Panagiotis G Asteris

List of Publications by Year
in descending order

117	6,636	47006	69250
papers	citations	47 h-index	77 g-index

118	118	118	2346
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Lateral Stiffness of Brick Masonry Infilled Plane Frames. Journal of Structural Engineering, 2003, 129, 1071-1079.	3.4	249
2	Mathematical Macromodeling of Infilled Frames: State of the Art. Journal of Structural Engineering, 2011, 137, 1508-1517.	3.4	245
3	Predicting concrete compressive strength using hybrid ensembling of surrogate machine learning models. Cement and Concrete Research, 2021, 145, 106449.	11.0	235
4	Concrete compressive strength using artificial neural networks. Neural Computing and Applications, 2020, 32, 11807-11826.	5.6	202
5	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
6	Mathematical micromodeling of infilled frames: State of the art. Engineering Structures, 2013, 56, 1905-1921.	5.3	189
7	Seismic vulnerability assessment of historical masonry structural systems. Engineering Structures, 2014, 62-63, 118-134.	5.3	180
8	A novel artificial intelligence technique to predict compressive strength of recycled aggregate concrete using ICA-XGBoost model. Engineering With Computers, 2021, 37, 3329-3346.	6.1	176
9	Self-compacting concrete strength prediction using surrogate models. Neural Computing and Applications, 2019, 31, 409-424.	5.6	166
10	Supervised Machine Learning Techniques to the Prediction of Tunnel Boring Machine Penetration Rate. Applied Sciences (Switzerland), 2019, 9, 3715.	2.5	155
11	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
12	Artificial bee colony-based neural network for the prediction of the fundamental period of infilled frame structures. Neural Computing and Applications, 2019, 31, 4837-4847.	5.6	143
13	Prediction of self-compacting concrete strength using artificial neural networks. European Journal of Environmental and Civil Engineering, 2016, 20, s102-s122.	2.1	137
14	Feed-Forward Neural Network Prediction of the Mechanical Properties of Sandcrete Materials. Sensors, 2017, 17, 1344.	3.8	131
15	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
16	Mapping and holistic design of natural hydraulic lime mortars. Cement and Concrete Research, 2020, 136, 106167.	11.0	122
17	Assessing Dynamic Conditions of the Retaining Wall: Developing Two Hybrid Intelligent Models. Applied Sciences (Switzerland), 2019, 9, 1042.	2.5	116
18	On the in-plane properties and capacities of infilled frames. Engineering Structures, 2012, 41, 385-402.	5.3	111

#	Article	IF	Citations
19	Soft computing-based techniques for concrete beams shear strength. Procedia Structural Integrity, 2019, 17, 924-933.	0.8	106
20	Krill herd algorithm-based neural network in structural seismic reliability evaluation. Mechanics of Advanced Materials and Structures, 2019, 26, 1146-1153.	2.6	105
21	A macro-modelling approach for the analysis of infilled frame structures considering the effects of openings and vertical loads. Structure and Infrastructure Engineering, 2016, 12, 551-566.	3.7	93
22	Numerical modelling of out-of-plane response of infilled frames: State of the art and future challenges for the equivalent strut macromodels. Engineering Structures, 2017, 132, 110-122.	5.3	89
23	Invasive Weed Optimization Technique-Based ANN to the Prediction of Rock Tensile Strength. Applied Sciences (Switzerland), 2019, 9, 5372.	2.5	88
24	Revealing the nature of metakaolin-based concrete materials using artificial intelligence techniques. Construction and Building Materials, 2022, 322, 126500.	7.2	88
25	Prediction of the Fundamental Period of Infilled RC Frame Structures Using Artificial Neural Networks. Computational Intelligence and Neuroscience, 2016, 2016, 1-12.	1.7	87
26	Compressive strength of natural hydraulic lime mortars using soft computing techniques. Procedia Structural Integrity, 2019, 17, 914-923.	0.8	86
27	Stochastic Vulnerability Assessment of Masonry Structures: Concepts, Modeling and Restoration Aspects. Applied Sciences (Switzerland), 2019, 9, 243.	2.5	83
28	Anisotropic masonry failure criterion using artificial neural networks. Neural Computing and Applications, 2017, 28, 2207-2229.	5.6	79
29	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
30	A Gene Expression Programming Model for Predicting Tunnel Convergence. Applied Sciences (Switzerland), 2019, 9, 4650.	2.5	74
31	Prediction of cement-based mortars compressive strength using machine learning techniques. Neural Computing and Applications, 2021, 33, 13089-13121.	5.6	73
32	Modeling of masonry failure surface under biaxial compressive stress using Neural Networks. Construction and Building Materials, 2014, 55, 447-461.	7.2	72
33	Soft computing based closed form equations correlating L and N-type Schmidt hammer rebound numbers of rocks. Transportation Geotechnics, 2021, 29, 100588.	4.5	71
34	Masonry Failure Criterion under Biaxial Stress State. Journal of Materials in Civil Engineering, 2001, 13, 58-64.	2.9	69
35	Examining Hybrid and Single SVM Models with Different Kernels to Predict Rock Brittleness. Sustainability, 2020, 12, 2229.	3.2	67
36	Estimation of axial load-carrying capacity of concrete-filled steel tubes using surrogate models. Neural Computing and Applications, 2021, 33, 3437-3458.	5.6	66

