Bhushan Karihaloo

List of Publications by Year
in descending order

271	8,621	44069	60623
papers	citations	48 h-index	81 g-index

276	276	276	3823
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Size-dependent effective elastic constants of solids containing nano-inhomogeneities with interface stress. Journal of the Mechanics and Physics of Solids, 2005, 53, 1574-1596.	4.8	642
2	Theory of Elasticity at the Nanoscale. Advances in Applied Mechanics, 2009, 42, 1-68.	2.3	222
3	Eshelby formalism for nano-inhomogeneities. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2005, 461, 3335-3353.	2.1	214
4	Strain-softening of concrete in uniaxial compression. Materials and Structures/Materiaux Et Constructions, 1997, 30, 195-209.	3.1	195
5	Nanoporous materials can be made stiffer than non-porous counterparts by surface modification. Acta Materialia, 2006, 54, 2983-2990.	7.9	182
6	XFEM for direct evaluation of mixed mode SIFs in homogeneous and bi-materials. International Journal for Numerical Methods in Engineering, 2004, 59, 1103-1118.	2.8	179
7	Fracture process zone size and true fracture energy of concrete using acoustic emission. Construction and Building Materials, 2010, 24, 479-486.	7.2	170
8	Modelling of stationary and growing cracks in FE framework without remeshing: a state-of-the-art review. Computers and Structures, 2003, 81, 119-129.	4.4	162
9	Determination of specimen-size independent fracture toughness of plain concrete. Magazine of Concrete Research, 1986, 38, 67-76.	2.0	138
10	Accurate determination of the coefficients of elastic crack tip asymptotic field by a hybrid crack element with p-adaptivity. Engineering Fracture Mechanics, 2001, 68, 1609-1630.	4.3	136
11	High performance fibre-reinforced cementitious composite (CARDIFRC) â€“ Performance and application to retrofitting. Engineering Fracture Mechanics, 2007, 74, 151-167.	4.3	129
12	Effective crack model for the determination of fracture toughness () of concrete. Engineering Fracture Mechanics, 1990, 35, 637-645.	4.3	128
13	A scaling law for properties of nano-structured materials. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2006, 462, 1355-1363.	2.1	124
14	Improving the accuracy of XFEM crack tip fields using higher order quadrature and statically admissible stress recovery. International Journal for Numerical Methods in Engineering, 2006, 66, 1378-1410.	2.8	123
15	Effect of specimen and crack sizes, water/cement ratio and coarse aggregate texture upon fracture toughness of concrete. Magazine of Concrete Research, 1984, 36, 227-236.	2.0	119
16	Retrofitting of Reinforced Concrete Beams with CARDIFRC. Journal of Composites for Construction, 2003, 7, 174-186.	3.2	111
17	Determination of size-independent specific fracture energy of concrete from three-point bend and wedge splitting tests. Magazine of Concrete Research, 2003, 55, 133-141.	2.0	109
18	A simple method for determining the true specific fracture energy of concrete. Magazine of Concrete Research, 2003, 55, 471-481.	2.0	108

