Amir H Alavi

List of Publications by Citations

172 papers	10,559 citations	48 h-index	100 g-index
188 ext. papers	12,585 ext. citations	4.5 avg, IF	7.11 L-index

#	Paper	IF	Citations
172	Cuckoo search algorithm: a metaheuristic approach to solve structural optimization problems. *Engineering With Computers*, **2013**, 29, 17-35	4.5	1163
171	Krill herd: A new bio-inspired optimization algorithm. *Communications in Nonlinear Science and Numerical Simulation*, **2012**, 17, 4831-4845	3.7	1162
170	Firefly algorithm with chaos. *Communications in Nonlinear Science and Numerical Simulation*, **2013**, 18, 89-98	3.7	558
169	Mixed variable structural optimization using Firefly Algorithm. *Computers and Structures*, **2011**, 89, 2325-2336	4.5	537
168	Machine learning in geosciences and remote sensing. *Geoscience Frontiers*, **2016**, 7, 3-10	6	472
167	Bat algorithm for constrained optimization tasks. *Neural Computing and Applications*, **2013**, 22, 1239-1255	4.8	336
166	An effective krill herd algorithm with migration operator in biogeography-based optimization. *Applied Mathematical Modelling*, **2014**, 38, 2454-2462	4.5	187
165	A new multi-gene genetic programming approach to nonlinear system modeling. Part I: materials and structural engineering problems. *Neural Computing and Applications*, **2012**, 21, 171-187	4.8	179
164	A robust data mining approach for formulation of geotechnical engineering systems. *Engineering Computations*, **2011**, 28, 242-274	1.4	179
163	Stud krill herd algorithm. *Neurocomputing*, **2014**, 128, 363-370	5.4	178
162	Nonlinear Genetic-Based Models for Prediction of Flow Number of Asphalt Mixtures. *Journal of Materials in Civil Engineering*, **2011**, 23, 248-263	3	178
161	Multi-stage genetic programming: A new strategy to nonlinear system modeling. *Information Sciences*, **2011**, 181, 5227-5239	7.7	178
160	Prediction of principal ground-motion parameters using a hybrid method coupling artificial neural networks and simulated annealing. *Computers and Structures*, **2011**, 89, 2176-2194	4.5	160
159	Internet of Things-enabled smart cities: State-of-the-art and future trends. *Measurement: Journal of the International Measurement Confederation*, **2018**, 129, 589-606	4.6	156
158	Chaotic cuckoo search. *Soft Computing*, **2016**, 20, 3349-3362	3.5	153
157	Hybrid krill herd algorithm with differential evolution for global numerical optimization. *Neural Computing and Applications*, **2014**, 25, 297-308	4.8	143
156	Formulation of flow number of asphalt mixes using a hybrid computational method. *Construction and Building Materials*, **2011**, 25, 1338-1355	6.7	132

155	An evolutionary approach for modeling of shear strength of RC deep beams. *Materials and Structures/Materiaux Et Constructions*, **2013**, 46, 2109-2119	3.4	127
154	A new multi-gene genetic programming approach to non-linear system modeling. Part II: geotechnical and earthquake engineering problems. *Neural Computing and Applications*, **2012**, 21, 189-201	4.8	123
153	Opposition-based krill herd algorithm with Cauchy mutation and position clamping. *Neurocomputing*, **2016**, 177, 147-157	5.4	120
152	A new improved krill herd algorithm for global numerical optimization. *Neurocomputing*, **2014**, 138, 392-402	5.4	120
151	A new predictive model for compressive strength of HPC using gene expression programming. *Advances in Engineering Software*, **2012**, 45, 105-114	3.6	119
150	A comprehensive review of krill herd algorithm: variants, hybrids and applications. *Artificial Intelligence Review*, **2019**, 51, 119-148	9.7	106
149	A novel improved accelerated particle swarm optimization algorithm for global numerical optimization. *Engineering Computations*, **2014**, 31, 1198-1220	1.4	102
148	A chaotic particle-swarm krill herd algorithm for global numerical optimization. *Kybernetes*, **2013**, 42, 962-978	2	99