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37	On the Use of Neuro-Swarm System to Forecast the Pile Settlement. Applied Sciences (Switzerland), 2020, 10, 1904.	2.5	62
38	Efficient computational techniques for predicting the California bearing ratio of soil in soaked conditions. Engineering Geology, 2021, 291, 106239.	6.3	62
39	Soft computing-based models for the prediction of masonry compressive strength. Engineering Structures, 2021, 248, 113276.	5.3	61
40	A novel integrated approach of augmented grey wolf optimizer and ANN for estimating axial load carrying-capacity of concrete-filled steel tube columns. Construction and Building Materials, 2022, 337, 127454.	7.2	60
41	Modeling of Infilled Frames With Openings. Open Construction and Building Technology Journal, 2012, 6, 81-91.	0.7	59
42	Mechanical properties of soilcrete mixtures modified with metakaolin. Construction and Building Materials, 2013, 47, 1026-1036.	7.2	56
43	Prediction of Surface Treatment Effects on the Tribological Performance of Tool Steels Using Artificial Neural Networks. Applied Sciences (Switzerland), 2019, 9, 2788.	2.5	55
44	A new auto-tuning model for predicting the rock fragmentation: a cat swarm optimization algorithm. Engineering With Computers, 2022, 38, 2209-2220.	6.1	55
45	Introducing stacking machine learning approaches for the prediction of rock deformation. Transportation Geotechnics, 2022, 34, 100756.	4.5	55
46	Soft computing techniques for the prediction of concrete compressive strength using Non-Destructive tests. Construction and Building Materials, 2021, 303, 124450.	7.2	53
47	Analysis and Prediction of COVID-19 Using SIR, SEIQR, and Machine Learning Models: Australia, Italy, and UK Cases. Information (Switzerland), 2021, 12, 109.	2.9	49
48	Prediction of axial load capacity of rectangular concrete-filled steel tube columns using machine learning techniques. Engineering With Computers, 2022, 38, 3283-3316.	6.1	49
49	Influence of column shear failure on pushover based assessment of masonry infilled reinforced concrete framed structures: A case study. Soil Dynamics and Earthquake Engineering, 2017, 100, 98-112.	3.8	48
50	Genetic justification of severe COVID-19 using a rigorous algorithm. Clinical Immunology, 2021, 226, 108726.	3.2	47
51	Natural Pozzolan as a Partial Substitute for Cement in Concrete. Open Construction and Building Technology Journal, 2013, 7, 33-42.	0.7	45
52	Genetic prediction of ICU hospitalization and mortality in COVIDâ€19 patients using artificial neural networks. Journal of Cellular and Molecular Medicine, 2022, 26, 1445-1455.	3.6	45
53	On the stability of colonnade structural systems under static and dynamic loading conditions. Bulletin of Earthquake Engineering, 2016, 14, 1131-1152.	4.1	44
54	Evaluation of the ultimate eccentric load of rectangular CFSTs using advanced neural network modeling. Engineering Structures, 2021, 248, 113297.	5.3	44