#	Article	IF	Citations
19	Size effect in shallow and deep notched quasi-brittle structures. International Journal of Fracture, 1999, 95, 379-390.	2.2	103
20	Size effect in concrete beams. Engineering Fracture Mechanics, 2003, 70, 979-993.	4.3	102
21	Direct determination of SIF and higher order terms of mixed mode cracks by a hybrid crack element. International Journal of Fracture, 2004, 125, 207-225.	2.2	101
22	Lattice modelling of the failure of particle composites. Engineering Fracture Mechanics, 2003, 70, 2385-2406.	4.3	99
23	Thermo-elastic properties of heterogeneous materials with imperfect interfaces: Generalized Levin's formula and Hill's connections. Journal of the Mechanics and Physics of Solids, 2007, 55, 1036-1052.	4.8	94
24	An improved effective crack model for the determination of fracture toughness of concrete. Cement and Concrete Research, 1989, 19, 603-610.	11.0	92
25	Effective conductivities of heterogeneous media containing multiple inclusions with various spatial distributions. Physical Review B, 2006, 73, .	3.2	91
26	Effective thermal conductivities of heterogeneous media containing multiple imperfectly bonded inclusions. Physical Review B, 2007, 75, .	3.2	90
27	Development of self-compacting high and ultra high performance concretes with and without steel fibres. Cement and Concrete Composites, 2012, 34, 185-190.	10.7	89
28	Dynamic strengths and toughness of an ultra high performance fibre reinforced concrete. Engineering Fracture Mechanics, 2013, 110, 477-488.	4.3	83
29	CARDIFRCÂ®â€“ Development and mechanical properties. Part III: Uniaxial tensile response and other mechanical properties. Magazine of Concrete Research, 2005, 57, 433-443.	2.0	81
30	Approximate Description of Crack Kinking and Curving. Journal of Applied Mechanics, Transactions ASME, 1981, 48, 515-519.	2.2	79
31	Reorientation of short steel fibres during the flow of self-compacting concrete mix and determination of the fibre orientation factor. Cement and Concrete Research, 2014, 56, 112-120.	11.0	78
32	Griffith crack moving along the interface of two dissimilar piezoelectric materials. International Journal of Fracture, 1998, 91, 197-203.	2.2	77
33	Optimum design of vibrating cantilevers. Journal of Optimization Theory and Applications, 1973, 11, 638-654.	1.5	74
34	Higher order terms of the crack tip asymptotic field for a notched three-point bend beam. International Journal of Fracture, 2001, 112, 111-128.	2.2	73
35	Lattice modelling of size effect in concrete strength. Engineering Fracture Mechanics, 2003, 70, 2307-2320.	4.3	73
36	Prediction of the plastic viscosity of self-compacting steel fibre reinforced concrete. Cement and Concrete Research, 2009, 39, 1209-1216.	11.0	72

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37	Hierarchical, multilayered cell walls reinforced by recycled silk cocoons enhance the structural integrity of honeybee combs. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9502-9506.	7.1	72
38	Dynamic response of a cracked piezoelectric ceramic under arbitrary electro-mechanical impact. International Journal of Solids and Structures, 1999, 36, 5125-5133.	2.7	70
39	Fatigue behaviour of damaged RC beams strengthened with ultra high performance fibre reinforced concrete. International Journal of Fatigue, 2018, 116, 659-668.	5.7	63
40	Flexural behavior of RC beams retrofitted with ultra-high strength concrete. Construction and Building Materials, 2018, 175, 815-824.	7.2	61
41	Determination of size-independent specific fracture energy of concrete mixes by two methods. Cement and Concrete Research, 2013, 50, 19-25.	11.0	59
42	Crack kinking under nonsymmetric loading. Engineering Fracture Mechanics, 1980, 13, 879-888.	4.3	56
43	Determination of size-independent specific fracture energy of concrete mixes by the tri-linear model. Cement and Concrete Research, 2013, 49, 82-88.	11.0	56
44	Honeybee combs: how the circular cells transform into rounded hexagons. Journal of the Royal Society Interface, 2013, 10, 20130299.	3.4	56
45	Direct evaluation of accurate coefficients of the linear elastic crack tip asymptotic field. Fatigue and Fracture of Engineering Materials and Structures, 2003, 26, 719-729.	3.4	54
46	Deterministic size effect in the strength of cracked concrete structures. Cement and Concrete Research, 2006, 36, 171-188.	11.0	54
47	A method for constructing the bilinear tension softening diagram of concrete corresponding to its true fracture energy. Magazine of Concrete Research, 2004, 56, 597-604.	2.0	51
48	Various size effects in fracture of concrete. Cement and Concrete Research, 1985, 15, 117-126.	11.0	50
49	Minimum-weight design of multi-purpose cylindrical bars. International Journal of Solids and Structures, 1976, 12, 267-273.	2.7	49
50	Fracture toughness of plain concrete from three-point bend specimens. Materials and Structures/Materiaux Et Constructions, 1989, 22, 185-193.	3.1	49
51	Determination of size-independent specific fracture energy of normal- and high-strength self-compacting concrete from wedge splitting tests. Construction and Building Materials, 2013, 48, 548-553.	7.2	49
52	Size-independent fracture energy in plain concrete beams using tri-linear model. Construction and Building Materials, 2011, 25, 3051-3058.	7.2	48
53	Multi-scale dynamic fracture model for quasi-brittle materials. International Journal of Engineering Science, 2012, 61, 3-9.	5.0	48
54	Effects of surface and initial stresses on the bending stiffness of trilayer plates and nanofilms. Journal of Mechanics of Materials and Structures, 2009, 4, 589-604.	0.6	46

