 32, 155-171.	6.1	123
27	Optimizing an ANN model with ICA for estimating bearing capacity of driven pile in cohesionless soil. Engineering With Computers, 2018, 34, 347-356.	6.1	123
28	Prediction of ground vibration induced by blasting operations through the use of the Bayesian Network and random forest models. Soil Dynamics and Earthquake Engineering, 2020, 139, 106390.	3.8	123
29	Prediction of the uniaxial compressive strength of sandstone using various modeling techniques. International Journal of Rock Mechanics and Minings Sciences, 2016, 85, 174-186.	5.8	119
30	Combination of neural network and ant colony optimization algorithms for prediction and optimization of flyrock and back-break induced by blasting. Engineering With Computers, 2016, 32, 255-266.	6.1	116
31	Assessing Dynamic Conditions of the Retaining Wall: Developing Two Hybrid Intelligent Models. Applied Sciences (Switzerland), 2019, 9, 1042.	2.5	116
32	Indirect measure of shale shear strength parameters by means of rock index tests through an optimized artificial neural network. Measurement: Journal of the International Measurement Confederation, 2014, 55, 487-498.	5.0	115
33	A neuro-genetic predictive model to approximate overbreak induced by drilling and blasting operation in tunnels. Bulletin of Engineering Geology and the Environment, 2019, 78, 981-990.	3.5	115
34	Predicting tunnel boring machine performance through a new model based on the group method of data handling. Bulletin of Engineering Geology and the Environment, 2019, 78, 3799-3813.	3.5	114
35	Application of Artificial Neural Network for Predicting Shaft and Tip Resistances of Concrete Piles. Earth Sciences Research Journal, 2015, 19, 85-93.	0.6	108
36	Application of deep neural networks in predicting the penetration rate of tunnel boring machines. Bulletin of Engineering Geology and the Environment, 2019, 78, 6347-6360.	3.5	108

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37	Development of a new hybrid ANN for solving a geotechnical problem related to tunnel boring machine performance. Engineering With Computers, 2020, 36, 345-357.	6.1	108
38	Deep neural network and whale optimization algorithm to assess flyrock induced by blasting. Engineering With Computers, 2021, 37, 173-186.	6.1	107
39	Feasibility of ICA in approximating ground vibration resulting from mine blasting. Neural Computing and Applications, 2018, 29, 457-465.	5.6	105
40	Application of several non-linear prediction tools for estimating uniaxial compressive strength of granitic rocks and comparison of their performances. Engineering With Computers, 2016, 32, 189-206.	6.1	104
41	Application of two intelligent systems in predicting environmental impacts of quarry blasting. Arabian Journal of Geosciences, 2015, 8, 9647-9665.	1.3	103
42	Neuro-fuzzy technique to predict air-overpressure induced by blasting. Arabian Journal of Geosciences, 2015, 8, 10937-10950.	1.3	102
43	Developing a hybrid model of salp swarm algorithm-based support vector machine to predict the strength of fiber-reinforced cemented paste backfill. Engineering With Computers, 2021, 37, 3519-3540.	6.1	97
44	Several non-linear models in estimating air-overpressure resulting from mine blasting. Engineering With Computers, 2016, 32, 441-455.	6.1	96
45	Prediction of Drillability of Rocks with Strength Properties Using a Hybrid GA-ANN Technique. Geotechnical and Geological Engineering, 2016, 34, 605-620.	1.7	96
46	Genetic programming and gene expression programming for flyrock assessment due to mine blasting. International Journal of Rock Mechanics and Minings Sciences, 2016, 88, 254-264.	5.8	92
47	Invasive Weed Optimization Technique-Based ANN to the Prediction of Rock Tensile Strength. Applied Sciences (Switzerland), 2019, 9, 5372.	2.5	88
48	Performance prediction of tunnel boring machine through developing a gene expression programming equation. Engineering With Computers, 2018, 34, 129-141.	6.1	87
49	An optimized ANN model based on genetic algorithm for predicting ripping production. Neural Computing and Applications, 2017, 28, 393-406.	5.6	85
50	Genetic programing and non-linear multiple regression techniques to predict backbreak in blasting operation. Engineering With Computers, 2016, 32, 123-133.	6.1	84
51	A new development of ANFISâ€"GMDH optimized by PSO to predict pile bearing capacity based on experimental datasets. Engineering With Computers, 2021, 37, 685-700.	6.1	83
