Alexander V Neimark

List of Publications by Year in Descending Order

208 papers	22,596 citations	63 h-index	149 g-index
225 ext. papers	26,001 ext. citations	5.6 avg, IF	7.18 L-index

#	Paper	IF	Citations
208	Interactions of Crosslinked Polyacrylic Acid Polyelectrolyte Gels with Nonionic and Ionic Surfactants.. *Journal of Physical Chemistry B*, **2021**, 125, 13817-13828	3.4	1
207	The effects of multiparticle interactions on the aggregation of asphaltenes. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 636, 128026	5.1	0
206	Dissipative particle dynamics simulations in colloid and Interface science: a review. *Advances in Colloid and Interface Science*, **2021**, 298, 102545	14.3	7
205	Monte Carlo Simulations of Nanopore Compartmentalization Yield Fingerprint Adsorption Isotherms as a Rationale for Advanced Structure Characterization of Metal Organic Frameworks. *ACS Applied Nano Materials*, **2021**, 4, 5531-5540	5.6	0
204	Pore size characterization of micro-mesoporous carbons using CO2 adsorption. *Carbon*, **2021**, 173, 842-848	10.4	10
203	Modeling of the Effects of Metal Complexation on the Morphology and Rheology of Xanthan Gum Polysaccharide Solutions. *Macromolecules*, **2021**, 54, 8675-8692	5.5	1
202	Deformation of Nanoporous Materials in the Process of Binary Adsorption: Methane Displacement by Carbon Dioxide from Coal. *Journal of Physical Chemistry C*, **2021**, 125, 21310-21316	3.8	2
201	Suspensions of lyophobic nanoporous particles as smart materials for energy absorption. *Journal of Colloid and Interface Science*, **2021**, 600, 229-242	9.3	
200	Pore size analysis of carbons with heterogeneous kernels from reactive molecular dynamics model and quenched solid density functional theory. *Carbon*, **2021**, 183, 672-684	10.4	0
199	Effects of metal-polymer complexation on structure and transport properties of metal-substituted polyelectrolyte membranes. *Journal of Colloid and Interface Science*, **2021**, 602, 654-668	9.3	4
198	Atomic-scale molecular models of oxidized activated carbon fibre nanoregions: Examining the effects of oxygen functionalities on wet formaldehyde adsorption. *Carbon*, **2020**, 165, 67-81	10.4	6
197	Pore opening and breathing transitions in metal-organic frameworks: Coupling adsorption and deformation. *Journal of Colloid and Interface Science*, **2020**, 578, 77-88	9.3	11
196	Structural mechanism of reactivation with steam of pitch-based activated carbon fibers. *Journal of Colloid and Interface Science*, **2020**, 578, 422-430	9.3	10
195	Coupling Structural and Adsorption Properties of Metal-Organic Frameworks: From Pore Size Distribution to Pore Type Distribution. *ACS Applied Materials & Interfaces*, **2020**, 12, 15595-15605	9.5	8
194	Reversible aggregation of particles with short oligomeric sidechains at the surface studied with Langevin dynamics. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 586, 124143	5.1	2
193	Nanoparticle Flow in Polymer Grafted Channels. *Journal of Physical Chemistry C*, **2020**, 124, 1478-1483	3.8	2
192	Adsorption-Induced Deformation of Microporous Solids: A New Insight from a Century-Old Theory. *Journal of Physical Chemistry C*, **2020**, 124, 749-755	3.8	7

191	Adhesion, intake, and release of nanoparticles by lipid bilayers. *Journal of Colloid and Interface Science*, **2020**, 561, 58-70	9.3	6
190	Modeling Gas-Liquid Interfaces by Dissipative Particle Dynamics: Adsorption and Surface Tension of Cetyl Trimethyl Ammonium Bromide at the Air-Water Interface. *Langmuir*, **2020**, 36, 14686-14698	4	11
