

# Prabir K Sarker

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

88  
papers

5,623  
citations

33  
h-index

74  
g-index

94  
ext. papers

7,108  
ext. citations

4.8  
avg, IF

6.76  
L-index

#	Paper	IF	Citations
88	Strength, permeability and microstructure of self-compacting concrete with the dual use of ferronickel slag as fine aggregate and supplementary binder. <i>Construction and Building Materials</i> , <b>2022</b> , 318, 125927	6.7	2
87	Nano-modified geopolymer and alkali-activated systems <b>2022</b> , 347-374		
86	A comprehensive review of properties of concrete containing lithium refinery residue as partial replacement of cement. <i>Construction and Building Materials</i> , <b>2022</b> , 328, 127053	6.7	0
85	Microstructural investigation of thermo-mechanically processed lithium slag for geopolymer precursor using various characterization techniques. <i>Construction and Building Materials</i> , <b>2022</b> , 342, 127952	6.7	0
84	Sulphuric acid resistance of ground ferronickel slag blended fly ash geopolymer mortar. <i>Construction and Building Materials</i> , <b>2021</b> , 313, 125505	6.7	1
83	Sustainable use of waste glass in alkali activated materials against H <sub>2</sub> SO <sub>4</sub> and HCl acid attacks. <i>Cleaner Engineering and Technology</i> , <b>2021</b> , 6, 100354	2.7	1
82	Combating Urban Heat Island Effect: A Review of Reflective Pavements and Tree Shading Strategies. <i>Buildings</i> , <b>2021</b> , 11, 93	3.2	19
81	Mechanical properties and microstructure of lightweight polymer composites containing mono and hybrid fillers sourced from recycled solid wastes. <i>Construction and Building Materials</i> , <b>2021</b> , 277, 122369	6.7	3
80	Improving the sulfate attack resistance of concrete by using supplementary cementitious materials (SCMs): A review. <i>Construction and Building Materials</i> , <b>2021</b> , 281, 122628	6.7	30
79	Mechanical and durability assessment of cement-based and alkali-activated coating mortars in an aggressive marine environment. <i>SN Applied Sciences</i> , <b>2021</b> , 3, 1	1.8	1
78	Sustainability implications of service life on residential buildings: An application of life cycle sustainability assessment framework. <i>Environmental and Sustainability Indicators</i> , <b>2021</b> , 10, 100109	3.5	5
77	Non-destructive prediction of strength of concrete made by lightweight recycled aggregates and nickel slag. <i>Journal of Building Engineering</i> , <b>2021</b> , 33, 101614	5.2	7
76	Nano- and micro-scale characterisation of interfacial transition zone (ITZ) of high volume slag and slag-fly ash blended concretes containing nano SiO <sub>2</sub> and nano CaCO <sub>3</sub> . <i>Construction and Building Materials</i> , <b>2021</b> , 269, 121311	6.7	19
75	Effect of waste glass powder as a partial precursor in ambient cured alkali activated fly ash and fly ash-GGBFS mortars. <i>Journal of Building Engineering</i> , <b>2021</b> , 34, 101934	5.2	11
74	Evaluation of the ASR of waste glass fine aggregate in alkali activated concrete by concrete prism tests. <i>Construction and Building Materials</i> , <b>2021</b> , 266, 121121	6.7	8
73	Strength and Microstructure Development of Fly Ash Geopolymer Binders Using Waste Glass Powder. <i>RILEM Bookseries</i> , <b>2021</b> , 43-52	0.5	1
72	Fresh and hardened properties of high-strength concrete incorporating byproduct fine crushed aggregate as partial replacement of natural sand. <i>Frontiers of Structural and Civil Engineering</i> , <b>2021</b> , 15, 124-135	2.5	0