52	A new developed approach for the prediction of ground vibration using a hybrid PSO-optimized ANFIS-based model. Environmental Earth Sciences, 2017, 76, 1.	2.7	79
53	Application of fuzzy inference system for prediction of rock fragmentation induced by blasting. Arabian Journal of Geosciences, 2015, 8, 10819-10832.	1.3	78
54	Rockburst prediction in hard rock mines developing bagging and boosting tree-based ensemble techniques. Journal of Central South University, 2021, 28, 527-542.	3.0	78

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55	A novel technique based on the improved firefly algorithm coupled with extreme learning machine (ELM-IFF) for predicting the thermal conductivity of soil. Engineering With Computers, 2022, 38, 3321-3340.	6.1	78
56	Implementing an ANN model optimized by genetic algorithm for estimating cohesion of limestone samples. Engineering With Computers, 2018, 34, 307-317.	6.1	76
57	Risk Assessment and Prediction of Flyrock Distance by Combined Multiple Regression Analysis and Monte Carlo Simulation of Quarry Blasting. Rock Mechanics and Rock Engineering, 2016, 49, 3631-3641.	5.4	75
58	A Novel Feature Selection Approach Based on Tree Models for Evaluating the Punching Shear Capacity of Steel Fiber-Reinforced Concrete Flat Slabs. Materials, 2020, 13, 3902.	2.9	75
59	Uniaxial compressive strength prediction through a new technique based on gene expression programming. Neural Computing and Applications, 2018, 30, 3523-3532.	5.6	74
60	A Gene Expression Programming Model for Predicting Tunnel Convergence. Applied Sciences (Switzerland), 2019, 9, 4650.	2.5	74
61	Investigating the effective parameters on the risk levels of rockburst phenomena by developing a hybrid heuristic algorithm. Engineering With Computers, 2021, 37, 1679.	6.1	74
62	Tensile strength prediction of rock material using non-destructive tests: A comparative intelligent study. Transportation Geotechnics, 2021, 31, 100652.	4.5	72
63	Use of Intelligent Methods to Design Effective Pattern Parameters of Mine Blasting to Minimize Flyrock Distance. Natural Resources Research, 2020, 29, 625-639.	4.7	70
64	Prediction of rockburst risk in underground projects developing a neuro-bee intelligent system. Bulletin of Engineering Geology and the Environment, 2020, 79, 4265-4279.	3.5	70
65	A novel approach for classification of soils based on laboratory tests using Adaboost, Tree and ANN modeling. Transportation Geotechnics, 2021, 27, 100508.	4.5	70
66	Gaussian Process Regression Technique to Estimate the Pile Bearing Capacity. Arabian Journal for Science and Engineering, 2020, 45, 8255-8267.	3.0	69
67	A Novel Combination of Whale Optimization Algorithm and Support Vector Machine with Different Kernel Functions for Prediction of Blasting-Induced Fly-Rock in Quarry Mines. Natural Resources Research, 2021, 30, 191-207.	4.7	69
68	Examining Hybrid and Single SVM Models with Different Kernels to Predict Rock Brittleness. Sustainability, 2020, 12, 2229.	3.2	67
69	A Combination of Feature Selection and Random Forest Techniques to Solve a Problem Related to Blast-Induced Ground Vibration. Applied Sciences (Switzerland), 2020, 10, 869.	2.5	67
70	Classification and regressionÂtree technique in estimating peak particle velocity caused by blasting. Engineering With Computers, 2017, 33, 45-53.	6.1	66
71	Improving Performance of Retaining Walls Under Dynamic Conditions Developing an Optimized ANN Based on Ant Colony Optimization Technique. IEEE Access, 2019, 7, 94692-94700.	4.2	66
72	Estimation of air-overpressure produced by blasting operation through a neuro-genetic technique. Environmental Earth Sciences, 2016, 75, 1.	2.7	64

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73	Function development for appraising brittleness of intact rocks using genetic programming and non-linear multiple regression models. Engineering With Computers, 2017, 33, 13-21.	6.1	64
74	Development of a precise model for prediction of blast-induced flyrock using regression tree technique. Environmental Earth Sciences, 2017, 76, 1.	2.7	63
75	Developing a new intelligent technique to predict overbreak in tunnels using an artificial bee colony-based ANN. Environmental Earth Sciences, 2019, 78, 1.	2.7	63
