Boming Yu

List of Publications by Year
in descending order

129 papers	9,034 citations	47006 47 h-index	42399 92 g-index
130 all docs	130 docs citations	130 times ranked	3630 citing authors

#	Article	IF	Citations
1	AN ANALYTICAL MODEL FOR EFFECTIVE THERMAL CONDUCTIVITY OF THE MEDIA EMBEDDED WITH FRACTURE NETWORKS OF POWER LAW LENGTH DISTRIBUTIONS. Fractals, 2022, 30, .	3.7	4
2	FRACTAL CHARACTERISTICS OF LOW-PERMEABILITY SANDSTONE RESERVOIRS. Fractals, 2022, 30, .	3.7	4
3	A FRACTAL-MONTE CARLO APPROACH TO MODEL OIL AND WATER TWO-PHASE SEEPAGE IN LOW-PERMEABILITY RESERVOIRS WITH ROUGH SURFACES. Fractals, 2021, 29, 2150003.	3.7	32
4	A FRACTAL MODEL FOR PREDICTING OXYGEN EFFECTIVE DIFFUSIVITY OF POROUS MEDIA WITH ROUGH SURFACES UNDER DRY AND WET CONDITIONS. Fractals, 2021, 29, 2150076.	3.7	31
5	A MULTI-FIELD COUPLED SEEPAGE MODEL FOR COAL SEAM WITH FRACTURES OF POWER LAW LENGTH DISTRIBUTIONS. Fractals, 2021, 29, 2150140.	3.7	2
6	PERMEABILITY MODELS FOR TWO-PHASE FLOW IN FRACTAL POROUS-FRACTURE MEDIA WITH THE TRANSFER OF FLUIDS FROM POROUS MATRIX TO FRACTURE. Fractals, 2021, 29, 2150148.	3.7	5
7	Transport property and application of tree-shaped network. , 2021, , 141-163.		2
8	FRACTAL ANALYSIS OF DIGIT ROCK CORES. Fractals, 2020, 28, 2050144.	3.7	33
9	ANALYSIS OF PERMEABILITY EVOLUTION CHARACTERISTICS BASED ON DUAL FRACTAL COUPLING MODEL FOR COAL SEAM. Fractals, 2020, 28, 2050133.	3.7	19
10	A COMPREHENSIVE MODEL FOR OILâ€“WATER RELATIVE PERMEABILITIES IN LOW-PERMEABILITY RESERVOIRS BY FRACTAL THEORY. Fractals, 2020, 28, 2050055.	3.7	9
11	A generalized thermal conductivity model for unsaturated porous media with fractal geometry. International Journal of Heat and Mass Transfer, 2020, 152, 119540.	4.8	44
12	STUDY ON EVOLUTION OF FRACTAL DIMENSION FOR FRACTURED COAL SEAM UNDER MULTI-FIELD COUPLING. Fractals, 2020, 28, 2050072.	3.7	34
13	A FRACTAL PERMEABILITY MODEL FOR POROUSâ€“FRACTURE MEDIA WITH THE TRANSFER OF FLUIDS FROM POROUS MATRIX TO FRACTURE. Fractals, 2019, 27, 1950121.	3.7	27
14	SEEPAGE PROPERTIES OF ROCK FRACTURES WITH POWER LAW LENGTH DISTRIBUTIONS. Fractals, 2019, 27, 1950057.	3.7	15
15	A novel fractal model for permeability of damaged tree-like branching networks. International Journal of Heat and Mass Transfer, 2018, 127, 278-285.	4.8	34
16	FRACTAL ANALYSIS OF FLOW RESISTANCE IN TREE-LIKE BRANCHING NETWORKS WITH ROUGHENED MICROCHANNELS. Fractals, 2017, 25, 1750008.	3.7	88
17	Analysis of permeabilities for slug flow in fractal porous media. International Communications in Heat and Mass Transfer, 2017, 88, 194-202.	5.6	31
18	Transport Phenomena and Properties in Treelike Networks. Applied Mechanics Reviews, 2016, 68, .	10.1	94