147	An improved NSGA-III algorithm with adaptive mutation operator for Big Data optimization problems. *Future Generation Computer Systems*, **2018**, 88, 571-585	7.5	96
146	A hybrid method based on krill herd and quantum-behaved particle swarm optimization. *Neural Computing and Applications*, **2016**, 27, 989-1006	4.8	94
145	New formulation for compressive strength of CFRP confined concrete cylinders using linear genetic programming. *Materials and Structures/Materiaux Et Constructions*, **2010**, 43, 963-983	3.4	93
144	Behavior of crossover operators in NSGA-III for large-scale optimization problems. *Information Sciences*, **2020**, 509, 470-487	7.7	93
143	Multi expression programming: a new approach to formulation of soil classification. *Engineering With Computers*, **2010**, 26, 111-118	4.5	83
142	A new hybrid method based on krill herd and cuckoo search for global optimisation tasks. *International Journal of Bio-Inspired Computation*, **2016**, 8, 286	2.9	82
141	A hybrid computational approach to derive new ground-motion prediction equations. *Engineering Applications of Artificial Intelligence*, **2011**, 24, 717-732	7.2	78
140	Novel Approach to Strength Modeling of Concrete under Triaxial Compression. *Journal of Materials in Civil Engineering*, **2012**, 24, 1132-1143	3	75
139	A new prediction model for the load capacity of castellated steel beams. *Journal of Constructional Steel Research*, **2011**, 67, 1096-1105	3.8	74
138	An intelligent structural damage detection approach based on self-powered wireless sensor data. *Automation in Construction*, **2016**, 62, 24-44	9.6	73

137	Energy-based numerical models for assessment of soil liquefaction. *Geoscience Frontiers*, **2012**, 3, 541-556	6	73
136	Empirical modeling of plate load test moduli of soil via gene expression programming. *Computers and Geotechnics*, **2011**, 38, 281-286	4.4	73
135	Metaheuristic Algorithms in Modeling and Optimization **2013**, 1-24		71
134	Modeling of maximum dry density and optimum moisture content of stabilized soil using artificial neural networks. *Journal of Plant Nutrition and Soil Science*, **2010**, 173, 368-379	2.3	69
133	Elephant Herding Optimization: Variants, Hybrids, and Applications. *Mathematics*, **2020**, 8, 1415	2.3	67
132	Monarch butterfly optimization: A comprehensive review. *Expert Systems With Applications*, **2021**, 168, 114418	7.8	67
131	Permanent deformation analysis of asphalt mixtures using soft computing techniques. *Expert Systems With Applications*, **2011**, 38, 6081-6100	7.8	64
130	Nonlinear modeling of shear strength of SFRC beams using linear genetic programming. *Structural Engineering and Mechanics*, **2011**, 38, 1-25		64
129	Continuous health monitoring of pavement systems using smart sensing technology. *Construction and Building Materials*, **2016**, 114, 719-736	6.7	64
128	Learning-based elephant herding optimization algorithm for solving numerical optimization problems. *Knowledge-Based Systems*, **2020**, 195, 105675	7.3	50
127	Genetic programming and orthogonal least squares: a hybrid approach to modeling the compressive strength of CFRP-confined concrete cylinders. *Journal of Mechanics of Materials and Structures*, **2010**, 5, 735-753	1.2	49
126	Detection of fatigue cracking in steel bridge girders: A support vector machine approach. *Archives of Civil and Mechanical Engineering*, **2017**, 17, 609-622	3.4	48
125	Formulation of shear strength of slender RC beams using gene expression programming, part I: Without shear reinforcement. *Automation in Construction*, **2014**, 42, 112-121	9.6	48
124	Krill herd algorithm for optimum design of truss structures. *International Journal of Bio-Inspired Computation*, **2013**, 5, 281	2.9	47
123	New machine learning-based prediction models for fracture energy of asphalt mixtures. *Measurement: Journal of the International Measurement Confederation*, **2019**, 135, 438-451	4.6	46
