

Mo-Ran Wang

List of Publications by Year in descending order

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210
papers

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41344

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8281
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#	ARTICLE	IF	CITATIONS
1	Critical REV Size of Multiphase Flow in Porous Media for Upscaling by Pore-Scale Modeling. Transport in Porous Media, 2022, 144, 111-132.	2.6	14
2	Lattice Boltzmann scheme for hydrodynamic equation of phonon transport. International Journal of Thermal Sciences, 2022, 171, 107178.	4.9	13
3	Wettability effects on mobilization of ganglia during displacement. International Journal of Mechanical Sciences, 2022, 215, 106933.	6.7	6
4	Effect of interfacial roughness on thermal boundary conductance: An elastic wave model using the Kirchhoff approximation. International Journal of Mechanical Sciences, 2022, 218, 106993.	6.7	4
5	Trapping patterns during capillary displacements in disordered media. Journal of Fluid Mechanics, 2022, 933, .	3.4	4
6	Preferential flow control in heterogeneous porous media by concentration-manipulated rheology of microgel particle suspension. Journal of Petroleum Science and Engineering, 2022, 212, 110275.	4.2	8
7	Can we infer the percolation status of 3D fractured media from 2D outcrops?. Engineering Geology, 2022, 302, 106648.	6.3	10
8	Thermodiffusion of ions in nanoconfined aqueous electrolytes. Journal of Colloid and Interface Science, 2022, 619, 331-338.	9.4	6
9	Numerical Simulation of Fluid Flow in Carbonate Rocks Based on Digital Rock Technology. Energies, 2022, 15, 3748.	3.1	2
10	A Steady-State Energy-Based Monte Carlo Method for Phonon Transport With Arbitrary Temperature Difference. Journal of Heat Transfer, 2022, 144, .	2.1	5
11	Non-monotonic wettability effects on displacement in heterogeneous porous media. Journal of Fluid Mechanics, 2022, 942, .	3.4	17
12	An improved straight-line method for permeability and porosity determination for tight reservoirs using pulse-decay measurements. Journal of Natural Gas Science and Engineering, 2022, 105, 104708.	4.4	5
13	Impacts of fracture properties on the formation and development of stimulated reservoir volume: A global sensitivity analysis. Journal of Petroleum Science and Engineering, 2022, 217, 110852.	4.2	7
14	Self-adaptive preferential flow control using displacing fluid with dispersed polymers in heterogeneous porous media. Journal of Fluid Mechanics, 2021, 906, .	3.4	30
15	Interfacial settling mode and tail dynamics of spherical-particle motion through immiscible fluids interfaces. Chemical Engineering Science, 2021, 229, 116091.	3.8	2
16	Electroosmotic flow: From microfluidics to nanofluidics. Electrophoresis, 2021, 42, 834-868.	2.4	50
17	Does Rheology of Bingham Fluid Influence Upscaling of Flow through Tight Porous Media?. Energies, 2021, 14, 680.	3.1	2
18	Experimental Investigation of Gas Dynamic Effects Using Nanoporous Synthetic Materials as Tight Rock Analogues. Transport in Porous Media, 2021, 137, 519-553.	2.6	8

