Muhammad Sahimi

List of Publications by Year
in descending order

292	13,928	18436 62	33814 99
papers	citations	h-index	g-index

316	316	316	8519
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Enhanced thermal fingering in a shear-thinning fluid flow through porous media: Dynamic pore network modeling. Physics of Fluids, 2022, 34, .	1.6	9
2	Percolation and Polymer Morphology and Rheology. , 2021, , 379-404.		0
3	Molecular Dynamics Study of Structure, Folding, and Aggregation of Poly-PR and Poly-GR Proteins. Biophysical Journal, 2021, 120, 64-72.	0.2	8
4	Speeding-up Simulation of Multiphase Flow in Digital Images of Heterogeneous Porous Media by Curvelet Transformation. Transport in Porous Media, 2021, 137, 215-232.	1.2	2
5	Physics- and image-based prediction of fluid flow and transport in complex porous membranes and materials by deep learning. Journal of Membrane Science, 2021, 622, 119050.	4.1	27
6	Elastic moduli of body-centered cubic lattice near rigidity percolation threshold: Finite-size effects and evidence for first-order phase transition. Physical Review E, 2021, 103, 042314.	0.8	1
7	Fast simulation of two-phase flow in three-dimensional digital images of heterogeneous porous media using multiresolution curvelet transformation. Advances in Water Resources, 2021, 150, 103882.	1.7	2
8	Flow and Transport Properties of Deforming Porous Media. I. Permeability. Transport in Porous Media, 2021, 138, 577-609.	1.2	2
9	Flow and Transport Properties of Deforming Porous Media. II. Electrical Conductivity. Transport in Porous Media, 2021, 138, 611-636.	1.2	3
10	Graphyne-3: a highly efficient candidate for separation of small gas molecules from gaseous mixtures. Scientific Reports, 2021, 11, 16325.	1.6	7
11	Simulating fluid flow in complex porous materials by integrating the governing equations with deep-layered machines. Npj Computational Materials, 2021, 7, .	3.5	24
12	Estimating Dispersion Coefficient in Flow Through Heterogeneous Porous Media by a Deep Convolutional Neural Network. Geophysical Research Letters, 2021, 48, e2021GL094443.	1.5	9
13	Reconstruction, optimization, and design of heterogeneous materials and media: Basic principles, computational algorithms, and applications. Physics Reports, 2021, 939, 1-82.	10.3	39
14	Universal Intrinsic Dynamics and Freezing of Water in Small Nanotubes. Journal of Physical Chemistry C, 2021, 125, 946-956.	1.5	5
15	Speeding-up image-based simulation of two-phase flow in porous media with lattice-Boltzmann method using three-dimensional curvelet transforms. Physics of Fluids, 2021, 33, .	1.6	7
16	sDMD: An open source program for discontinuous molecular dynamics simulation of protein folding and aggregation. Computer Physics Communications, 2020, 247, 106873.	3.0	6
17	Linking Morphology of Porous Media to Their Macroscopic Permeability by Deep Learning. Transport in Porous Media, 2020, 131, 427-448.	1.2	95
18	Molecular Dynamics Study of the Effect of Layer Charge and Interlayer Cations on Swelling of Mixed-Layer Chloriteâ€“Montmorillonite Clays. Journal of Physical Chemistry C, 2020, 124, 2553-2561.	1.5	24

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19	Efficient Imageâ€Based Simulation of Flow and Transport in Heterogeneous Porous Media: Application of Curvelet Transforms. Geophysical Research Letters, 2020, 47, e2019GL085671.	1.5	6
20	Two-phase flow of CO2-brine in a heterogeneous sandstone: Characterization of the rock and comparison of the lattice-Boltzmann, pore-network, and direct numerical simulation methods. Advances in Water Resources, 2020, 135, 103469.	1.7	30