76	Forecasting of TBM advance rate in hard rock condition based on artificial neural network and genetic programming techniques. Bulletin of Engineering Geology and the Environment, 2020, 79, 2069-2084.	3.5	63
77	A SVR-GWO technique to minimize flyrock distance resulting from blasting. Bulletin of Engineering Geology and the Environment, 2020, 79, 4369-4385.	3.5	63
78	Development of a new model for predicting flyrock distance in quarry blasting: a genetic programming technique. Bulletin of Engineering Geology and the Environment, 2016, 75, 993-1006.	3.5	62
79	Rock strength assessment based on regression tree technique. Engineering With Computers, 2016, 32, 343-354.	6.1	62
80	A Monte Carlo technique in safety assessment of slope under seismic condition. Engineering With Computers, 2017, 33, 807-817.	6.1	62
81	On the Use of Neuro-Swarm System to Forecast the Pile Settlement. Applied Sciences (Switzerland), 2020, 10, 1904.	2.5	62
82	Optimization of flyrock and rock fragmentation in the Tajareh limestone mine using metaheuristics method of firefly algorithm. Engineering With Computers, 2018, 34, 241-251.	6.1	61
83	Development of GP and GEP models to estimate an environmental issue induced by blasting operation. Environmental Monitoring and Assessment, 2018, 190, 351.	2.7	61
84	The use of new intelligent techniques in designing retaining walls. Engineering With Computers, 2020, 36, 283-294.	6.1	61
85	Stability analysis of underground mine hard rock pillars via combination of finite difference methods, neural networks, and Monte Carlo simulation techniques. Underground Space (China), 2021, 6, 379-395.	7.5	61
86	A Risk-Based Technique to Analyze Flyrock Results Through Rock Engineering System. Geotechnical and Geological Engineering, 2018, 36, 2247-2260.	1.7	60
87	A new design of evolutionary hybrid optimization of SVR model in predicting the blast-induced ground vibration. Engineering With Computers, 2021, 37, 1455-1471.	6.1	60
88	Predicting tunnel squeezing using support vector machine optimized by whale optimization algorithm. Acta Geotechnica, 2022, 17, 1343-1366.	5.7	60
89	Settlement prediction of the rock-socketed piles through a new technique based on gene expression programming. Neural Computing and Applications, 2018, 29, 1115-1125.	5.6	59
90	Development of a new methodology for estimating the amount of PPV in surface mines based on prediction and probabilistic models (GEP-MC). International Journal of Mining, Reclamation and Environment, 2021, 35, 48-68.	2.8	59

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91	A novel approach for forecasting of ground vibrations resulting from blasting: modified particle swarm optimization coupled extreme learning machine. Engineering With Computers, 2021, 37, 3221-3235.	6.1	58
92	Prediction of air-overpressure induced by blasting using an ANFIS-PNN model optimized by GA. Applied Soft Computing Journal, 2021, 99, 106904.	7.2	58
93	An efficient optimal neural network based on gravitational search algorithm in predicting the deformation of geogrid-reinforced soil structures. Transportation Geotechnics, 2021, 26, 100446.	4.5	57
94	A Novel Intelligent ELM-BBO Technique for Predicting Distance of Mine Blasting-Induced Flyrock. Natural Resources Research, 2020, 29, 4103-4120.	4.7	56
95	Intelligent modelling of sandstone deformation behaviour using fuzzy logic and neural network systems. Bulletin of Engineering Geology and the Environment, 2018, 77, 345-361.	3.5	55
96	Random Forest and Bayesian Network Techniques for Probabilistic Prediction of Flyrock Induced by Blasting in Quarry Sites. Natural Resources Research, 2020, 29, 655-667.	4.7	55
97	Introducing stacking machine learning approaches for the prediction of rock deformation. Transportation Geotechnics, 2022, 34, 100756.	4.5	55
98	A new model based on gene expression programming to estimate air flow in a single rock joint. Environmental Earth Sciences, 2016, 75, 1.	2.7	54
99	Prediction and minimization of blast-induced flyrock using gene expression programming and firefly algorithm. Neural Computing and Applications, 2018, 29, 269-281.	5.6	54
100	Design and implementation of a new tuned hybrid intelligent model to predict the uniaxial compressive strength of the rock using SFS-ANFIS. Engineering With Computers, 2021, 37, 2717-2734.	6.1	54
101	A new approach for estimation of rock brittleness based on non-destructive tests. Nondestructive Testing and Evaluation, 2019, 34, 354-375.	2.1	53