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19	Analysis of axial thermal conductivity of dual-porosity fractal porous media with random fractures. International Journal of Heat and Mass Transfer, 2016, 102, 884-890.	4.8	63
20	Optimal structure of damaged tree-like branching networks for the equivalent thermal conductivity. International Journal of Thermal Sciences, 2016, 102, 89-99.	4.9	43
21	Transport Phenomena in Porous Media and Fractal Geometry. Journal of Chemistry, 2015, 2015, 1-2.	1.9	1
22	Fractal analysis of permeability of dual-porosity media embedded with random fractures. International Journal of Heat and Mass Transfer, 2015, 88, 814-821.	4.8	102
23	Analysis of electroosmotic characters in fractal porous media. Chemical Engineering Science, 2015, 127, 202-209.	3.8	29
24	Minimum applied pressure for a drop through an abruptly constricted capillary. Microfluidics and Nanofluidics, 2015, 19, 1-8.	2.2	30
25	Permeability model for fractal porous media with rough surfaces. Microfluidics and Nanofluidics, 2015, 18, 1085-1093.	2.2	88
26	A fractal analysis of permeability for fractured rocks. International Journal of Heat and Mass Transfer, 2015, 81, 75-80.	4.8	219
27	NUMERICAL SIMULATION OF TORTUOSITY FOR FLUID FLOW IN TWO-DIMENSIONAL PORE FRACTAL MODELS OF POROUS MEDIA. Fractals, 2014, 22, 1450015.	3.7	40
28	FRACTAL ANALYSIS OF HYDRAULICS IN POROUS MEDIA WITH WALL EFFECTS. Fractals, 2014, 22, 1440001.	3.7	8
29	Fractal analysis of permeability near the wall in porous media. International Journal of Modern Physics C, 2014, 25, 1450021.	1.7	8
30	A comprehensive study of the effective thermal conductivity of living biological tissue with randomly distributed vascular trees. International Journal of Heat and Mass Transfer, 2014, 72, 616-621.	4.8	17
31	Fractal analysis of dimensionless capillary pressure function. International Journal of Heat and Mass Transfer, 2014, 69, 26-33.	4.8	54
32	A fractal streaming current model for charged microscale porous media. Journal of Electrostatics, 2014, 72, 441-446.	1.9	21
33	A fractal model for spherical seepage in porous media. International Communications in Heat and Mass Transfer, 2014, 58, 71-78.	5.6	26
34	Analysis of thermal conductivity in living biological tissue with vascular network and convection. International Journal of Thermal Sciences, 2014, 86, 219-226.	4.9	35
35	A fractal analysis of laminar flow resistance in roughened microchannels. International Journal of Heat and Mass Transfer, 2014, 77, 208-217.	4.8	89
36	A COMPREHENSIVE ANALYSIS OF THE SEEPAGE CHARACTERS OF NON-NEWTONIAN FLUIDS IN FRACTAL POROUS MEDIA. Journal of Porous Media, 2014, 17, 1031-1044.	1.9	9

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37	Prediction of relative permeability in unsaturated porous media with a fractal approach. International Journal of Heat and Mass Transfer, 2013, 64, 829-837.	4.8	171
38	Radial permeability of fractured porous media by Monte Carlo simulations. International Journal of Heat and Mass Transfer, 2013, 57, 369-374.	4.8	59
39	A fractal model for gaseous leak rates through contact surfaces under non-isothermal condition. Applied Thermal Engineering, 2013, 52, 54-61.	6.0	23
40	Fractal analysis of the effective thermal conductivity of biological media embedded with randomly distributed vascular trees. International Journal of Heat and Mass Transfer, 2013, 67, 74-80.	4.8	34
41	A fractal model for gas slippage factor in porous media in the slip flow regime. Chemical Engineering Science, 2013, 87, 209-215.	3.8	88
42	Research on the effective gas diffusion coefficient in dry porous media embedded with a fractal-like tree network. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 1557-1566.	2.6	45
43	A fractal permeability model for gas flow through dual-porosity media. Journal of Applied Physics, 2012, 111, .	2.5	83
44	A diffusivity model for gas diffusion through fractal porous media. Chemical Engineering Science, 2012, 68, 650-655.	3.8	114
45	A fractal model for the starting pressure gradient for Bingham fluids in porous media embedded with randomly distributed fractal-like tree networks. Advances in Water Resources, 2011, 34, 1574-1580.	3.8	29
46	Analysis of Seepage for Power-Law Fluids in the Fractal-Like Tree Network. Transport in Porous Media, 2011, 87, 191-206.	2.6	14
47	A Discussion of the Effect of Tortuosity on the Capillary Imbibition in Porous Media. Transport in Porous Media, 2011, 89, 251-263.	2.6	365
48	A numerical study on growth mechanism of dropwise condensation. International Journal of Heat and Mass Transfer, 2011, 54, 2004-2013.	4.8	44
49	A fractal model for the starting pressure gradient for Bingham fluids in porous media embedded with fractal-like tree networks. International Journal of Heat and Mass Transfer, 2011, 54, 4491-4494.	4.8	37
50	Study of the effect of capillary pressure on the permeability of porous media embedded with a fractal-like tree network. International Journal of Multiphase Flow, 2011, 37, 507-513.	3.4	28
51	Transmission probability for Knudsen diffusion in a single chamber-throat pore. Vacuum, 2011, 85, 1017-1020.	3.5	5
52	An Overview: Analysis of Heat and Mass Transfer in Fractal Media by Fractal Geometry and Technique. , 2010, , .		0
53	Turbulent impinging jet heat transfer enhancement due to intermittent pulsation. International Journal of Thermal Sciences, 2010, 49, 1247-1252.	4.9	104
54	Study of the starting pressure gradient in branching network. Science China Technological Sciences, 2010, 53, 2397-2403.	4.0	32

