Frank Collins

List of Publications by Year
in descending order

56 papers	6,389 citations	156536 32 h-index	206121 51 g-index
56 all docs	56 docs citations	56 times ranked	4671 citing authors

#	Article	IF	Citations
1	A Porous Stone Technique to Measure the Initial Water Uptake by Supplementary Cementitious Materials. Minerals (Basel, Switzerland), 2021, 11, 1185.	0.8	4
2	Durability Characterisation of Portland Cementâ€"Carbon Nanotube Nanocomposites. Materials, 2020, 13, 4097.	1.3	10
3	On the mechanisms for improved strengths of carbon nanofiber-enriched mortars. Cement and Concrete Research, 2020, 136, 106178.	4.6	29
4	Miniature Resistance Measurement Device for Structural Health Monitoring of Reinforced Concrete Infrastructure. Sensors, 2020, 20, 4313.	2.1	18
5	Enhancing fresh properties and strength of concrete with a pre-dispersed carbon nanotube liquid admixture. Construction and Building Materials, 2020, 247, 118524.	3.2	33
6	Suitability of Remediated PFAS-Affected Soil in Cement Pastes and Mortars. Sustainability, 2020, 12, 4300.	1.6	5
7	A Miniature Device for in-Situ Measurement of Concrete Corrosion. , 2018, , .		2
8	Modeling Steel-Concrete Bond Strength Depletion during Corrosion. ACI Materials Journal, 2018, 115, .	0.3	0
9	Strain ageing effect on the temperature dependent mechanical properties of partially damaged structural mild-steel induced by high strain rate loading. Construction and Building Materials, 2016, 123, 454-463.	3.2	16
10	Distribution of carbon nanotubes in fresh ordinary Portland cement pastes: understanding from a two-phase perspective. RSC Advances, 2016, 6, 5745-5753.	1.7	50
11	Discussion: Effect of strain rate on splitting tensile strength of geopolymer concrete. Magazine of Concrete Research, 2015, 67, 906-907.	0.9	4
12	Effect of strain ageing on the mechanical properties of partially damaged structural mild steel. Construction and Building Materials, 2015, 77, 83-93.	3.2	32
13	Effect of ultrasonication energy on engineering properties of carbon nanotube reinforced cement pastes. Carbon, 2015, 85, 212-220.	5.4	233
14	Mechanical properties and microstructure of a graphene oxideâ€"cement composite. Cement and Concrete Composites, 2015, 58, 140-147.	4.6	623
15	Mechanical behavior of geopolymer concrete subjected to high strain rate compressive loadings. Materials and Structures/Materiaux Et Constructions, 2015, 48, 671-681.	1.3	48
16	Reinforcing Effects of Graphene Oxide on Portland Cement Paste. Journal of Materials in Civil Engineering, 2015, 27, .	1.3	323
17	Effect of transient creep on compressive strength of geopolymer concrete for elevated temperature exposure. Cement and Concrete Research, 2014, 56, 182-189.	4.6	95
18	Predicting the influence of ultrasonication energy on the reinforcing efficiency of carbon nanotubes. Carbon, 2014, 77, 1-10.	5.4	76

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19	Effects of mineral admixtures and lime on disintegration of alkali-activated slag exposed to 50Â°C. Construction and Building Materials, 2014, 70, 254-261.	3.2	14
20	Effect of strain rate on splitting tensile strength of geopolymer concrete. Magazine of Concrete Research, 2014, 66, 825-835.	0.9	42
21	Sensitivity Analysis of Corrosion Rate Prediction Models Utilized for Reinforced Concrete Affected by Chloride. Journal of Materials Engineering and Performance, 2013, 22, 1530-1540.	1.2	15
22	Damping and microstructure of fly ash-based geopolymers. Journal of Materials Science, 2013, 48, 3128-3137.	1.7	28
23	The role of alumina on performance of alkali-activated slag paste exposed to 50Â°C. Cement and Concrete Research, 2013, 54, 143-150.	4.6	28
24	Carbon dioxide equivalent (CO2-e) emissions: A comparison between geopolymer and OPC cement concrete. Construction and Building Materials, 2013, 43, 125-130.	3.2	1,413
25	Effect of very fine particles on workability and strength of concrete made with dune sand. Construction and Building Materials, 2013, 47, 131-137.	3.2	146
26	2nd generation concrete construction: carbon footprint accounting. Engineering, Construction and Architectural Management, 2013, 20, 330-344.	1.8	11
27	Discussion on Properties and Microstructure of Geopolymer Concrete Containing Fly Ash and Recycled Aggregate. Advanced Materials Research, 2012, 450-451, 1577-1583.	0.3	16
28	The influence of water absorption and porosity on the deterioration of cement paste and concrete exposed to elevated temperatures, as in a fire event. Cement and Concrete Composites, 2012, 34, 1067-1074.	4.6	69
29	Mechanical properties and microstructure analysis of fly ash geopolymeric recycled concrete. Journal of Hazardous Materials, 2012, 237-238, 20-29.	6.5	180
30	The influences of admixtures on the dispersion, workability, and strength of carbon nanotubeâ€"OPC paste mixtures. Cement and Concrete Composites, 2012, 34, 201-207.	4.6	358
31	Experimental study on strength and ductility of steel tubular stub columns filled with Geopolymeric Recycled Concrete. , 2012, , 757-764.		0
32	Dispersion of carbon nanotubes with SDS surfactants: a study from a binding energy perspective. Chemical Science, 2011, 2, 1407.	3.7	166
33	Carbon nanotubeâ€"cement composites: A retrospect. IES Journal Part A: Civil and Structural Engineering, 2011, 4, 254-265.	0.4	96
34	Effects of slag and cooling method on the progressive deterioration of concrete after exposure to elevated temperatures as in a fire event. Materials and Structures/Materiaux Et Constructions, 2011, 44, 709-718.	1.3	41
35	NMR, XRD, IR and synchrotron NEXAFS spectroscopic studies of OPC and OPC/slag cement paste hydrates. Materials and Structures/Materiaux Et Constructions, 2011, 44, 1773-1791.	1.3	89
36	Bond Strength Modelling of Corroding Steel Reinforcement in Concrete. Advanced Materials Research, 2011, 255-260, 757-761.	0.3	1

