Pawel Sikora

List of Publications by Year
in descending order

54 papers	1,774 citations	218592 26 h-index	276775 41 g-index
54 all docs	54 docs citations	54 times ranked	1484 citing authors

#	Article	IF	Citations
1	The effects of nano- and micro-sized additives on 3D printable cementitious and alkali-activated composites: a review. Applied Nanoscience (Switzerland), 2022, 12, 805-823.	1.6	39
2	Investigating the release of ZnO nanoparticles from cement mortars on microbiological models. Applied Nanoscience (Switzerland), 2022, 12, 489-502.	1.6	14
3	Boosting Portland cement-free composite performance via alkali-activation and reinforcement with pre-treated functionalised wheat straw. Industrial Crops and Products, 2022, 178, 114648.	2.5	15
4	A systematic experimental study on biochar-cementitious composites: Towards carbon sequestration. Industrial Crops and Products, 2022, 184, 115103.	2.5	15
5	High-performance polylactic acid compressed strawboard using pre-treated and functionalised wheat straw. Industrial Crops and Products, 2022, 184, 114996.	2.5	9
6	Insight into the microstructural and durability characteristics of 3D printed concrete: Cast versus printed specimens. Case Studies in Construction Materials, 2022, 17, e01320.	0.8	6
7	Effect of different expanded aggregates on durability-related characteristics of lightweight aggregate concrete. Materials Characterization, 2021, 173, 110907.	1.9	18
8	The effects of nanosilica on the fresh and hardened properties of 3D printable mortars. Construction and Building Materials, 2021, 281, 122574.	3.2	35
9	Investigation of additive incorporation on rheological, microstructural and mechanical properties of 3D printable alkali-activated materials. Materials and Design, 2021, 202, 109574.	3.3	64
10	The performance of ultra-lightweight foamed concrete incorporating nanosilica. Archives of Civil and Mechanical Engineering, 2021, 21, 1.	1.9	16
11	Evaluation of the effects of bismuth oxide (Bi2O3) micro and nanoparticles on the mechanical, microstructural and Î³-ray/neutron shielding properties of Portland cement pastes. Construction and Building Materials, 2021, 284, 122758.	3.2	27
12	Thermal performance of building envelopes with structural layers of the same density: Lightweight aggregate concrete versus foamed concrete. Building and Environment, 2021, 196, 107799.	3.0	18
13	Biofilms in the gravity sewer interfaces: making a friend from a foe. Reviews in Environmental Science and Biotechnology, 2021, 20, 795-813.	3.9	4
14	Modification of Lightweight Aggregate Concretes with Silica Nanoparticlesâ€"A Review. Materials, 2021, 14, 4242.	1.3	12
15	3D printable lightweight cementitious composites with incorporated waste glass aggregates and expanded microspheres â€" Rheological, thermal and mechanical properties. Journal of Building Engineering, 2021, 44, 102718.	1.6	25
16	Development of rapid-hardening ultra-high strength cementitious composites using superzeolite and N-C-S-H-PCE alkaline nanomodifier. Eastern-European Journal of Enterprise Technologies, 2021, 5, 62-72.	0.3	6
17	Hygric Properties of Machine-Made, Historic Clay Bricks from North-Eastern Poland (Former East) Tj ETQq1 1 0.784314 rgBT /Overlock	1.3	3
18	The effects of seawater on the hydration, microstructure and strength development of Portland cement pastes incorporating colloidal silica. Applied Nanoscience (Switzerland), 2020, 10, 2627-2638.	1.6	46