21	Phase transitions, percolation, fracture of materials, and deep learning. Physical Review E, 2020, 102, 011001.	0.8	5
22	Formation of a Stable Bridge between Two Disjoint Nanotubes with Single-File Chains of Water. Journal of Physical Chemistry B, 2020, 124, 8340-8346.	1.2	13
23	Identifying the Optimal Path and Computing the Threshold Pressure for Flow of Bingham Fluids Through Heterogeneous Porous Media. Transport in Porous Media, 2020, 135, 779-798.	1.2	5
24	A Study of the Role of Microfractures in Counter-Current Spontaneous Imbibition by Lattice Boltzmann Simulation. Transport in Porous Media, 2020, 133, 313-332.	1.2	28
25	Machine learning in geo- and environmental sciences: From small to large scale. Advances in Water Resources, 2020, 142, 103619.	1.7	138
26	Nanoscale detection of metastable states in porous and granular media. Journal of Applied Physics, 2020, 127, 024901.	1.1	4
27	Quantifying accuracy of stochastic methods of reconstructing complex materials by deep learning. Physical Review E, 2020, 101, 043301.	0.8	19
28	Molecular origin of sliding friction and flash heating in rock and heterogeneous materials. Scientific Reports, 2020, 10, 22264.	1.6	1
29	Wetting and Drying Transitions of Water Nanodroplets on Suspended Graphene Bilayers. Journal of Physical Chemistry C, 2020, 124, 28152-28158.	1.5	4
30	Enhancing images of shale formations by a hybrid stochastic and deep learning algorithm. Neural Networks, 2019, 118, 310-320.	3.3	69
31	Regulation of migration of chemotactic tumor cells by the spatial distribution of collagen fiber orientation. Physical Review E, 2019, 99, 062414.	0.8	17
32	Hertzâ€Mindlin Theory of Contacting Grains and the Effectiveâ€Medium Approximation for the Permeability of Deforming Porous Media. Geophysical Research Letters, 2019, 46, 8039-8045.	1.5	24
33	Morphology and kinetics of random sequential adsorption of superballs: From hexapods to cubes. Physical Review E, 2019, 100, 020602.	0.8	5
34	Saturation Dependence of Nonâ€Fickian Transport in Porous Media. Water Resources Research, 2019, 55, 1153-1166.	1.7	35
35	Molecular Dynamics Simulation of Hydration and Swelling of Mixed-Layer Clays in the Presence of Carbon Dioxide. Journal of Physical Chemistry C, 2019, 123, 4243-4255.	1.5	40
36	Efficient Transport Between Disjoint Nanochannels by a Water Bridge. Physical Review Letters, 2019, 122, 214506.	2.9	33

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37	Exact enumeration approach to first-passage time distribution of non-Markov random walks. Physical Review E, 2019, 99, 062101.	0.8	7
38	Molecular dynamics study of structure, folding, and aggregation of poly-glycine-alanine (Poly-GA). Journal of Chemical Physics, 2019, 150, 144307.	1.2	7
39	Sliding friction between two silicon-carbide surfaces. Journal of Applied Physics, 2019, 125, .	1.1	5
40	Upscaling of Geological Models of Oil Reservoirs with Unstructured Grids Using Lifting-Based Graph Wavelet Transforms. Transport in Porous Media, 2019, 127, 661-684.	1.2	18
41	Effect of heterogeneity and spatial correlations on the structure of a tumor invasion front in cellular environments. Physical Review E, 2019, 100, 062409.	0.8	9
42	Thermal Conduction in Deforming Isotropic and Anisotropic Granular Porous Media with Rough Grain Surface. Transport in Porous Media, 2018, 124, 221-236.	1.2	6
43	Role of the Interplay Between the Internal and External Conditions in Invasive Behavior of Tumors. Scientific Reports, 2018, 8, 5968.	1.6	9
44	Dynamics of proteins aggregation. II. Dynamic scaling in confined media. Journal of Chemical Physics, 2018, 148, 104305.	1.2	9