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55	On crack kinking and curving. Mechanics of Materials, 1982, 1, 189-201.	3.2	45
56	Improved Lattice Model for Concrete Fracture. Journal of Engineering Mechanics - ASCE, 2002, 128, 57-65.	2.9	45
57	Coefficients of the crack tip asymptotic field for wedge splitting specimens. Engineering Fracture Mechanics, 2003, 70, 2407-2420.	4.3	45
58	Implementation of hybrid crack element on a general finite element mesh and in combination with XFEM. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 1864-1873.	6.6	45
59	A new fatigue failure theory for multidirectional fiber-reinforced composite laminates with arbitrary stacking sequence. International Journal of Fatigue, 2016, 87, 294-300.	5.7	43
60	CARDIFRCÂ®â€“ Development and mechanical properties. Part I: Development and workability. Magazine of Concrete Research, 2005, 57, 347-352.	2.0	42
61	Doubly periodic arrays of bridged cracks and short fibre-reinforced cementitious composites. Journal of the Mechanics and Physics of Solids, 1996, 44, 1565-1586.	4.8	40
62	An improved Puckâ€™s failure theory for fibre-reinforced composite laminates including the in situ strength effect. Composites Science and Technology, 2014, 98, 86-92.	7.8	40
63	Influence of mix composition and strength on the fracture properties of self-compacting concrete. Construction and Building Materials, 2016, 110, 312-322.	7.2	40
64	Contribution of t m Phase Transformation to the Toughening of ZTA. Journal of the American Ceramic Society, 1991, 74, 1703-1706.	3.8	37
65	Size-dependent bending of thin metallic films. International Journal of Plasticity, 2008, 24, 991-1007.	8.8	37
66	3D modelling of the flow of self-compacting concrete with or without steel fibres. Part I: slump flow test. Computational Particle Mechanics, 2014, 1, 373-389.	3.0	36
67	Incremental-secant modulus iteration scheme and stress recovery for simulating cracking process in quasi-brittle materials using XFEM. International Journal for Numerical Methods in Engineering, 2007, 69, 2606-2635.	2.8	35
68	Effect of Surface Roughness, Type and Size of Model Aggregates on the Bond Strength of Aggregate/Mortar Interface. Journal of Materials Science, 2004, 12, 361-374.	1.2	34
69	Asymptotic fields at the tip of a cohesive crack. International Journal of Fracture, 2008, 150, 55-74.	2.2	34
70	Modelling the flow of selfâ€compacting concrete. International Journal for Numerical and Analytical Methods in Geomechanics, 2011, 35, 713-723.	3.3	34
71	Asymptotic fields at frictionless and frictional cohesive crack tips in quasibrittle materials. Journal of Mechanics of Materials and Structures, 2006, 1, 881-910.	0.6	33
72	Mix proportioning of self-compacting normal and high-strength concretes. Magazine of Concrete Research, 2013, 65, 546-556.	2.0	32