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55	Fractal analysis of Herschelâ€“Bulkley fluid flow in porous media. International Journal of Heat and Mass Transfer, 2010, 53, 3570-3574.	4.8	31
56	Symmetry is not always prefect. International Journal of Heat and Mass Transfer, 2010, 53, 5022-5024.	4.8	25
57	Fractal analysis of invasion depth of extraneous fluids in porous media. Chemical Engineering Science, 2010, 65, 5178-5186.	3.8	147
58	Response to â€œComments on the â€˜On the Physical Properties of Apparent Two-Phase Fractal Porous Mediumâ€™â€: Vadose Zone Journal, 2010, 9, 194.	2.2	0
59	A HIERARCHICAL MODEL FOR MULTI-PHASE FRACTAL MEDIA. Fractals, 2010, 18, 53-64.	3.7	4
60	PREDICTION OF MAXIMUM PORE SIZE OF POROUS MEDIA BASED ON FRACTAL GEOMETRY. Fractals, 2010, 18, 417-423.	3.7	81
61	Fractal Characterization of Spontaneous Co-current Imbibition in Porous Media. Energy & Fuels, 2010, 24, 1860-1867.	5.1	300
62	Heat transfer under a pulsed slot turbulent impinging jet at large temperature differences. Thermal Science, 2010, 14, 271-281.	1.1	34
63	Dielectric constant of porous ultra low-k dielectrics by fractal-Monte Carlo simulations. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 1978-1982.	2.1	5
64	Analysis of seepage characters in fractal porous media. International Journal of Heat and Mass Transfer, 2009, 52, 3272-3278.	4.8	81
65	A new comprehensive model for nucleate pool boiling heat transfer of pure liquid at low to high heat fluxes including CHF. International Journal of Heat and Mass Transfer, 2009, 52, 4203-4210.	4.8	32
66	A fractal analysis of dropwise condensation heat transfer. International Journal of Heat and Mass Transfer, 2009, 52, 4823-4828.	4.8	31
67	A fractal model for heat transfer of nanofluids by convection in a pool. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 4178-4181.	2.1	48
68	On the Physical Properties of Apparent Twoâ€Phase Fractal Porous Media. Vadose Zone Journal, 2009, 8, 177-186.	2.2	88
69	Thermal conductivity of nanofluids and size distribution of nanoparticles by Monte Carlo simulations. Journal of Nanoparticle Research, 2008, 10, 1319-1328.	1.9	38
70	A resistance model for flow through porous media. Transport in Porous Media, 2008, 71, 331-343.	2.6	96
71	Developing a new form of permeability and Kozenyâ€“Carman constant for homogeneous porous media by means of fractal geometry. Advances in Water Resources, 2008, 31, 74-81.	3.8	574
72	An analysis of the radial flow in the heterogeneous porous media based on fractal and constructal tree networks. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 6471-6483.	2.6	51