45	Theoretical Model and Numerical Simulation of Adsorption and Deformation in Flexible Metalâ€“Organic Frameworks. Journal of Physical Chemistry C, 2018, 122, 9465-9473.	1.5	13
46	Rapid Learning-Based and Geologically Consistent History Matching. Transport in Porous Media, 2018, 122, 279-304.	1.2	18
47	Pore-network model of evaporation-induced salt precipitation in porous media: The effect of correlations and heterogeneity. Advances in Water Resources, 2018, 112, 59-71.	1.7	35
48	Higher-order correlation functions in disordered media: Computational algorithms and application to two-phase heterogeneous materials. Physical Review E, 2018, 98, .	0.8	22
49	Effect of Elastic Deformation and Rough Grain Surface on Heat Conduction in Partially Saturated Granular Porous Media. Water Resources Research, 2018, 54, 9533-9548.	1.7	8
50	Nanojunction Effects on Water Flow in Carbon Nanotubes. Scientific Reports, 2018, 8, 7752.	1.6	26
51	Effect of the geometry of confining media on the stability and folding rate of Î±-helix proteins. Journal of Chemical Physics, 2018, 148, 194305.	1.2	3
52	Image-based modeling of gas adsorption and deformation in porous media. Scientific Reports, 2018, 8, 8249.	1.6	26
53	A stochastic multiscale algorithm for modeling complex granular materials. Granular Matter, 2018, 20, 1.	1.1	21
54	Complex Behavior of Ordered and Icelike Water in Carbon Nanotubes near Its Bulk Boiling Point. Journal of Physical Chemistry Letters, 2018, 9, 4746-4752.	2.1	8

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55	Editorial to the Special Issue on Reconstruction of Porous Media and Materials and Its Applications. Transport in Porous Media, 2018, 125, 1-3.	1.2	5
56	Iodine k-edge dual energy imaging reveals the influence of particle size distribution on solute transport in drying porous media. Scientific Reports, 2018, 8, 10731.	1.6	15
57	Molecular Dynamics Simulation of Hydration and Swelling of Mixed-Layer Clays. Journal of Physical Chemistry C, 2018, 122, 14631-14639.	1.5	52
58	Electrical Conductivity of Partially Saturated Packings of Particles. Transport in Porous Media, 2017, 118, 1-16.	1.2	27
59	Imageâ€based modeling of granular porous media. Geophysical Research Letters, 2017, 44, 4738-4746.	1.5	59
60	Fabrication of silicon carbide membranes on highly permeable supports. Journal of Membrane Science, 2017, 537, 239-247.	4.1	31
61	Pore-scale simulation of flow of CO2 and brine in reconstructed and actual 3D rock cores. Journal of Petroleum Science and Engineering, 2017, 155, 21-33.	2.1	54
62	Fabrication of high-surface area nanoporous SiOC ceramics using pre-ceramic polymer precursors and a sacrificial template: Precursor effects. Microporous and Mesoporous Materials, 2017, 241, 338-345.	2.2	25
63	Adsorption-induced swelling of porous media. International Journal of Greenhouse Gas Control, 2017, 57, 1-13.	2.3	33
64	Flow, Transport, and Reaction in Porous Media: Percolation Scaling, Criticalâ€Path Analysis, and Effective Medium Approximation. Reviews of Geophysics, 2017, 55, 993-1078.	9.0	130
65	Data mining and machine learning for identifying sweet spots in shale reservoirs. Expert Systems With Applications, 2017, 88, 435-447.	4.4	65
66	Effect of deformation on the thermal conductivity of granular porous media with rough grain surface. Geophysical Research Letters, 2017, 44, 8285-8293.	1.5	18
67	Fabrication of Grapheneâ€“Polyimide Nanocomposites with Superior Electrical Conductivity. ACS Applied Materials & Interfaces, 2017, 9, 43230-43238.	4.0	47
68	Nucleation of Salt Crystals in Clay Minerals: Molecular Dynamics Simulation. Journal of Physical Chemistry Letters, 2017, 8, 3166-3172.	2.1	38
69	Direct Modeling of Granular Materials. , 2017, , .		2