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73	Simulation of the flow of self-compacting concrete in the V-funnel by SPH. Cement and Concrete Research, 2017, 100, 47-59.	11.0	32
74	Minimum cost design of reinforced concrete beams using continuum-type optimality criteria. Structural Optimization, 1994, 7, 91-102.	0.6	31
75	Fracture Model for Flexural Failure of Beams Retrofitted with CARDIFRC. Journal of Engineering Mechanics - ASCE, 2003, 129, 1028-1038.	2.9	31
76	Minimum-weight design of hollow cylinders for given lower bounds on torsional and flexural rigidities. International Journal of Solids and Structures, 1977, 13, 1271-1280.	2.7	30
77	Minimum cost design of reinforced concrete structures. Structural Optimization, 1990, 2, 173-184.	0.6	30
78	Fracture mechanics of cement mortar and plain concrete. Advanced Cement Based Materials, 1993, 1, 92-105.	0.3	30
79	High-rate deformation and fracture of fiber reinforced concrete. Journal of Applied Mechanics and Technical Physics, 2012, 53, 926-933.	0.5	30
80	Bilinear tension softening diagrams of concrete mixes corresponding to their size-independent specific fracture energy. Construction and Building Materials, 2013, 47, 1160-1166.	7.2	30
81	Higher order terms of the crack tip asymptotic field for a wedge-splitting specimen. International Journal of Fracture, 2001, 112, 129-137.	2.2	29
82	3D modelling of the flow of self-compacting concrete with or without steel fibres. Part II: L-box test and the assessment of fibre reorientation during the flow. Computational Particle Mechanics, 2014, 1, 391-408.	3.0	29
83	Tension softening of fibre-reinforced cementitious composites. Cement and Concrete Composites, 1997, 19, 315-328.	10.7	28
84	Asymptotics of multiple crack interactions and prediction of effective modulus. International Journal of Solids and Structures, 2000, 37, 4261-4273.	2.7	28
85	An overview of a hybrid crack element and determination of its complete displacement field. Engineering Fracture Mechanics, 2007, 74, 1107-1117.	4.3	28
86	Mix proportioning of self-compacting high- and ultra-high-performance concretes with and without steel fibres. Magazine of Concrete Research, 2012, 64, 1089-1100.	2.0	28
87	Proportioning of selfâ€“compacting concrete mixes based on target plastic viscosity and compressive strength: Part I - mix design procedure. Journal of Sustainable Cement-Based Materials, 2016, 5, 199-216.	3.1	28
88	Approximate Green's functions for singular and higher order terms of an edge crack in a finite plate. Engineering Fracture Mechanics, 2002, 69, 959-981.	4.3	27
89	Application of penalty-equilibrium hybrid stress element method to crack problems. Engineering Fracture Mechanics, 1999, 63, 1-22.	4.3	26
90	Modelling of tension softening in quasi-brittle materials by an array of circular holes with edge cracks. Mechanics of Materials, 1991, 11, 123-134.	3.2	25

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91	Buckling-driven delamination growth in composite laminates: Guidelines for assessing the threat posed by interlaminar matrix delamination. Composites Part B: Engineering, 2008, 39, 386-395.	12.0	25
92	Simulation of self-compacting concrete flow in the J-ring test using smoothed particle hydrodynamics (SPH). Cement and Concrete Research, 2016, 89, 27-34.	11.0	25
93	Minimum-cost reinforced concrete beams and columns. Computers and Structures, 1991, 41, 509-518.	4.4	24
94	Tension softening of quasi-brittle materials modelled by singly and doubly periodic arrays of coplanar penny-shaped cracks. Mechanics of Materials, 1992, 13, 257-275.	3.2	24
95	Materials With Negative Poissonâ€™s Ratio: A Qualitative Microstructural Model. Journal of Applied Mechanics, Transactions ASME, 1994, 61, 1001-1004.	2.2	24
96	Fracture of solids containing arrays of cracks. Engineering Fracture Mechanics, 1979, 12, 49-77.	4.3	23
97	A note on complexities of compression failure. Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences, 1979, 368, 483-493.	1.4	23
98	Verification of the applicability of lattice model to concrete fracture by AE study. International Journal of Fracture, 2010, 161, 121-129.	2.2	23
99	On the solution of doubly periodic array of cracks. Mechanics of Materials, 1997, 26, 209-212.	3.2	22
100	Coefficients of the crack tip asymptotic field for a standard compact tension specimen. International Journal of Fracture, 2002, 118, 1-15.	2.2	22
101	Optimal control of a dynamical system representing a gantry crane. Journal of Optimization Theory and Applications, 1982, 36, 409-417.	1.5	21
102	Optimum In Situ Strength Design of Composite Laminates. Part II: Optimum Design. Journal of Composite Materials, 1996, 30, 1338-1358.	2.4	21
103	Matrix crack-induced delamination in composite laminates under transverse loading. Composite Structures, 1997, 38, 661-666.	5.8	21
104	On the solution of optimization problems with singularities. International Journal of Solids and Structures, 1977, 13, 725-733.	2.7	20
105	Optimum In Situ Strength Design of Composite Laminates. Part I: In Situ Strength Parameters. Journal of Composite Materials, 1996, 30, 1314-1337.	2.4	20
106	A new technique for retrofitting damaged concrete structures. Proceedings of the Institution of Civil Engineers: Structures and Buildings, 2002, 152, 309-318.	0.8	20
107	Strain distributions in nano-onions with uniform and non-uniform compositions. Nanotechnology, 2006, 17, 3380-3387.	2.6	20
108	Fracture characteristics of solids containing doubly-periodic arrays of cracks. Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences, 1978, 360, 373-387.	1.4	19