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55	Slope Stability Classification under Seismic Conditions Using Several Tree-Based Intelligent Techniques. Applied Sciences (Switzerland), 2022, 12, 1753.	2.5	44
56	Parameters affecting the fundamental period of infilled RC frame structures. Earthquake and Structures, 2015, 9, 999-1028.	1.0	42
57	On the Structural Analysis and Seismic Protection of Historical Masonry Structures. Open Construction and Building Technology Journal, 2008, 2, 124-133.	0.7	41
58	Numerical Modeling of Historic Masonry Structures. Advances in Civil and Industrial Engineering Book Series, 2015, , 213-256.	0.2	41
59	Predicting the thermal conductivity of soils using integrated approach of ANN and PSO with adaptive and time-varying acceleration coefficients. International Journal of Thermal Sciences, 2022, 173, 107427.	4.9	41
60	A Novel Heuristic Algorithm for the Modeling and Risk Assessment of the COVID-19 Pandemic Phenomenon. CMES - Computer Modeling in Engineering and Sciences, 2020, 125, 815-828.	1.1	38
61	Residual out-of-plane capacity of infills damaged by in-plane cyclic loads. Engineering Structures, 2020, 209, 109957.	5.3	36
62	On the fundamental period of infilled RC frame buildings. Structural Engineering and Mechanics, 2015, 54, 1175-1200.	1.0	34
63	Surface treatment of tool steels against galling failure. MATEC Web of Conferences, 2018, 188, 04024.	0.2	33
64	Modeling Flexural and Compressive Strengths Behaviour of Cement-Grouted Sands Modified with Water Reducer Polymer. Applied Sciences (Switzerland), 2022, 12, 1016.	2.5	31
65	A methodological approach for the selection of compatible and performable restoration mortars in seismic hazard areas. Construction and Building Materials, 2017, 155, 1-14.	7.2	29
66	Fundamental period of infilled reinforced concrete frame structures. Structure and Infrastructure Engineering, 2017, 13, 929-941.	3.7	29
67	Masonry Compressive Strength Prediction Using Artificial Neural Networks. Communications in Computer and Information Science, 2019, , 200-224.	0.5	29
68	A refreshing view of soft computing models for predicting the deflection of reinforced concrete beams. Applied Soft Computing Journal, 2020, 97, 106831.	7.2	29
69	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
70	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
71	A generalized artificial intelligence model for estimating the friction angle of clays in evaluating slope stability using a deep neural network and Harris Hawks optimization algorithm. Engineering With Computers, 2022, 38, 3901-3914.	6.1	29
72	Numerical Investigation of the Effect of Infill Walls on the Structural Response of RC Frames. Open Construction and Building Technology Journal, 2012, 6, 164-181.	0.7	28

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73	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
74	Earthquake Resistant Design and Rehabilitation of Masonry Historical Structures. Practice Periodical on Structural Design and Construction, 2005, 10, 49-55.	1.3	27
75	Rock-Burst Occurrence Prediction Based on Optimized NaÃ¯ve Bayes Models. IEEE Access, 2021, 9, 91347-91360.	4.2	27
76	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
77	Improved Levenbergâ€“Marquardt backpropagation neural network by particle swarm and whale optimization algorithms to predict the deflection of RC beams. Engineering With Computers, 2022, 38, 3847-3869.	6.1	25
78	Multi-strut macro-model for masonry infilled frames with openings. Journal of Building Engineering, 2020, 32, 101683.	3.4	24
79	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
80	COVID-19 Patient Detection Based on Fusion of Transfer Learning and Fuzzy Ensemble Models Using CXR Images. Applied Sciences (Switzerland), 2021, 11, 11423.	2.5	22
81	Nonlinear Seismic Response Analysis of Realistic Gravity Dam-Reservoir Systems. International Journal of Nonlinear Sciences and Numerical Simulation, 2003, 4, .	1.0	21
82	Heuristic algorithm-based semi-empirical formulas for estimating the compressive strength of the normal and high performance concrete. Construction and Building Materials, 2021, 304, 124467.	7.2	21
83	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
84	On Random Subspace Optimization-Based Hybrid Computing Models Predicting the California Bearing Ratio of Soils. Materials, 2021, 14, 6516.	2.9	21
85	Interpreting the experimental results of compressive strength of hand-mixed cement-grouted sands using various mathematical approaches. Archives of Civil and Mechanical Engineering, 2022, 22, 1.	3.8	21
86	Surrogate models for the compressive strength mapping of cement mortar materials. Soft Computing, 2021, 25, 6347-6372.	3.6	20
87	A new self-adaptive quasi-oppositional stochastic fractal search for the inverse problem of structural damage assessment. AEJ - Alexandria Engineering Journal, 2022, 61, 1922-1936.	6.4	20
88	Stacking Ensemble Tree Models to Predict Energy Performance in Residential Buildings. Sustainability, 2021, 13, 8298.	3.2	20
89	Seismic and Restoration Assessment of Monumental Masonry Structures. Materials, 2017, 10, 895.	2.9	18
90	Investigation of the mechanical behaviour of metakaolin-based sandcrete mixtures. European Journal of Environmental and Civil Engineering, 2019, 23, 300-324.	2.1	18

