

# Rawaz Kurda

## List of Publications by Year in descending order

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125  
papers

7,477  
citations

44069

48  
h-index

58581

82  
g-index

128  
all docs

128  
docs citations

128  
times ranked

4118  
citing authors

#	ARTICLE	IF	CITATIONS
1	Concrete made with used tyre aggregate: durability-related performance. Journal of Cleaner Production, 2012, 25, 42-50.	9.3	284
2	Establishing a relationship between modulus of elasticity and compressive strength of recycled aggregate concrete. Journal of Cleaner Production, 2016, 112, 2171-2186.	9.3	276
3	Influence of the pre-saturation of recycled coarse concrete aggregates on concrete properties. Magazine of Concrete Research, 2011, 63, 617-627.	2.0	264
4	Evaluation of the durability of concrete made with crushed glass aggregates. Journal of Cleaner Production, 2013, 41, 7-14.	9.3	255
5	Durability performance of concrete with recycled aggregates from construction and demolition waste plants. Construction and Building Materials, 2015, 77, 357-369.	7.2	246
6	Effect of incorporation of high volume of recycled concrete aggregates and fly ash on the strength and global warming potential of concrete. Journal of Cleaner Production, 2017, 166, 485-502.	9.3	230
7	Water absorption and electrical resistivity of concrete with recycled concrete aggregates and fly ash. Cement and Concrete Composites, 2019, 95, 169-182.	10.7	204
8	Structural concrete with incorporation of coarse recycled concrete and ceramic aggregates: durability performance. Materials and Structures/Materiaux Et Constructions, 2009, 42, 663-675.	3.1	201
9	Comparative environmental life cycle assessment of thermal insulation materials of buildings. Energy and Buildings, 2014, 82, 466-481.	6.7	192
10	Economic viability analysis of a construction and demolition waste recycling plant in Portugal – part I: location, materials, technology and economic analysis. Journal of Cleaner Production, 2013, 39, 338-352.	9.3	191
11	The past and future of sustainable concrete: A critical review and new strategies on cement-based materials. Journal of Cleaner Production, 2021, 281, 123558.	9.3	181
12	Compared environmental and economic impact from cradle to gate of concrete with natural and recycled coarse aggregates. Journal of Cleaner Production, 2017, 162, 529-543.	9.3	177
13	Life cycle assessment of concrete made with high volume of recycled concrete aggregates and fly ash. Resources, Conservation and Recycling, 2018, 139, 407-417.	10.8	175
14	Influence of water-reducing admixtures on the mechanical performance of recycled concrete. Journal of Cleaner Production, 2013, 59, 93-98.	9.3	173
15	Influence of curing conditions on the mechanical performance of concrete containing recycled plastic aggregate. Construction and Building Materials, 2012, 36, 196-204.	7.2	159
16	Construction and demolition waste indicators. Waste Management and Research, 2013, 31, 241-255.	3.9	149
17	Study of the rheology of self-compacting concrete with fine recycled concrete aggregates. Construction and Building Materials, 2015, 96, 491-501.	7.2	147
18	Durability performance of structural concrete containing silica fume and marble industry waste powder. Journal of Cleaner Production, 2018, 170, 42-60.	9.3	129