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109	Elastic Field of a Partially Debonded Elliptic Inhomogeneity in an Elastic Matrix (Plane-Strain). Journal of Applied Mechanics, Transactions ASME, 1985, 52, 835-840.	2.2	19
110	Cracked composite laminates least prone to delamination. Proceedings of the Royal Society A, 1994, 444, 17-35.	0.9	19
111	A model for ageing visco-elastic tension softening materials. International Journal for Numerical and Analytical Methods in Geomechanics, 1998, 3, 27-39.	0.8	18
112	Asymptotic bounds on overall moduli of cracked bodies. International Journal of Solids and Structures, 2000, 37, 6221-6237.	2.7	18
113	Optimization techniques for the design of high-performance fibre-reinforced concrete. Structural and Multidisciplinary Optimization, 2001, 21, 32-39.	3.5	18
114	CARDIFRCÂ®â€“ Development and mechanical properties. Part II: Fibre distribution. Magazine of Concrete Research, 2005, 57, 421-432.	2.0	18
115	Minimum-Weight Design of Thin-Walled Cylinders Subject to Flexural and Torsional Stiffness Constraints. Journal of Applied Mechanics, Transactions ASME, 1980, 47, 106-110.	2.2	17
116	Minimum-cost design of reinforced concrete structures. Computers and Structures, 1991, 41, 1357-1364.	4.4	17
117	Mechanical and fracture properties of cement-based bi-materials after thermal cycling. Cement and Concrete Research, 2009, 39, 1087-1094.	11.0	17
118	Fatigue life and self-induced volumetric changes of CARDIFRC. Magazine of Concrete Research, 2010, 62, 679-683.	2.0	17
119	Elastic Field of an Elliptic Inhomogeneity With Debonding Over an Arc (Antiplane Strain). Journal of Applied Mechanics, Transactions ASME, 1985, 52, 91-97.	2.2	16
120	Size-effect prediction from effective crack model for plain concrete. Materiaux Et Constructions, 1990, 23, 178-185.	0.3	16
121	An anisotropic damage model for plain concrete. Engineering Fracture Mechanics, 1990, 35, 205-209.	4.3	16
122	Interaction of penny-shaped cracks with a half-plane crack. International Journal of Solids and Structures, 1993, 30, 2117-2139.	2.7	16
123	Minimum cost design of RC frames using the DCOC method Part I: Columns under uniaxial bending actions. Structural Optimization, 1995, 10, 16-32.	0.6	16
124	Optimum Microstructure of Transformation-Toughened Ceramics for Enhanced Wear Performance. Journal of the American Ceramic Society, 1995, 78, 3-8.	3.8	16
125	Time-dependent tension softening. International Journal for Numerical and Analytical Methods in Geomechanics, 1996, 1, 295-304.	0.8	16
126	Design of Fiber-Reinforced DSP Mixes for Minimum Brittleness. Advanced Cement Based Materials, 1998, 7, 89-101.	0.3	16