189	Stability of Lipid Coatings on Nanoparticle-Decorated Surfaces. *ACS Nano*, **2020**,	16.7	5
188	In-situ growth and characterization of metal oxide nanoparticles within block-copolymer polyelectrolyte membranes. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 601, 125028	5.1	1
187	Permeation dynamics of dimethyl methylphosphonate through polyelectrolyte composite membranes by in-situ Raman spectroscopy. *Journal of Membrane Science*, **2020**, 595, 117462	9.6	4
186	Mechanical Characterization of Hierarchical Structured Porous Silica by in Situ Dilatometry Measurements during Gas Adsorption. *Langmuir*, **2019**, 35, 2948-2956	4	10
185	Deciphering the Relations between Pore Structure and Adsorption Behavior in Metal-Organic Frameworks: Unexpected Lessons from Argon Adsorption on Copper-Benzene-1,3,5-tricarboxylate. *Journal of the American Chemical Society*, **2019**, 141, 8397-8401	16.4	22
184	Thermally stable near UV-light transparent and conducting SWCNT/glass flexible films. *Carbon*, **2019**, 152, 7-15	10.4	2
183	Critical Conditions of Adhesion and Separation of Functionalized Nanoparticles on Polymer Grafted Substrates. *Journal of Physical Chemistry C*, **2019**, 123, 16091-16106	3.8	4
182	Disordered Mesoporous Zirconium (Hydr)oxides for Decomposition of Dimethyl Chlorophosphate. *ACS Applied Materials & Interfaces*, **2019**, 11, 17931-17939	9.5	8
181	In Situ Small-Angle Neutron Scattering Investigation of Adsorption-Induced Deformation in Silica with Hierarchical Porosity. *Langmuir*, **2019**, 35, 11590-11600	4	5
180	Phase Behavior and Capillary Condensation Hysteresis of Carbon Dioxide in Mesopores. *Langmuir*, **2019**, 35, 11291-11298	4	21
179	Phonons in deformable microporous crystalline solids. *Zeitschrift Fur Kristallographie - Crystalline Materials*, **2019**, 234, 513-527	1	3
178	Polyoxometalate hybrid catalyst for detection and photodecomposition of mustard gas surrogate vapors. *Applied Surface Science*, **2019**, 467-468, 428-438	6.7	19
177	Super-sieving effect in phenol adsorption from aqueous solutions on nanoporous carbon beads. *Carbon*, **2018**, 135, 12-20	10.4	21
176	Coarse-grained model of nanoscale segregation, water diffusion, and proton transport in Nafion membranes. *Journal of Chemical Physics*, **2018**, 148, 024108	3.9	34
175	Adhesion and Separation of Nanoparticles on Polymer-Grafted Porous Substrates. *Langmuir*, **2018**, 34, 1481-1496	4	9
174	Nanoparticle-Engendered Rupture of Lipid Membranes. *Journal of Physical Chemistry Letters*, **2018**, 9, 4872-4877	6.4	9

173	Phenol Molecular Sheets Woven by Water Cavities in Hydrophobic Slit Nanospaces. *Langmuir*, **2018**, 34, 15150-15159	4	1
172	Elucidating the Effects of Metal Complexation on Morphological and Rheological Properties of Polymer Solutions by a Dissipative Particle Dynamics Model. *Macromolecules*, **2018**, 51, 4987-5000	5.5	15
171	Determination of Isosteric Heat of Adsorption by Quenched Solid Density Functional Theory. *Langmuir*, **2017**, 33, 1769-1779	4	31
170	Adsorption-Induced Deformation of Hierarchically Structured Mesoporous Silica-Effect of Pore-Level Anisotropy. *Langmuir*, **2017**, 33, 5592-5602	4	38
169	Adhesion of Phospholipid Bilayers to Hydroxylated Silica: Existence of Nanometer-Thick Water Interlayers. *Langmuir*, **2017**, 33, 13148-13156	4	11
168	Molecular simulation aided nanoporous carbon design for highly efficient low-concentrated formaldehyde capture. *Carbon*, **2017**, 124, 152-160	10.4	21