70	Statistical characterization of microstructure of packings of polydisperse hard cubes. Physical Review E, 2017, 95, 052902.	0.8	14
71	Enhancing multipleâ€point geostatistical modeling: 2. Iterative simulation and multiple distance function. Water Resources Research, 2016, 52, 2099-2122.	1.7	68
72	Enhancing multipleâ€point geostatistical modeling: 1. Graph theory and pattern adjustment. Water Resources Research, 2016, 52, 2074-2098.	1.7	74

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73	Packing of nonoverlapping cubic particles: Computational algorithms and microstructural characteristics. Physical Review E, 2016, 94, 062901.	0.8	14
74	Static and dynamic properties of supercooled water in small nanotubes. Journal of Chemical Physics, 2016, 145, 024502.	1.2	9
75	Dynamics of proteins aggregation. I. Universal scaling in unbounded media. Journal of Chemical Physics, 2016, 145, 134306.	1.2	9
76	Pore-Network Simulation of Unstable Miscible Displacements in Porous Media. Transport in Porous Media, 2016, 113, 511-529.	1.2	13
77	Stochastic shale permeability matching: Three-dimensional characterization and modeling. International Journal of Coal Geology, 2016, 165, 231-242.	1.9	57
78	Modeling relative permeability of water in soil: Application of effectiveâ€medium approximation and percolation theory. Water Resources Research, 2016, 52, 5025-5040.	1.7	34
79	Upscaling of solute transport in disordered porous media by wavelet transformations. Advances in Water Resources, 2016, 96, 180-189.	1.7	22
80	Acoustic wave propagation in heterogeneous two-dimensional fractured porous media. Physical Review E, 2016, 93, 063305.	0.8	14
81	Computer simulation of the effect of deformation on the morphology and flow properties of porous media. Physical Review E, 2016, 94, 042903.	0.8	33
82	Interoccurrence time statistics in fully-developed turbulence. Scientific Reports, 2016, 6, 27452.	1.6	10
83	Microstructural characterization of random packings of cubic particles. Scientific Reports, 2016, 6, 35024.	1.6	23
84	Molecular Simulation Study of Gas Solubility and Diffusion in a Polymer-Boron Nitride Nanotube Composite. Journal of Physical Chemistry B, 2016, 120, 1273-1284.	1.2	18
85	Multiscale study for stochastic characterization of shale samples. Advances in Water Resources, 2016, 89, 91-103.	1.7	81
86	Molecular Dynamics Simulation of Transport and Separation of Carbon Dioxideâ€“Alkane Mixtures in a Nanoporous Membrane Under Sub- and Supercritical Conditions. Transport in Porous Media, 2016, 115, 495-518.	1.2	5
87	Experimental investigation of hydrogen adsorption in doped silicon-carbide nanotubes. International Journal of Hydrogen Energy, 2016, 41, 369-374.	3.8	33
88	Multiscale and multiresolution modeling of shales and their flow and morphological properties. Scientific Reports, 2015, 5, 16373.	1.6	74
89	Dynamics of supercooled water in nanotubes: Cage correlation function and diffusion coefficient. Physical Review E, 2015, 92, 030301.	0.8	12
90	Denoising of Seismic Data Using Curvelet Transformation: The Effect of on the Content of the Data. , 2015, , .		1

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91	Nonuniversality of the Archie exponent due to multifractality of resistivity well logs. Geophysical Research Letters, 2015, 42, 10,655.	1.5	26
92	Geostatistical Simulation and Reconstruction of Porous Media by a Cross-Correlation Function and Integration of Hard and Soft Data. Transport in Porous Media, 2015, 107, 871-905.	1.2	38
93	Gas and solute diffusion in partially saturated porous media: Percolation theory and Effective Medium Approximation compared with lattice Boltzmann simulations. Journal of Geophysical Research: Solid Earth, 2015, 120, 182-190.	1.4	34