71	Fresh and hardened properties of geopolymer binder using ground high magnesium ferronickel slag with fly ash. <i>Construction and Building Materials</i> , <b>2021</b> , 272, 121877	6.7	17
70	Workability and Flexural Properties of Fibre-Reinforced Geopolymer Using Different Mono and Hybrid Fibres. <i>Materials</i> , <b>2021</b> , 14,	3.5	2
69	Strength and toughness of ambient-cured geopolymer concrete containing virgin and recycled fibres in mono and hybrid combinations. <i>Construction and Building Materials</i> , <b>2021</b> , 304, 124649	6.7	5
68	Microstructural and non-destructive investigation of the effect of high temperature exposure on ground ferronickel slag blended fly ash geopolymer mortars. <i>Journal of Building Engineering</i> , <b>2021</b> , 43, 103099	5.2	4
67	Development of triple bottom line indicators for life cycle sustainability assessment of residential bulidings. <i>Journal of Environmental Management</i> , <b>2020</b> , 264, 110476	7.9	19
66	Effect of waste glass fine aggregate on the strength, durability and high temperature resistance of alkali-activated fly ash and GGBFS blended mortar. <i>Construction and Building Materials</i> , <b>2020</b> , 263, 120177	6.7	36
65	Reuse of waste glass as a supplementary binder and aggregate for sustainable cement-based construction materials: A review. <i>Journal of Building Engineering</i> , <b>2020</b> , 28, 101052	5.2	33
64	Mitigation of the potential alkali-silica reaction of FNS using ground FNS as a supplementary binder. <i>Advances in Cement Research</i> , <b>2020</b> , 32, 537-546	1.8	11
63	Workability, strength and microstructural properties of ground ferronickel slag blended fly ash geopolymer mortar. <i>Journal of Sustainable Cement-Based Materials</i> , <b>2020</b> , 1-18	3.6	5
62	Deterioration of ambient-cured and heat-cured fly ash geopolymer concrete by high temperature exposure and prediction of its residual compressive strength. <i>Construction and Building Materials</i> , <b>2020</b> , 262, 120924	6.7	27
61	Fresh and hardened properties of high strength self-compacting concrete using by-product ferronickel slag fine aggregate. <i>Journal of Building Engineering</i> , <b>2020</b> , 32, 101686	5.2	5
60	Effect of sulphate exposure on mortar consisting of ferronickel slag aggregate and supplementary cementitious materials. <i>Journal of Building Engineering</i> , <b>2020</b> , 28, 101012	5.2	10
59	Alkali silica reaction of waste glass aggregate in alkali activated fly ash and GGBFS mortars. <i>Materials and Structures/Materiaux Et Constructions</i> , <b>2019</b> , 52, 1	3.4	15
58	Impact of Service Life on the Environmental Performance of Buildings. <i>Buildings</i> , <b>2019</b> , 9, 9	3.2	13
57	Effect of elevated temperatures on concrete incorporating ferronickel slag as fine aggregate. <i>Fire and Materials</i> , <b>2019</b> , 43, 8-21	1.8	21
56	Use of Fly-Ash Geopolymer Incorporating Ground Granulated Slag for Stabilisation of Kaolin Clay Cured at Ambient Temperature. <i>Geotechnical and Geological Engineering</i> , <b>2019</b> , 37, 721-740	1.5	21
55	The Effect of Ordinary Portland Cement Substitution on the Thermal Stability of Geopolymer Concrete. <i>Materials</i> , <b>2019</b> , 12,	3.5	5
54	Comparison of the alkali-silica reactions of ferronickel slag aggregate in fly ash geopolymer and cement mortars. <i>European Journal of Environmental and Civil Engineering</i> , <b>2019</b> , 1-14	1.5	4