167	Nanoporosity Change on Elastic Relaxation of Partially Folded Graphene Monoliths. *Langmuir*, **2017** , 33, 14565-14570	4	8
166	Reconciliation of Gibbs Excess Adsorption Thermodynamics and Poromechanics of Nanoporous Materials **2017**,		3
165	Morphologically disordered pore model for characterization of micro-mesoporous carbons. *Carbon*, **2017**, 111, 358-370	10.4	21
164	In Situ Growth and Characterization of Metal Oxide Nanoparticles within Polyelectrolyte Membranes. *Angewandte Chemie - International Edition*, **2016**, 55, 11522-7	16.4	12
163	Mechanisms of chain adsorption on porous substrates and critical conditions of polymer chromatography. *Journal of Colloid and Interface Science*, **2016**, 481, 181-93	9.3	7
162	Deformation of Microporous Carbons during N2, Ar, and CO2 Adsorption: Insight from the Density Functional Theory. *Langmuir*, **2016**, 32, 8265-74	4	40
161	Critical conditions of polymer adsorption and chromatography on non-porous substrates. *Journal of Colloid and Interface Science*, **2016**, 474, 25-33	9.3	7
160	Using in-situ adsorption dilatometry for assessment of micropore size distribution in monolithic carbons. *Carbon*, **2016**, 103, 263-272	10.4	28
159	Adsorption deformation of microporous composites. *Dalton Transactions*, **2016**, 45, 4136-40	4.3	11
158	In Situ Growth and Characterization of Metal Oxide Nanoparticles within Polyelectrolyte Membranes. *Angewandte Chemie*, **2016**, 128, 11694-11699	3.6	1
157	Coarse-grained model of water diffusion and proton conductivity in hydrated polyelectrolyte membrane. *Journal of Chemical Physics*, **2016**, 144, 014902	3.9	30
156	Parametrization of Chain Molecules in Dissipative Particle Dynamics. *Journal of Physical Chemistry B* , **2016**, 120, 4980-91	3.4	23

155	Modeling Proton Dissociation and Transfer Using Dissipative Particle Dynamics Simulation. *Journal of Chemical Theory and Computation*, **2015**, 11, 4395-403	6.4	25
154	Modeling Aggregation of Ionic Surfactants Using a Smeared Charge Approximation in Dissipative Particle Dynamics Simulations. *Journal of Physical Chemistry B*, **2015**, 119, 11673-83	3.4	62
153	Deformation of Microporous Carbon during Adsorption of Nitrogen, Argon, Carbon Dioxide, and Water Studied by in Situ Dilatometry. *Langmuir*, **2015**, 31, 12512-9	4	35
152	Physisorption of gases, with special reference to the evaluation of surface area and pore size distribution (IUPAC Technical Report). *Pure and Applied Chemistry*, **2015**, 87, 1051-1069	2.1	7465
151	Extra adsorption and adsorbate superlattice formation in metal-organic frameworks. *Nature*, **2015**, 527, 503-7	50.4	176
150	Adhesion of nanoparticles to polymer brushes studied with the ghost tweezers method. *Journal of Chemical Physics*, **2015**, 142, 034705	3.9	17
149	Shock Wave Induced Collapse of Arrays of Nanobubbles Located Next to a Lipid Membrane: Coarse-Grained Computer Simulations. *Journal of Physical Chemistry B*, **2015**, 119, 8879-89	3.4	20
148	Oxygen incorporation in rubrene single crystals. *Scientific Reports*, **2014**, 4, 4753	4.9	30
147	Shock wave interaction with a phospholipid membrane: coarse-grained computer simulations. *Journal of Chemical Physics*, **2014**, 140, 054906	3.9	33
146	Morphological transformations in polymer brushes in binary mixtures: DPD study. *Langmuir*, **2014**, 30, 12932-40	4	25