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19	Influence of recycled aggregates and high contents of fly ash on concrete fresh properties. Cement and Concrete Composites, 2017, 84, 198-213.	10.7	127
20	Mechanical, environmental and economic performance of structural concrete containing silica fume and marble industry waste powder. Construction and Building Materials, 2018, 169, 237-251.	7.2	119
21	Environmental life cycle assessment of coarse natural and recycled aggregates for concrete. European Journal of Environmental and Civil Engineering, 2018, 22, 429-449.	2.1	118
22	Combined influence of recycled concrete aggregates and high contents of fly ash on concrete properties. Construction and Building Materials, 2017, 157, 554-572.	7.2	105
23	Physico-mechanical and performance characterization of mortars incorporating fine glass waste aggregate. Cement and Concrete Composites, 2014, 50, 47-59.	10.7	102
24	Improving corrosion resistance of steel rebars in concrete with marble and granite waste dust as partial cement replacement. Construction and Building Materials, 2018, 185, 110-119.	7.2	86
25	High-performance concrete with recycled stone slurry. Cement and Concrete Research, 2007, 37, 210-220.	11.0	85
26	Mechanical and durability behaviour of concrete with granite waste dust as partial cement replacement under adverse exposure conditions. Construction and Building Materials, 2019, 194, 143-152.	7.2	80
27	Increased Durability of Concrete Made with Fine Recycled Concrete Aggregates Using Superplasticizers. Materials, 2016, 9, 98.	2.9	79
28	Environmental and economic benefits of steel, glass, and polypropylene fiber reinforced cement composite application in jointed plain concrete pavement. Composites Communications, 2020, 22, 100437.	6.3	76
29	Toxicity and environmental and economic performance of fly ash and recycled concrete aggregates use in concrete: A review. Heliyon, 2018, 4, e00611.	3.2	74
30	A new method to determine the density and water absorption of fine recycled aggregates. Materials Research, 2013, 16, 1045-1051.	1.3	70
31	Multi-criteria optimization of recycled aggregate concrete mixes. Journal of Cleaner Production, 2020, 276, 124316.	9.3	70
32	Optimizing recycled concrete containing high volume of fly ash in terms of the embodied energy and chloride ion resistance. Journal of Cleaner Production, 2018, 194, 735-750.	9.3	68
33	Effect of magnetized water on foam stability and compressive strength of foam concrete. Construction and Building Materials, 2019, 197, 280-290.	7.2	66
34	Prediction of Chloride Ion Penetration of Recycled Aggregate Concrete. Materials Research, 2015, 18, 427-440.	1.3	64
35	Carbonation of concrete made with high amount of fly ash and recycled concrete aggregates for utilization of CO <sub>2</sub> . Journal of CO <sub>2</sub> Utilization, 2019, 29, 12-19.	6.8	64
36	Transportation matters – Does it? GIS-based comparative environmental assessment of concrete mixes with cement, fly ash, natural and recycled aggregates. Resources, Conservation and Recycling, 2018, 137, 1-10.	10.8	63

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37	Application of statistical analysis to evaluate the corrosion resistance of steel rebars embedded in concrete with marble and granite waste dust. Journal of Cleaner Production, 2019, 210, 837-846.	9.3	63
38	ANN, M5P-tree and nonlinear regression approaches with statistical evaluations to predict the compressive strength of cement-based mortar modified with fly ash. Journal of Materials Research and Technology, 2020, 9, 12416-12427.	5.8	63
39	From the new European Standards to an environmental, energy and economic assessment of building assemblies from cradle-to-cradle (3E-C2C). Energy and Buildings, 2013, 64, 199-208.	6.7	60
40	Effect of crushed concrete waste's maximum size as partial replacement of natural coarse aggregate on the mechanical and durability properties of concrete. Resources, Conservation and Recycling, 2019, 149, 664-673.	10.8	57
41	Synergistic effects of fly ash and hooked steel fibers on strength and durability properties of high strength recycled aggregate concrete. Resources, Conservation and Recycling, 2021, 168, 105444.	10.8	56
42	NativeLCA - a systematic approach for the selection of environmental datasets as generic data: application to construction products in a national context. International Journal of Life Cycle Assessment, 2015, 20, 731-750.	4.7	55
43	Punching behaviour of concrete slabs incorporating coarse recycled concrete aggregates. Engineering Structures, 2015, 100, 238-248.	5.3	54
44	Generation of construction and demolition waste in Portugal. Waste Management and Research, 2011, 29, 739-750.	3.9	53
45	Effect of Varying Steel Fiber Content on Strength and Permeability Characteristics of High Strength Concrete with Micro Silica. Materials, 2020, 13, 5739.	2.9	53
46	Soft computing techniques: Systematic multiscale models to predict the compressive strength of HVFA concrete based on mix proportions and curing times. Journal of Building Engineering, 2021, 33, 101851.	3.4	52
47	Indirect evaluation of the compressive strength of recycled aggregate concrete with high fly ash ratios. Magazine of Concrete Research, 2018, 70, 204-216.	2.0	51
48	Combined Economic and Mechanical Performance Optimization of Recycled Aggregate Concrete with High Volume of Fly Ash. Applied Sciences (Switzerland), 2018, 8, 1189.	2.5	50
49	Assessment and communication of the environmental performance of construction products in Europe: Comparison between PEF and EN 15804 compliant EPD schemes. Resources, Conservation and Recycling, 2020, 156, 104703.	10.8	50
50	Demolition waste generation for development of a regional management chain model. Waste Management, 2016, 49, 156-169.	7.4	49
51	A comparative study of the mechanical and life cycle assessment of high-content fly ash and recycled aggregates concrete. Journal of Building Engineering, 2020, 29, 101173.	3.4	46
52	CONCRETOP - A multi-criteria decision method for concrete optimization. Environmental Impact Assessment Review, 2019, 74, 73-85.	9.2	45
53	Mechanical characteristics of pumice-based geopolymer paste. Resources, Conservation and Recycling, 2020, 162, 105055.	10.8	42
54	Methodology for the Assessment of the Ecotoxicological Potential of Construction Materials. Materials, 2017, 10, 649.	2.9	40

