Stephen J Foster

List of Publications by Year
in descending order

118 papers	3,537 citations	134610 34 h-index	175968 55 g-index
119 all docs	119 docs citations	119 times ranked	2649 citing authors

#	Article	IF	Citations
1	Numerical simulation of risk mitigation strategies for early-age thermal cracking and DEF in concrete. Construction and Building Materials, 2022, 322, 126478.	3.2	8
2	A stereological approach to estimation of fibre distribution in concrete. Construction and Building Materials, 2022, 324, 126547.	3.2	2
3	Capturing the early-age physicochemical transformations of alkali-activated fly ash and slag using ultrasonic pulse velocity technique. Cement and Concrete Composites, 2022, 130, 104529.	4.6	10
4	Behavior of <scp>Postcracked</scp> steel fiberâ€reinforced concrete in fatigue and development of a damage prediction model. Structural Concrete, 2022, 23, 1593-1610.	1.5	4
5	Moment redistribution and post-peak behaviour of lightly reinforced-SFRC continuous slabs. Engineering Structures, 2021, 232, 111834.	2.6	9
6	Minimising risk of early-age thermal cracking and delayed ettringite formation in concrete â€“ A hybrid numerical simulation and genetic algorithm mix optimisation approach. Construction and Building Materials, 2021, 299, 124280.	3.2	7
7	Effects of mixing duration on engineering properties of geopolymer concrete. Construction and Building Materials, 2021, 303, 124449.	3.2	14
8	Concentrically and eccentrically loaded high-strength concrete columns with high-strength reinforcement: An experimental study. Engineering Structures, 2021, 248, 113251.	2.6	2
9	Model error and reliability of reinforced concrete beams in shear designed according to the Modified Compression Field Theory. Structural Concrete, 2021, 22, 3711-3726.	1.5	3
10	Continuous Monitoring of the Early-Age Properties of Activated GGBFS with Alkaline Solutions of Different Concentrations. Journal of Materials in Civil Engineering, 2021, 33, .	1.3	9
11	High-density geopolymer concrete for Port Kembla breakwater upgrade. Construction and Building Materials, 2020, 262, 120920.	3.2	6
12	Authors' closure on the discussion of the article: â€œOn shear in members without stirrups and the application of energyâ€based methods in light of 30â€‰years of test observationsâ€•(discussion by DÃ¶nmez et) Tj ET Q q 0 0 0 rg BT /O		
13	Gradient-based fibre detection method on 3D micro-CT tomographic image for defining fibre orientation bias in ultra-high-performance concrete. Cement and Concrete Research, 2020, 129, 105962.	4.6	39
14	Development of high-density geopolymer concrete with steel furnace slag aggregate for coastal protection structures. Construction and Building Materials, 2020, 248, 118681.	3.2	22
15	On shear in members without stirrups and the application of energyâ€based methods in light of 30 years of test observations. Structural Concrete, 2019, 20, 1481-1489.	1.5	9
16	Assessment of model error for reinforced concrete beams with steel fibers in bending. Structural Concrete, 2019, 20, 1010-1021.	1.5	4
17	Performance of oxygen/argon plasma-treated steel fibres in cement mortar. Cement and Concrete Composites, 2019, 97, 24-32.	4.6	13
18	Design of steel fiber reinforced concrete beams for shear using inverse analysis for determination of residual tensile strength. Structural Concrete, 2018, 19, 129-140.	1.5	22

#	Article	IF	Citations
19	Flexural performance of steel fibre reinforced concrete beams designed for moment redistribution. Engineering Structures, 2018, 177, 695-706.	2.6	24
20	Reflections on an academic career. Structural Concrete, 2018, 19, 967-968.	1.5	0
21	Investigation into the use of macro synthetic fibre reinforced concrete for breakwater armour units. Coastal Engineering, 2018, 140, 60-71.	1.7	11
22	Precision of cement hydration heat models in capturing the effects of SCMs and retarders. Magazine of Concrete Research, 2018, 70, 1217-1231.	0.9	6
23	An integrated approach for predicting the shear capacity of fibre reinforced concrete beams. Engineering Structures, 2018, 174, 346-357.	2.6	26
24	Behaviour of steel-CFRP lap joints under hygrothermal cycles and sustained loadings. Composite Structures, 2018, 203, 740-749.	3.1	19
25	Time-Dependent Buckling Testing of Eccentrically-Loaded Slender High-Strength Concrete Panels. ACI Structural Journal, 2018, 115, .	0.3	3
26	Meshless and analytical solutions to the time-dependent advection-diffusion-reaction equation with variable coefficients and boundary conditions. Applied Mathematical Modelling, 2017, 49, 220-242.	2.2	8
27	Sustainable Steel-timber Joints for Framed Structures. Procedia Engineering, 2017, 172, 2-12.	1.2	8
28	Fatigue of steel-fibre-reinforced concrete prestressed railway sleepers. Engineering Structures, 2017, 141, 241-250.	2.6	48
29	Influence of temperature on water vapour sorption isotherms and kinetics of hardened cement paste and concrete. Cement and Concrete Research, 2017, 92, 37-55.	4.6	50
30	Fatigue behaviour of transversely restrained precast steel fibre reinforced concrete slabs in a deconstructable composite deck. Construction and Building Materials, 2017, 132, 516-528.	3.2	6
31	Application of the meshless generalised RKPM to the transient advection-diffusion-reaction equation. Computers and Structures, 2017, 193, 172-186.	2.4	4
32	Better, smarter, and stronger!. Structural Concrete, 2017, 18, 379-380.	1.5	0
33	Instantaneous deflection calculation for steel fibre reinforced concrete one way members. Engineering Structures, 2017, 131, 438-445.	2.6	38
34	Material characterisation of macro synthetic fibre reinforced concrete. Cement and Concrete Composites, 2017, 84, 124-133.	4.6	55
35	Experimental Study of Progressive Collapse Resistance of RC Framed Structures. ACI Structural Journal, 2017, 114, .	0.3	11
36	Safety Risks Associated with Carbon Nanotube-Reinforced Mortar. ACI Materials Journal, 2017, 114, .	0.3	2