145	Local pressure changes in lipid bilayers due to adsorption of melittin and magainin-h2 antimicrobial peptides: results from computer simulations. *Journal of Physical Chemistry B*, **2014**, 118, 12673-9	3.4	10
144	Bioactive Agarose Carbon-Nanotube Composites are Capable of Manipulating Brain-Implant Interface. *Journal of Applied Polymer Science*, **2014**, 131,	2.9	14
143	Comment on "Volume shrinkage of a metal-organic framework host induced by the dispersive attraction of guest gas molecules". *Physical Chemistry Chemical Physics*, **2014**, 16, 4394-5	3.6	8
142	Self-assembly in Nafion membranes upon hydration: water mobility and adsorption isotherms. *Journal of Physical Chemistry B*, **2014**, 118, 11353-64	3.4	63
141	Carbon Molecular Sieves: Reconstruction of Atomistic Structural Models with Experimental Constraints. *Journal of Physical Chemistry C*, **2014**, 118, 12996-13007	3.8	17
140	Carbon nanotube composites as multifunctional substrates for in situ actuation of differentiation of human neural stem cells. *Advanced Healthcare Materials*, **2014**, 3, 1745-52	10.1	31
139	Adsorption induced transitions in soft porous crystals: an osmotic potential approach to multistability and intermediate structures. *Journal of Chemical Physics*, **2013**, 138, 174706	3.9	67
138	Adsorption Deformation and Structural Transitions in Metal□Organic Frameworks: From the Unit Cell to the Crystal. *Journal of Physical Chemistry Letters*, **2013**, 4, 3198-3205	6.4	121

137	Calculations of critical micelle concentration by dissipative particle dynamics simulations: the role of chain rigidity. *Journal of Physical Chemistry B*, **2013**, 117, 10304-10	3.4	77
136	Prediction of the Critical Micelle Concentration of Nonionic Surfactants by Dissipative Particle Dynamics Simulations. *Journal of Physical Chemistry Letters*, **2013**, 4, 797-802	6.4	109
135	Interactions of sarin with polyelectrolyte membranes: a molecular dynamics simulation study. *Journal of Physical Chemistry B*, **2013**, 117, 365-72	3.4	7
134	Density functional theory methods for characterization of porous materials. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2013**, 437, 3-32	5.1	723
133	Experimental and theoretical studies of scanning adsorption□desorption isotherms. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2013**, 437, 76-89	5.1	61
132	Melittin creates transient pores in a lipid bilayer: results from computer simulations. *Journal of Physical Chemistry B*, **2013**, 117, 5031-42	3.4	47
131	Screening of carbonaceous nanoporous materials for capture of nerve agents. *Physical Chemistry Chemical Physics*, **2013**, 15, 291-8	3.6	20
130	Adsorption of n-pentane on mesoporous silica and adsorbent deformation. *Langmuir*, **2013**, 29, 8601-8	4	58
129	Polymer translocation through a nanopore: DPD study. *Journal of Physical Chemistry B*, **2013**, 117, 3648-58	3.4	25
128	Communication: Thermodynamic analysis of critical conditions of polymer adsorption. *Journal of Chemical Physics*, **2013**, 139, 201101	3.9	3
127	Critical conditions of polymer chromatography: an insight from SCFT modeling. *Journal of Chemical Physics*, **2013**, 138, 244903	3.9	9
126	The characterization of macroporous solids: An overview of the methodology. *Microporous and Mesoporous Materials*, **2012**, 154, 2-6	5.3	56
125	Characterization of the pore structure of three-dimensionally ordered mesoporous carbons using high resolution gas sorption. *Langmuir*, **2012**, 28, 12647-54	4	79