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91	Three dimensional modelling of ancient colonnade structural systems subjected to harmonic and seismic loading. Structural Engineering and Mechanics, 2016, 60, 633-653.	1.0	18
92	Novel integrated approaches for predicting the compressibility of clay using cascade forward neural networks optimized by swarm- and evolution-based algorithms. Acta Geotechnica, 2022, 17, 1257-1272.	5.7	15
93	Fundamental period of infilled RC frame structures with vertical irregularity. Structural Engineering and Mechanics, 2017, 61, 663-674.	1.0	15
94	Properties of sandcrete mixtures modified with metakaolin. European Journal of Environmental and Civil Engineering, 2016, 20, s18-s37.	2.1	14
95	Strategies for Waste Recycling: The Mechanical Performance of Concrete Based on Limestone and Plastic Waste. Sustainability, 2022, 14, 1706.	3.2	13
96	The FP4026 Research Database on the fundamental period of RC infilled frame structures. Data in Brief, 2016, 9, 704-709.	1.0	12
97	Seismic Vulnerability of Ancient Colonnade. Advances in Civil and Industrial Engineering Book Series, 2015, , 331-358.	0.2	9
98	Strength of Unreinforced Masonry Walls under Concentrated Compression Loads. Practice Periodical on Structural Design and Construction, 2005, 10, 133-140.	1.3	8
99	Optimizing ANN performance using DOE: application on turning of a titanium alloy. MATEC Web of Conferences, 2018, 178, 01017.	0.2	8
100	Nonlinear models to predict stress versus strain of early age strength of flowable ordinary Portland cement. European Journal of Environmental and Civil Engineering, 2022, 26, 8433-8457.	2.1	8
101	Data on the physical and mechanical properties of soilcrete materials modified with metakaolin. Data in Brief, 2017, 13, 487-497.	1.0	7
102	A Simple Heuristic Algorithm to Determine the Set of Closed Surfaces of the Cubic Tensor Polynomial~!2009-04-24~!2009-09-17~!2010-06-09~!. The Open Applied Mathematics Journal, 2010, 4, 1-5.	0.3	7
103	Testing and Modeling the Gradually ApplyingÂCompressive StressÂto Measuring the Strain of Self-Compacted Cement Paste UsingÂVipulanandan p-q Model. Journal of Testing and Evaluation, 2022, 50, 1604-1621.	0.7	6
104	Definition of Seismic Vulnerability Maps for Civil Protection Systems: The Case of Lampedusa Island. Open Construction and Building Technology Journal, 2016, 10, 87-105.	0.7	5
105	Emerging Technologies and Materials for the Seismic Protection of Cultural Heritage. Advances in Civil and Industrial Engineering Book Series, 2015, , 576-606.	0.2	5
106	NEURAL NETWORK APPROXIMATION OF THE MASONRY FAILURE UNDER BIAXIAL COMPRESSIVE STRESS. , 2013, , .		5
107	Strategies of Identification of a Base-Isolated Hospital Building by Coupled Quasi-Static and Snap-Back Tests. Journal of Earthquake Engineering, 2022, 26, 4172-4200.	2.5	4
108	Numerical Investigation of Seismic Behavior of Spatial Asymmetric Multi- Storey Reinforced Concrete Buildings with Masonry Infill Walls. Open Construction and Building Technology Journal, 2012, 6, 113-125.	0.7	4

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109	Seismic behaviour of irregular steel frames with beam and joint energy dissipation. Soil Dynamics and Earthquake Engineering, 2022, 152, 107052.	3.8	4
110	Modeling of Infilled Framed Structures. Computational Methods in Applied Sciences (Springer), 2013, , 197-224.	0.3	3
111	Engineering and Design: Most Central Knowledge in Architecture and Engineering Jobs. Leadership and Management in Engineering, 2012, 12, 6-11.	0.3	2
112	Sandâ€“Tire Shred Mixture Performance in Controlling Surface Explosion Hazards That Affect Underground Structures. Applied Sciences (Switzerland), 2021, 11, 11741.	2.5	2
113	Seismic Vulnerability of Ancient Colonnade. , 2016, , 950-974.		1
114	Numerical method for the undamped forced dynamics of steel cable network structures. Structural Engineering and Mechanics, 2006, 23, 449-454.	1.0	1
115	Numerical Modeling of Historic Masonry Structures. , 2016, , 27-68.		1
116	The most central occupation requirements for engineering jobs: engineering education implications. , 2014, , 123-143.		0
117	Assessment of Masonry Structures Based on Analytical Damage Indices. Communications in Computer and Information Science, 2019, , 513-531.	0.5	0