94	Reconstruction of nonstationary disordered materials and media: Watershed transform and cross-correlation function. Physical Review E, 2015, 91, 032401.	0.8	52
95	Solubility and diffusivity of H2 and CO2 in the ionic liquid [bmim][PF6]. International Journal of Hydrogen Energy, 2015, 40, 8713-8720.	3.8	18
96	Fabrication of high-surface area nanoporous SiOC materials using pre-ceramic polymer blends and a sacrificial template. Microporous and Mesoporous Materials, 2015, 210, 77-85.	2.2	14
97	First principles-based multiparadigm, multiscale strategy for simulating complex materials processes with applications to amorphous SiC films. Journal of Chemical Physics, 2015, 142, 174703.	1.2	10
98	Three-Dimensional Stochastic Characterization of Shale SEM Images. Transport in Porous Media, 2015, 110, 521-531.	1.2	100
99	Toward a process-based molecular model of SiC membranes: III. Prediction of transport and separation of binary gaseous mixtures based on the atomistic reactive force field. Journal of Membrane Science, 2015, 473, 85-93.	4.1	12
100	Electro-osmotic flow in disordered porous and fractured media. Physical Review E, 2014, 89, 033007.	0.8	9
101	Hydrogen sorption hysteresis and superior storage capacity of silicon-carbide nanotubes over their carbon counterparts. International Journal of Hydrogen Energy, 2014, 39, 21107-21115.	3.8	37
102	Coherence index and curvelet transformation for denoising geophysical data. Physical Review E, 2014, 90, 042810.	0.8	5
103	Field evaluation of carbon molecular sieve membranes for the separation and purification of hydrogen from coal- and biomass-derived syngas. Journal of Membrane Science, 2014, 450, 81-92.	4.1	53
104	Fabrication of nanoporous silicon oxycarbide materials using layered double-hydroxide as a sacrificial template. Microporous and Mesoporous Materials, 2014, 190, 267-274.	2.2	9
105	Wave propagation in disordered fractured porous media. Physical Review E, 2014, 89, 023301.	0.8	7
106	Molecular dynamics simulation of formation and growth of CdS nanoparticles. Molecular Simulation, 2014, 40, 361-369.	0.9	1
107	Chemisorption, physisorption and hysteresis during hydrogen storage in carbon nanotubes. International Journal of Hydrogen Energy, 2014, 39, 1390-1397.	3.8	88
108	Hydrogen Production from Biomass-Derived Syngas Using a Membrane Reactor Based Process. Industrial & Engineering Chemistry Research, 2014, 53, 819-827.	1.8	18

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109	Ensemblesâ€based and GAâ€based optimization for landfill gas production. AICHE Journal, 2014, 60, 2063-2071.	1.8	6
110	MS-CCSIM: Accelerating pattern-based geostatistical simulation of categorical variables using a multi-scale search in Fourier space. Computers and Geosciences, 2014, 67, 75-88.	2.0	87
111	Highly permeable porous silicon carbide support tubes for the preparation of nanoporous inorganic membranes. Journal of Membrane Science, 2014, 451, 192-204.	4.1	57
112	Analysis of pressure fluctuations in fluidized beds. III. The significance of the cross correlations. Chemical Engineering Science, 2013, 101, 390-400.	1.9	9
113	Mechanical properties of heat-treated organic foams. Physical Review E, 2013, 87, .	0.8	14
114	Use of microseismicity for determining the structure of the fracture network of large-scale porous media. Physical Review E, 2013, 87, .	0.8	33
115	On the Use of Porous and Nonporous Fillers in the Fabrication of Silicon Carbide Membranes. Industrial & Engineering Chemistry Research, 2013, 52, 10269-10275.	1.8	24