124	Capillary condensation hysteresis in overlapping spherical pores: a Monte Carlo simulation study. *Langmuir*, **2012**, 28, 12100-7	4	22
123	Advanced Physical Adsorption Characterization of Nanoporous Carbons **2012**, 107-145		28
122	DPD Simulation of Protein Conformations: From □Helices to □Structures. *Journal of Physical Chemistry Letters*, **2012**, 3, 3081-7	6.4	53
121	Monte Carlo simulation of cavitation in pores with nonwetting defects. *Langmuir*, **2012**, 28, 4702-11	4	18
120	Difference between magainin-2 and melittin assemblies in phosphatidylcholine bilayers: results from coarse-grained simulations. *Journal of Physical Chemistry B*, **2012**, 116, 3021-30	3.4	67

119	A stand-alone mesoporous crystal structure model from in situ X-ray diffraction: nitrogen adsorption on 3D cagelike mesoporous silica SBA-16. *Chemistry - A European Journal*, **2012**, 18, 10300-11	4.8	18
118	Quenched solid density functional theory method for characterization of mesoporous carbons by nitrogen adsorption. *Carbon*, **2012**, 50, 1583-1590	10.4	311
117	Translocation dynamics of freely jointed Lennard-Jones chains into adsorbing pores. *Journal of Chemical Physics*, **2012**, 137, 144903	3.9	16
116	Understanding adsorption-induced structural transitions in metal-organic frameworks: from the unit cell to the crystal. *Journal of Chemical Physics*, **2012**, 137, 184702	3.9	27
115	Adsorption-driven translocation of polymer chain into nanopores. *Journal of Chemical Physics*, **2012**, 136, 214901	3.9	19
114	Effects of CO2 adsorption on coal deformation during geological sequestration. *Journal of Geophysical Research*, **2011**, 116,		34
113	Structural transitions in MIL-53 (Cr): view from outside and inside. *Langmuir*, **2011**, 27, 4734-41	4	125
112	Adsorption-induced deformation of mesoporous solids: macroscopic approach and density functional theory. *Langmuir*, **2011**, 27, 6926-31	4	72
111	Mechanism of Breathing Transitions in Metal□Organic Frameworks. *Journal of Physical Chemistry Letters*, **2011**, 2, 2033-2037	6.4	63
110	Monte Carlo simulation of polymer adsorption. *Adsorption*, **2011**, 17, 265-271	2.6	6
109	Solvation forces between molecularly rough surfaces. *Journal of Colloid and Interface Science*, **2011**, 362, 382-8	9.3	21
108	Biohybrid Carbon Nanotube/Agarose Fibers for Neural Tissue Engineering. *Advanced Functional Materials*, **2011**, 21, 2624-2632	15.6	74
107	Interactions of phosphororganic agents with water and components of polyelectrolyte membranes. *Journal of Physical Chemistry B*, **2011**, 115, 13617-23	3.4	19
106	Molecular modeling of organophosphorous agents and their aqueous solutions. *Journal of Physical Chemistry A*, **2011**, 115, 5201-9	2.8	15
105	Absorption and transport properties of ultra-fine cellulose webs. *Journal of Colloid and Interface Science*, **2011**, 353, 290-3	9.3	34
104	Liquid intrusion and alternative methods for the characterization of macroporous materials (IUPAC Technical Report). *Pure and Applied Chemistry*, **2011**, 84, 107-136	2.1	108
103	Comparative analysis of essential collective dynamics and NMR-derived flexibility profiles in evolutionarily diverse prion proteins. *Prion*, **2011**, 5, 188-200	2.3	21
102	Calculation of chemical potentials of chain molecules by the incremental gauge cell method. *Journal of Chemical Physics*, **2011**, 135, 214109	3.9	12

101	Self-assembly in block polyelectrolytes. *Journal of Chemical Physics*, **2011**, 134, 054104	3.9	22