122	Design equations for prediction of pressuremeter soil deformation moduli utilizing expression programming systems. *Neural Computing and Applications*, **2013**, 23, 1771-1786	4.8	43
121	Genetic-based modeling of uplift capacity of suction caissons. *Expert Systems With Applications*, **2011**, 38, 12608-12618	7.8	43
120	Towards automatic detection of atrial fibrillation: A hybrid computational approach. *Computers in Biology and Medicine*, **2010**, 40, 919-30	7	42

119	Damage detection using self-powered wireless sensor data: An evolutionary approach. *Measurement: Journal of the International Measurement Confederation*, **2016**, 82, 254-283	4.6	41
118	L□y-Flight Krill Herd Algorithm. *Mathematical Problems in Engineering*, **2013**, 2013, 1-14	1.1	41
117	An overview of smartphone technology for citizen-centered, real-time and scalable civil infrastructure monitoring. *Future Generation Computer Systems*, **2019**, 93, 651-672	7.5	41
116	An evolutionary computational approach for formulation of compression index of fine-grained soils. *Engineering Applications of Artificial Intelligence*, **2014**, 33, 58-68	7.2	40
115	A Multi-Stage Krill Herd Algorithm for Global Numerical Optimization. *International Journal on Artificial Intelligence Tools*, **2016**, 25, 1550030	0.9	39
114	Linear genetic programming for shear strength prediction of reinforced concrete beams without stirrups. *Applied Soft Computing Journal*, **2014**, 19, 112-120	7.5	38
113	Fatigue cracking detection in steel bridge girders through a self-powered sensing concept. *Journal of Constructional Steel Research*, **2017**, 128, 19-38	3.8	38
112	Formulation of elastic modulus of concrete using linear genetic programming. *Journal of Mechanical Science and Technology*, **2010**, 24, 1273-1278	1.6	36
111	Buckling analysis of graphene-reinforced mechanical metamaterial beams with periodic webbing patterns. *International Journal of Engineering Science*, **2018**, 131, 1-18	5.7	36
110	An empirical model for shear capacity of RC deep beams using genetic-simulated annealing. *Archives of Civil and Mechanical Engineering*, **2013**, 13, 354-369	3.4	33
109	New Ground-Motion Prediction Equations Using Multi Expression Programing. *Journal of Earthquake Engineering*, **2011**, 15, 511-536	1.8	33
108	Piezoelectric Sensing Techniques in Structural Health Monitoring: A State-of-the-Art Review. *Sensors*, **2020**, 20,	3.8	33
107	New prediction models for concrete ultimate strength under true-triaxial stress states: An evolutionary approach. *Advances in Engineering Software*, **2017**, 110, 55-68	3.6	32
106	Behavior appraisal of steel semi-rigid joints using Linear Genetic Programming. *Journal of Constructional Steel Research*, **2009**, 65, 1738-1750	3.8	32
105	A´web server for comparative analysis of single-cell RNA-seq data. *Nature Communications*, **2018**, 9, 4768	17.4	32
104	Explicit formulation of bearing capacity of shallow foundations on rock masses using artificial neural networks: application and supplementary studies. *Environmental Earth Sciences*, **2015**, 73, 3417-3431	2.9	31
103	Formulation of shear strength of slender RC beams using gene expression programming, part II: With shear reinforcement. *Measurement: Journal of the International Measurement Confederation*, **2017**, 95, 367-376	4.6	29
102	Formulation of uplift capacity of suction caissons using multi expression programming. *KSCE Journal of Civil Engineering*, **2011**, 15, 363-373	1.9	29

101	Numerical modeling of stress–strain behavior of sand under cyclic loading. *Engineering Geology*, **2010**, 116, 53-72	6	28
100	Modeling of compressive strength of HPC mixes using a combined algorithm of genetic programming and orthogonal least squares. *Structural Engineering and Mechanics*, **2010**, 36, 225-241		27