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37	Calibration of Australian Standard AS3600 concrete structures part II: reliability indices and changes to capacity reduction factors. Australian Journal of Structural Engineering, 2016, 17, 254-266.	0.4	21
38	Shear-Bond Behaviour of Steel-Fibre Reinforced Concrete (SFRC) Composite Slabs with Deep Trapezoidal Decking: Experimental Study. , 2016, , .		0
39	Collapse analysis of reinforced concrete frames including bar fracture. Advances in Structural Engineering, 2016, 19, 203-217.	1.2	3
40	Reserve of Strength in Inverted U-Shaped RC Culverts: Effect of Backfill on Ultimate Load Capacity and Fatigue Life. Journal of Bridge Engineering, 2016, 21, 04015051.	1.4	10
41	Utilisation of steel furnace slag coarse aggregate in a low calcium fly ash geopolymer concrete. Cement and Concrete Research, 2016, 89, 220-229.	4.6	92
42	Fibre-reinforced concrete beam assemblages subject to column loss. Magazine of Concrete Research, 2016, 68, 305-317.	0.9	0
43	Behaviour of precast concrete deck slabs with transverse confining systems. Magazine of Concrete Research, 2016, 68, 863-876.	0.9	3
44	Fibre-reinforced concrete beam assemblages subject to column loss. Magazine of Concrete Research, 2016, 68, 305-317.	0.9	10
45	Modelling the tension stiffening effect in SFR-RC. Magazine of Concrete Research, 2016, 68, 339-352.	0.9	38
46	Testing of new adhesive and CFRP laminate for steel-CFRP joints under sustained loading and temperature cycles. Composites Part B: Engineering, 2016, 99, 235-247.	5.9	52
47	Compressive stress-strain model for low-calcium fly ash-based geopolymer and heat-cured Portland cement concrete. Cement and Concrete Composites, 2016, 73, 136-146.	4.6	157
48	Calibration of Australian Standard AS3600 Concrete Structures: part I statistical analysis of material properties and model error. Australian Journal of Structural Engineering, 2016, 17, 242-253.	0.4	28
49	Prediction of water vapour sorption isotherms and microstructure of hardened Portland cement pastes. Cement and Concrete Research, 2016, 81, 134-150.	4.6	32
50	Shear strength of steel fibre reinforced concrete beams with stirrups. Engineering Structures, 2016, 111, 323-332.	2.6	118
51	Predicting the flexural response of steel fibre reinforced concrete prisms using a sectional model. Cement and Concrete Composites, 2016, 67, 1-11.	4.6	17
52	Deconstructable steelâ€“fibre reinforced concrete deck slabs with a transverse confining system. Materials and Design, 2016, 89, 1007-1019.	3.3	8
53	High temperature behaviour of hybrid steelâ€“PVA fibre reinforced reactive powder concrete. Materials and Structures/Materiaux Et Constructions, 2016, 49, 769-782.	1.3	130
54	Creep and drying shrinkage of a blended slag and low calcium fly ash geopolymer Concrete. Materials and Structures/Materiaux Et Constructions, 2016, 49, 1619-1628.	1.3	102