100	Deformation of Coal Induced by Methane Adsorption at Geological Conditions. *Energy & Fuels*, **2010**, 24, 5955-5964	4.1	69
99	The Behavior of Flexible MIL-53(Al) upon CH4 and CO2 Adsorption. *Journal of Physical Chemistry C*, **2010**, 114, 22237-22244	3.8	171
98	Insight into the Effect of Dealumination on Mordenite Using Experimentally Validated Simulations. *Journal of Physical Chemistry C*, **2010**, 114, 2056-2065	3.8	37
97	Cavitation in metastable liquid nitrogen confined to nanoscale pores. *Langmuir*, **2010**, 26, 10147-57	4	153
96	Adsorption-induced deformation of mesoporous solids. *Langmuir*, **2010**, 26, 13021-7	4	118
95	Stress-Based Model for the Breathing of Metal-Organic Frameworks. *Journal of Physical Chemistry Letters*, **2010**, 1, 445-9	6.4	187
94	Effect of Mixing on the Pore Structure of Alumina Extrudates. *Particle and Particle Systems Characterization*, **2010**, 27, 42-47	3.1	4
93	Multicomponent gauge cell method. *Journal of Chemical Physics*, **2009**, 130, 224103	3.9	13
92	Quenched solid density functional theory and pore size analysis of micro-mesoporous carbons. *Carbon*, **2009**, 47, 1617-1628	10.4	611
91	Density Functional Theory of in Situ Synchrotron Powder X-ray Diffraction on Mesoporous Crystals: Argon Adsorption on MCM-41. *Journal of Physical Chemistry C*, **2009**, 113, 791-794	3.8	37
90	Surface Area and Porosity **2008**, 721		9
89	Adsorption-induced deformation of microporous carbons: pore size distribution effect. *Langmuir*, **2008**, 24, 6603-8	4	112
88	Argon Adsorption on MCM-41 Mesoporous Crystal Studied by In Situ Synchrotron Powder X-ray Diffraction. *Journal of Physical Chemistry C*, **2008**, 112, 10803-10813	3.8	50
87	Molecular dynamics simulation of nanoscale distribution and mobility of water and dimethylmethylphosphonate in sulfonated polystyrene. *Journal of Physical Chemistry B*, **2008**, 112, 14905-10	3.4	18
86	Carbon nanotube fibers are compatible with Mammalian cells and neurons. *IEEE Transactions on Nanobioscience*, **2008**, 7, 11-4	3.4	40
85	Specifics of solvation of sulfonated polyelectrolytes in water, dimethylmethylphosphonate, and their mixture: a molecular simulation study. *Journal of Chemical Physics*, **2008**, 128, 164902	3.9	34
84	Evidence of Large Voids in Pure-Silica-Zeolite Low-k Dielectrics Synthesized by Spin-on of Nanoparticle Suspensions. *Advanced Materials*, **2008**, 20, 3110-3116	24	33

83	Interaction of water vapour at 298K with Al-MCM-41 materials synthesised at room temperature. *Microporous and Mesoporous Materials*, **2007**, 103, 82-93	5.3	25
82	Positive curvature effects and interparticle capillary condensation during nitrogen adsorption in particulate porous materials. *Journal of Colloid and Interface Science*, **2007**, 314, 415-21	9.3	10
81	Density functional theory model of adsorption on amorphous and microporous solids. *Studies in Surface Science and Catalysis*, **2007**, 160, 9-16	1.8	8
80	Phase transitions and criticality in small systems: vapor-liquid transition in nanoscale spherical cavities. *Journal of Physical Chemistry B*, **2006**, 110, 9403-12	3.4	59
79	Ribbon-to-fiber transformation in the process of spinning of carbon-nanotube dispersion. *Physical Review Letters*, **2006**, 97, 188303	7.4	16
78	Density functional theory model of adsorption deformation. *Langmuir*, **2006**, 22, 10864-8	4	121
77	Characterization of micro-mesoporous materials from nitrogen and toluene adsorption: experiment and modeling. *Langmuir*, **2006**, 22, 513-6	4	68