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55	Current status on the use of recycled aggregates in concrete: Where do we go from here?. RILEM Technical Letters, 0, 1, 1-5.	0.0	40
56	Comparative life cycle assessment between imported and recovered fly ash for blended cement concrete in the UK. Journal of Cleaner Production, 2020, 244, 118722.	9.3	39
57	Effect of Magnetized Water on the Mechanical and Durability Properties of Concrete Block Pavers. Materials, 2018, 11, 1647.	2.9	38
58	Can We Truly Predict the Compressive Strength of Concrete without Knowing the Properties of Aggregates?. Applied Sciences (Switzerland), 2018, 8, 1095.	2.5	38
59	Electrical resistivity and capillarity of self-compacting concrete with incorporation of fly ash and limestone filler. Advances in Concrete Construction, 2013, 1, 65-84.	0.4	38
60	Shrinkage and creep performance of concrete with recycled aggregates from CDW plants. Magazine of Concrete Research, 2017, 69, 974-995.	2.0	37
61	Mechanical Characterization of Concrete Reinforced with Different Types of Carbon Nanotubes. Arabian Journal for Science and Engineering, 2019, 44, 8361-8376.	3.0	36
62	Mechanical and Durability Properties of Concrete with Coarse Recycled Aggregate Produced with Electric Arc Furnace Slag Concrete. Applied Sciences (Switzerland), 2020, 10, 216.	2.5	35
63	Evaluation of high-performance self-compacting concrete using alternative materials and exposed to elevated temperatures by non-destructive testing. Journal of Building Engineering, 2020, 32, 101720.	3.4	33
64	The effect of high temperature on the residual mechanical performance of concrete made with recycled ceramic coarse aggregates. Fire and Materials, 2016, 40, 289-304.	2.0	32
65	Dynamic characterization of full-scale structures made with recycled coarse aggregates. Journal of Cleaner Production, 2017, 142, 4195-4205.	9.3	32
66	Enhancing the Hardened Properties of Recycled Concrete (RC) through Synergistic Incorporation of Fiber Reinforcement and Silica Fume. Materials, 2020, 13, 4112.	2.9	32
67	Abrasion resistance of concrete made with recycled aggregates. International Journal of Sustainable Engineering, 2010, 3, 58-64.	3.5	31
68	CONCRETOP method: Optimization of concrete with various incorporation ratios of fly ash and recycled aggregates in terms of quality performance and life-cycle cost and environmental impacts. Journal of Cleaner Production, 2019, 226, 642-657.	9.3	31
69	Effect of magnetized mixing water on the fresh and hardened state properties of steel fibre reinforced self-compacting concrete. Construction and Building Materials, 2020, 248, 118660.	7.2	31
70	Modeling Flexural and Compressive Strengths Behaviour of Cement-Grouted Sands Modified with Water Reducer Polymer. Applied Sciences (Switzerland), 2022, 12, 1016.	2.5	31
71	Assessing the sustainability potential of alkali-activated concrete from electric arc furnace slag using the ECO2 framework. Construction and Building Materials, 2021, 281, 122559.	7.2	30
72	Using statistical analysis and laboratory testing to evaluate the effect of magnetized water on the stability of foaming agents and foam concrete. Construction and Building Materials, 2019, 207, 28-40.	7.2	29