#	Article	IF	Citations
19	Cement-Based Composites: Advancements in Development and Characterization. Crystals, 2020, 10, 832.	1.0	5
20	Biocarbonation: A novel method for synthesizing nano-zinc/zirconium carbonates and oxides. Arabian Journal of Chemistry, 2020, 13, 8092-8099.	2.3	4
21	Evaluating the effects of nanosilica on the material properties of lightweight and ultra-lightweight concrete using image-based approaches. Construction and Building Materials, 2020, 264, 120241.	3.2	59
22	The Effects of Temperature Curing on the Strength Development, Transport Properties, and Freeze-Thaw Resistance of Blast Furnace Slag Cement Mortars Modified with Nanosilica. Materials, 2020, 13, 5800.	1.3	9
23	The effects of seawater and nanosilica on the performance of blended cements and composites. Applied Nanoscience (Switzerland), 2020, 10, 5009-5026.	1.6	25
24	An Investigation of the Mechanical and Physical Characteristics of Cement Paste Incorporating Different Air Entraining Agents using X-ray Micro-Computed Tomography. Crystals, 2020, 10, 23.	1.0	6
25	The Effect of Lightweight Concrete Cores on the Thermal Performance of Vacuum Insulation Panels. Materials, 2020, 13, 2632.	1.3	10
26	Inverse Estimation Method of Material Randomness Using Observation. Crystals, 2020, 10, 512.	1.0	1
27	Comparison of the pore size distributions of concretes with different air-entraining admixture dosages using 2D and 3D imaging approaches. Materials Characterization, 2020, 162, 110182.	1.9	33
28	The effects of calciumâ€“silicateâ€“hydrate (Câ€“Sâ€“H) seeds on reference microorganisms. Applied Nanoscience (Switzerland), 2020, 10, 4855-4867.	1.6	8
29	The microstructural and thermal characteristics of silica nanoparticle-modified cement mortars after exposure to high temperatures. Part I.. Nanotechnologies in Construction, 2020, 12, 108-115.	0.1	0
30	Challenges in Studying the Incorporation of Nanomaterials to Building Materials on Microbiological Models. Springer Proceedings in Physics, 2019, , 285-303.	0.1	6
31	Influence of Nanosilica on Mechanical Properties, Sorptivity, and Microstructure of Lightweight Concrete. Materials, 2019, 12, 3078.	1.3	51
32	Preparation and Characterization of Ultra-Lightweight Foamed Concrete Incorporating Lightweight Aggregates. Applied Sciences (Switzerland), 2019, 9, 1447.	1.3	33
33	Comparison of lightweight aggregate and foamed concrete with the same density level using image-based characterizations. Construction and Building Materials, 2019, 211, 988-999.	3.2	79
34	Accident Rate as a Measure of Safety Assessment in Polish Civil Engineering. Safety, 2019, 5, 77.	0.9	2
35	Mechanical and microstructural properties of cement pastes containing carbon nanotubes and carbon nanotube-silica core-shell structures, exposed to elevated temperature. Cement and Concrete Composites, 2019, 95, 193-204.	4.6	88
36	Incorporation of magnetite powder as a cement additive for improving thermal resistance and gamma-ray shielding properties of cement-based composites. Construction and Building Materials, 2019, 204, 113-121.	3.2	29

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37	The effect of nanomaterials on thermal resistance of cement-based composites exposed to elevated temperature. Materials Today: Proceedings, 2018, 5, 15968-15975.	0.9	9
38	The effects of Fe3O4 and Fe3O4/SiO2 nanoparticles on the mechanical properties of cement mortars exposed to elevated temperatures. Construction and Building Materials, 2018, 182, 441-450.	3.2	28
39	Antimicrobial Activity of Al2O3, CuO, Fe3O4, and ZnO Nanoparticles in Scope of Their Further Application in Cement-Based Building Materials. Nanomaterials, 2018, 8, 212.	1.9	92
40	The Influence of Nanomaterials on the Thermal Resistance of Cement-Based Compositesâ€"A Review. Nanomaterials, 2018, 8, 465.	1.9	75
41	Waste-free synthesis of silica nanospheres and silica nanocoatings from recycled ethanolâ€"ammonium solution. Chemical Papers, 2017, 71, 841-848.	1.0	10
42	The effect of elevated temperature on the properties of cement mortars containing nanosilica and heavyweight aggregates. Construction and Building Materials, 2017, 137, 420-431.	3.2	105
43	Chemical and thermal stability of core-shelled magnetite nanoparticles and solid silica. Applied Surface Science, 2017, 407, 391-397.	3.1	56
44	Thermal Properties of Cement Mortars Containing Waste Glass Aggregate and Nanosilica. Procedia Engineering, 2017, 196, 159-166.	1.2	67
45	Properties of Cement Composites Modified with Silica-magnetite Nanostructures. Procedia Engineering, 2017, 196, 105-112.	1.2	7
46	The effects of silica/titania nanocomposite on the mechanical and bactericidal properties of cement mortars. Construction and Building Materials, 2017, 150, 738-746.	3.2	83
47	Evaluation of the Effects of Crushed and Expanded Waste Glass Aggregates on the Material Properties of Lightweight Concrete Using Image-Based Approaches. Materials, 2017, 10, 1354.	1.3	85
48	Characterization of Mechanical and Bactericidal Properties of Cement Mortars Containing Waste Glass Aggregate and Nanomaterials. Materials, 2016, 9, 701.	1.3	70
49	Application of Nanomaterials in Production of Self-Sensing Concretes: Contemporary Developments and Prospects. Archives of Civil Engineering, 2016, 62, 61-74.	0.7	11
50	The Influence of Nano-Fe3O4 on the Microstructure and Mechanical Properties of Cementitious Composites. Nanoscale Research Letters, 2016, 11, 182.	3.1	92
51	Mechanical Properties of Shielding Concrete with Magnetite Aggregate Subjected to High Temperature. Procedia Engineering, 2015, 108, 39-46.	1.2	62
52	The Effect of Nanosilica on the Mechanical Properties of polymer-Cement Composites (PCC). Procedia Engineering, 2015, 108, 139-145.	1.2	39
53	The Effect of Nanosilica and Titanium Dioxide on the Mechanical and Self-Cleaning Properties of Waste-Glass Cement Mortar. Procedia Engineering, 2015, 108, 146-153.	1.2	33
54	Effect of incorporation route on dispersion of mesoporous silica nanospheres in cement mortar. Construction and Building Materials, 2014, 66, 418-421.	3.2	30