76	Using nitrogen and carbon dioxide molecules to probe arsenic(V) bioaccessibility in soils. *Environmental Science & Technology*, **2006**, 40, 7732-8	10.3	3
75	Density functional theory model of adsorption on amorphous and microporous silica materials. *Langmuir*, **2006**, 22, 11171-9	4	264
74	Adsorption hysteresis of nitrogen and argon in pore networks and characterization of novel micro- and mesoporous silicas. *Langmuir*, **2006**, 22, 756-64	4	445
73	Nitrogen and carbon dioxide adsorption by soils. *Environmental Science & Technology*, **2005**, 39, 4990-5	10.3	41
72	Vapor-to-droplet transition in a Lennard-Jones fluid: simulation study of nucleation barriers using the ghost field method. *Journal of Physical Chemistry B*, **2005**, 109, 5962-76	3.4	24
71	Monte Carlo simulation study of droplet nucleation. *Journal of Chemical Physics*, **2005**, 122, 174508	3.9	32
70	A simulation method for the calculation of chemical potentials in small, inhomogeneous, and dense systems. *Journal of Chemical Physics*, **2005**, 122, 234108	3.9	41
69	Diffusion-Controlled Hysteresis. *Adsorption*, **2005**, 11, 265-270	2.6	23
68	Characterization of Worm-Like Micro- and Mesoporous Silicas by Small-Angle Scattering and High-Resolution Adsorption Porosimetry. *Adsorption*, **2005**, 11, 653-655	2.6	34
67	The birth of a bubble: a molecular simulation study. *Journal of Chemical Physics*, **2005**, 122, 54707	3.9	52
66	Simultaneous Transport of Water and Organic Molecules through Polyelectrolyte Membranes. *Journal of Physical Chemistry B*, **2004**, 108, 8900-8909	3.4	59

65	Molecular Model of Dimethylmethylphosphonate and Its Interactions with Water. *Journal of Physical Chemistry A*, **2004**, 108, 1435-1439	2.8	25
64	Meniscus motion in a prewetted capillary. *Physics of Fluids*, **2003**, 15, 3134	4.4	13
63	Spontaneous adsorption of viscous and viscoelastic fluids by capillaries and porous substrates. *Journal of Colloid and Interface Science*, **2003**, 262, 16-24	9.3	19
62	Modeling of spontaneous penetration of viscoelastic fluids and biofluids into capillaries. *Journal of Colloid and Interface Science*, **2003**, 262, 253-62	9.3	25
61	Sorption hysteresis of benzene in charcoal particles. *Environmental Science & Technology*, **2003**, 37, 409-17	10.3	282
60	"Humic coverage index" as a determining factor governing strain-specific hydrocarbon availability to contaminant-degrading bacteria in soils. *Environmental Science & Technology*, **2003**, 37, 5168-74	10.3	14
59	Nanopore Structure and Sorption Properties of Cu□BTC Metal□Organic Framework. *Nano Letters*, **2003**, 3, 713-718	11.5	309
58	Monte Carlo Simulation Test of Pore Blocking Effects. *Langmuir*, **2003**, 19, 3240-3247	4	125
57	Bridging scales from molecular simulations to classical thermodynamics: density functional theory of capillary condensation in nanopores. *Journal of Physics Condensed Matter*, **2003**, 15, 347-365	1.8	154
56	Hierarchical Pore Structure and Wetting Properties of Single-Wall Carbon Nanotube Fibers. *Nano Letters*, **2003**, 3, 419-423	11.5	65
55	Specifics of freezing of Lennard-Jones fluid confined to molecularly thin layers. *Journal of Chemical Physics*, **2003**, 118, 7585	3.9	42
54	Nucleation of liquid bridges and bubbles in nanoscale capillaries. *Journal of Chemical Physics*, **2003**, 119, 9755-9764	3.9	81
53	Capillary condensation as a morphological transition. *Advances in Colloid and Interface Science*, **2002** , 96, 143-67	14.3	43
