Ayaz Ahmad

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/10103869/publications.pdf

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34	1,713	218592	377752
papers	citations	26 h-index	34 g-index

34	34	34	275
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Predicting the compressive strength of concrete with fly ash admixture using machine learning algorithms. Construction and Building Materials, 2021, 308, 125021.	3.2	166
2	Prediction of Compressive Strength of Fly Ash Based Concrete Using Individual and Ensemble Algorithm. Materials, 2021, 14, 794.	1.3	130
3	Compressive Strength Prediction via Gene Expression Programming (GEP) and Artificial Neural Network (ANN) for Concrete Containing RCA. Buildings, 2021, 11, 324.	1.4	107
4	Effect of Coconut Fiber Length and Content on Properties of High Strength Concrete. Materials, 2020, 13, 1075.	1.3	101
5	Comparative Study of Supervised Machine Learning Algorithms for Predicting the Compressive Strength of Concrete at High Temperature. Materials, 2021, 14, 4222.	1.3	83
6	Compressive strength prediction of fly ash-based geopolymer concrete via advanced machine learning techniques. Case Studies in Construction Materials, 2022, 16, e00840.	0.8	74
7	Application of Advanced Machine Learning Approaches to Predict the Compressive Strength of Concrete Containing Supplementary Cementitious Materials. Materials, 2021, 14, 5762.	1.3	67
8	Plastic Waste Management Strategies and Their Environmental Aspects: A Scientometric Analysis and Comprehensive Review. International Journal of Environmental Research and Public Health, 2022, 19, 4556.	1.2	66
9	Application of Novel Machine Learning Techniques for Predicting the Surface Chloride Concentration in Concrete Containing Waste Material. Materials, 2021, 14, 2297.	1.3	64
10	Potential use of recycled plastic and rubber aggregate in cementitious materials for sustainable construction: A review. Journal of Cleaner Production, 2021, 329, 129736.	4.6	58
11	An Experimental and Empirical Study on the Use of Waste Marble Powder in Construction Material. Materials, 2021, 14, 3829.	1.3	57
12	Prediction of Geopolymer Concrete Compressive Strength Using Novel Machine Learning Algorithms. Polymers, 2021, 13, 3389.	2.0	52
13	Predicting the Mechanical Properties of RCA-Based Concrete Using Supervised Machine Learning Algorithms. Materials, 2022, 15, 647.	1.3	50
14	A scientometric review of waste material utilization in concrete for sustainable construction. Case Studies in Construction Materials, 2021, 15, e00683.	0.8	48
15	Machine Learning Prediction Models to Evaluate the Strength of Recycled Aggregate Concrete. Materials, 2022, 15, 2823.	1.3	46
16	Application of Soft Computing Techniques to Predict the Strength of Geopolymer Composites. Polymers, 2022, 14, 1074.	2.0	43
17	Analyzing the Compressive Strength of Ceramic Waste-Based Concrete Using Experiment and Artificial Neural Network (ANN) Approach. Materials, 2021, 14, 4518.	1.3	41
18	Computation of High-Performance Concrete Compressive Strength Using Standalone and Ensembled Machine Learning Techniques. Materials, 2021, 14, 7034.	1.3	39

#	Article	IF	Citations
19	Evaluation of Artificial Intelligence Methods to Estimate the Compressive Strength of Geopolymers. Gels, 2022, 8, 271.	2.1	39
20	A systematic review of waste materials in cement-based composites for construction applications. Journal of Building Engineering, 2022, 45, 103447.	1.6	38
21	Comparison of Prediction Models Based on Machine Learning for the Compressive Strength Estimation of Recycled Aggregate Concrete. Materials, 2022, 15, 3430.	1.3	38
22	Sustainable approach of using sugarcane bagasse ash in cement-based composites: A systematic review. Case Studies in Construction Materials, 2021, 15, e00698.	0.8	35
23	A comprehensive overview of geopolymer composites: A bibliometric analysis and literature review. Case Studies in Construction Materials, 2022, 16, e00830.	0.8	32
24	Comparative Study of Experimental and Modeling of Fly Ash-Based Concrete. Materials, 2022, 15, 3762.	1.3	32
25	A scientometric analysis approach to analyze the present research on recycled aggregate concrete. Journal of Building Engineering, 2022, 46, 103679.	1.6	31
26	Potential use of waste eggshells in cement-based materials: A bibliographic analysis and review of the material properties. Construction and Building Materials, 2022, 344, 128143.	3.2	29
27	Predicting the Splitting Tensile Strength of Recycled Aggregate Concrete Using Individual and Ensemble Machine Learning Approaches. Crystals, 2022, 12, 569.	1.0	23
28	Assessment of Artificial Intelligence Strategies to Estimate the Strength of Geopolymer Composites and Influence of Input Parameters. Polymers, 2022, 14, 2509.	2.0	23
29	Exploring the Use of Waste Marble Powder in Concrete and Predicting Its Strength with Different Advanced Algorithms. Materials, 2022, 15, 4108.	1.3	21
30	A Comprehensive Review of Types, Properties, Treatment Methods and Application of Plant Fibers in Construction and Building Materials. Materials, 2022, 15, 4362.	1.3	20
31	Prediction of Compressive Strength of Fly-Ash-Based Concrete Using Ensemble and Non-Ensemble Supervised Machine-Learning Approaches. Applied Sciences (Switzerland), 2022, 12, 361.	1.3	18
32	Split Tensile Strength Prediction of Recycled Aggregate-Based Sustainable Concrete Using Artificial Intelligence Methods. Materials, 2022, 15, 4296.	1.3	18
33	A Systematic Review of the Research Development on the Application of Machine Learning for Concrete. Materials, 2022, 15, 4512.	1.3	14
34	Comparative study of evolutionary artificial intelligence approaches to predict the rheological properties of fresh concrete. Materials Today Communications, 2022, 32, 103964.	0.9	10