102	Neuro-genetic, neuro-imperialism and genetic programing models in predicting ultimate bearing capacity of pile. Engineering With Computers, 2020, 36, 1101-1115.	6.1	53
103	A new technique to predict fly-rock in bench blasting based on an ensemble of support vector regression and GLMNET. Engineering With Computers, 2021, 37, 421-435.	6.1	51
104	Applying a meta-heuristic algorithm to predict and optimize compressive strength of concrete samples. Engineering With Computers, 2021, 37, 1133-1145.	6.1	51
105	A new hybridÂsimulated annealing-based geneticÂprogramming technique to predict the ultimateÂbearing capacity of piles. Engineering With Computers, 2021, 37, 2111.	6.1	50
106	An optimized system of GMDH-ANFIS predictive model by ICA for estimating pile bearing capacity. Artificial Intelligence Review, 2022, 55, 2313-2350.	15.7	50
107	Practical Risk Assessment of Ground Vibrations Resulting from Blasting, Using Gene Expression Programming and Monte Carlo Simulation Techniques. Applied Sciences (Switzerland), 2020, 10, 472.	2.5	50
108	Prediction of blast-induced air overpressure: a hybrid AI-based predictive model. Environmental Monitoring and Assessment, 2015, 187, 666.	2.7	48

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109	Experimental and intelligent techniques to estimate bearing capacity of cohesive soft soils reinforced with soil-cement columns. Measurement: Journal of the International Measurement Confederation, 2018, 124, 529-538.	5.0	48
110	Data-Driven Compressive Strength Prediction of Fly Ash Concrete Using Ensemble Learner Algorithms. Buildings, 2022, 12, 132.	3.1	47
111	Employing a genetic algorithm and grey wolf optimizer for optimizing RF models to evaluate soil liquefaction potential. Artificial Intelligence Review, 2022, 55, 5673-5705.	15.7	45
112	A combination of fuzzy Delphi method and hybrid ANN-based systems to forecast ground vibration resulting from blasting. Scientific Reports, 2020, 10, 19397.	3.3	44
113	Slope Stability Classification under Seismic Conditions Using Several Tree-Based Intelligent Techniques. Applied Sciences (Switzerland), 2022, 12, 1753.	2.5	44
114	Prediction of the durability of limestone aggregates using computational techniques. Neural Computing and Applications, 2018, 29, 423-433.	5.6	42
115	A new hybrid method for predicting ripping production in different weathering zones through in situ tests. Measurement: Journal of the International Measurement Confederation, 2019, 147, 106826.	5.0	42
116	Prediction of bearing capacity of thin-walled foundation: a simulation approach. Engineering With Computers, 2018, 34, 319-327.	6.1	40
117	Estimating the friction angle of black shale core specimens with hybrid-ANN approaches. Measurement: Journal of the International Measurement Confederation, 2019, 145, 744-755.	5.0	40
118	Rock tensile strength prediction using empirical and soft computing approaches. Bulletin of Engineering Geology and the Environment, 2019, 78, 4519-4531.	3.5	40
119	Development of a novel hybrid intelligent model for solving engineering problems using GS-GMDH algorithm. Engineering With Computers, 2020, 36, 1379-1391.	6.1	40
120	Predicting the use frequency of ride-sourcing by off-campus university students through random forest and Bayesian network techniques. Transportation Research, Part A: Policy and Practice, 2020, 136, 262-281.	4.2	40
121	Prediction of TBM performance in fresh through weathered granite using empirical and statistical approaches. Tunnelling and Underground Space Technology, 2021, 118, 104183.	6.2	39
122	An expert system based on hybrid ICA-ANN technique to estimate macerals contents of Indian coals. Environmental Earth Sciences, 2017, 76, 1.	2.7	38
123	A Novel Combination of Tree-Based Modeling and Monte Carlo Simulation for Assessing Risk Levels of Flyrock Induced by Mine Blasting. Natural Resources Research, 2021, 30, 225-243.	4.7	38
124	Optimal ELM–Harris Hawks Optimization and ELM–Grasshopper Optimization Models to Forecast Peak Particle Velocity Resulting from Mine Blasting. Natural Resources Research, 2021, 30, 2647-2662.	4.7	38
125	Strength characterisation of shale using Mohr–Coulomb and Hoek–Brown criteria. Measurement: Journal of the International Measurement Confederation, 2015, 63, 269-281.	5.0	37