52	Experimental Confirmation of Different Mechanisms of Evaporation from Ink-Bottle Type Pores: Equilibrium, Pore Blocking, and Cavitation. *Langmuir*, **2002**, 18, 9830-9837	4	408
51	Density Functional Theory of Adsorption in Spherical Cavities and Pore Size Characterization of Templated Nanoporous Silicas with Cubic and Three-Dimensional Hexagonal Structures. *Langmuir*, **2002**, 18, 1550-1560	4	464
50	A New Templated Ordered Structure with Combined Micro- and Mesopores and Internal Silica Nanocapsules. *Journal of Physical Chemistry B*, **2002**, 106, 5873-5877	3.4	267
49	Inside the hysteresis loop: multiplicity of internal states in confined fluids. *Physical Review E*, **2002**, 65, 031505	2.4	64
48	Capillary condensation in MMS and pore structure characterization. *Microporous and Mesoporous Materials*, **2001**, 44-45, 697-707	5.3	326

47	Adsorption of nitrogen, neopentane, n-hexane, benzene and methanol for the evaluation of pore sizes in silica grades of MCM-41. *Microporous and Mesoporous Materials*, **2001**, 47, 323-337	5.3	99
46	Characterization of nanoporous materials from adsorption and desorption isotherms. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2001**, 187-188, 11-21	5.1	326
45	Spontaneous Penetration of Liquids into Capillaries and Porous Membranes Revisited. *Journal of Colloid and Interface Science*, **2001**, 235, 101-113	9.3	64
44	The Wicking Kinetics of Liquid Droplets into Yarns. *Textile Reseach Journal*, **2001**, 71, 862-869	1.7	17
43	Density functional theories and molecular simulations of adsorption and phase transitions in nanopores. *Physical Review E*, **2001**, 64, 011602	2.4	249
42	Molecular Dynamics Simulation of Microstructure and Molecular Mobilities in Swollen Nafion Membranes. *Journal of Physical Chemistry B*, **2001**, 105, 9586-9594	3.4	178
41	Studies of Liquid□Vapor Equilibria, Criticality, and Spinodal Transitions in Nanopores by the Gauge Cell Monte Carlo Simulation Method. *Journal of Physical Chemistry B*, **2001**, 105, 7009-7020	3.4	115
40	Characterization of Micro- and Mesoporosity in SBA-15 Materials from Adsorption Data by the NLDFT Method. *Journal of Physical Chemistry B*, **2001**, 105, 6817-6823	3.4	445
39	Molecular Dynamics Simulation of Nafion Oligomer Solvation in Equimolar Methanol□Water Mixture. *Journal of Physical Chemistry B*, **2001**, 105, 7830-7834	3.4	124
38	Statistical geometry of cavities in a metastable confined fluid. *Physical Review E*, **2000**, 62, 538-44	2.4	32
37	Relations between Structural Parameters and Adsorption Characterization of Templated Nanoporous Materials with Cubic Symmetry. *Langmuir*, **2000**, 16, 2419-2423	4	105
36	Gauge cell method for simulation studies of phase transitions in confined systems. *Physical Review E*, **2000**, 62, 4611-22	2.4	132
35	Adsorption hysteresis in nanopores. *Physical Review E*, **2000**, 62, R1493-6	2.4	205
34	Classification of Equilibrium Configurations of Wetting Films on Planar Substrates. *Langmuir*, **2000**, 16, 5526-5529	4	10
33	Density Functional Theory of Adsorption Hysteresis and Nanopore Characterization. *Studies in Surface Science and Catalysis*, **2000**, 51-60	1.8	20
32	Characterization of MCM-48 Materials. *Langmuir*, **2000**, 16, 4648-4654	4	237
31	Unified Approach to Pore Size Characterization of Microporous Carbonaceous Materials from N2, Ar, and CO2 Adsorption Isotherms□*Langmuir*, **2000**, 16, 2311-2320	4	569
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