Prabir K Sarker

List of Publications by Year
in descending order

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91 papers	8,805 citations	81743 39 h-index	60497 81 g-index
95 all docs	95 docs citations	95 times ranked	5280 citing authors

#	Article	IF	Citations
1	A comprehensive review on the applications of coal fly ash. Earth-Science Reviews, 2015, 141, 105-121.	4.0	1,206
2	Effect of GGBFS on setting, workability and early strength properties of fly ash geopolymer concrete cured in ambient condition. Construction and Building Materials, 2014, 66, 163-171.	3.2	933
3	The effects of ground granulated blast-furnace slag blending with fly ash and activator content on the workability and strength properties of geopolymer concrete cured at ambient temperature. Materials & Design, 2014, 62, 32-39.	5.1	595
4	Joining of carbon fibre reinforced polymer (CFRP) composites and aluminium alloys â€“ A review. Composites Part A: Applied Science and Manufacturing, 2017, 101, 1-29.	3.8	418
5	Flexural strength and elastic modulus of ambient-cured blended low-calcium fly ash geopolymer concrete. Construction and Building Materials, 2017, 130, 22-31.	3.2	328
6	Use of OPC to improve setting and early strength properties of low calcium fly ash geopolymer concrete cured at room temperature. Cement and Concrete Composites, 2015, 55, 205-214.	4.6	318
7	A review of the alumina recovery from coal fly ash, with a focus in China. Fuel, 2014, 120, 74-85.	3.4	302
8	Effect of fire exposure on cracking, spalling and residual strength of fly ash geopolymer concrete. Materials & Design, 2014, 63, 584-592.	5.1	284
9	Fracture behaviour of heat cured fly ash based geopolymer concrete. Materials & Design, 2013, 44, 580-586.	5.1	273
10	A study on the effect of nano silica on compressive strength of high volume fly ash mortars and concretes. Materials & Design, 2014, 60, 433-442.	5.1	254
11	Bond strength of reinforcing steel embedded in fly ash-based geopolymer concrete. Materials and Structures/Materiaux Et Constructions, 2011, 44, 1021-1030.	1.3	226
12	Effect of Fly Ash on the Durability Properties of High Strength Concrete. Procedia Engineering, 2011, 14, 1149-1156.	1.2	220
13	Sorptivity and acid resistance of ambient-cured geopolymer mortars containing nano-silica. Cement and Concrete Composites, 2016, 72, 235-245.	4.6	172
14	Effects of nano-silica on the strength development of geopolymer cured at room temperature. Construction and Building Materials, 2015, 101, 675-683.	3.2	144
15	Early Age Properties of Low-calcium Fly Ash Geopolymer Concrete Suitable for Ambient Curing. Procedia Engineering, 2015, 125, 601-607.	1.2	134
16	Sustainable use of ferronickel slag fine aggregate and fly ash in structural concrete: Mechanical properties and leaching study. Journal of Cleaner Production, 2017, 162, 438-448.	4.6	134
17	Effect of ultrafine fly ash on mechanical properties of high volume fly ash mortar. Construction and Building Materials, 2014, 51, 278-286.	3.2	117
18	Value added utilization of by-product electric furnace ferronickel slag as construction materials: A review. Resources, Conservation and Recycling, 2018, 134, 10-24.	5.3	115