116	Toward a Process-Based Molecular Model of SiC Membranes. 1. Development of a Reactive Force Field. Journal of Physical Chemistry C, 2013, 117, 3308-3319.	1.5	39
117	Toward a Process-Based Molecular Model of SiC Membranes. 2. Reactive Dynamics Simulation of the Pyrolysis of Polymer Precursor To Form Amorphous SiC. Journal of Physical Chemistry C, 2013, 117, 3320-3329.	1.5	24
118	Cross-Correlation Function for Accurate Reconstruction of Heterogeneous Media. Physical Review Letters, 2013, 110, 078002.	2.9	148
119	Tortuosity in Porous Media: A Critical Review. Soil Science Society of America Journal, 2013, 77, 1461-1477.	1.2	569
120	Percolation Theory Generates a Physically Based Description of Tortuosity in Saturated and Unsaturated Porous Media. Soil Science Society of America Journal, 2013, 77, 1920-1929.	1.2	87
121	Dispersion in porous media, continuous-time random walks, and percolation. Physical Review E, 2012, 85, 016316.	0.8	46
122	Reconstruction of three-dimensional porous media using a single thin section. Physical Review E, 2012, 85, 066709.	0.8	131
123	Morphology, propagation dynamics and scaling characteristics of drying fronts in porous media. Geophysical Research Letters, 2012, 39, .	1.5	29
124	Accelerating geostatistical simulations using graphics processing units (GPU). Computers and Geosciences, 2012, 46, 51-59.	2.0	58
125	Multiple-point geostatistical modeling based on the cross-correlation functions. Computational Geosciences, 2012, 16, 779-797.	1.2	238
126	Computer simulation of gas generation and transport in landfills: VIâ€”Dynamic updating of the model using the ensemble Kalman filter. Chemical Engineering Science, 2012, 74, 69-78.	1.9	15

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127	Adsorption Isotherms of Arsenic on Conditioned Layered Double Hydroxides in the Presence of Various Competing Ions. Industrial & Engineering Chemistry Research, 2011, 50, 2220-2226.	1.8	46
128	Molecular dynamics simulation of pressure-driven water flow in silicon-carbide nanotubes. Journal of Chemical Physics, 2011, 135, 204509.	1.2	52
129	Approaching complexity by stochastic methods: From biological systems to turbulence. Physics Reports, 2011, 506, 87-162.	10.3	258
130	Analysis of Cross Correlations Between Well Logs of Hydrocarbon Reservoirs. Transport in Porous Media, 2011, 90, 445-464.	1.2	21
131	Computer simulation of gas generation and transport in landfills. V: Use of artificial neural network and the genetic algorithm for short- and long-term forecasting and planning. Chemical Engineering Science, 2011, 66, 2646-2659.	1.9	29
132	Determination of the true pore size distribution by flow permporometry experiments: An invasion percolation model. Journal of Membrane Science, 2011, 367, 55-62.	4.1	28
133	Scaling, multifractality, and long-range correlations in well log data of large-scale porous media. Physica A: Statistical Mechanics and Its Applications, 2011, 390, 2096-2111.	1.2	33
134	Analysis of porosity distribution of large-scale porous media and their reconstruction by Langevin equation. Physical Review E, 2011, 83, 026309.	0.8	7
135	Confinement in nanopores can destabilize Î±-helix folding proteins and stabilize the Î² structures. Journal of Chemical Physics, 2011, 135, 125101.	1.2	17
136	Network model for the evolution of the pore structure of silicon-carbide membranes during their fabrication. Journal of Membrane Science, 2010, 356, 138-146.	4.1	30
137	Upscaled Unstructured Computational Grids for Efficient Simulation of Flow in Fractured Porous Media. Transport in Porous Media, 2010, 83, 195-218.	1.2	22
138	Efficient Computational Strategies for Solving Global Optimization Problems. Computing in Science and Engineering, 2010, 12, 74-83.	1.2	19