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127	Optimum in situ strength design of laminates under combined mechanical and thermal loads. Composite Structures, 1999, 47, 635-641.	5.8	16
128	Micromechanics of Fiber-Reinforced Cementitious Composites. Advanced Engineering Materials, 2000, 2, 726-732.	3.5	16
129	Proportioning of self-compacting concrete mixes based on target plastic viscosity and compressive strength: Part II - experimental validation. Journal of Sustainable Cement-Based Materials, 2016, 5, 217-232.	3.1	16
130	Flexural Fatigue Behavior of a Self-Compacting Ultrahigh Performance Fiber-Reinforced Concrete. Journal of Materials in Civil Engineering, 2017, 29, .	2.9	16
131	Minimum cost design of RC beams using DCOC Part II: Beams with uniform cross-sections. Structural Optimization, 1994, 7, 252-259.	0.6	15
132	Mode II and mode III stress singularities and intensities at a crack tip terminating on a transversely isotropic-orthotropic bimaterial interface. Proceedings of the Royal Society A, 1994, 444, 447-460.	0.9	15
133	Mechanics of fibre-reinforced cementitious composites. Computers and Structures, 2000, 76, 19-34.	4.4	15
134	Influence of processing defects on the measured properties of Cuâ€“Al2O3 composites: A forensic investigation. Composites Part A: Applied Science and Manufacturing, 2013, 46, 140-146.	7.6	15
135	A mechanism-based spatiotemporal non-local constitutive formulation for elastodynamics of composites. Mechanics of Materials, 2019, 128, 105-116.	3.2	15
136	Optimum design of statically indeterminate beams under multiple loads. Computers and Structures, 1987, 26, 521-538.	4.4	14
137	Tensile response of quasi-brittle materials. Pure and Applied Geophysics, 1991, 137, 461-487.	1.9	14
138	Minimum cost design of RC beams using DCOC Part I: Beams with freely-varying cross-sections. Structural Optimization, 1994, 7, 237-251.	0.6	14
139	An improved hybrid-stress element approach to torsion of shafts. Computers and Structures, 1999, 71, 535-563.	4.4	14
140	Homogenization-based multivariable element method for pure torsion of composite shafts. Computers and Structures, 2001, 79, 1645-1660.	4.4	14
141	Conductivities of heterogeneous media with graded anisotropic constituents. Journal of Applied Physics, 2006, 100, 034906.	2.5	14
142	Optimal design of multi-purpose tie column of solid construction. International Journal of Solids and Structures, 1979, 15, 103-109.	2.7	13
143	Optimal design of multi-purpose beam-columns. Journal of Optimization Theory and Applications, 1979, 27, 439-448.	1.5	13
144	Three-dimensional elastic crack tip interactions with shear transformation strains. International Journal of Solids and Structures, 1989, 25, 591-607.	2.7	13

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145	Application of a visco-elastic tension-softening constitutive model to cracked and ageing concrete. Construction and Building Materials, 1999, 13, 15-21.	7.2	13
146	High-performance fibre-reinforce cementitious composties for retrofitting. International Journal of Materials and Product Technology, 2002, 17, 17.	0.2	13
147	Compatible composition profiles and critical sizes of alloyed quantum dots. Physical Review B, 2006, 74, .	3.2	13
148	The impossibility of comminuting small particles by compression. Nature, 1979, 279, 169-170.	27.8	12
149	Surface cracks in transformation toughening ceramics. International Journal of Solids and Structures, 1994, 31, 51-64.	2.7	12
150	The optimal design of beam-columns. International Journal of Solids and Structures, 1979, 15, 855-859.	2.7	11
151	Optimal design of multi-purpose tie-beams. Journal of Optimization Theory and Applications, 1979, 27, 427-438.	1.5	11
152	OPTIMAL DESIGN OF BEAM-COLUMNS SUBJECTED TO CONCENTRATED MOMENTS. Engineering Optimization, 1980, 5, 59-65.	2.6	11
153	Maximum strength/stiffness design of structural members in presence of self-weight. Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences, 1983, 389, 119-132.	1.4	11
154	Prediction of load-deflection behavior of plain concrete from fracture energy. Cement and Concrete Research, 1986, 16, 373-382.	11.0	11
155	A partially debonded ellipsoidal inclusion in an elastic medium. Part I: Stress and displacement fields. Mechanics of Materials, 1988, 7, 191-197.	3.2	11
156	Optimum structures under strength and stiffness constraints. Computers and Structures, 1988, 28, 641-661.	4.4	11
157	Interaction between a surface crack and a subsurface inclusion. International Journal of Fracture, 1993, 63, 1-10.	2.2	11
158	Multiple Cracking in Angle-Ply Composite Laminates. Journal of Composite Materials, 1995, 29, 1321-1336.	2.4	11
159	Asymptotic fields ahead of mixed mode frictional cohesive cracks. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2010, 90, 710-720.	1.6	11
160	Minimum-Weight Thin-Walled Cylinders of Given Torsional and Flexural Rigidity. Journal of Applied Mechanics, Transactions ASME, 1983, 50, 892-894.	2.2	10
161	Fracture of glassy brittle materials. Journal of Materials Science Letters, 1985, 4, 1285-1289.	0.5	10
162	COMPUTER-AIDED MINIMUM-WEIGHT DESIGN OF STATICALLY INDETERMINATE BEAMS. Engineering Optimization, 1986, 10, 139-156.	2.6	10