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19	Nonequilibrium effects on the electron-phonon coupling constant in metals. <i>Physical Review B</i> , 2021, 103, .	3.2	18
20	Dynamic analysis of deformation and start-up process of residual-oil droplet on wall under shear flow. <i>Journal of Petroleum Science and Engineering</i> , 2021, 199, 108335.	4.2	9
21	Phonon vortex dynamics in graphene ribbon by solving Boltzmann transport equation with ab initio scattering rates. <i>International Journal of Heat and Mass Transfer</i> , 2021, 169, 120981.	4.8	12
22	Investigation of Spontaneous Imbibition Behavior in a 3D Pore Space Under Reservoir Condition by Lattice Boltzmann Method. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2021JB021987.	3.4	9
23	Size effect on phonon hydrodynamics in graphite microstructures and nanostructures. <i>Physical Review B</i> , 2021, 104, .	3.2	10
24	Reexamination of electron-phonon coupling constant in continuum model by comparison with Boltzmann transport theory. <i>International Journal of Heat and Mass Transfer</i> , 2021, 174, 121309.	4.8	3
25	In-plane interfacial phonon transport through multi-layer thin films by theoretical analyses and Monte Carlo simulations. <i>International Journal of Heat and Mass Transfer</i> , 2021, 176, 121438.	4.8	5
26	Temperature-regulated surface charge manipulates ionic current rectification in tapered nanofluidic channel. <i>International Journal of Mechanical Sciences</i> , 2021, 210, 106754.	6.7	8
27	Reassessment of transient permeability measurement for tight rocks: The role of boundary and initial conditions. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 95, 104173.	4.4	2
28	Electrokinetic Mechanisms and Synergistic Effect on Ion-Tuned Wettability in Oil-Brine-Rock Systems. <i>Transport in Porous Media</i> , 2021, 140, 7-26.	2.6	2
29	<i>A Special Issue on</i> Progress in Nanogeosciences. <i>Journal of Nanoscience and Nanotechnology</i> , 2021, 21, 1-9.	0.9	0
30	Nonnegative magnetoresistance in hydrodynamic regime of electron fluid transport in two-dimensional materials. <i>Physical Review B</i> , 2021, 104, .	3.2	5
31	A modified pulseâ€decay approach to simultaneously measure permeability and porosity of tight rocks. <i>Energy Science and Engineering</i> , 2021, 9, 2354-2363.	4.0	5
32	An Earlyâ€Time Solution of Pulseâ€Decay Method for Permeability Measurement of Tight Rocks. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2021JB022422.	3.4	2
33	Enhanced oil recovery mechanism and recovery performance of microâ€gel particle suspensions by microfluidic experiments. <i>Energy Science and Engineering</i> , 2020, 8, 986-998.	4.0	33
34	Compaction effects on permeability of spherical packing. <i>Engineering Computations</i> , 2020, 37, 3079-3096.	1.4	5
35	Anion Diffusion in Compacted Clays by Poreâ€Scale Simulation and Experiments. <i>Water Resources Research</i> , 2020, 56, e2019WR027037.	4.2	7
36	Does Lowâ€Viscosity Fracturing Fluid Always Create Complex Fractures?. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2020JB020332.	3.4	9

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37	An improved immersed moving boundary for hydrodynamic force calculation in lattice Boltzmann method. International Journal for Numerical Methods in Engineering, 2020, 121, 4493-4508.	2.8	5
38	Abnormal thermal boundary resistance of thin films with heat source. International Journal of Heat and Mass Transfer, 2020, 147, 118941.	4.8	3
39	Large area high-performance bismuth vanadate photoanode for efficient solar water splitting. Journal of Materials Chemistry A, 2020, 8, 3845-3850.	10.3	30
40	Review of low salinity waterflooding mechanisms: Wettability alteration and its impact on oil recovery. Fuel, 2020, 267, 117112.	6.4	86
41	Temperature effects on electrical double layer at solid-liquid aqueous solution interface. Electrophoresis, 2020, 41, 1067-1072.	2.4	16
42	Nonwetting droplet oscillation and displacement by viscoelastic fluids. Physical Review Fluids, 2020, 5, .	2.5	17
43	Direct simulation of second sound in graphene by solving the phonon Boltzmann equation via a multiscale scheme. Physical Review B, 2019, 100, .	3.2	25
44	Efficiency improvement of discrete-ordinates method for interfacial phonon transport by Gauss-Legendre integral for frequency domain. Journal of Computational Physics, 2019, 399, 108920.	3.8	9
45	Deviation Monte Carlo scheme for thermal and electrical transport in metal nanostructures. Physical Review B, 2019, 99, .	3.2	5
46	Pore-scale Study of Ion Transport Mechanisms in Inhomogeneously Charged Nanoporous Rocks: Impacts of Interface Properties on Macroscopic Transport. Journal of Geophysical Research: Solid Earth, 2019, 124, 5387-5407.	3.4	12
47	Transport mechanism of deformable micro-gel particle through micropores with mechanical properties characterized by AFM. Scientific Reports, 2019, 9, 1453.	3.3	18
48	Competitive effects of interfacial interactions on ion-tuned wettability by atomic simulations. Journal of Colloid and Interface Science, 2019, 540, 495-500.	9.4	30
49	Manipulation of effective thermal conductivity of multilayer thin film by varying thickness ratio of layers using Monte Carlo simulation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 58-62.	2.1	6
50	Flexibility of inactive electrokinetic layer at charged solid-liquid interface in response to bulk ion concentration. Journal of Colloid and Interface Science, 2019, 534, 195-204.	9.4	15
51	Multiscale modeling of ion diffusion in cement paste: electrical double layer effects. Cement and Concrete Composites, 2019, 96, 55-65.	10.7	44
52	Dispersion of charged solute in charged micro- and nanochannel with reversible sorption. Electrophoresis, 2019, 40, 838-844.	2.4	3
53	Cation Diffusion in Compacted Clay: A Pore-Scale View. Environmental Science & Technology, 2019, 53, 1976-1984.	10.0	16
54	Microstructure Effects on Effective Gas Diffusion Coefficient of Nanoporous Materials. Transport in Porous Media, 2019, 126, 431-453.	2.6	39