99	New design equations for estimation of ultimate bearing capacity of shallow foundations resting on rock masses. *Geoscience Frontiers*, **2016**, 7, 91-99	6	26
98	A new approach for damage detection in asphalt concrete pavements using battery-free wireless sensors with non-constant injection rates. *Measurement: Journal of the International Measurement Confederation*, **2017**, 110, 217-229	4.6	25
97	Artificial intelligence in seismology: Advent, performance and future trends. *Geoscience Frontiers*, **2020**, 11, 739-744	6	25
96	Development of prediction models for shear strength of SFRCB using a machine learning approach. *Neural Computing and Applications*, **2019**, 31, 2085-2094	4.8	24
95	Structural health monitoring of steel frames using a network of self-powered strain and acceleration sensors: A numerical study. *Automation in Construction*, **2018**, 85, 344-357	9.6	24
94	Numerical modeling of concrete strength under multiaxial confinement pressures using linear genetic programming. *Automation in Construction*, **2013**, 36, 136-144	9.6	22
93	Nonlinear neural-based modeling of soil cohesion intercept. *KSCE Journal of Civil Engineering*, **2011**, 15, 831-840	1.9	22
92	Prediction of maximum dry density and optimum moisture content of stabilised soil using RBF neural networks. *IES Journal Part A: Civil and Structural Engineering*, **2009**, 2, 98-106		22
91	A self-powered surface sensing approach for detection of bottom-up cracking in asphalt concrete pavements: Theoretical/numerical modeling. *Construction and Building Materials*, **2017**, 144, 728-746	6.7	21
90	AN INTRODUCTION OF KRILL HERD ALGORITHM FOR ENGINEERING OPTIMIZATION. *Journal of Civil Engineering and Management*, **2015**, 22, 302-310	3	21
89	Deriving an intelligent model for soil compression index utilizing multi-gene genetic programming. *Environmental Earth Sciences*, **2016**, 75, 1	2.9	20
88	A comprehensive review of self-powered sensors in civil infrastructure: State-of-the-art and future research trends. *Engineering Structures*, **2021**, 234, 111963	4.7	20
87	Post-buckling response of non-uniform cross-section bilaterally constrained beams. *Mechanics Research Communications*, **2016**, 78, 42-50	2.2	20
86	New machine learning prediction models for compressive strength of concrete modified with glass cullet. *Engineering Computations*, **2019**, 36, 876-898	1.4	19
85	High-precision modeling of uplift capacity of suction caissons using a hybrid computational method. *Geomechanics and Engineering*, **2010**, 2, 253-280		19
84	Internet of things-based fog and cloud computing technology for smart traffic monitoring. *Internet of Things (Netherlands)*, **2021**, 14, 100175	6.9	19

83	Nonlinear genetic-based simulation of soil shear strength parameters. *Journal of Earth System Science*, **2011**, 120, 1001-1022	1.8	18
82	Real-Time Detection of Cracks on Concrete Bridge Decks Using Deep Learning in the Frequency Domain. *Engineering*, **2020**, 7, 1786-1786	9.7	18
81	Genetic programming in civil engineering: advent, applications and future trends. *Artificial Intelligence Review*, **2021**, 54, 1863-1885	9.7	18
80	Simulated Annealing-Based Krill Herd Algorithm for Global Optimization. *Abstract and Applied Analysis*, **2013**, 2013, 1-11	0.7	17
79	A Discussion on Genetic programming for retrieving missing information in wave records along the west coast of India[Applied Ocean Research 2007; 29 (3): 99111]. *Applied Ocean Research*, **2008**, 30, 338-339	3.4	16
78	Multifunctional Meta-Tribomaterial Nanogenerators for Energy Harvesting and Active Sensing. *Nano Energy*, **2021**, 86,	17.1	16
77	Smartphone-based molecular sensing for advanced characterization of asphalt concrete materials. *Measurement: Journal of the International Measurement Confederation*, **2020**, 151, 107212	4.6	15
76	Structural Optimization Using Krill Herd Algorithm **2013**, 335-349		14