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163	Optimization â€" a tool in advanced materials technology. Structural Optimization, 1994, 8, 9-15.	0.6	10
164	Estimation of the yield stress and distribution of large aggregates from slump flow test of self-compacting concrete mixes using smooth particle hydrodynamics simulation. Journal of Sustainable Cement-Based Materials, 2016, 5, 117-134.	3.1	10
165	A simple method for determining the true specific fracture energy of concrete. Magazine of Concrete Research, 2003, 55, 471-481.	2.0	10
166	Optimal design of multi-purpose structures. Journal of Optimization Theory and Applications, 1979, 27, 449-461.	1.5	9
167	Optimal Strength and Stiffness Design of Beams. Journal of Structural Engineering, 1983, 109, 221-237.	3.4	9
168	Optimum sections for given torsional and flexural rigidity. Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences, 1987, 409, 67-77.	1.4	9
169	Asymptotics of three-dimensional macrocrack-microcrack interaction. International Journal of Solids and Structures, 1995, 32, 1495-1500.	2.7	9
170	Micromechanical modelling of strain hardening and tension softening in cementitious composites. Computational Mechanics, 1997, 19, 453-462.	4.0	9
171	Seismic performance parameters of RC beams retrofitted by CARDIFRCÂ®. Engineering Structures, 2004, 26, 2069-2079.	5.3	9
172	Asymptotic Crack Tip Fields in Linear and Nonlinear Materials and Their Role in Crack Propagation. Physical Mesomechanics, 2019, 22, 18-31.	1.9	9
173	Optimal strength design of beam-columns. International Journal of Solids and Structures, 1983, 19, 937-953.	2.7	8
174	Maximum Strength Design of Structural Frames. Journal of Structural Engineering, 1985, 111, 1267-1287.	3.4	8
175	A General Theory of Optimal Elastic Design for Structures With Segmentation. Journal of Applied Mechanics, Transactions ASME, 1986, 53, 242-248.	2.2	8
176	Minimum cost design of RC frames using the DCOC method Part II: Columns under biaxial bending actions. Structural Optimization, 1995, 10, 33-39.	0.6	8
177	Fatigue Crack Growth from Small Surface Cracks in Transformation-Toughened Ceramics. Journal of the American Ceramic Society, 1995, 78, 406-410.	3.8	8
178	Looking into concrete. Magazine of Concrete Research, 2001, 53, 135-147.	2.0	8
179	Behavior of RC Beams Retrofitted with CARDIFRC after Thermal Cycling. Journal of Materials in Civil Engineering, 2010, 22, 21-28.	2.9	8
180	A bridging law and its application to the analysis of toughness of carbon nanotube-reinforced composites and pull-out of fibres grafted with nanotubes. Archive of Applied Mechanics, 2016, 86, 361-373.	2.2	8

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181	Minimum-Cost Design of Reinforced Concrete Members by Non-Linear Programming. , 1993, , 927-949.		8
182	Spread of plasticity from a stack of cracks under mode I conditions. International Journal of Solids and Structures, 1977, 13, 367-375.	2.7	7
183	Spread of plasticity from stacked stress concentrations. International Journal of Solids and Structures, 1977, 13, 221-228.	2.7	7
184	Compressive fracture of brittle materials. Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences, 1984, 396, 297-314.	1.4	7
185	Stress intensity factor and energy release rate for three-point bend specimens. Engineering Fracture Mechanics, 1986, 25, 315-321.	4.3	7
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