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55	A Generalized Local Grid Refinement Approach for Modeling of Multi-Physicochemical Transports by Lattice Boltzmann Method. <i>Advances in Applied Mathematics and Mechanics</i> , 2019, 11, 312-337.	1.2	3
56	LATTICE BOLTZMANN MODEL FOR UPSCALING OF FLOW IN HETEROGENEOUS POROUS MEDIA BASED ON DARCY'S LAW. <i>Journal of Porous Media</i> , 2019, 22, 1131-1139.	1.9	3
57	Lattice Boltzmann model for three-phase viscoelastic fluid flow. <i>Physical Review E</i> , 2018, 97, 023312.	2.1	35
58	Characterization of spontaneous imbibition dynamics in irregular channels by mesoscopic modeling. <i>Computers and Fluids</i> , 2018, 168, 21-31.	2.5	29
59	Phonon hydrodynamics for nanoscale heat transport at ordinary temperatures. <i>Physical Review B</i> , 2018, 97, .	3.2	69
60	Coupling of high Knudsen number and non-ideal gas effects in microporous media. <i>Journal of Fluid Mechanics</i> , 2018, 840, 56-73.	3.4	28
61	Pore-scale study of thermal effects on ion diffusion in clay with inhomogeneous surface charge. <i>Journal of Colloid and Interface Science</i> , 2018, 514, 443-451.	9.4	14
62	Hydro-mechanical coupled mechanisms of hydraulic fracture propagation in rocks with cemented natural fractures. <i>Journal of Petroleum Science and Engineering</i> , 2018, 163, 421-434.	4.2	54
63	A new thermo-mechanical coupled DEM model with non-spherical grains for thermally induced damage of rocks. <i>Journal of the Mechanics and Physics of Solids</i> , 2018, 116, 54-69.	4.8	36
64	Interfacial phonon transport with frequency-dependent transmissivity by Monte Carlo simulation. <i>International Journal of Heat and Mass Transfer</i> , 2018, 123, 616-628.	4.8	37
65	Prediction and optimization of radiative thermal properties of nano TiO ₂ assembled fibrous insulations. <i>International Journal of Heat and Mass Transfer</i> , 2018, 117, 729-739.	4.8	50
66	Pore-scale modeling of chloride ion diffusion in cement microstructures. <i>Cement and Concrete Composites</i> , 2018, 85, 92-104.	10.7	47
67	Shear-thinning or shear-thickening fluid for better EOR? – A direct pore-scale study. <i>Journal of Petroleum Science and Engineering</i> , 2018, 161, 683-691.	4.2	51
68	Pore-Scale Modeling of Spontaneous Imbibition Behavior in a Complex Shale Porous Structure by Pseudopotential Lattice Boltzmann Method. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 9586-9600.	3.4	38
69	Gas permeability calculation of tight rocks based on laboratory measurements with non-ideal gas slippage and poroelastic effects considered. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2018, 112, 16-24.	5.8	14
70	Nonequilibrium thermodynamics of phonon hydrodynamic model for nanoscale heat transport. <i>Physical Review B</i> , 2018, 98, .	3.2	23
71	Reactive Transport of Protons in Electro-Osmotic Displacements with Electrolyte Concentration Difference in a Microcapillary. <i>Analytical Chemistry</i> , 2018, 90, 11802-11811.	6.5	3
72	Critical Resolution and Sample Size of Digital Rock Analysis for Unconventional Reservoirs. <i>Energies</i> , 2018, 11, 1798.	3.1	19