53	Acid Resistance of Mortar Using Ferronickel Slag (FNS) Aggregate and Ground FNS as Supplementary Cementitious Material. <i>ACI Materials Journal</i> , <b>2019</b> , 116,	0.9	3
52	Influence of different monomer ratios and recycled concrete aggregate on mechanical properties and durability of geopolymer concretes. <i>Construction and Building Materials</i> , <b>2019</b> , 205, 519-528	6.7	45
51	Investigating Various Factors Affecting the Long-Term Compressive Strength of Heat-Cured Fly Ash Geopolymer Concrete and the Use of Orthogonal Experimental Design Method. <i>International Journal of Concrete Structures and Materials</i> , <b>2019</b> , 13,	2.8	15
50	Thermal properties and residual strength after high temperature exposure of cement mortar using ferronickel slag aggregate. <i>Construction and Building Materials</i> , <b>2019</b> , 199, 601-612	6.7	26
49	Durability characteristics of concrete using ferronickel slag fine aggregate and fly ash. <i>Magazine of Concrete Research</i> , <b>2018</b> , 70, 865-874	2	26
48	Durability of Mortar Incorporating Ferronickel Slag Aggregate and Supplementary Cementitious Materials Subjected to Wet/Dry Cycles. <i>International Journal of Concrete Structures and Materials</i> , <b>2018</b> , 12,	2.8	26
47	Value added utilization of by-product electric furnace ferronickel slag as construction materials: A review. <i>Resources, Conservation and Recycling</i> , <b>2018</b> , 134, 10-24	11.9	79
46	Recycling difficult-to-treat e-waste cathode-ray-tube glass as construction and building materials: A critical review. <i>Renewable and Sustainable Energy Reviews</i> , <b>2018</b> , 81, 595-604	16.2	66
45	Effect of fly ash on the service life, carbon footprint and embodied energy of high strength concrete in the marine environment. <i>Energy and Buildings</i> , <b>2018</b> , 158, 1694-1702	7	43
44	Potential alkali silica reaction expansion mitigation of ferronickel slag aggregate by fly ash. <i>Structural Concrete</i> , <b>2018</b> , 19, 1376-1386	2.6	17
43	The ASR mechanism of reactive aggregates in concrete and its mitigation by fly ash: A critical review. <i>Construction and Building Materials</i> , <b>2018</b> , 171, 743-758	6.7	58
42	Soundness and compressive strength of Portland cement blended with ground granulated ferronickel slag. <i>Construction and Building Materials</i> , <b>2017</b> , 140, 194-202	6.7	73
41	Joining of carbon fibre reinforced polymer (CFRP) composites and aluminium alloys [A review. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2017</b> , 101, 1-29	8.4	252
40	Sustainable use of ferronickel slag fine aggregate and fly ash in structural concrete: Mechanical properties and leaching study. <i>Journal of Cleaner Production</i> , <b>2017</b> , 162, 438-448	10.3	96
39	Compressive Strength of Mortar Containing Ferronickel Slag as Replacement of Natural Sand. <i>Procedia Engineering</i> , <b>2017</b> , 171, 689-694		39
38	Feasibility of producing nano cement in a traditional cement factory in Iraq. <i>Case Studies in Construction Materials</i> , <b>2017</b> , 7, 91-101	2.7	2
37	Life cycle assessment for environmental product declaration of concrete in the Gulf States. <i>Sustainable Cities and Society</i> , <b>2017</b> , 35, 36-46	10.1	19
36	Flexural strength and elastic modulus of ambient-cured blended low-calcium fly ash geopolymer concrete. <i>Construction and Building Materials</i> , <b>2017</b> , 130, 22-31	6.7	191

35	Fracture properties of GGBFS-blended fly ash geopolymer concrete cured in ambient temperature. <i>Materials and Structures/Materiaux Et Constructions</i> , <b>2017</b> , 50, 1	3.4	43
34	Effects of Ultrafine Fly Ash on Setting, Strength, and Porosity of Geopolymers Cured at Room Temperature. <i>Journal of Materials in Civil Engineering</i> , <b>2017</b> , 29, 06016021	3	13
33	Expansion due to alkali-silica reaction of ferronickel slag fine aggregate in OPC and blended cement mortars. <i>Construction and Building Materials</i> , <b>2016</b> , 123, 135-142	6.7	74
32	Sorptivity and acid resistance of ambient-cured geopolymer mortars containing nano-silica. <i>Cement and Concrete Composites</i> , <b>2016</b> , 72, 235-245	8.6	97
31	Effect of nano and micro-silica on bond behaviour of steel and polypropylene fibres in high volume fly ash mortar. <i>Construction and Building Materials</i> , <b>2016</b> , 115, 690-698	6.7	46
30	Effect of nano-CuO and fly ash on the properties of self-compacting mortar. <i>Construction and Building Materials</i> , <b>2015</b> , 94, 758-766	6.7	70
29	Fire endurance of steel reinforced fly ash geopolymer concrete elements. <i>Construction and Building Materials</i> , <b>2015</b> , 90, 91-98	6.7	69
28	A comprehensive review on the applications of coal fly ash. <i>Earth-Science Reviews</i> , <b>2015</b> , 141, 105-121	10.2	877
27	Use of OPC to improve setting and early strength properties of low calcium fly ash geopolymer concrete cured at room temperature. <i>Cement and Concrete Composites</i> , <b>2015</b> , 55, 205-214	8.6	209
26	Global Warming Implications of the Use of By-Products and Recycled Materials in Western Australia's Housing Sector. <i>Materials</i> , <b>2015</b> , 8, 6909-6925	3.5	16
25	Effects of nano-silica on the strength development of geopolymer cured at room temperature. <i>Construction and Building Materials</i> , <b>2015</b> , 101, 675-683	6.7	92
24	Drying Shrinkage of Slag Blended Fly Ash Geopolymer Concrete Cured at Room Temperature. <i>Procedia Engineering</i> , <b>2015</b> , 125, 594-600		71
23	Early Age Properties of Low-calcium Fly Ash Geopolymer Concrete Suitable for Ambient Curing. <i>Procedia Engineering</i> , <b>2015</b> , 125, 601-607		80
22	A review of the alumina recovery from coal fly ash, with a focus in China. <i>Fuel</i> , <b>2014</b> , 120, 74-85	7.1	242
21	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. <i>Materials &amp; Design</i> , <b>2014</b> , 62, 32-39		408
20	Effect of fire exposure on cracking, spalling and residual strength of fly ash geopolymer concrete. <i>Materials &amp; Design</i> , <b>2014</b> , 63, 584-592		188
19	A study on the effect of nano silica on compressive strength of high volume fly ash mortars and concretes. <i>Materials &amp; Design</i> , <b>2014</b> , 60, 433-442		183
18	Effect of ultrafine fly ash on mechanical properties of high volume fly ash mortar. <i>Construction and Building Materials</i> , <b>2014</b> , 51, 278-286	6.7	78