#	Article	IF	Citations
19	Improving the sulfate attack resistance of concrete by using supplementary cementitious materials (SCMs): A review. Construction and Building Materials, 2021, 281, 122628.	3.2	113
20	Soundness and compressive strength of Portland cement blended with ground granulated ferronickel slag. Construction and Building Materials, 2017, 140, 194-202.	3.2	112
21	Drying Shrinkage of Slag Blended Fly Ash Geopolymer Concrete Cured at Room Temperature. Procedia Engineering, 2015, 125, 594-600.	1.2	110
22	Expansion due to alkali-silica reaction of ferronickel slag fine aggregate in OPC and blended cement mortars. Construction and Building Materials, 2016, 123, 135-142.	3.2	109
23	Fire endurance of steel reinforced fly ash geopolymer concrete elements. Construction and Building Materials, 2015, 90, 91-98.	3.2	103
24	The ASR mechanism of reactive aggregates in concrete and its mitigation by fly ash: A critical review. Construction and Building Materials, 2018, 171, 743-758.	3.2	103
25	Analysis of geopolymer concrete columns. Materials and Structures/Materiaux Et Constructions, 2009, 42, 715-724.	1.3	93
26	Influence of different monomer ratios and recycled concrete aggregate on mechanical properties and durability of geopolymer concretes. Construction and Building Materials, 2019, 205, 519-528.	3.2	88
27	Recycling difficult-to-treat e-waste cathode-ray-tube glass as construction and building materials: A critical review. Renewable and Sustainable Energy Reviews, 2018, 81, 595-604.	8.2	85
28	Deterioration of ambient-cured and heat-cured fly ash geopolymer concrete by high temperature exposure and prediction of its residual compressive strength. Construction and Building Materials, 2020, 262, 120924.	3.2	84
29	Effect of waste glass fine aggregate on the strength, durability and high temperature resistance of alkali-activated fly ash and GGBFS blended mortar. Construction and Building Materials, 2020, 263, 120177.	3.2	79
30	Fracture properties of GGBFS-blended fly ash geopolymer concrete cured in ambient temperature. Materials and Structures/Materiaux Et Constructions, 2017, 50, 1.	1.3	69
31	Effect of fly ash on the service life, carbon footprint and embodied energy of high strength concrete in the marine environment. Energy and Buildings, 2018, 158, 1694-1702.	3.1	69
32	Combating Urban Heat Island Effectâ€"A Review of Reflective Pavements and Tree Shading Strategies. Buildings, 2021, 11, 93.	1.4	66
33	Effect of nano and micro-silica on bond behaviour of steel and polypropylene fibres in high volume fly ash mortar. Construction and Building Materials, 2016, 115, 690-698.	3.2	64
34	Reuse of waste glass as a supplementary binder and aggregate for sustainable cement-based construction materials: A review. Journal of Building Engineering, 2020, 28, 101052.	1.6	62
35	Nano- and micro-scale characterisation of interfacial transition zone (ITZ) of high volume slag and slag-fly ash blended concretes containing nano SiO2 and nano CaCO3. Construction and Building Materials, 2021, 269, 121311.	3.2	55
36	Compressive Strength of Mortar Containing Ferronickel Slag as Replacement of Natural Sand. Procedia Engineering, 2017, 171, 689-694.	1.2	50