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73	Properties of roller-compacted concrete pavement containing waste aggregates and nano SiO <sub>2</sub> . Construction and Building Materials, 2020, 249, 118747.	7.2	29
74	Mechanical performance and autogenous and drying shrinkage of MgO-based recycled aggregate high-performance concrete. Construction and Building Materials, 2022, 314, 125726.	7.2	29
75	Evaluation of the Ecotoxicological Potential of Fly Ash and Recycled Concrete Aggregates Use in Concrete. Applied Sciences (Switzerland), 2020, 10, 351.	2.5	28
76	Experimental investigation of eco-friendly high strength fiber-reinforced concrete developed with combined incorporation of tyre-steel fiber and fly ash. Construction and Building Materials, 2022, 314, 125626.	7.2	28
77	A whole life cycle performance-based ECONomic and ECOlogical assessment framework (ECO2) for concrete sustainability. Journal of Cleaner Production, 2021, 292, 126060.	9.3	27
78	Evaluation of Mechanical and Permeability Characteristics of Microfiber-Reinforced Recycled Aggregate Concrete with Different Potential Waste Mineral Admixtures. Materials, 2021, 14, 5933.	2.9	27
79	A Critical Review on the Influence of Fine Recycled Aggregates on Technical Performance, Environmental Impact and Cost of Concrete. Applied Sciences (Switzerland), 2020, 10, 1018.	2.5	25
80	Electrical resistivity-Compressive strength predictions for normal strength concrete with waste steel slag as a coarse aggregate replacement using various analytical models. Construction and Building Materials, 2022, 327, 127008.	7.2	25
81	A Systematic Review of the Discrepancies in Life Cycle Assessments of Green Concrete. Applied Sciences (Switzerland), 2019, 9, 4803.	2.5	23
82	Durability performance of dry-mix shotcrete produced with coarse recycled concrete aggregates. Journal of Building Engineering, 2020, 29, 101135.	3.4	22
83	Thermal Performance of Concrete with Recycled Concrete Powder as Partial Cement Replacement and Recycled CDW Aggregate. Applied Sciences (Switzerland), 2020, 10, 4540.	2.5	22
84	Long-term analysis of the physical properties of the mixed recycled aggregate and their effect on the properties of mortars. Construction and Building Materials, 2021, 274, 121796.	7.2	22
85	Comprehensive multiscale techniques to estimate the compressive strength of concrete incorporated with carbon nanotubes at various curing times and mix proportions. Journal of Materials Research and Technology, 2021, 15, 6506-6527.	5.8	22
86	Shrinkage prediction of recycled aggregate structural concrete with alternative binders through partial correction coefficients. Cement and Concrete Composites, 2022, 129, 104506.	10.7	22
87	Life Cycle Assessment of Mortars with Incorporation of Industrial Wastes. Fibers, 2019, 7, 59.	4.0	21
88	Incorporation of Alkali-Activated Municipal Solid Waste Incinerator Bottom Ash in Mortar and Concrete: A Critical Review. Materials, 2020, 13, 3428.	2.9	21
89	Mix design of concrete: Advanced particle packing model by developing and combining multiple frameworks. Construction and Building Materials, 2022, 320, 126218.	7.2	19
90	Influence of forest biomass bottom ashes on the fresh, water and mechanical behaviour of cement-based mortars. Resources, Conservation and Recycling, 2019, 149, 750-759.	10.8	18