139	Controlled nucleation and growth of CdS nanoparticles by turbulent dispersion. Physical Review E, 2010, 81, 026304.	0.8	13
140	Molecular dynamics simulations of adsorption and diffusion of gases in silicon-carbide nanotubes. Journal of Chemical Physics, 2010, 132, 014310.	1.2	85
141	Process Intensification in Hydrogen Production from Biomass-Derived Syngas. Industrial & Engineering Chemistry Research, 2010, 49, 10986-10993.	1.8	30
142	Anomalous fluctuations of vertical velocity of Earth and their possible implications for earthquakes. Physical Review E, 2010, 82, 036105.	0.8	12
143	Numerical simulations of localization of electromagnetic waves in two- and three-dimensional disordered media. Physical Review B, 2009, 80, .	1.1	13
144	ANALYSIS AND SIMULATION OF LONG-RANGE CORRELATIONS IN CURVED SPACE. International Journal of Modern Physics C, 2009, 20, 1211-1232.	0.8	6

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145	Upscaling of the Geological Models of Large-Scale Porous Media Using Multiresolution Wavelet Transformations. Journal of Heat Transfer, 2009, 131, .	1.2	10
146	Molecular simulation of protein dynamics in nanopores. II. Diffusion. Journal of Chemical Physics, 2009, 130, 085105.	1.2	22
147	Effect of polystyrene on the morphology and physical properties of silicon carbide nanofibers. Materials Chemistry and Physics, 2009, 118, 259-263.	2.0	26
148	Propagation and localization of acoustic and elastic waves in heterogeneous materials: renormalization group analysis and numerical simulations. Acta Mechanica, 2009, 205, 197-222.	1.1	3
149	Upscaling of the permeability by multiscale wavelet transformations and simulation of multiphase flows in heterogeneous porous media. Computational Geosciences, 2009, 13, 187-214.	1.2	38
150	Molecular pore-network model for nanoporous materials. I: Application to adsorption in silicon-carbide membranes. Journal of Membrane Science, 2009, 335, 5-12.	4.1	20
151	Molecular pore-network model for nanoporous materials. II: Application to transport and separation of gaseous mixtures in silicon-carbide membranes. Journal of Membrane Science, 2009, 345, 323-330.	4.1	20
152	Mapping stochastic processes onto complex networks. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P07046.	0.9	67
153	The Preparation and Characterization of Hydrotalcite Thin Films. Industrial & Engineering Chemistry Research, 2009, 48, 5794-5801.	1.8	27
154	Turbulencelike Behavior of Seismic Time Series. Physical Review Letters, 2009, 102, 014101.	2.9	49
155	A PERCOLATION MODEL OF MOBILE AD-HOC NETWORKS. International Journal of Modern Physics C, 2009, 20, 1871-1902.	0.8	11
156	Pore network model of transport and separation of binary gas mixtures in nanoporous membranes. Journal of Membrane Science, 2008, 315, 48-57.	4.1	35
157	Experimental studies and computer simulation of the preparation of nanoporous silicon-carbide membranes by chemical-vapor infiltration/chemical-vapor deposition techniques. Chemical Engineering Science, 2008, 63, 1460-1470.	1.9	23
158	Upscaling and Simulation of Waterflooding in Heterogeneous Reservoirs Using Wavelet Transformations: Application to the SPE-10 Model. Transport in Porous Media, 2008, 72, 311-338.	1.2	33
159	A novel sacrificial interlayer-based method for the preparation of silicon carbide membranes. Journal of Membrane Science, 2008, 316, 73-79.	4.1	69
160	Preparation of Hydrotalcite Thin Films Using an Electrophoretic Technique. Industrial & Engineering Chemistry Research, 2008, 47, 9127-9132.	1.8	32