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73	Synthetic Multifunctional Graphene Composites with Reshaping and Self-Healing Features via a Facile Biom mineralization-Inspired Process. <i>Advanced Materials</i> , 2018, 30, e1803004.	21.0	55
74	Interfacial Phonon Transport Through Si/Ge Multilayer Film Using Monte Carlo Scheme With Spectral Transmissivity. <i>Frontiers in Energy Research</i> , 2018, 6, .	2.3	17
75	Graphene: Synthetic Multifunctional Graphene Composites with Reshaping and Self-Healing Features via a Facile Biom mineralization-Inspired Process (<i>Adv. Mater.</i> 34/2018). <i>Advanced Materials</i> , 2018, 30, 1870253.	21.0	1
76	Reverse electrodialysis through nanochannels with inhomogeneously charged surfaces and overlapped electric double layers. <i>Journal of Colloid and Interface Science</i> , 2018, 529, 214-223.	9.4	13
77	Macroscopic heat transport equations and heat waves in nonequilibrium states. <i>Physica D: Nonlinear Phenomena</i> , 2017, 342, 24-31.	2.8	12
78	Manipulating electrokinetic conductance of nanofluidic channel by varying inlet pH of solution. <i>Microfluidics and Nanofluidics</i> , 2017, 21, 1.	2.2	15
79	Pore-scale modeling of hydromechanical coupled mechanics in hydrofracturing process. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 3410-3429.	3.4	32
80	An improved pore-network model including viscous coupling effects using direct simulation by the lattice Boltzmann method. <i>Advances in Water Resources</i> , 2017, 100, 26-34.	3.8	53
81	Thermodynamic Extremum Principles for Nonequilibrium Stationary State in Heat Conduction. <i>Journal of Heat Transfer</i> , 2017, 139, .	2.1	1
82	Direct simulation of electroosmosis around a spherical particle with inhomogeneously acquired surface charge. <i>Electrophoresis</i> , 2017, 38, 580-595.	2.4	2
83	Effective gas diffusion coefficient in fibrous materials by mesoscopic modeling. <i>International Journal of Heat and Mass Transfer</i> , 2017, 107, 736-746.	4.8	29
84	Characterization of nanopore morphology of shale and its effects on gas permeability. <i>Journal of Natural Gas Science and Engineering</i> , 2017, 47, 83-90.	4.4	28
85	Upscaling scheme for long-term ion diffusion in charged porous media. <i>Physical Review E</i> , 2017, 96, 023308.	2.1	1
86	Transient solute transport with sorption in Poiseuille flow. <i>Journal of Fluid Mechanics</i> , 2017, 828, 733-752.	3.4	14
87	An improved elastic-tubes model for the correlation of permeability and stress with correction for the Klinkenberg effect. <i>Journal of Natural Gas Science and Engineering</i> , 2017, 48, 24-35.	4.4	8
88	Heat transport in two-dimensional materials by directly solving the phonon Boltzmann equation under Callaway's dual relaxation model. <i>Physical Review B</i> , 2017, 96, .	3.2	55
89	Electro-osmosis in inhomogeneously charged microporous media by pore-scale modeling. <i>Journal of Colloid and Interface Science</i> , 2017, 486, 219-231.	9.4	29
90	Molecular dynamics for ion-tuned wettability in oil/brine/rock systems. <i>AIP Advances</i> , 2017, 7, .	1.3	16