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37	Inclusion of carbonation during the life cycle of built and recycled concrete: influence on their carbon footprint. International Journal of Life Cycle Assessment, 2010, 15, 549-556.	2.2	196
38	Prediction of capillary transport of alkali activated slag cementitious binders under unsaturated conditions by elliptical pore shape modeling. Journal of Porous Materials, 2010, 17, 435-442.	1.3	6
39	Capillary Shape: Influence on Water Transport within Unsaturated Alkali Activated Slag Concrete. Journal of Materials in Civil Engineering, 2010, 22, 260-266.	1.3	23
40	Residual strength properties of sodium silicate alkali activated slag paste exposed to elevated temperatures. Materials and Structures/Materiaux Et Constructions, 2010, 43, 765-773.	1.3	64
41	Residual compressive behavior of alkaliâ€activated concrete exposed to elevated temperatures. Fire and Materials, 2009, 33, 51-62.	0.9	62
42	Prediction of convective transport within unsaturated concrete utilizing pore size distribution data. Journal of Porous Materials, 2009, 16, 651-656.	1.3	6
43	Long-term progressive deterioration following fire exposure of OPC versus slag blended cement pastes. Materials and Structures/Materiaux Et Constructions, 2009, 42, 95-101.	1.3	41
44	Phase transformations and mechanical strength of OPC/Slag pastes submitted to high temperatures. Materials and Structures/Materiaux Et Constructions, 2008, 41, 345-350.	1.3	101
45	Effect of polypropylene fibers on shrinkage and cracking of concretes. Materials and Structures/Materiaux Et Constructions, 2008, 41, 1741-1753.	1.3	84
46	Unsaturated Capillary Flow within Alkali Activated Slag Concrete. Journal of Materials in Civil Engineering, 2008, 20, 565-570.	1.3	23
47	Microcracking and strength development of alkali activated slag concrete. Cement and Concrete Composites, 2001, 23, 345-352.	4.6	231
48	Cracking tendency of alkali-activated slag concrete subjected to restrained shrinkage. Cement and Concrete Research, 2000, 30, 791-798.	4.6	150
49	Effect of pore size distribution on drying shrinking of alkali-activated slag concrete. Cement and Concrete Research, 2000, 30, 1401-1406.	4.6	507
50	Effects of ultra-fine materials on workability and strength of concrete containing alkali-activated slag as the binder. Cement and Concrete Research, 1999, 29, 459-462.	4.6	118
51	Strength and shrinkage properties of alkali-activated slag concrete placed into a large column. Cement and Concrete Research, 1999, 29, 659-666.	4.6	37
52	Strength and shrinkage properties of alkali-activated slag concrete containing porous coarse aggregate. Cement and Concrete Research, 1999, 29, 607-610.	4.6	108
53	Workability and mechanical properties of alkali activated slag concrete. Cement and Concrete Research, 1999, 29, 455-458.	4.6	311
54	Evaluation of concrete spall repairs by pullout test. Materiaux Et Constructions, 1989, 22, 280-286.	0.3	3

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55	Which Rust Deposition Model Should Be Used in Predicting Concrete Cover Cracking due to Reinforcement Corrosion?. Advanced Materials Research, 0, 468-471, 1000-1004.	0.3	1
56	Probabilistic Modelling of the Deterioration of Reinforced Concrete Port Infrastructure. Key Engineering Materials, 0, 569-570, 207-214.	0.4	3