126	Evaluating Slope Deformation of Earth Dams Due to Earthquake Shaking Using MARS and GMDH Techniques. Applied Sciences (Switzerland), 2020, 10, 1486.	2.5	36

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127	The Potential Application of a New Intelligent Based Approach in Predicting the Tensile Strength of Rock. IEEE Access, 2020, 8, 57148-57157.	4.2	34
128	Estimation of ultimate bearing capacity of driven piles in c-Ï† soil using MLP-GWO and ANFIS-GWO models: a comparative study. Soft Computing, 2021, 25, 4103-4119.	3.6	34
129	Proposing several hybrid PSO-extreme learning machine techniques to predict TBM performance. Engineering With Computers, 2022, 38, 3811-3827.	6.1	34
130	Application of Tree-Based Predictive Models to Forecast Air Overpressure Induced by Mine Blasting. Natural Resources Research, 2021, 30, 1865-1887.	4.7	32
131	Artificial Neural Network and Firefly Algorithm for Estimation and Minimization of Ground Vibration Induced by Blasting in a Mine. Natural Resources Research, 2020, 29, 4121-4132.	4.7	32
132	Intelligent rockburst prediction model with sample category balance using feedforward neural network and Bayesian optimization. Underground Space (China), 2022, 7, 833-846.	7.5	32
133	Development of fuzzy-GMDH model optimized by GSA to predict rock tensile strength based on experimental datasets. Neural Computing and Applications, 2020, 32, 14047-14067.	5.6	31
134	Modeling Flexural and Compressive Strengths Behaviour of Cement-Grouted Sands Modified with Water Reducer Polymer. Applied Sciences (Switzerland), 2022, 12, 1016.	2.5	31
135	A new multikernel relevance vector machine based on the HPSOGWO algorithm for predicting and controlling blast-induced ground vibration. Engineering With Computers, 2022, 38, 1905-1920.	6.1	30
136	A GMDH Predictive Model to Predict Rock Material Strength Using Three Non-destructive Tests. Journal of Nondestructive Evaluation, 2020, 39, 1.	2.4	30
137	Optimized functional linked neural network for predicting diaphragm wall deflection induced by braced excavations in clays. Geoscience Frontiers, 2022, 13, 101313.	8.4	30
138	Prediction of Peak Particle Velocity Caused by Blasting through the Combinations of Boosted-CHAID and SVM Models with Various Kernels. Applied Sciences (Switzerland), 2021, 11, 3705.	2.5	29
139	TBM performance prediction developing a hybrid ANFIS-PNN predictive model optimized by imperialism competitive algorithm. Neural Computing and Applications, 2021, 33, 16149-16179.	5.6	29
140	Novel Ensemble Tree Solution for Rockburst Prediction Using Deep Forest. Mathematics, 2022, 10, 787.	2.2	29
141	Seepage Analysis in Short Embankments Using Developing a Metaheuristic Method Based on Governing Equations. Applied Sciences (Switzerland), 2020, 10, 1761.	2.5	28
142	Novel Fuzzy-Based Optimization Approaches for the Prediction of Ultimate Axial Load of Circular Concrete-Filled Steel Tubes. Buildings, 2021, 11, 629.	3.1	28
143	Investigating the Applications of Machine Learning Techniques to Predict the Rock Brittleness Index. Applied Sciences (Switzerland), 2020, 10, 1691.	2.5	27
144	Rock-Burst Occurrence Prediction Based on Optimized NaÃ¯ve Bayes Models. IEEE Access, 2021, 9, 91347-91360.	4.2	27

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145	The Effectiveness of Ensemble-Neural Network Techniques to Predict Peak Uplift Resistance of Buried Pipes in Reinforced Sand. Applied Sciences (Switzerland), 2021, 11, 908.	2.5	27
146	Intelligence Prediction of Some Selected Environmental Issues of Blasting: A Review. Open Construction and Building Technology Journal, 2020, 14, 298-308.	0.7	27
147	Novel ensemble intelligence methodologies for rockburst assessment in complex and variable environments. Scientific Reports, 2022, 12, 1844.	3.3	27
148	An evolutionary adaptive neuro-fuzzy inference system for estimating field penetration index of tunnel boring machine in rock mass. Journal of Rock Mechanics and Geotechnical Engineering, 2021, 13, 1290-1299.	8.1	26
149	A Combination of Fuzzy Delphi Method and ANN-based Models to Investigate Factors of Flyrock Induced by Mine Blasting. Natural Resources Research, 2021, 30, 1905-1924.	4.7	25
150	The Effects of Rock Index Tests on Prediction of Tensile Strength of Granitic Samples: A Neuro-Fuzzy Intelligent System. Sustainability, 2021, 13, 10541.	3.2	25