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73	A fractal model for the starting pressure gradient for Bingham fluids in porous media. International Journal of Heat and Mass Transfer, 2008, 51, 1402-1408.	4.8	104
74	Analysis of Flow in Fractal Porous Media. Applied Mechanics Reviews, 2008, 61, .	10.1	374
75	ANALYSIS OF PERMEABILITY FOR ELLIS FLUID FLOW IN FRACTAL POROUS MEDIA. Chemical Engineering Communications, 2008, 195, 1240-1256.	2.6	10
76	Fractal Model for Thermal Contact Conductance. Journal of Heat Transfer, 2008, 130, .	2.1	50
77	A FRACTAL ANALYSIS OF SUBCOOLED NUCLEATE POOL BOILING. Fractals, 2008, 16, 1-9.	3.7	12
78	Fractal Theory on Drying: A Review. Drying Technology, 2008, 26, 640-650.	3.1	35
79	FRACTAL DIMENSION FOR TORTUOUS STREAMTUBES IN POROUS MEDIA. Fractals, 2007, 15, 385-390.	3.7	47
80	STUDY OF THE EFFECT OF CAPILLARY PRESSURE ON PERMEABILITY. Fractals, 2007, 15, 55-62.	3.7	16
81	A FRACTAL MODEL FOR RELATIVE PERMEABILITY OF UNSATURATED POROUS MEDIA WITH CAPILLARY PRESSURE EFFECT. Fractals, 2007, 15, 217-222.	3.7	19
82	Fractal-like tree networks increasing the permeability. Physical Review E, 2007, 75, 056301.	2.1	41
83	A self-similarity model for dielectric constant of porous ultra low-<i>k</i>dielectrics. Journal Physics D: Applied Physics, 2007, 40, 5377-5382.	2.8	9
84	The effective thermal conductivity of nanofluids based on the nanolayer and the aggregation of nanoparticles. Journal Physics D: Applied Physics, 2007, 40, 3164-3171.	2.8	160
85	Comments on â€œFractal Fragmentation, Soil Porosity, and Soil Water Properties: I. Theoryâ€• Soil Science Society of America Journal, 2007, 71, 632-632.	2.2	6
86	A fractal model for critical heat flux in pool boiling. International Journal of Thermal Sciences, 2007, 46, 426-433.	4.9	28
87	A fractal resistance model for flow through porous media. International Journal of Heat and Mass Transfer, 2007, 50, 3925-3932.	4.8	130
88	A fractal analysis of subcooled flow boiling heat transfer. International Journal of Multiphase Flow, 2007, 33, 1126-1139.	3.4	32
89	A new deterministic complex network model with hierarchical structure. Physica A: Statistical Mechanics and Its Applications, 2007, 385, 707-717.	2.6	37
90	A Monte Carlo method for simulating fractal surfaces. Physica A: Statistical Mechanics and Its Applications, 2007, 386, 176-186.	2.6	66

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91	A Generalized Model for the Effective Thermal Conductivity of Unsaturated Porous Media Based on Self-Similarity. Journal of Porous Media, 2007, 10, 551-568.	1.9	29
92	A new model for heat conduction of nanofluids based on fractal distributions of nanoparticles. Journal Physics D: Applied Physics, 2006, 39, 4486-4490.	2.8	95
93	Fractal-like tree networks reducing the thermal conductivity. Physical Review E, 2006, 73, 066302.	2.1	73
94	Heat conduction in fractal tree-like branched networks. International Journal of Heat and Mass Transfer, 2006, 49, 3746-3751.	4.8	140
95	Analysis of permeability for the fractal-like tree network by parallel and series models. Physica A: Statistical Mechanics and Its Applications, 2006, 369, 884-894.	2.6	96
96	Permeability of the fractal disk-shaped branched network with tortuosity effect. Physics of Fluids, 2006, 18, 078103.	4.0	37
97	An Investigation on Transport Properties Near the Wall in Porous Media by Fractal Models. Heat Transfer Engineering, 2006, 27, 54-62.	1.9	8
98	A FRACTAL ANALYSIS OF PERMEABILITY FOR POWER-LAW FLUIDS IN POROUS MEDIA. Fractals, 2006, 14, 171-177.	3.7	38
99	The scaling laws of transport properties for fractal-like tree networks. Journal of Applied Physics, 2006, 100, 104906.	2.5	71
100	EFFECTS OF PLASMA SHIELDING ON PULSED LASER ABLATION. Modern Physics Letters B, 2006, 20, 899-909.	1.9	5
101	FRACTAL DIMENSIONS FOR MULTIPHASE FRACTAL MEDIA. Fractals, 2006, 14, 111-118.	3.7	35
102	Geometrical Models for Tortuosity of Streamlines in Threeâ€Dimensional Porous Media. Canadian Journal of Chemical Engineering, 2006, 84, 301-309.	1.7	44
103	Permeability of fractal porous media by Monte Carlo simulations. International Journal of Heat and Mass Transfer, 2005, 48, 2787-2794.	4.8	108
104	Kinetic approach to one-dimensional non-uniform granular gases. Journal of Physics A, 2005, 38, 8861-8872.	1.6	13
105	Fractal geometry model for effective thermal conductivity of three-phase porous media. Journal of Applied Physics, 2004, 95, 6426-6434.	2.5	54
106	Discussion: â€œA Numerical Study of Thermal Dispersion in Porous Mediaâ€•and â€œNumerical Determination of Thermal Dispersion Coefficients Using a Periodic Porous Structureâ€• Journal of Heat Transfer, 2004, 126, 1060-1061.	2.1	3
107	FRACTAL DIMENSIONS FOR UNSATURATED POROUS MEDIA. Fractals, 2004, 12, 17-22.	3.7	37
108	Fractal analysis of permeabilities for porous media. AICHE Journal, 2004, 50, 46-57.	3.6	156