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37	Thermal properties and residual strength after high temperature exposure of cement mortar using ferronickel slag aggregate. Construction and Building Materials, 2019, 199, 601-612.	3.2	43
38	Strength and Permeation Properties of Slag Blended Fly Ash Based Geopolymer Concrete. Advanced Materials Research, 0, 651, 168-173.	0.3	42
39	Use of Fly-Ash Geopolymer Incorporating Ground Granulated Slag for Stabilisation of Kaolin Clay Cured at Ambient Temperature. Geotechnical and Geological Engineering, 2019, 37, 721-740.	0.8	41
40	Development of triple bottom line indicators for life cycle sustainability assessment of residential bulidings. Journal of Environmental Management, 2020, 264, 110476.	3.8	40
41	Fresh and hardened properties of geopolymer binder using ground high magnesium ferronickel slag with fly ash. Construction and Building Materials, 2021, 272, 121877.	3.2	40
42	Durability characteristics of concrete using ferronickel slag fine aggregate and fly ash. Magazine of Concrete Research, 2018, 70, 865-874.	0.9	36
43	Effect of mixture proportions on the drying shrinkage and permeation properties of high strength concrete containing class F fly ash. KSCE Journal of Civil Engineering, 2013, 17, 1437-1445.	0.9	34
44	Effect of elevated temperatures on concrete incorporating ferronickel slag as fine aggregate. Fire and Materials, 2019, 43, 8-21.	0.9	34
45	Life cycle assessment for environmental product declaration of concrete in the Gulf States. Sustainable Cities and Society, 2017, 35, 36-46.	5.1	32
46	Investigating Various Factors Affecting the Long-Term Compressive Strength of Heat-Cured Fly Ash Geopolymer Concrete and the Use of Orthogonal Experimental Design Method. International Journal of Concrete Structures and Materials, 2019, 13, .	1.4	31
47	Durability of Mortar Incorporating Ferronickel Slag Aggregate and Supplementary Cementitious Materials Subjected to Wetâ€“Dry Cycles. International Journal of Concrete Structures and Materials, 2018, 12, .	1.4	29
48	Sulphuric acid resistance of ground ferronickel slag blended fly ash geopolymer mortar. Construction and Building Materials, 2021, 313, 125505.	3.2	25
49	Global Warming Implications of the Use of By-Products and Recycled Materials in Western Australiaâ€™s Housing Sector. Materials, 2015, 8, 6909-6925.	1.3	24
50	Alkali silica reaction of waste glass aggregate in alkali activated fly ash and GGBFS mortars. Materials and Structures/Materiaux Et Constructions, 2019, 52, 1.	1.3	23
51	Strength and toughness of ambient-cured geopolymer concrete containing virgin and recycled fibres in mono and hybrid combinations. Construction and Building Materials, 2021, 304, 124649.	3.2	23
52	Potential alkali silica reaction expansion mitigation of ferronickel slag aggregate by fly ash. Structural Concrete, 2018, 19, 1376-1386.	1.5	22
53	Bond Strengths of Geopolymer and Cement Concretes. Advances in Science and Technology, 0, , .	0.2	20
54	Effects of Ultrafine Fly Ash on Setting, Strength, and Porosity of Geopolymers Cured at Room Temperature. Journal of Materials in Civil Engineering, 2017, 29, .	1.3	19

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55	Impact of Service Life on the Environmental Performance of Buildings. Buildings, 2019, 9, 9.	1.4	19
56	Non-destructive prediction of strength of concrete made by lightweight recycled aggregates and nickel slag. Journal of Building Engineering, 2021, 33, 101614.	1.6	19
57	Effect of waste glass powder as a partial precursor in ambient cured alkali activated fly ash and fly ash-GGBFS mortars. Journal of Building Engineering, 2021, 34, 101934.	1.6	19
58	Effect of Nano Silica and Ultrafine Fly Ash on Compressive Strength of High Volume Fly Ash Mortar. Applied Mechanics and Materials, 0, 368-370, 1061-1065.	0.2	18
59	Evaluation of the ASR of waste glass fine aggregate in alkali activated concrete by concrete prism tests. Construction and Building Materials, 2021, 266, 121121.	3.2	18
60	Strength, permeability and microstructure of self-compacting concrete with the dual use of ferronickel slag as fine aggregate and supplementary binder. Construction and Building Materials, 2022, 318, 125927.	3.2	18
61	Sustainability implications of service life on residential buildings â€“ An application of life cycle sustainability assessment framework. Environmental and Sustainability Indicators, 2021, 10, 100109.	1.7	17
62	Properties Of Fly Ash And Slag Blended Geopolymer Concrete Cured At Ambient Temperature. , 2013, , .		17
63	Microstructural investigation of thermo-mechanically processed lithium slag for geopolymer precursor using various characterization techniques. Construction and Building Materials, 2022, 342, 127952.	3.2	17
64	Fresh and hardened properties of high strength self-compacting concrete using by-product ferronickel slag fine aggregate. Journal of Building Engineering, 2020, 32, 101686.	1.6	16
65	The Effect of Ordinary Portland Cement Substitution on the Thermal Stability of Geopolymer Concrete. Materials, 2019, 12, 2501.	1.3	15
66	Microstructural and non-destructive investigation of the effect of high temperature exposure on ground ferronickel slag blended fly ash geopolymer mortars. Journal of Building Engineering, 2021, 43, 103099.	1.6	15
67	Stabilisation of Clay with Fly-Ash Geopolymer Incorporating GGBFS. , 0, , .		15
68	Mitigation of the potential alkaliâ€“silica reaction of FNS using ground FNS as a supplementary binder. Advances in Cement Research, 2020, 32, 537-546.	0.7	14
69	Comparison of the alkali-silica reactions of ferronickel slag aggregate in fly ash geopolymer and cement mortars. European Journal of Environmental and Civil Engineering, 2022, 26, 891-904.	1.0	13
70	Effect of sulphate exposure on mortar consisting of ferronickel slag aggregate and supplementary cementitious materials. Journal of Building Engineering, 2020, 28, 101012.	1.6	13
71	A comprehensive review of properties of concrete containing lithium refinery residue as partial replacement of cement. Construction and Building Materials, 2022, 328, 127053.	3.2	13
72	Workability and Flexural Properties of Fibre-Reinforced Geopolymer Using Different Mono and Hybrid Fibres. Materials, 2021, 14, 4447.	1.3	12