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91	Electrokinetic mechanism of wettability alternation at oil-water-rock interface. Surface Science Reports, 2017, 72, 369-391.	7.2	53
92	Critical Size of Continuum Theory Applicability for Single-Phase Liquid Flow in Nanochannel. Journal of Nanoscience and Nanotechnology, 2017, 17, 6149-6158.	0.9	7
93	Phonon hydrodynamics: progress, applications and perspectives. Scientia Sinica: Physica, Mechanica Et Astronomica, 2017, 47, 070010.	0.4	4
94	Bonding Strength Effects in Hydro-Mechanical Coupling Transport in Granular Porous Media by Pore-Scale Modeling. Computation, 2016, 4, 15.	2.0	12
95	Lattice Boltzmann modeling for multiphase viscoplastic fluid flow. Journal of Non-Newtonian Fluid Mechanics, 2016, 234, 118-128.	2.4	45
96	Lattice Boltzmann modeling of phonon transport. Journal of Computational Physics, 2016, 315, 1-15.	3.8	69
97	Drop movements and replacement on surface driven by shear force via hybrid atomistic-continuum simulations. Molecular Simulation, 2016, 42, 855-862.	2.0	3
98	Prediction and optimization of radiative thermal properties of ultrafine fibrous insulations. Applied Thermal Engineering, 2016, 104, 394-402.	6.0	35
99	Pore-scale geometry effects on gas permeability in shale. Journal of Natural Gas Science and Engineering, 2016, 34, 948-957.	4.4	58
100	Numerical prediction of the decline of the shale gas production rate with considering the geomechanical effects based on the two-part Hooke's model. Fuel, 2016, 185, 362-369.	6.4	30
101	Thermodynamic analysis of gas flow and heat transfer in microchannels. International Journal of Heat and Mass Transfer, 2016, 103, 773-782.	4.8	10
102	Thermodynamic framework for a generalized heat transport equation. Communications in Applied and Industrial Mathematics, 2016, 7, 167-176.	0.3	3
103	Evaporation Flux Distribution of Drops on a Hydrophilic or Hydrophobic Flat Surface by Molecular Simulations. Langmuir, 2016, 32, 8255-8264.	3.5	24
104	Predictions of Relative Permeability for Low Permeability Reservoirs and its Scale Effect. , 2016, , .		1
105	Continuous inertial microparticle and blood cell separation in straight channels with local microstructures. Lab on A Chip, 2016, 16, 532-542.	6.0	115
106	Permeability of high-Kn real gas flow in shale and production prediction by pore-scale modeling. Journal of Natural Gas Science and Engineering, 2016, 28, 328-337.	4.4	40
107	Lattice Boltzmann simulations for the vortex tori pattern in the three-dimensional cubic-quintic complex Ginzburg-Landau equation. Journal of Computational Physics, 2016, 306, 311-319.	3.8	4
108	Droplet evaporation on a horizontal substrate under gravity field by mesoscopic modeling. Journal of Colloid and Interface Science, 2016, 463, 317-323.	9.4	21

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109	Understanding of flux-limited behaviors of heat transport in nonlinear regime. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 452-457.	2.1	12
110	Lattice Boltzmann Simulation of Particle Motion in Binary Immiscible Fluids. Communications in Computational Physics, 2015, 18, 757-786.	1.7	20
111	Applicability of Donnan equilibrium theory at nanochannelâ€reservoir interfaces. Journal of Colloid and Interface Science, 2015, 452, 78-88.	9.4	18
112	Modeling of electrokinetic reactive transport in micropore using a coupled lattice Boltzmann method. Journal of Geophysical Research: Solid Earth, 2015, 120, 2877-2890.	3.4	25
113	Lattice Boltzmann Modeling of Thermal Conduction in Composites with Thermal Contact Resistance. Communications in Computational Physics, 2015, 17, 1037-1055.	1.7	22
114	Phonon hydrodynamics and its applications in nanoscale heat transport. Physics Reports, 2015, 595, 1-44.	25.6	188
115	On mechanisms of choked gas flows in microchannels. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 2351-2356.	2.1	10
116	Comparisons of different implementations of turbulence modelling in lattice Boltzmann method. Journal of Turbulence, 2015, 16, 67-80.	1.4	7
117	PREDICTION OF THERMAL CONDUCTIVITY OF FIBER/AEROGEL COMPOSITES FOR OPTIMAL THERMAL INSULATION. Journal of Porous Media, 2015, 18, 971-984.	1.9	27
118	Molecular Dynamics Simulations on Electrokinetic Nanofluidics. , 2015, , 2297-2307.		0
119	Multiscale Simulations. , 2015, , 2326-2334.		1
120	EFFECTS OF DIELECTRIC PERMITTIVITY OF SOLID STRUCTURE ON ELECTRO-OSMOTIC PERMEABILITY IN POROUS MEDIA. Journal of Porous Media, 2015, 18, 1021-1029.	1.9	0
121	Micro- and Nanoscale Gas Fluidics. , 2015, , 1794-1802.		0
122	Effective Transport Properties of Porous Media by Modeling. , 2015, , 357-390.		0
123	Fundamentals and Modeling of Electrokinetic Transport in Nanochannels. Israel Journal of Chemistry, 2014, 54, 1533-1555.	2.3	14
124	Multiscale Fluid Mechanics and Modeling. Procedia IUTAM, 2014, 10, 100-114.	1.2	15
125	Electro-osmosis of non-Newtonian fluids in porous media using lattice Poissonâ€Boltzmann method. Journal of Colloid and Interface Science, 2014, 436, 186-193.	9.4	27
126	Mixing enhancement of low-Reynolds electro-osmotic flows in microchannels with temperature-patterned walls. Journal of Colloid and Interface Science, 2014, 431, 50-63.	9.4	42

