Behzad Nematollahi

List of Publications by Year
in descending order

57	3,774	201575 27	197736 49
papers	citations	h-index	g-index

63	63	63	1794
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effect of surface moisture on inter-layer strength of 3D printed concrete. Construction and Building Materials, 2018, 172, 468-475.	3.2	356
2	Effect of different superplasticizers and activator combinations on workability and strength of fly ash based geopolymer. Materials & Design, 2014, 57, 667-672.	5.1	299
3	Synthesis of heat and ambient cured one-part geopolymer mixes with different grades of sodium silicate. Ceramics International, 2015, 41, 5696-5704.	2.3	284
4	Effect of Polypropylene Fibre Addition on Properties of Geopolymers Made by 3D Printing for Digital Construction. Materials, 2018, 11, 2352.	1.3	171
5	Development of 3D-printable ultra-high performance fiber-reinforced concrete for digital construction. Construction and Building Materials, 2020, 257, 119546.	3.2	167
6	Development of 3D printable engineered cementitious composites with ultra-high tensile ductility for digital construction. Materials and Design, 2019, 181, 108088.	3.3	157
7	High ductile behavior of a polyethylene fiber-reinforced one-part geopolymer composite: A micromechanics-based investigation. Archives of Civil and Mechanical Engineering, 2017, 17, 555-563.	1.9	137
8	Micromechanics-based investigation of a sustainable ambient temperature cured one-part strain hardening geopolymer composite. Construction and Building Materials, 2017, 131, 552-563.	3.2	137
9	Tensile Strain Hardening Behavior of PVA Fiber-Reinforced Engineered Geopolymer Composite. Journal of Materials in Civil Engineering, 2015, 27, .	1.3	135
10	Comparative deflection hardening behavior of short fiber reinforced geopolymer composites. Construction and Building Materials, 2014, 70, 54-64.	3.2	130
11	Mechanical and thermal properties of lightweight geopolymer mortar incorporating crumb rubber. Journal of Cleaner Production, 2018, 195, 1069-1080.	4.6	127
12	Matrix design of strain hardening fiber reinforced engineered geopolymer composite. Composites Part B: Engineering, 2016, 89, 253-265.	5.9	125
13	Printability, accuracy and strength of geopolymer made using powder-based 3D printing for construction applications. Automation in Construction, 2019, 101, 179-189.	4.8	120
14	Fiber orientation effects on ultra-high performance concrete formed by 3D printing. Cement and Concrete Research, 2021, 143, 106384.	4.6	113
15	Integrating reinforcement in digital fabrication with concrete: A review and classification framework. Cement and Concrete Composites, 2021, 119, 103964.	4.6	101
16	Current Progress of 3D Concrete Printing Technologies. , 2017, , .		93
17	Thermal and mechanical properties of sustainable lightweight strain hardening geopolymer composites. Archives of Civil and Mechanical Engineering, 2017, 17, 55-64.	1.9	88
18	Method of Optimisation for Ambient Temperature Cured Sustainable Geopolymers for 3D Printing Construction Applications. Materials, 2019, 12, 902.	1.3	80

#	Article	IF	Citations
19	Effect of Type of Fiber on Inter-Layer Bond and Flexural Strengths of Extrusion-Based 3D Printed Geopolymer. Materials Science Forum, 0, 939, 155-162.	0.3	73
20	Ambient temperature cured â€˜just-add-waterâ€™ geopolymer for 3D concrete printing applications. Cement and Concrete Composites, 2021, 121, 104060.	4.6	72
21	Application of geopolymers for treatment of water contaminated with organic and inorganic pollutants: State-of-the-art review. Journal of Environmental Chemical Engineering, 2021, 9, 105095.	3.3	65
22	Mechanical properties and durability of unconfined and confined geopolymer concrete with fiber reinforced polymers exposed to sulfuric acid. Construction and Building Materials, 2019, 215, 1015-1032.	3.2	58
23	Microscale investigation of fiber-matrix interface properties of strain-hardening geopolymer composite. Ceramics International, 2017, 43, 15616-15625.	2.3	55
24	3D concrete printing of permanent formwork for concrete column construction. Cement and Concrete Composites, 2021, 121, 104039.	4.6	49
25	Micromechanics constitutive modelling and optimization of strain hardening geopolymer composite. Ceramics International, 2017, 43, 5999-6007.	2.3	44
26	Efficiency of Different Superplasticizers and Retarders on Properties of â€˜One-Partâ€™ Fly Ash-Slag Blended Geopolymers with Different Activators. Materials, 2019, 12, 3410.	1.3	44
27	A roadmap for quality control of hardening and hardened printed concrete. Cement and Concrete Research, 2022, 157, 106800.	4.6	43
28	3D Concrete Printing for Construction Applications. , 2019, , 1-11.		40
29	Digital fabrication of eco-friendly ultra-high performance fiber-reinforced concrete. Cement and Concrete Composites, 2022, 125, 104281.	4.6	34
30	Influence of Binder Saturation Level on Compressive Strength and Dimensional Accuracy of Powder-Based 3D Printed Geopolymer. Materials Science Forum, 0, 939, 177-183.	0.3	33
31	Interlayer Strength of 3D Printed Concrete. , 2019, , 241-264.		31
32	A comparison of the effects of pozzolanic binders on the hardened-state properties of high-strength cementitious composites reinforced with waste tire fibers. Composites Part B: Engineering, 2019, 162, 134-153.	5.9	30
33	Properties of Fresh and Hardened Glass Fiber Reinforced Fly Ash Based Geopolymer Concrete. Key Engineering Materials, 0, 594-595, 629-633.	0.4	27
34	Efficacy of Available Superplasticizers on Geopolymers. Research Journal of Applied Sciences, Engineering and Technology, 2014, 7, 1464-1468.	0.1	27
35	Properties of one-part geopolymer incorporating wollastonite as partial replacement of geopolymer precursor or sand. Materials Letters, 2020, 263, 127236.	1.3	25
36	Post-processing Methods to Improve Strength of Particle-Bed 3D Printed Geopolymer for Digital Construction Applications. Frontiers in Materials, 2019, 6, .	1.2	21

