Anthony Duncan Jefferson

List of Publications by Year
in descending order

50 papers	2,004 citations	279487 23 h-index	253896 43 g-index
51 all docs	51 docs citations	51 times ranked	1342 citing authors

#	Article	IF	Citations
1	A crack-opening-dependent numerical model for self-healing cementitious materials. International Journal of Solids and Structures, 2022, 244-245, 111601.	1.3	5
2	Enhanced concrete crack closure with hybrid shape memory polymer tendons. Engineering Structures, 2021, 226, 111330.	2.6	26
3	A review of vascular networks for self-healing applications. Smart Materials and Structures, 2021, 30, 063001.	1.8	42
4	A reformulated hardening soil model. Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics, 2020, 173, 11-29.	0.4	3
5	Mechanical response of a vascular self-healing cementitious material system under varying loading conditions. Construction and Building Materials, 2020, 254, 119245.	3.2	30
6	Development of 3D Printed Networks in Self-Healing Concrete. Materials, 2020, 13, 1328.	1.3	32
7	Characterisation of a vascular self-healing cementitious material system: Flow and curing properties. Construction and Building Materials, 2020, 245, 118332.	3.2	25
8	An indicatorâ€based problem reduction scheme for coupled reactive transport models. International Journal for Numerical Methods in Engineering, 2019, 120, 1428-1455.	1.5	3
9	An experimental and numerical study on vascular self-healing cementitious materials. MATEC Web of Conferences, 2019, 289, 01004.	0.1	3
10	A survey on problems encountered in current concrete construction and the potential benefits of self-healing cementitious materials. Case Studies in Construction Materials, 2018, 8, 238-247.	0.8	74
11	Experimental characterization of the self-healing capacity of cement based materials and its effects on the material performance: A state of the art report by COST Action SARCOS WG2. Construction and Building Materials, 2018, 167, 115-142.	3.2	183
12	Progressive instability in circular masonry columns. Engineering Structures, 2018, 157, 96-104.	2.6	5
13	A Review of Selfâ€Healing Concrete for Damage Management of Structures. Advanced Materials Interfaces, 2018, 5, 1800074.	1.9	412
14	Research Progress on Numerical Models for Selfâ€Healing Cementitious Materials. Advanced Materials Interfaces, 2018, 5, 1701378.	1.9	37
15	A coupled chemo-mechanical damage-healing model for cementitious materials. , 2018, , 285-288.		0
16	Micromechanical modelling of self-healing cementitious materials. International Journal of Solids and Structures, 2017, 113-114, 180-191.	1.3	28
17	Development of high shrinkage polyethylene terephthalate (PET) shape memory polymer tendons for concrete crack closure. Smart Materials and Structures, 2017, 26, 045006.	1.8	14
18	Capillary Flow Characteristics of an Autogenic and Autonomic Healing Agent for Self-Healing Concrete. Journal of Materials in Civil Engineering, 2017, 29, .	1.3	13