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127	Lattice Poisson-Boltzmann Method, Analysis of Electroosmotic Microfluidics. , 2014, , 1-23.		0
128	Micro- and Nanoscale Gas Fluidics. , 2014, , 1-10.		0
129	Molecular Dynamics Simulations on Electrokinetic Nanofluidics. , 2014, , 1-11.		0
130	Momentum-exchange method in lattice Boltzmann simulations of particle-fluid interactions. Physical Review E, 2013, 88, 013303.	2.1	82
131	Numerical study of active control of mixing in electro-osmotic flows by temperature difference using lattice Boltzmann methods. Journal of Colloid and Interface Science, 2013, 407, 546-555.	9.4	15
132	Electro-spinning/netting: A strategy for the fabrication of three-dimensional polymer nano-fiber/nets. Progress in Materials Science, 2013, 58, 1173-1243.	32.8	440
133	Energy Conversion and Power Generation Using Nanofluidics. , 2013, , 1-10.		0
134	GRAIN SIZE EFFECTS ON EFFECTIVE THERMAL CONDUCTIVITY OF POROUS MATERIALS WITH INTERNAL THERMAL CONTACT RESISTANCE. Journal of Porous Media, 2013, 16, 1043-1048.	1.9	22
135	Multiscale Simulations. , 2013, , 1-9.		1
136	Numerical Simulation of Fluid Flow and Heat Transfer Processes. Advances in Mechanical Engineering, 2013, 5, 497950.	1.6	3
137	Understanding of Thermal Conductance of Thin Gas Layers. Advances in Mechanical Engineering, 2013, 5, 692842.	1.6	8
138	Effective Resistance of Gas Flow in Microchannels. Advances in Mechanical Engineering, 2013, 5, 950681.	1.6	3
139	Liquid flow retardation in nanospaces due to electroviscosity: Electrical double layer overlap, hydrodynamic slippage, and ambient atmospheric CO2 dissolution. Physics of Fluids, 2012, 24, 072001.	4.0	18
140	Uncovering Molecular Mechanisms of Electrowetting and Saturation with Simulations. Physical Review Letters, 2012, 108, 216101.	7.8	47
141	Structure Effects on Electro-Osmosis in Microporous Media. Journal of Heat Transfer, 2012, 134, .	2.1	23
142	Engineering thermal and mechanical properties of flexible fiber-reinforced aerogel composites. Journal of Sol-Gel Science and Technology, 2012, 63, 445-456.	2.4	74
143	Biomimicry via Electrospinning. Critical Reviews in Solid State and Materials Sciences, 2012, 37, 94-114.	12.3	100
144	Understanding length dependences of effective thermal conductivity of nanowires. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 3514-3517.	2.1	25