17	Effect of GGBFS on setting, workability and early strength properties of fly ash geopolymer concrete cured in ambient condition. <i>Construction and Building Materials</i> , <b>2014</b> , 66, 163-171	6.7	578
16	Fracture behaviour of heat cured fly ash based geopolymer concrete. <i>Materials &amp; Design</i> , <b>2013</b> , 44, 580-586		185
15	Effect of mixture proportions on the drying shrinkage and permeation properties of high strength concrete containing class F fly ash. <i>KSCE Journal of Civil Engineering</i> , <b>2013</b> , 17, 1437-1445	1.9	24
14	Effect of Nano Silica and Ultrafine Fly Ash on Compressive Strength of High Volume Fly Ash Mortar. <i>Applied Mechanics and Materials</i> , <b>2013</b> , 368-370, 1061-1065	0.3	16
13	Early-age tensile strength and calcium hydroxide content of concrete containing low-calcium fly-ash. <i>Australian Journal of Structural Engineering</i> , <b>2013</b> , 14,	1.4	1
12	Strength and Permeation Properties of Slag Blended Fly Ash Based Geopolymer Concrete. <i>Advanced Materials Research</i> , <b>2013</b> , 651, 168-173	0.5	24
11	Fracture Properties Of Geopolymer Concrete Cured In Ambient Temperature <b>2013</b> ,		3
10	Fly Ash Based Geopolymer Concrete: A Review <b>2013</b> ,		3
9	Properties Of Fly Ash And Slag Blended Geopolymer Concrete Cured At Ambient Temperature <b>2013</b> ,		15
8	Effect of Fly Ash on the Durability Properties of High Strength Concrete. <i>Procedia Engineering</i> , <b>2011</b> , 14, 1149-1156		131
7	Bond strength of reinforcing steel embedded in fly ash-based geopolymer concrete. <i>Materials and Structures/Materiaux Et Constructions</i> , <b>2011</b> , 44, 1021-1030	3.4	157
6	Bond Strengths of Geopolymer and Cement Concretes. <i>Advances in Science and Technology</i> , <b>2010</b> , 69, 143-151	0.1	12
5	Analysis of geopolymer concrete columns. <i>Materials and Structures/Materiaux Et Constructions</i> , <b>2009</b> , 42, 715-724	3.4	74
4	Simplified design of reinforced concrete slender columns for eccentric loadings. <i>Australian Journal of Structural Engineering</i> , <b>2003</b> , 5, 9-16	1.4	
3	Stabilisation of Clay with Fly-Ash Geopolymer Incorporating GGBFS		11
2	A Comprehensive Review of Flexible Pavement Failures, Improvement Methods and its Disadvantages. <i>Key Engineering Materials</i> , <b>879</b> , 136-148	0.4	
1	Nanomechanical characterization of ambient-cured fly ash geopolymers containing nanosilica. <i>Journal of Sustainable Cement-Based Materials</i> , 1-14	3.6	1