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91	Electrical conductivity, microstructures, chemical compositions, and systematic multivariable models to evaluate the effect of waste slag smelting (pyrometallurgical) on the compressive strength of concrete. Environmental Science and Pollution Research, 2022, 29, 68488-68521.	5.3	16
92	Recycled Aggregate Concrete. , 2019, , 365-418.		14
93	Stress-strain behavior, elastic modulus, and toughness of the soilcrete modified with powder polymers. Construction and Building Materials, 2021, 295, 123621.	7.2	14
94	Environmental and Economic Life Cycle Assessment of Recycled Coarse Aggregates: A Portuguese Case Study. Materials, 2021, 14, 5452.	2.9	14
95	Comparison Between Two Nonlinear Models to Predict the Stress–Strain Behavior, Modulus of Elasticity, and Toughness of the Flowable Cement Paste. Iranian Journal of Science and Technology - Transactions of Civil Engineering, 2022, 46, 2131-2145.	1.9	13
96	Life cycle assessment (LCA) of precast concrete blocks utilizing ground granulated blast furnace slag. Environmental Science and Pollution Research, 2022, 29, 83580-83595.	5.3	13
97	Toxicity of Recycled Concrete Aggregates: Review on Leaching Tests. Open Construction and Building Technology Journal, 2018, 12, 187-196.	0.7	12
98	Effect of recycled tyre steel fiber on flexural toughness, residual strength, and chloride permeability of high-performance concrete (HPC). Journal of Sustainable Cement-Based Materials, 2023, 12, 141-157.	3.1	12
99	Simultaneous effect of granite waste dust as partial replacement of cement and magnetized water on the properties of concrete exposed to NaCl and H2SO4 solutions. Construction and Building Materials, 2021, 288, 123064.	7.2	11
100	Behaviour of RC beams strengthened with FRP strips under combined action of torsion and bending. European Journal of Environmental and Civil Engineering, 2022, 26, 4263-4279.	2.1	11
101	Heat-Induced Spalling of Concrete: A Review of the Influencing Factors and Their Importance to the Phenomenon. Materials, 2022, 15, 1693.	2.9	11
102	Effect of reactive magnesium oxide in alkali-activated fly ash mortars exposed to accelerated CO2 curing. Construction and Building Materials, 2022, 342, 127999.	7.2	11
103	Environmental and Economic Comparison of Natural and Recycled Aggregates Using LCA. Recycling, 2022, 7, 43.	5.0	11
104	Influence of the Crushing Process of Recycled Aggregates on Concrete Properties. Key Engineering Materials, 2014, 634, 151-162.	0.4	10
105	Multivariable models to forecast the mechanical properties of polymerized cement paste. Journal of Materials Research and Technology, 2021, 14, 2677-2699.	5.8	10
106	The Influence of Fly Ash on the Mechanical Performance of Cementitious Materials Produced with Recycled Cement. Applied Sciences (Switzerland), 2022, 12, 2257.	2.5	10
107	Equivalent functional unit in recycled aggregate concrete. , 2019, , 293-327.		9
108	Experimental study using ASTM and BS standards and model evaluations to predict the compressive strength of the cement grouted sands modified with polymer. Case Studies in Construction Materials, 2021, 15, e00600.	1.7	9



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109	Performance Enhancement of Alkali-Activated Electric Arc Furnace Slag Mortars through an Accelerated CO <sub>2</sub> Curing Process. Applied Sciences (Switzerland), 2022, 12, 1662.	2.5	9
110	Statistical analysis of Portuguese ready-mixed concrete production. Construction and Building Materials, 2019, 209, 283-294.	7.2	8
111	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
112	Performance of Concrete Made with Recycled Aggregates from Portuguese CDW Recycling Plants. Key Engineering Materials, 2014, 634, 193-205.	0.4	6
113	Eurocode Design of Recycled Aggregate Concrete for Chloride Environments: Stochastic Modeling of Chloride Migration and Reliability-Based Calibration of Cover. Crystals, 2021, 11, 284.	2.2	6
114	Evaluation of alkali-silica reaction in recycled aggregates: The applicability of the mortar bar test. Construction and Building Materials, 2021, 299, 124250.	7.2	6
115	A Review of the Combined Effect of Fibers and Nano Materials on the Technical Performance of Mortar and Concrete. Sustainability, 2022, 14, 3464.	3.2	6
116	Forecasting the mechanical properties of soilcrete using various simulation approaches. Structures, 2021, 34, 653-665.	3.6	4
117	Reliability-based recommendations for EN1992 carbonation cover design of concrete with coarse recycled concrete aggregates. Structural Concrete, 2022, 23, 1873-1889.	3.1	3
118	Special Issue Low Binder Concrete and Mortars. Applied Sciences (Switzerland), 2020, 10, 3866.	2.5	2
119	A Review on the Performance of Concrete Containing Non-Potable Water. Applied Sciences (Switzerland), 2021, 11, 6729.	2.5	2
120	Concrete with High Volume of Recycled Concrete Aggregates and Fly Ash: Shrinkage Behavior Modeling. ACI Materials Journal, 2019, 116, .	0.2	2
121	A proposed performance based approach for life cycle assessment of reinforced blended cement concrete. , 2019, , .		2
122	Calculation of the environmental impact of the integration of industrial waste in concrete using LCA. , 2022, , 553-577.		2
123	Fresh Concrete Properties. , 2019, , 181-218.		1
124	Strength Development of Concrete. , 2019, , 219-282.		1
125	Ecotoxicity of Recycled Aggregates: Application of a Prediction Methodology. Materials, 2022, 15, 3510.	2.9	1