E J Garboczi

List of Publications by Year in descending order

33 papers	3,193 citations	279798 23 h-index	395702 33 g-index
34 all docs	34 docs citations	34 times ranked	3124 citing authors

#	Article	IF	Citations
1	Investigation of the Effect of Artificial Internal Defects on the Tensile Behavior of Laser Powder Bed Fusion 17â€“4 Stainless Steel Samples: Simultaneous Tensile Testing and X-Ray Computed Tomography. Experimental Mechanics, 2020, 60, 987-1004.	2.0	24
2	Local elastic moduli of simple random composites computed at different length scales. Materials and Structures/Materiaux Et Constructions, 2020, 53, 1.	3.1	3
3	RILEM and the National Institute of Standards and Technology (NIST) over the past 50Âyears. Materials and Structures/Materiaux Et Constructions, 2018, 51, 1.	3.1	1
4	Investigation of pore structure in cobalt chrome additively manufactured parts using X-ray computed tomography and three-dimensional image analysis. Additive Manufacturing, 2017, 17, 23-38.	3.0	57
5	Synchrotron 4-dimensional imaging of two-phase flow through porous media. MRS Advances, 2016, 1, 2757-2761.	0.9	1
6	Anm: a geometrical model for the composite structure of mortar and concrete using real-shape particles. Materials and Structures/Materiaux Et Constructions, 2016, 49, 149-158.	3.1	66
7	Characterization of Metal Powders Used for Additive Manufacturing. Journal of Research of the National Institute of Standards and Technology, 2014, 119, 460.	1.2	363
8	Intrinsic Viscosity and the Polarizability of Particles Having a Wide Range of Shapes. Advances in Chemical Physics, 2007, , 85-153.	0.3	85
9	Impedance/Dielectric Spectroscopy of Electroceramics?Part 2: Grain Shape Effects and Local Properties of Polycrystalline Ceramics. Journal of Electroceramics, 2005, 14, 293-301.	2.0	25
10	Impedance/Dielectric Spectroscopy of Electroceramics?Part 1: Evaluation of Composite Models for Polycrystalline Ceramics. Journal of Electroceramics, 2005, 14, 283-291.	2.0	47
11	Computation of the linear elastic properties of random porous materials with a wide variety of microstructure. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2002, 458, 1033-1054.	2.1	229
12	Intrinsic viscosity and the electrical polarizability of arbitrarily shaped objects. Physical Review E, 2001, 64, 061401.	2.1	132
13	Linear elastic properties of 2D and 3D models of porous materials made from elongated objects. Modelling and Simulation in Materials Science and Engineering, 2001, 9, 371-390.	2.0	113
14	Microstructure and transport properties of porous building materials. II: Three-dimensional X-ray tomographic studies. Materials and Structures/Materiaux Et Constructions, 2000, 33, 147-153.	3.1	107
15	Intrinsic conductivity of objects having arbitrary shape and conductivity. Physical Review E, 1996, 53, 6169-6180.	2.1	101
16	Geometrical percolation threshold of overlapping ellipsoids. Physical Review E, 1995, 52, 819-828.	2.1	702
17	Computer simulation study of the effective viscosity in Brinkmanâ€™s equation. Physics of Fluids, 1994, 6, 1434-1439.	4.0	127
18	Interfacial Zone Percolation in Concrete: Effects of Interfacial Zone Thickness and Aggregate Shape. Materials Research Society Symposia Proceedings, 1994, 370, 437.	0.1	26

#	Article	IF	Citations
19	X-Ray Microtomography of an Astm C109 Mortar Exposed to Sulfate Attack. Materials Research Society Symposia Proceedings, 1994, 370, 77.	0.1	21
20	Cross-property relations and permeability estimation in model porous media. Physical Review E, 1993, 48, 4584-4591.	2.1	150
21	Computational Materials Science of Cement-Based Materials. MRS Bulletin, 1993, 18, 50-54.	3.5	19
22	Length scales relating the fluid permeability and electrical conductivity in random two-dimensional model porous media. Physical Review B, 1992, 46, 6080-6090.	3.2	119
23	The elastic moduli of simple twoâ€dimensional isotropic composites: Computer simulation and effective medium theory. Journal of Applied Physics, 1992, 72, 5948-5955.	2.5	55
24	Computer simulation of the diffusivity of cement-based materials. Journal of Materials Science, 1992, 27, 2083-2092.	3.7	314
25	Universal conductivity curve for a plane containing random holes. Physical Review A, 1991, 43, 6473-6482.	2.5	85
26	Elastic properties of central-force networks with bond-length mismatch. Physical Review B, 1990, 42, 8405-8417.	3.2	50
27	Elastic softening versus amorphization in a simple model of ion-induced radiation damage. Physical Review B, 1989, 39, 2472-2475.	3.2	4
28	Effective force constant for a central-force random network. Physical Review B, 1988, 37, 318-320.	3.2	6
29	Cauchy relations for central-force random networks. Physical Review B, 1987, 36, 2115-2120.	3.2	11
30	Site percolation on central-force elastic networks. Physical Review B, 1987, 35, 8579-8586.	3.2	32
31	Effective-medium theory of percolation on central-force elastic networks. III. The superelastic problem. Physical Review B, 1986, 33, 3289-3294.	3.2	23
32	Density of states for random-central-force elastic networks. Physical Review B, 1985, 32, 4513-4518.	3.2	34
33	Effective-medium theory of percolation on central-force elastic networks. II. Further results. Physical Review B, 1985, 31, 7276-7281.	3.2	61