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73	Workability, strength and microstructural properties of ground ferronickel slag blended fly ash geopolymer mortar. Journal of Sustainable Cement-Based Materials, 2022, 11, 75-87.	1.7	8
74	Mechanical properties and microstructure of lightweight polymer composites containing mono and hybrid fillers sourced from recycled solid wastes. Construction and Building Materials, 2021, 277, 122369.	3.2	8
75	Mechanical and durability assessment of cement-based andÂalkali-activated coating mortars in an aggressive marine environment. SN Applied Sciences, 2021, 3, 1.	1.5	8
76	Fracture Properties Of Geopolymer Concrete Cured In Ambient Temperature. , 2013, , .		6
77	Feasibility of producing nano cement in a traditional cement factory in Iraq. Case Studies in Construction Materials, 2017, 7, 91-101.	0.8	5
78	Fly Ash Based Geopolymer Concrete: A Review. , 2013, , .		5
79	Reinforced Concrete Columns under Unequal Load Eccentricities. ACI Structural Journal, 2003, 100, .	0.3	5
80	Sustainable use of waste glass in alkali activated materials against H2SO4 and HCl acid attacks. Cleaner Engineering and Technology, 2022, 6, 100354.	2.1	5
81	Fresh and hardened properties of high-strength concrete incorporating byproduct fine crushed aggregate as partial replacement of natural sand. Frontiers of Structural and Civil Engineering, 2021, 15, 124-135.	1.2	4
82	Nanomechanical characterization of ambient-cured fly ash geopolymers containing nanosilica. Journal of Sustainable Cement-Based Materials, 2022, 11, 164-174.	1.7	4
83	Acid Resistance of Mortar Using Ferronickel Slag (FNS) Aggregate and Ground FNS as Supplementary Cementitious Material. ACI Materials Journal, 2019, 116, .	0.3	4
84	Early-age tensile strength and calcium hydroxide content of concrete containing low-calcium fly-ash. Australian Journal of Structural Engineering, 2013, 14, .	0.4	1
85	Strength and Microstructure Development of Fly Ash Geopolymer Binders Using Waste Glass Powder. RILEM Bookseries, 2021, , 43-52.	0.2	1
86	Effect of Sand Percentage on the Compaction Properties and Undrained Shear Strength of Low Plasticity Clay. ARO-the Scientific Journal of Koya University, 2021, 9, 16-20.	0.2	1
87	A Comprehensive Review of Flexible Pavement Failures, Improvement Methods and its Disadvantages. Key Engineering Materials, 0, 879, 136-148.	0.4	1
88	COMPRESSIVE STRENGTH OF GEOPOLYMER MORTAR USING GROUND FERRONICKEL SLAG AND FLY ASH. Proceedings of International Structural Engineering and Construction, 2020, 7, .	0.1	1
89	Simplified design of reinforced concrete slender columns for eccentric loadings. Australian Journal of Structural Engineering, 2003, 5, 9-16.	0.4	0
90	Carbonation of High Strength Concrete Containing Class F Fly Ash. , 2012, , .		0

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91	Nano-modified geopolymer and alkali-activated systems. , 2022, , 347-374.		0