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55	Experimental Study of Temperature Effects on Water Vapour Sorption and Moisture Transport Phenomena. , 2015, , .		0
56	Derivation of the Ïƒâ€w relationship for SFRC from prism bending tests. Structural Concrete, 2015, 16, 93-105.	1.5	95
57	Fatigue Behavior of Steel-Fiber-Reinforced Concrete Beams. Journal of Structural Engineering, 2015, 141, .	1.7	59
58	High strength and reactive powder concrete columns subjected to impact: Experimental investigation. Construction and Building Materials, 2015, 78, 153-171.	3.2	50
59	Bond strength between blended slag and Class F fly ash geopolymer concrete with steel reinforcement. Cement and Concrete Research, 2015, 72, 48-53.	4.6	214
60	Arching behaviour of precast concrete slabs in a deconstructable composite bridge deck. Construction and Building Materials, 2015, 87, 67-77.	3.2	12
61	Theoretical and Experimental Investigation of Failure Behavior of One-Way High-Strength Concrete Wall Panels. Journal of Structural Engineering, 2015, 141, .	1.7	8
62	Wet thermo-mechanical behavior of steelâ€“CFRP joints â€“ An experimental study. Composites Part B: Engineering, 2015, 83, 284-296.	5.9	33
63	Ductility in concentrically loaded reinforced concrete columns. Australian Journal of Structural Engineering, 2015, 16, 237-250.	0.4	5
64	Ultrahigh-Performance Concrete Segmental Bridge Technology: Toward Sustainable Bridge Construction. Journal of Bridge Engineering, 2015, 20, .	1.4	94
65	Hygro-Thermal Modelling of Concrete Exposed to High Temperatures. Applied Mechanics and Materials, 2014, 553, 637-642.	0.2	0
66	Reserve of strength in reinforced concrete frames: Analysis of arching action. Australian Journal of Structural Engineering, 2014, 15, .	0.4	1
67	A non-linear steel-concrete interface damage model for reinforced concrete after cracking. Australian Journal of Structural Engineering, 2014, 15, .	0.4	0
68	A simple strategy for constitutive modelling of timber. Construction and Building Materials, 2014, 53, 138-148.	3.2	33
69	Mixed mode fracture behaviour of steel fibre reinforced concrete. Materials and Structures/Materiaux Et Constructions, 2014, 47, 67-76.	1.3	17
70	A force-based frame finite element formulation for analysis of two- and three-layered composite beams with material non-linearity. International Journal of Non-Linear Mechanics, 2014, 62, 12-22.	1.4	23
71	Influence of freezeâ€“thaw cycling on the bond strength of steelâ€“FRP lap joints. Composites Part B: Engineering, 2014, 60, 178-185.	5.9	54
72	Strength and serviceability of continuous composite slabs with deep trapezoidal steel decking and steel fibre reinforced concrete. Engineering Structures, 2013, 49, 866-875.	2.6	42

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73	Development of arching action in longitudinally-restrained reinforced concrete beams. Construction and Building Materials, 2013, 47, 7-19.	3.2	63
74	Development of a mix design methodology for highâ€performance geopolymer mortars. Structural Concrete, 2013, 14, 148-156.	1.5	35
75	The behaviour of steel-fibre-reinforced geopolymer concrete beams in shear. Magazine of Concrete Research, 2013, 65, 308-318.	0.9	65
76	Design for SLS according to fib Model Code 2010. Structural Concrete, 2013, 14, 99-123.	1.5	55
77	A generic model for investigation of arching action in reinforced concrete members. Construction and Building Materials, 2013, 38, 742-750.	3.2	22
78	Background to fib Model Code 2010 shear provisions â€“ part II: punching shear. Structural Concrete, 2013, 14, 204-214.	1.5	55
79	Physical understandings and development of mechanical models for the design of concrete structures. Structural Concrete, 2013, 14, 193-194.	1.5	1
80	Background to the fib Model Code 2010 shear provisions â€“ part I: beams and slabs. Structural Concrete, 2013, 14, 195-203.	1.5	78
81	A Mechanistic 1D Finite Element Model for Nonlinear Analysis of FRP-Strengthened Reinforced Concrete Beams. Advances in Structural Engineering, 2013, 16, 1989-2004.	1.2	2
82	FE Modeling of CFRP-Repaired RC Beams Subjected to Fatigue Loading. Journal of Composites for Construction, 2012, 16, 572-580.	1.7	16
83	Punching shear strength of steel fibre reinforced concrete slabs. Engineering Structures, 2012, 40, 83-94.	2.6	99
84	A total secant flexibility-based formulation for frame elements with physical and geometrical nonlinearities. Finite Elements in Analysis and Design, 2010, 46, 288-297.	1.7	22
85	Nonlinear static and cyclic analysis of concrete-filled steel columns. Journal of Constructional Steel Research, 2010, 66, 793-802.	1.7	38
86	Finite element modelling of reinforced concrete framed structures including catenary action. Computers and Structures, 2010, 88, 529-538.	2.4	33
87	Nonlinear reinforced concrete frame element with torsion. Engineering Structures, 2010, 32, 988-1002.	2.6	26
88	FE Modeling of FRP-Repaired Planar Concrete Elements Subjected to Monotonic and Cyclic Loading. Journal of Composites for Construction, 2010, 14, 720-729.	1.7	8
89	Shear Strength of Steel Fiber-Reinforced Ultrahigh- Performance Concrete Beams without Stirrups. Journal of Structural Engineering, 2010, 136, 1393-1400.	1.7	138
90	Characteristics of ultra-high performance â€˜ductileâ€™ concrete and its impact on sustainable construction. IES Journal Part A: Civil and Structural Engineering, 2010, 3, 168-187.	0.4	47