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37	Fresh and Hardened Properties of 3D Printable Geopolymer Cured in Ambient Temperature. RILEM Bookseries, 2019, , 3-11.	0.2	18
38	Properties of additively manufactured geopolymer incorporating mineral wollastonite microfibers. Construction and Building Materials, 2022, 331, 127282.	3.2	18
39	Study of particle packing and paste rheology in alkali activated mixtures to meet the rheology demands of 3D Concrete Printing. Cement and Concrete Composites, 2022, 131, 104581.	4.6	16
40	Synthesis of mesoporous magnesium aluminate (MgAl2O4) nanopowder with high surface area with a novel and simple solâ€“gel method. Journal of Porous Materials, 2015, 22, 481-485.	1.3	15
41	Effect of Delay Time on the Mechanical Properties of Extrusion-Based 3D Printed Concrete. , 2017, , .		15
42	Hardened Properties of 3D Printable â€˜One-Partâ€™ Geopolymer for Construction Applications. RILEM Bookseries, 2019, , 190-199.	0.2	13
43	Compressive Strength and Dimensional Accuracy of Portland Cement Mortar Made Using Powder-Based 3D Printing for Construction Applications. RILEM Bookseries, 2019, , 245-254.	0.2	10
44	Properties of Extrusion-Based 3D Printable Geopolymers for Digital Construction Applications. , 2019, , 371-388.		9
45	Properties of 3D-Printable Ductile Fibre-Reinforced Geopolymer Composite for Digital Construction Applications. RILEM Bookseries, 2020, , 363-372.	0.2	9
46	Structural behavior of precast Ultra-High Performance Fiber Reinforced Concrete (UHPFRC) cantilever retaining walls: Part I â€” Analysis and design procedures and Environmental Impact Calculations (EIC). KSCE Journal of Civil Engineering, 2014, 18, 1470-1480.	0.9	8
47	Structural behavior of precast Ultra-High Performance Fiber Reinforced Concrete (UHPFRC) cantilever retaining walls: Part II â€” Full scale experimental testing. KSCE Journal of Civil Engineering, 2014, 18, 1481-1495.	0.9	8
48	Digital Fabrication of â€˜Just-Add-Waterâ€™ Geopolymers: Effects of Curing Condition and Print-Time Interval. RILEM Bookseries, 2020, , 93-102.	0.2	6
49	Effect of Wollastonite Micro-Fiber Addition on Properties of 3D-Printable â€˜Just-Add-Waterâ€™ Geopolymers. RILEM Bookseries, 2020, , 23-31.	0.2	6
50	A review on ultra high performance â€˜ductileâ€™ concrete (UHPdC) technology. International Journal of Civil and Structural Engineering, 2012, 2, .	0.2	6
51	Development of Powder-Based 3D Concrete Printing Using Geopolymers. , 2019, , 223-240.		5
52	Post-processing Techniques to Enhance Strength of Portland Cement Mortar Digitally Fabricated Using Powder-Based 3D Printing Process. RILEM Bookseries, 2020, , 457-464.	0.2	4
53	Sustainability Assessment of Precast Ultra-High Performance Fiber Reinforced Concrete (UHPFRC) Cantilever Retaining Walls. Research Journal of Applied Sciences, Engineering and Technology, 2014, 7, 3971-3977.	0.1	3
54	Enhancing Strength of Powder-Based 3D Printed Geopolymers for Digital Construction Applications. RILEM Bookseries, 2020, , 417-425.	0.2	2

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55	Properties of Powder-Based 3D Printed Geopolymers. , 2019, , 265-280.		1
56	Shape Accuracy Evaluation of Geopolymer Specimens Made Using Particle-Bed 3D Printing. RILEM Bookseries, 2020, , 1011-1019.	0.2	1
57	Quantitative Evaluation of Orientation of Steel Fibers in 3D-Printed Ultra-High Performance Concrete. RILEM Bookseries, 2020, , 389-397.	0.2	1