#	ARTICLE	IF	CITATIONS
19	A plastic-damage-contact constitutive model for concrete with smoothed evolution functions. Computers and Structures, 2016, 169, 40-56.	2.4	13
20	A coupled thermo-hygro-chemical model for characterising autogenous healing in ordinary cementitious materials. Cement and Concrete Research, 2016, 88, 184-197.	4.6	20
21	A smooth unloading–reloading approach for the nonlinear finite element analysis of quasi-brittle materials. Engineering Fracture Mechanics, 2016, 152, 105-125.	2.0	8
22	A plastic-damage constitutive model for the finite element analysis of fibre reinforced concrete. Engineering Fracture Mechanics, 2016, 159, 35-62.	2.0	40
23	MODELLING SOIL-FIBRE COMPOSITE BEHAVIOUR USING A MICROMECHANICAL APPROACH. , 2016, , .		0
24	The simulation of crack opening-closing and aggregate interlock behaviour in finite element concrete models. International Journal for Numerical Methods in Engineering, 2015, 104, 48-78.	1.5	18
25	The simulation of inelastic matrix strains in cementitious materials using micromechanical solutions. Engineering Fracture Mechanics, 2015, 133, 191-210.	2.0	2
26	Porosity development in a thermo-hygral finite element model for cementitious materials. Cement and Concrete Research, 2015, 78, 216-233.	4.6	13
27	Numerical simulation of the long-term behaviour of a self-healing concrete beam vs standard reinforced concrete. Engineering Structures, 2015, 102, 176-188.	2.6	16
28	Finite element crack width computations with a thermo-hygro-mechanical-hydration model for concrete structures. European Journal of Environmental and Civil Engineering, 2014, 18, 793-813.	1.0	10
29	Simulation of the capillary flow of an autonomic healing agent in discrete cracks in cementitious materials. Cement and Concrete Research, 2014, 58, 35-44.	4.6	51
30	Smoothed contact in a micromechanical model for cement bound materials. Computers and Structures, 2013, 118, 115-125.	2.4	3
31	Crack healing of cementitious materials using shrinkable polymer tendons. Structural Concrete, 2013, 14, 138-147.	1.5	25
32	Investigation of capillary flow in discrete cracks in cementitious materials. Cement and Concrete Research, 2012, 42, 972-981.	4.6	33
33	A material model for cementitious composite materials with an exterior point Eshelby microcrack initiation criterion. International Journal of Solids and Structures, 2011, 48, 3312-3325.	1.3	30
34	Shrinkage behavior of poly(ethylene terephthalate) for a new cementitious–shrinkable polymer material system. Journal of Applied Polymer Science, 2011, 120, 2516-2526.	1.3	10
35	A new system for crack closure of cementitious materials using shrinkable polymers. Cement and Concrete Research, 2010, 40, 795-801.	4.6	76
36	A model for cementitious composite materials based on micro-mechanical solutions and damage-contact theory. Computers and Structures, 2010, 88, 1361-1366.	2.4	9

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37	Micromodelling of eccentrically loaded brickwork: Study of masonry wallettes. Engineering Structures, 2010, 32, 1244-1251.	2.6	54
38	Experimental investigation of adhesive-based self-healing of cementitious materials. Magazine of Concrete Research, 2010, 62, 831-843.	0.9	165
39	An experimental, numerical and analytical investigation of gas flow characteristics in concrete. Cement and Concrete Research, 2008, 38, 360-367.	4.6	13
40	Experimental Tests and Numerical Modelling of Hexagonal Concrete Specimens. Materials and Structures/Materiaux Et Constructions, 2007, 40, 491-505.	1.3	3
41	Three dimensional finite element simulations of fracture tests using the Craft concrete model. Computers and Concrete, 2004, 1, 261-284.	0.7	43
42	Craftâ€"â€"a plastic-damage-contact model for concrete. I. Model theory and thermodynamic considerations. International Journal of Solids and Structures, 2003, 40, 5973-5999.	1.3	67
43	Craftâ€"â€"a plastic-damage-contact model for concrete. II. Model implementation with implicit return-mapping algorithm and consistent tangent matrix. International Journal of Solids and Structures, 2003, 40, 6001-6022.	1.3	27
44	Tripartite Cohesive Crack Model. Journal of Engineering Mechanics - ASCE, 2002, 128, 644-653.	1.6	9
45	Constitutive modelling of aggregate interlock in concrete. International Journal for Numerical and Analytical Methods in Geomechanics, 2002, 26, 515-535.	1.7	20
46	Experimental Investigations into Seismic Failure of High Arch Dams. Journal of Structural Engineering, 2000, 126, 926-935.	1.7	55
47	Evaluation of strains at peak stresses in concrete: A three-phase composite model approach. Cement and Concrete Composites, 1998, 20, 301-318.	4.6	142
48	Plastic-Damage Model for Interfaces in Cementitious Materials. Journal of Engineering Mechanics - ASCE, 1998, 124, 775-782.	1.6	13
49	Stepped softening functions for concrete fracture in finite element analysis. Computers and Structures, 1991, 41, 331-344.	2.4	5
50	Large Scale Application of Self-Healing Concrete: Design, Construction, and Testing. Frontiers in Materials, 0, 5, .	1.2	75