151	The effects of ABC, ICA, and PSO optimization techniques on prediction of ripping production. Engineering With Computers, 2020, 36, 1355-1370.	6.1	24
152	Prediction of Lateral Deflection of Small-Scale Piles Using Hybrid PSO–ANN Model. Arabian Journal for Science and Engineering, 2020, 45, 3499-3509.	3.0	24
153	Stochastic fractal search-tuned ANFIS model to predict blast-induced air overpressure. Engineering With Computers, 2022, 38, 497-511.	6.1	24
154	A novel improved Harris Hawks optimization algorithm coupled with ELM for predicting permeability of tight carbonates. Engineering With Computers, 2022, 38, 4323-4346.	6.1	24
155	Application of hybrid intelligent systems in predicting the unconfined compressive strength of clay material mixed with recycled additive. Transportation Geotechnics, 2021, 30, 100627.	4.5	24
156	A hybrid GEP and WOA approach to estimate the optimal penetration rate of TBM in granitic rock mass. Soft Computing, 2021, 25, 11877-11895.	3.6	23
157	A Combination of Expert-Based System and Advanced Decision-Tree Algorithms to Predict Air-Overpressure Resulting from Quarry Blasting. Natural Resources Research, 2021, 30, 1889-1903.	4.7	22
158	A new development of ANFIS-Based Henry gas solubility optimization technique for prediction of soil shear strength. Transportation Geotechnics, 2021, 29, 100579.	4.5	22
159	A precise neuro-fuzzy model enhanced by artificial bee colony techniques for assessment of rock brittleness index. Neural Computing and Applications, 2022, 34, 3263-3281.	5.6	21
160	A new hybrid model of information entropy and unascertained measurement with different membership functions for evaluating destressability in burst-prone underground mines. Engineering With Computers, 2022, 38, 381-399.	6.1	20
161	Developing a hybrid model of information entropy and unascertained measurement theory for evaluation of the excavatability in rock mass. Engineering With Computers, 2022, 38, 247-270.	6.1	20
162	Stacking Ensemble Tree Models to Predict Energy Performance in Residential Buildings. Sustainability, 2021, 13, 8298.	3.2	20

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163	Effects of soil reinforcement on uplift resistance of buried pipeline. Measurement: Journal of the International Measurement Confederation, 2015, 64, 57-63.	5.0	19
164	Load carrying capacity assessment of thin-walled foundations: an ANFIS–PNN model optimized by genetic algorithm. Engineering With Computers, 2022, 38, 4073-4095.	6.1	19
165	Computational estimation of lateral pile displacement in layered sand using experimental data. Measurement: Journal of the International Measurement Confederation, 2019, 146, 110-118.	5.0	18
166	Strength evaluation of granite block samples with different predictive models. Engineering With Computers, 2021, 37, 891-908.	6.1	18
167	Optimized Support Vector Machines Combined with Evolutionary Random Forest for Prediction of Back-Break Caused by Blasting Operation. Sustainability, 2021, 13, 12797.	3.2	18
168	Reliability and Prediction of Embedment Depth of Sheet pile Walls Using Hybrid ANN with Optimization Techniques. Arabian Journal for Science and Engineering, 2022, 47, 12853-12871.	3.0	18
169	Ripping Production Prediction in Different Weathering Zones According to Field Data. Geotechnical and Geological Engineering, 2017, 35, 2381-2399.	1.7	16
170	Evaluation and Optimization of Prediction of Toe that Arises from Mine Blasting Operation Using Various Soft Computing Techniques. Natural Resources Research, 2020, 29, 887-903.	4.7	16
171	Development of a Group Method of Data Handling Technique to Forecast Iron Ore Price. Applied Sciences (Switzerland), 2020, 10, 2364.	2.5	16
172	Hybridization of Parametric and Non-parametric Techniques to Predict Air Over-pressure Induced by Quarry Blasting. Natural Resources Research, 2021, 30, 209-224.	4.7	15
173	Neuro-swarm and neuro-imperialism techniques to investigate the compressive strength of concrete constructed by freshwater and magnetic salty water. Measurement: Journal of the International Measurement Confederation, 2021, 182, 109720.	5.0	15
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175	Ensemble machine learning models for prediction of flyrock due to quarry blasting. International Journal of Environmental Science and Technology, 2022, 19, 8661-8676.	3.5	15
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