161	Reply to â€œComment on â€˜Renormalization group analysis and numerical simulation of propagation and localization of acoustic waves in heterogeneous mediaâ€™â€‰â€•â€• Physical Review B, 2008, 77, .	1.1	10
162	Exact Lyapunov exponent of the harmonic magnon modes of one-dimensional Heisenberg-Mattis spin glasses. Physical Review B, 2008, 77, .	1.1	2

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163	Numerical simulation of the localization of elastic waves in two- and three-dimensional heterogeneous media. Physical Review B, 2008, 78, .	1.1	21
164	Dynamic renormalization group analysis of propagation of elastic waves in two-dimensional heterogeneous media. Physical Review B, 2008, 77, .	1.1	29
165	Study of CO2 Diffusion and Adsorption on Calcined Layered Double Hydroxides: The Effect of Particle Size. Industrial & Engineering Chemistry Research, 2008, 47, 6150-6157.	1.8	42
166	Molecular simulation of protein dynamics in nanopores. I. Stability and folding. Journal of Chemical Physics, 2008, 128, 115105.	1.2	19
167	Localization properties of acoustic waves in the random-dimer media. Physical Review B, 2008, 78, .	1.1	25
168	Development of optimal models of porous media by combining static and dynamic data: The permeability and porosity distributions. Physical Review E, 2007, 75, 056311.	0.8	28
169	Renormalization group analysis and numerical simulation of propagation and localization of acoustic waves in heterogeneous media. Physical Review B, 2007, 75, .	1.1	37
170	Preparation of Polyetherimide Nanoparticles by an Electrospray Technique. Industrial & Engineering Chemistry Research, 2007, 46, 3348-3357.	1.8	24
171	Atomistic simulation of nanoporous layered double hydroxide materials and their properties. II. Adsorption and diffusion. Journal of Chemical Physics, 2007, 127, 224701.	1.2	23
172	Molecular dynamics simulations of transport and separation of supercritical carbon dioxide-alkane mixtures in supported membranes. Chemical Engineering Science, 2007, 62, 2777-2789.	1.9	19
173	Computer simulation of gas generation and transport in landfills. III: Development of lanfillsâ€™ optimal model. Chemical Engineering Science, 2007, 62, 6378-6390.	1.9	22
174	Silicon carbide membranes for gas separation applications. Journal of Membrane Science, 2007, 288, 290-297.	4.1	128
175	Numerical simulation of ac conduction in three-dimensional heterogeneous materials. Physical Review B, 2006, 73, .	1.1	13
176	Transport properties of composite solid films with rough self-affine surfaces. Physical Review B, 2006, 74, .	1.1	12
177	Discrete simulation of the dynamics of spread of extreme opinions in a society. Physica A: Statistical Mechanics and Its Applications, 2006, 364, 537-543.	1.2	24
178	Generation of long-range correlations in large systems as an optimization problem. Physical Review E, 2006, 73, 056121.	0.8	28
179	Analysis of Non-stationary Data for Heart-rate Fluctuations in Terms of Drift and Diffusion Coefficients. Journal of Biological Physics, 2006, 32, 117-128.	0.7	44
180	Exact Analysis of Level-Crossing Statistics for (d+1)-Dimensional Fluctuating Surfaces. Journal of Statistical Physics, 2006, 124, 1471-1490.	0.5	7

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181	Grid coarsening, simulation of transport processes in, and scale-up of heterogeneous media: Application of multiresolution wavelet transformations. Mechanics of Materials, 2006, 38, 772-785.	1.7	17
182	Supercritical fluids in porous composite materials: Direction-dependent flow properties. Physical Review E, 2006, 73, 036312.	0.8	10
183	Shape of a Wave Front in a Heterogenous Medium. Physical Review Letters, 2006, 96, 075507.	2.9	15
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