75	New design equations for assessment of load carrying capacity of castellated steel beams: a machine learning approach. *Neural Computing and Applications*, **2013**, 23, 119-131	4.8	14
74	Mechanical metamaterial piezoelectric nanogenerator (MM-PENG): Design principle, modeling and performance. *Materials and Design*, **2020**, 187, 108214	8.1	14
73	High-performance fiber reinforced concrete as a repairing material to normal concrete structures: Experiments, numerical simulations and a machine learning-based prediction model. *Construction and Building Materials*, **2019**, 223, 1167-1181	6.7	13
72	Self-powered piezo-floating-gate sensors for health monitoring of steel plates. *Engineering Structures*, **2017**, 148, 584-601	4.7	13
71	Applications of Computational Intelligence in Behavior Simulation of Concrete Materials. *Studies in Computational Intelligence*, **2011**, 221-243	0.8	13
70	Discussion on Soft computing approach for real-time estimation of missing wave heights by S.N. Londhe [Ocean Engineering 35 (2008) 10801089]. *Ocean Engineering*, **2010**, 37, 1239-1240	3.9	13
69	Damage growth detection in steel plates: Numerical and experimental studies. *Engineering Structures*, **2016**, 128, 124-138	4.7	13
68	A Shannon entropy approach for structural damage identification based on self-powered sensor data. *Engineering Structures*, **2019**, 200, 109619	4.7	12
67	Robust attenuation relations for peak time-domain parameters of strong ground motions. *Environmental Earth Sciences*, **2012**, 67, 53-70	2.9	12
66	A hybrid computational approach to formulate soil deformation moduli obtained from PLT. *Engineering Geology*, **2011**, 123, 324-332	6	12

65	Artificial intelligence-enabled smart mechanical metamaterials: advent and future trends. *International Materials Reviews*, **2021**, 66, 365-393	16.1	12
64	Expression Programming Techniques for Formulation of Structural Engineering Systems **2013**, 439-455		11
63	Multigene Genetic Programming for Estimation of Elastic Modulus of Concrete. *Mathematical Problems in Engineering*, **2014**, 2014, 1-10	1.1	11
62	Nonlinear modeling of soil deformation modulus through LGP-based interpretation of pressuremeter test results. *Engineering Applications of Artificial Intelligence*, **2012**, 25, 1437-1449	7.2	11
61	Formulation of secant and reloading soil deformation moduli using multi expression programming. *Engineering Computations*, **2012**, 29, 173-197	1.4	11
60	Impact of new multiple twisted tapes on treatment of solar heat exchanger. *European Physical Journal Plus*, **2022**, 137, 1	3.1	11
59	Developing a prediction model for rutting depth of asphalt mixtures using gene expression programming. *Construction and Building Materials*, **2021**, 267, 120543	6.7	11
58	Damage localization and quantification in gusset plates: A battery-free sensing approach. *Structural Control and Health Monitoring*, **2018**, 25, e2158	4.5	10
57	Formulation of soil angle of shearing resistance using a hybrid GP and OLS method. *Engineering With Computers*, **2013**, 29, 37-53	4.5	10
56	A NEW DESIGN EQUATION FOR PREDICTION OF ULTIMATE BEARING CAPACITY OF SHALLOW FOUNDATION ON GRANULAR SOILS. *Journal of Civil Engineering and Management*, **2014**, 19, S78-S90	3	10
55	An innovative approach for modeling of hysteretic energy demand in steel moment resisting frames. *Neural Computing and Applications*, **2014**, 24, 1285-1291	4.8	10
54	Towards the prediction of business failure via computational intelligence techniques. *Expert Systems*, **2011**, 28, 209-226	2.1	10
53	Micro-composite films constrained by irregularly bilateral walls: A size-dependent post-buckling analysis. *Composite Structures*, **2018**, 195, 219-231	5.3	9
52	Error Metrics and Performance Fitness Indicators for Artificial Intelligence and Machine Learning in Engineering and Sciences. *Architecture, Structures and Construction*,1		9
