Sumit Chakraborty

List of Publications by Year
in descending order

37	1,177	471371 17	377752 34
papers	citations	h-index	g-index

38	38	38	1060
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Improvement in mechanical properties of jute fibres through mild alkali treatment as demonstrated by utilisation of the Weibull distribution model. Bioresource Technology, 2012, 107, 222-228.	4.8	204
2	Effect of Jute as Fiber Reinforcement Controlling the Hydration Characteristics of Cement Matrix. Industrial & Engineering Chemistry Research, 2013, 52, 1252-1260.	1.8	141
3	Improvement of the mechanical properties of jute fibre reinforced cement mortar: A statistical approach. Construction and Building Materials, 2013, 38, 776-784.	3.2	96
4	Adsorption of Anionic-Azo Dye from Aqueous Solution by Lignocellulose-Biomass Jute Fiber: Equilibrium, Kinetics, and Thermodynamics Study. Industrial & Engineering Chemistry Research, 2012, 51, 12095-12106.	1.8	94
5	Polymer modified jute fibre as reinforcing agent controlling the physical and mechanical characteristics of cement mortar. Construction and Building Materials, 2013, 49, 214-222.	3.2	73
6	Chemically modified jute fibre reinforced non-pressure (NP) concrete pipes with improved mechanical properties. Construction and Building Materials, 2012, 37, 841-850.	3.2	68
7	Effectiveness of sewage sludge ash combined with waste pozzolanic minerals in developing sustainable construction material: An alternative approach for waste management. Journal of Cleaner Production, 2017, 153, 253-263.	4.6	61
8	A mild alkali treated jute fibre controlling the hydration behaviour of greener cement paste. Scientific Reports, 2015, 5, 7837.	1.6	40
9	Effectiveness of the surface modified jute fibre as fibre reinforcement in controlling the physical and mechanical properties of concrete paver blocks. Construction and Building Materials, 2018, 191, 554-563.	3.2	36
10	Lignocellulosic jute fiber as a bioadsorbent for the removal of azo dye from its aqueous solution: Batch and column studies. Journal of Applied Polymer Science, 2013, 129, 15-27.	1.3	34
11	Hydration study of the polymer modified jute fibre reinforced cement paste using analytical techniques. Construction and Building Materials, 2015, 101, 166-173.	3.2	28
12	A hypothetical model based on effectiveness of combined alkali and polymer latex modified jute fibre in controlling the setting and hydration behaviour of cement. Construction and Building Materials, 2014, 68, 1-9.	3.2	26
13	Investigation of the acid and sulfate resistance performances of hydrogen-rich water based mortars. Construction and Building Materials, 2017, 137, 1-11.	3.2	25
14	Efficacy of alkali-treated jute as fibre reinforcement in enhancing the mechanical properties of cement mortar. Materials and Structures/Materiaux Et Constructions, 2016, 49, 1093-1104.	1.3	23
15	Hydration Mechanism of the Hydrogen-Rich Water Based Cement Paste. Journal of Physical Chemistry C, 2016, 120, 8198-8209.	1.5	19
16	Investigation on the effectiveness of chemically synthesized nano cement in controlling the physical and mechanical performances of concrete. Construction and Building Materials, 2014, 70, 1-8.	3.2	18
17	Effectiveness of the mild alkali and dilute polymer modification in controlling the durability of jute fibre in alkaline cement medium. Construction and Building Materials, 2018, 174, 330-342.	3.2	18
18	Development of the electrolyzed water based set accelerated greener cement paste. Materials Letters, 2019, 243, 46-49.	1.3	15

#	Article	IF	Citations
19	Investigation on the effectiveness of electrolyzed water in controlling the early age properties of cement mortar. Construction and Building Materials, 2019, 211, 1-11.	3.2	14
20	Chemical attack and corrosion resistance of concrete prepared with electrolyzed water. Journal of Materials Research and Technology, 2021, 11, 1193-1205.	2.6	14
21	Effect of electrolyzed water (EW) in accelerating the cement setting and hydration as demonstrated by the analytical techniques. Construction and Building Materials, 2021, 311, 125367.	3.2	14
22	Effectiveness of carbonated lime as a raw material in producing a CO2-stored cementitious material by the hydrothermal method. Construction and Building Materials, 2015, 95, 556-565.	3.2	13
23	Hydrogen-rich water revealed benefits in controlling the physical and mechanical performances of cement mortar. Construction and Building Materials, 2015, 100, 31-39.	3.2	12
24	Prediction of the curing time to achieve maturity of the nano cement based concrete using the Weibull distribution model. Construction and Building Materials, 2015, 84, 307-314.	3.2	11
25	Strength and Durability Assessment of Portland Cement Mortars Formulated from Hydrogen-Rich Water. Advances in Materials Science and Engineering, 2017, 2017, 1-10.	1.0	11
26	Durability Study of Silica Fume-mortar exposed to the Combined Sulfate and Chloride-rich Solution. KSCE Journal of Civil Engineering, 2019, 23, 356-366.	0.9	10
27	Effectiveness of the Top-Down Nanotechnology in the Production of Ultrafine Cement (~220â€‰nm). Journal of Nanomaterials, 2014, 2014, 1-9.	1.5	8
28	Concrete Prepared Using Electrolyzed Water Revealed Benefits in Controlling the Early Age Properties. Journal of Materials in Civil Engineering, 2021, 33, .	1.3	8
29	Surface grafting of Corchorus olitorius fibre: A green approach for the development of activated bioadsorbent. Carbohydrate Polymers, 2013, 92, 2118-2127.	5.1	7
30	Aqueous-based carbon dioxide sequestration. , 2018, , 39-64.		6
31	Development of nano cement concrete by top-down and bottom-up nanotechnology concept. , 2020, , 183-213.		6
32	Synthesis of a Cementitious Material Nanocement Using Bottom-Up Nanotechnology Concept: An Alternative Approach to Avoid CO2Emission during Production of Cement. Journal of Nanomaterials, 2014, 2014, 1-12.	1.5	5
33	Investigation on the Effectiveness of Aqueous Carbonated Lime in Producing an Alternative Cementitious Material. International Journal of Concrete Structures and Materials, 2016, 10, 15-28.	1.4	5
34	Prediction of the Failure Stress of Hydrogen-rich Water Based Cement Mortar Using the Weibull Distribution Model. KSCE Journal of Civil Engineering, 2018, 22, 1827-1839.	0.9	5
35	Effectiveness of a hydrothermally produced alternative cementitious material on the physical and mechanical performance of concrete. Journal of Cleaner Production, 2017, 142, 3269-3280.	4.6	4
36	Prediction of the curing time to achieve maturity of the nano-cement based concrete using the Weibull distribution model: A complementary data set. Data in Brief, 2015, 4, 285-291.	0.5	3

#	Article	IF	Citations
37	New Frontiers in Cementitious and Lime-Based Materials and Composites. Crystals, 2022, 12, 61.	1.0	1