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91	A reinforced concrete frame element with shear effect. Structural Engineering and Mechanics, 2010, 36, 57-78.	1.0	3
92	Nonlinear analysis of 3D reinforced concrete frames: effect of section torsion on the global response. Structural Engineering and Mechanics, 2010, 36, 421-445.	1.0	8
93	Design of FRC beams for shear using the VEM and the draft Model Code approach. Fibre-reinforced Concrete: From Design To Structural Applications, 2010, , 195-210.	0.0	25
94	The application of steel-fibres as concrete reinforcement in Australia: from material to structure. Materials and Structures/Materiaux Et Constructions, 2009, 42, 1209-1220.	1.3	46
95	Nonlocal Damage Formulation for a Flexibility-Based Frame Element. Journal of Structural Engineering, 2009, 135, 1213-1221.	1.7	49
96	Analysis of RC beams subjected to shock loading using a modified fibre element formulation. Computers and Concrete, 2009, 6, 377-390.	0.7	18
97	Time-dependent modelling of RC structures using the cracked membrane model and solidification theory. Computers and Structures, 2008, 86, 1305-1317.	2.4	11
98	The Use of Low Ductility Welded Wire Mesh in the Design of Suspended Reinforced Concrete Slabs. Australian Journal of Structural Engineering, 2008, 8, 237-247.	0.4	7
99	Behaviour of Reactive Powder Concrete Columns without Steel Ties. Journal of Advanced Concrete Technology, 2008, 6, 377-386.	0.8	13
100	Shear Strength of Fiber Reinforced Reactive Powder Concrete Prestressed Girders without Stirrups. Journal of Advanced Concrete Technology, 2006, 4, 123-132.	0.8	93
101	A Smeared â€" Fixed Crack Model for FE Analysis of RC Membranes Incorporating Aggregate Interlock. Advances in Structural Engineering, 2006, 9, 91-102.	1.2	7
102	Modelling time-dependent cracking in reinforced concrete using bond-slip Interface elements. Computers and Concrete, 2004, 1, 151-168.	0.7	5
103	Cracked Membrane Model: Finite Element Implementation. Journal of Structural Engineering, 2003, 129, 1155-1163.	1.7	32
104	Design of HSC Columns with Steel Fibres. , 2003, , 128.		2
105	Design of Disturbed Regions in Reactive Powder Concrete Bridge Girders. , 2003, , 117.		7
106	Evaluation of Efficiency Factor Models used in Strut-and-Tie Modeling of Nonflexural Members. Journal of Structural Engineering, 2002, 128, 569-577.	1.7	52
107	Modelling triaxial compression using the Microplane formulation for low confinement. Computers and Structures, 2002, 80, 919-934.	2.4	12
108	Strength and Ductility of Fiber-Reinforced High-Strength Concrete Columns. Journal of Structural Engineering, 2001, 127, 28-34.	1.7	83

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109	A three-dimensional finite element model for confined concrete structures. Computers and Structures, 2000, 77, 441-451.	2.4	26
110	Design of non-flexural members for shear. Cement and Concrete Composites, 1998, 20, 465-475.	4.6	15
111	Cover Spalling in HSC Columns Loaded in Concentric Compression. Journal of Structural Engineering, 1998, 124, 1431-1437.	1.7	74
112	Finite-Element Model for Confined Concrete Columns. Journal of Structural Engineering, 1998, 124, 1011-1017.	1.7	11
113	Splitting of reinforced concrete panels under concentrated loads. Structural Engineering and Mechanics, 1997, 5, 803-815.	1.0	0
114	Rotating crack finite element model for reinforced concrete structures. Computers and Structures, 1996, 58, 43-50.	2.4	24
115	Finite element analysis of out-of-plane buckling of reinforced concrete walls. Computers and Structures, 1996, 61, 1037-1042.	2.4	8
116	An application of the arc length method involving concrete cracking. International Journal for Numerical Methods in Engineering, 1992, 33, 269-285.	1.5	19
117	A two-dimensional mesh generator for generation about axes of symmetry, incorporating line element overlays. Computers and Structures, 1990, 36, 933-962.	2.4	4
118	Effects of Silane Treatment on the Bond Between Steel Fibres and Mortar. Magazine of Concrete Research, 0, , 1-37.	0.9	0