51	Small and large deformation models of post-buckled beams under lateral constraints. *Mathematics and Mechanics of Solids*, **2019**, 24, 386-405	2.3	9
50	A new approach for modeling of flow number of asphalt mixtures. *Archives of Civil and Mechanical Engineering*, **2017**, 17, 326-335	3.4	8
49	An energy harvesting and damage sensing solution based on postbuckling response of nonuniform cross-section beams. *Structural Control and Health Monitoring*, **2018**, 25, e2052	4.5	8
48	An Intelligent Model for the Prediction of Bond Strength of FRP Bars in Concrete: A Soft Computing Approach. *Technologies*, **2019**, 7, 42	2.4	8

47	A data mining approach to compressive strength of CFRP-confined concrete cylinders. *Structural Engineering and Mechanics*, **2010**, 36, 759-783		8
46	A New Structural Health Monitoring Approach Based on Smartphone Measurements of Magnetic Field Intensity. *IEEE Instrumentation and Measurement Magazine*, **2021**, 24, 49-58	1.4	8
45	Next-Generation Models for Evaluation of the Flow Number of Asphalt Mixtures. *International Journal of Geomechanics*, **2015**, 15, 04015009	3.1	7
44	A Hybrid PBIL-Based Krill Herd Algorithm **2015**,		7
43	Study of Lagrangian and Evolutionary Parameters in Krill Herd Algorithm. *Adaptation, Learning, and Optimization*, **2015**, 111-128	0.7	7
42	A Genetic Programming-Based Approach for the Performance Characteristics Assessment of Stabilized Soil **2012**, 343-376		7
41	A new approach for crack detection in plate structures using an integrated extended finite element and enhanced vibrating particles system optimization methods. *Structures*, **2021**, 29, 638-651	3.4	7
40	Multifunctional Triboelectric Nanogenerator-enabled Structural Elements for Next Generation Civil Infrastructure Monitoring Systems.. *Advanced Functional Materials*, **2021**, 31, 2105825	15.6	7
39	A Novel Cuckoo Search with Chaos Theory and Elitism Scheme **2014**,		6
38	A computational intelligence-based approach for short-term traffic flow prediction. *Expert Systems*, **2010**, 29, no-no	2.1	6
37	A new hybrid method based on krill herd and cuckoo search for global optimisation tasks. *International Journal of Bio-Inspired Computation*, **2016**, 8, 286	2.9	6
36	Size-dependent buckling instability and recovery of beam-like, architected microstructures. *Materials and Design*, **2019**, 162, 405-417	8.1	6
35	Comment on Sivapragasam C, Maheswaran R, Venkatesh V. 2008. Genetic programming approach for flood routing in natural channels. Hydrological Processes 22: 623628 *Hydrological Processes*, **2010**, 24, 798-799	3.3	5
34	Self-charging and self-monitoring smart civil infrastructure systems: current practice and future trends **2019**,		5
33	A Hybrid Meta-Heuristic Method Based on Firefly Algorithm and Krill Herd. *Advances in Computer and Electrical Engineering Book Series*, **2016**, 505-524	0.3	5
32	An energy harvesting solution based on the post-buckling response of non-prismatic slender beams **2017**,		4
31	Magnetic capsulate triboelectric nanogenerators.. *Scientific Reports*, **2022**, 12, 89	4.9	4
30	Integration of a prototype wireless communication system with micro-electromechanical temperature and humidity sensor for concrete pavement health monitoring. *Cogent Engineering*, **2015**, 2, 1014278	1.5	3

29	Evolutionary computation for design and characterization of nanoscale metastructures. *Applied Materials Today*, **2020**, 21, 100816	6.6	3
28	A Novel Data Reduction Approach for Structural Health Monitoring Systems. *Sensors*, **2019**, 19,	3.8	3
27	Bond strength prediction of FRP-bar reinforced concrete **2019**,		3
26	An optimal event-triggered tracking control for battery-based wireless sensor networks **2016**,		3
25	A deep learning approach to predict Hamburg rutting curve. *Road Materials and Pavement Design*, **2021**, 22, 2159-2180	2.6	3
24	Structural health monitoring using a hybrid network of self-powered accelerometer and strain sensors **2017**,		2