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109	A generalized model for the effective thermal conductivity of porous media based on self-similarity. Journal Physics D: Applied Physics, 2004, 37, 3030-3040.	2.8	114
110	Permeabilities of unsaturated fractal porous media. International Journal of Multiphase Flow, 2003, 29, 1625-1642.	3.4	143
111	A self-similarity model for effective thermal conductivity of porous media. Journal Physics D: Applied Physics, 2003, 36, 2157-2164.	2.8	62
112	Pyroelectric properties of ferroelectric ceramic/ferroelectric polymer 0â€“3 composites. Journal of Applied Physics, 2003, 94, 2553-2558.	2.5	11
113	Global-Space Propagating Characteristics of Pulsed-Laser-Induced Shock Waves. Modern Physics Letters B, 2003, 17, 1057-1066.	1.9	2
114	Study on Optimization of Transverse Thermal Conductivities of Unidirectional Composites. Journal of Heat Transfer, 2003, 125, 980-987.	2.1	35
115	A Fractal Model for Nucleate Pool Boiling Heat Transfer. Journal of Heat Transfer, 2002, 124, 1117-1124.	2.1	56
116	Fractal Models for the Effective Thermal Conductivity of Bidispersed Porous Media. Journal of Thermophysics and Heat Transfer, 2002, 16, 22-29.	1.6	120
117	An analytical solution for transverse thermal conductivities of unidirectional fibre composites with thermal barrier. Journal Physics D: Applied Physics, 2002, 35, 1867-1874.	2.8	47
118	A fractal permeability model for bi-dispersed porous media. International Journal of Heat and Mass Transfer, 2002, 45, 2983-2993.	4.8	862
119	Comments on â€œreexamination of correlations for nucleate site distribution on boiling surface by fractal theoryâ€• Journal of Thermal Science, 2002, 11, 383-384.	1.9	0
120	A fractal in-plane permeability model for fabrics. Polymer Composites, 2002, 23, 201-221.	4.6	175
121	FRACTAL CHARACTERS OF PORE MICROSTRUCTURES OF TEXTILE FABRICS. Fractals, 2001, 09, 155-163.	3.7	51
122	SOME FRACTAL CHARACTERS OF POROUS MEDIA. Fractals, 2001, 09, 365-372.	3.7	666
123	Dynamic simulation on the preparation process of thin films by pulsed laser. Science in China Series A: Mathematics, 2001, 44, 1485-1496.	0.5	18
124	Heat transfer during flow and resin reaction through fiber reinforcement. Chemical Engineering Science, 2000, 55, 3365-3376.	3.8	21
125	A simplified in-plane permeability model for textile fabrics. Polymer Composites, 2000, 21, 660-685.	4.6	64
126	Dynamic Modeling of a Tunnel Kiln. Heat Transfer Engineering, 1994, 15, 39-53.	1.9	14

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127	Computation of heat conduction in self-similar porous structures. Physical Review A, 1991, 44, 3664-3668.	2.5	5
128	Properties for two-dimensional fractal aggregation in external fields. Physical Review A, 1990, 41, 5564-5567.	2.5	8
129	FRACTAL MONTE CARLO SIMULATIONS OF THE EFFECTIVE PERMEABILITY FOR A FRACTURE NETWORK. Fractals, 0, , .	3.7	4