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145	Highly sensitive humidity sensors based on electro-spinning/netting a polyamide 6 nano-fiber/net modified by polyethyleneimine. Journal of Materials Chemistry, 2011, 21, 16231.	6.7	89
146	Fabrication of biomimetic superhydrophobic surfaces inspired by lotus leaf and silver ragwort leaf. Nanoscale, 2011, 3, 1258.	5.6	195
147	Non-Fourier heat conductions in nanomaterials. Journal of Applied Physics, 2011, 110, .	2.5	113
148	Engineering biomimetic superhydrophobic surfaces of electrospun nanomaterials. Nano Today, 2011, 6, 510-530.	11.9	417
149	Polyamide 6 composite nano-fiber/net functionalized by polyethyleneimine on quartz crystal microbalance for highly sensitive formaldehyde sensors. Journal of Materials Chemistry, 2011, 21, 12784.	6.7	84
150	A comparison of optimization theories for energy conservation in heat exchanger groups. Science Bulletin, 2011, 56, 449-454.	1.7	36
151	Microscale Gas Flow Dynamics and Molecular Models for Gas Flow and Heat Transfer. , 2011, , 33-48.		0
152	A new approach to analysis and optimization of evaporative cooling system I: Theory. Energy, 2010, 35, 2448-2454.	8.8	83
153	Modeling of electrokinetic transport in silica nanofluidic channels. Analytica Chimica Acta, 2010, 664, 158-164.	5.4	52
154	Self-assembly of phthalocyanine and polyacrylic acid composite multilayers on cellulose nanofibers. Carbohydrate Polymers, 2010, 80, 839-844.	10.2	29
155	Electrochemomechanical energy conversion efficiency in silica nanochannels. Microfluidics and Nanofluidics, 2010, 9, 181-190.	2.2	42
156	Electrochemical charge of silica surfaces at high ionic strength in narrow channels. Journal of Colloid and Interface Science, 2010, 343, 381-386.	9.4	116
157	Modeling electrokinetic flows in microchannels using coupled lattice Boltzmann methods. Journal of Computational Physics, 2010, 229, 728-744.	3.8	117
158	Molecular simulations of electroosmotic flows in rough nanochannels. Journal of Computational Physics, 2010, 229, 7834-7847.	3.8	31
159	Understanding of temperature and size dependences of effective thermal conductivity of nanotubes. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 4312-4315.	2.1	66
160	Multi-dimensional effect on optimal network structure for fluid distribution. Chemical Engineering and Processing: Process Intensification, 2010, 49, 1038-1043.	3.6	8
161	The physical chemistry of materials. Materials Today, 2010, 13, 67.	14.2	2
162	Electrospun nanomaterials for ultrasensitive sensors. Materials Today, 2010, 13, 16-27.	14.2	562

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163	Nonlinear effective properties of unsaturated porous materials. International Journal of Nonlinear Sciences and Numerical Simulation, 2010, 11, .	1.0	2
164	Electroviscous effects in nanofluidic channels. Journal of Chemical Physics, 2010, 132, 024701.	3.0	35
165	Amphiphobic Nanofibrous Silica Mats with Flexible and High-Heat-Resistant Properties. Journal of Physical Chemistry C, 2010, 114, 916-921.	3.1	126
166	A highly sensitive humidity sensor based on a nanofibrous membrane coated quartz crystal microbalance. Nanotechnology, 2010, 21, 055502.	2.6	153
167	Modeling of electroosmosis of dilute electrolyte solutions in silica microporous media. Journal of Geophysical Research, 2010, 115, .	3.3	17
168	Field Synergy Principle for Energy Conservation Analysis and Application. Advances in Mechanical Engineering, 2010, 2, 129313.	1.6	15
169	Mesosopic Modeling of Multiphysicochemical Transport Phenomena in Porous Media. Advances in Mechanical Engineering, 2010, 2, 142879.	1.6	11
170	GENERAL HEAT CONDUCTION EQUATIONS BASED ON THE THERMOMASS THEORY. Frontiers in Heat and Mass Transfer, 2010, 1, .	0.2	45
171	Optimization principles for convective heat transfer. Energy, 2009, 34, 1199-1206.	8.8	181
172	Elastic property of multiphase composites with random microstructures. Journal of Computational Physics, 2009, 228, 5978-5988.	3.8	40
173	Thermal conductivity enhancement of carbon fiber composites. Applied Thermal Engineering, 2009, 29, 418-421.	6.0	174
174	Electrokinetic Transport in Microchannels with Random Roughness. Analytical Chemistry, 2009, 81, 2953-2961.	6.5	68
175	Optimization Principle for Variable Viscosity Fluid Flow and Its Application to Heavy Oil Flow Drag Reduction. Energy & Fuels, 2009, 23, 4470-4478.	5.1	21
176	Gas Sensors Based on Electrospun Nanofibers. Sensors, 2009, 9, 1609-1624.	3.8	371
177	Molecular Simulation of Electrokinetic Transport in Nanofluidics. , 2009, , .		0
178	Electroosmosis of Dilute Electrolyte Solutions in Microporous Media. , 2009, , .		0
179	Lattice evolution solution for the nonlinear Poisson-Boltzmann equation in confined domains. Communications in Nonlinear Science and Numerical Simulation, 2008, 13, 575-583.	3.3	32
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