23	A new method for detection of fatigue cracking in steel bridge girders using self-powered wireless sensors **2017**,		2
22	Discussion on Prediction of shear strength parameters of soils using artificial neural networks and multivariate regression methods *Engineering Geology*, **2012**, 137-138, 107-108	6	2
21	THE NEXT-GENERATION CONSTITUTIVE CORRELATIONS FOR SIMULATION OF CYCLIC STRESS-STRAIN BEHAVIOUR OF SAND. *Journal of Civil Engineering and Management*, **2014**, 21, 31-44	3	2
20	Discussion on Models to predict the deformation modulus and the coefficient of subgrade reaction for earth filling structures by Ismail Diner [Adv. Eng. Software 42 (2011) 160171]. *Advances in Engineering Software*, **2012**, 52, 44-46	3.6	2
19	Real time substation distributed control system simulator development based on IEC 61850 standard for a sample substation (case study: Sheikh bahayi substation 400/230/63KV) **2013**,		2
18	Damage Detection in Pavement Structures Using Self-powered Sensors. *RILEM Bookseries*, **2016**, 665-671	0.5	2
17	Next-generation remote sensing and prediction of sand and dust storms: State-of-the-art and future trends. *International Journal of Remote Sensing*, **2021**, 42, 5277-5316	3.1	2
16	Studying the Feasibility of Postoperative Monitoring of Spinal Fusion Progress Using a Self-powered Fowler-Nordheim Sensor-Data-Logger. *IEEE Transactions on Biomedical Engineering*, **2021**, PP,	5	2
15	Patient-Specific Self-Powered Metamaterial Implants for Detecting Bone Healing Progress. *Advanced Functional Materials*,2203533	15.6	2
14	Verification of data integrity and co-operative loss recovery for secure data storage in cloud computing. *Cogent Engineering*, **2019**, 6, 1654694	1.5	1
13	Prediction of the Vaccine-derived Poliovirus Outbreak Incidence: A Hybrid Machine Learning Approach. *Scientific Reports*, **2020**, 10, 5058	4.9	1
12	Electrochemical study of the inhibition effect of cow bone ash on the corrosion resistance of mild steel in artificial concrete pore solution. *Cogent Engineering*, **2019**, 6, 1644710	1.5	1

11	A novel self-powered approach for structural health monitoring **2015**,		1
10	A molecular sensing method integrated with support vector machines to characterize asphalt mixtures. *Measurement: Journal of the International Measurement Confederation*, **2021**, 179, 109528	4.6	1
9	An explainable prediction framework for engineering problems: case studies in reinforced concrete members modeling. *Engineering Computations*, **2021**, ahead-of-print,	1.4	1
8	Structural damage detection using rate of total energy. *Measurement: Journal of the International Measurement Confederation*, **2019**, 133, 91-98	4.6	1
7	Advanced multifunctional structures for future smart cities **2022**, 29-52		1
6	Advanced sensing and monitoring systems for smart cities **2022**, 1-26		0
5	Reply to Comments on Empirical modelling of plate load test moduli of soil via gene expression programming by Ali Mollahasani, Amir Hossein Alavi, Amir Hossein Gandomi [Computers and Geotechnics 38 (2011) 281286]. *Computers and Geotechnics*, **2012**, 39, 73-74	4.4	
4	Discussion on Predicting the shear strength of reinforced concrete beams using artificial neural networks by M.Y. Mansour, M. Dicleli, J.Y. Lee, J. Zhang [Eng Struct 26 (2004) 781799]. *Engineering Structures*, **2009**, 31, 2801	4.7	
3	Discussion on Alternative data-driven methods to estimate wind from waves by inverse modeling by Mansi Daga, M. C. Deo [Natural Hazards (2008) NHAZ 524, Article 9299, DOI 10.1007/s11069-008-9299-2]. *Natural Hazards*, **2010**, 52, 671-673	3	
2	An enhanced adaptive global-best harmony search algorithm for continuous optimization problems. *Engineering Reports*, **2020**, 2, e12264	1.2	
1	Metaheuristics in Reliability and Risk Analysis. *ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering*, **2018**, 4, 02018001	1.7	