Alexander V Neimark

List of Publications by Year
in descending order

213 papers	29,795 citations	13865 67 h-index	4774 169 g-index
225 all docs	225 docs citations	225 times ranked	25301 citing authors

#	Article	IF	Citations
1	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.	1.9	12,159
2	Density functional theory methods for characterization of porous materials. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 437, 3-32.	4.7	915
3	Quenched solid density functional theory and pore size analysis of micro-mesoporous carbons. Carbon, 2009, 47, 1617-1628.	10.3	705
4	Unified Approach to Pore Size Characterization of Microporous Carbonaceous Materials from N2, Ar, and CO2Adsorption Isothermsâ€. Langmuir, 2000, 16, 2311-2320.	3.5	628
5	Adsorption Hysteresis of Nitrogen and Argon in Pore Networks and Characterization of Novel Micro- and Mesoporous Silicas. Langmuir, 2006, 22, 756-764.	3.5	505
6	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.	3.5	493
7	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.	2.6	486
8	Experimental Confirmation of Different Mechanisms of Evaporation from Ink-Bottle Type Pores:â€‰ Equilibrium, Pore Blocking, and Cavitation. Langmuir, 2002, 18, 9830-9837.	3.5	456
9	Capillary Hysteresis in Nanopores: Theoretical and Experimental Studies of Nitrogen Adsorption on MCM-41. Langmuir, 1995, 11, 4765-4772.	3.5	447
10	Evaluation of Pore Structure Parameters of MCM-41 Catalyst Supports and Catalysts by Means of Nitrogen and Argon Adsorption. Journal of Physical Chemistry B, 1997, 101, 3671-3679.	2.6	384
11	Capillary condensation in MMS and pore structure characterization. Microporous and Mesoporous Materials, 2001, 44-45, 697-707.	4.4	368
12	Characterization of nanoporous materials from adsorption and desorption isotherms. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 187-188, 11-21.	4.7	362
13	Quenched solid density functional theory method for characterization of mesoporous carbons by nitrogen adsorption. Carbon, 2012, 50, 1583-1590.	10.3	360
14	Density functional theory model for calculating pore size distributions: pore structure of nanoporous catalysts. Advances in Colloid and Interface Science, 1998, 76-77, 203-226.	14.7	343
15	Nanopore Structure and Sorption Properties of Cuâ^'BTC Metalâ^'Organic Framework. Nano Letters, 2003, 3, 713-718.	9.1	333
16	Pore Size Analysis of MCM-41 Type Adsorbents by Means of Nitrogen and Argon Adsorption. Journal of Colloid and Interface Science, 1998, 207, 159-169.	9.4	321
17	Density Functional Theory Model of Adsorption on Amorphous and Microporous Silica Materials. Langmuir, 2006, 22, 11171-11179.	3.5	307
18	Sorption Hysteresis of Benzene in Charcoal Particles. Environmental Science & Technology, 2003, 37, 409-417.	10.0	305

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19	A New Templated Ordered Structure with Combined Micro- and Mesopores and Internal Silica Nanocapsules. Journal of Physical Chemistry B, 2002, 106, 5873-5877.	2.6	286
20	Density functional theories and molecular simulations of adsorption and phase transitions in nanopores. Physical Review E, 2001, 64, 011602.	2.1	275
21	Characterization of MCM-48 Materials. Langmuir, 2000, 16, 4648-4654.	3.5	271
22	Molecular Level Models for CO2 Sorption in Nanopores. Langmuir, 1999, 15, 8736-8742.	3.5	270
23	Adsorption hysteresis in nanopores. Physical Review E, 2000, 62, R1493-R1496.	2.1	227
24	Extra adsorption and adsorbate superlattice formation in metal-organic frameworks. Nature, 2015, 527, 503-507.	27.8	212
25	Stress-Based Model for the Breathing of Metalâ"Organic Frameworks. Journal of Physical Chemistry Letters, 2010, 1, 445-449.	4.6	209
26	The Behavior of Flexible MIL-53(Al) upon CH₄and CO₂Adsorption. Journal of Physical Chemistry C, 2010, 114, 22237-22244.	3.1	197
27	Molecular Dynamics Simulation of Microstructure and Molecular Mobilities in Swollen Nafion Membranes. Journal of Physical Chemistry B, 2001, 105, 9586-9594.	2.6	194
28	Molecular Simulation Study of Nafion Membrane Solvation in Water and Methanol. Journal of Physical Chemistry B, 2000, 104, 4471-4478.	2.6	183
29	Cavitation in Metastable Liquid Nitrogen Confined to Nanoscale Pores. Langmuir, 2010, 26, 10147-10157.	3.5	180
30	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	170
31	Liquid intrusion and alternative methods for the characterization of macroporous materials (IUPAC) Tj ETQq1 1 0.784314 rgBT /Overl	1.9	163
32	Calibration of Pore Volume in Adsorption Experiments and Theoretical Models. Langmuir, 1997, 13, 5148-5160.	3.5	154
33	Adsorption Deformation and Structural Transitions in Metalâ€"Organic Frameworks: From the Unit Cell to the Crystal. Journal of Physical Chemistry Letters, 2013, 4, 3198-3205.	4.6	148
34	Structural Transitions in MIL-53 (Cr): View from Outside and Inside. Langmuir, 2011, 27, 4734-4741.	3.5	143
35	Adsorption-Induced Deformation of Mesoporous Solids. Langmuir, 2010, 26, 13021-13027.	3.5	141
36	Gauge cell method for simulation studies of phase transitions in confined systems. Physical Review E, 2000, 62, 4611-4622.	2.1	140

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37	Density Functional Theory Model of Adsorption Deformation. Langmuir, 2006, 22, 10864-10868.	3.5	140
38	Prediction of the Critical Micelle Concentration of Nonionic Surfactants by Dissipative Particle Dynamics Simulations. Journal of Physical Chemistry Letters, 2013, 4, 797-802.	4.6	138
39	A new approach to the determination of the surface fractal dimension of porous solids. Physica A: Statistical Mechanics and Its Applications, 1992, 191, 258-262.	2.6	137
40	Molecular Dynamics Simulation of Nafion Oligomer Solvation in Equimolar Methanolâ^'Water Mixture. Journal of Physical Chemistry B, 2001, 105, 7830-7834.	2.6	135
41	Monte Carlo Simulation Test of Pore Blocking Effects. Langmuir, 2003, 19, 3240-3247.	3.5	132
42	Adsorption-Induced Deformation of Microporous Carbons: Pore Size Distribution Effect. Langmuir, 2008, 24, 6603-6608.	3.5	129
43	Studies of Liquidâ^'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.	2.6	124
44	Relations between Structural Parameters and Adsorption Characterization of Templated Nanoporous Materials with Cubic Symmetry. Langmuir, 2000, 16, 2419-2423.	3.5	119
45	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.	4.4	108
46	Calculating Surface Fractal Dimensions of Adsorbents. Adsorption Science and Technology, 1990, 7, 210-219.	3.2	102
47	Biohybrid Carbon Nanotube/Agarose Fibers for Neural Tissue Engineering. Advanced Functional Materials, 2011, 21, 2624-2632.	14.9	95
48	Calculations of Critical Micelle Concentration by Dissipative Particle Dynamics Simulations: The Role of Chain Rigidity. Journal of Physical Chemistry B, 2013, 117, 10304-10310.	2.6	90
49	Nucleation of liquid bridges and bubbles in nanoscale capillaries. Journal of Chemical Physics, 2003, 119, 9755-9764.	3.0	87
50	Adsorption-Induced Deformation of Mesoporous Solids: Macroscopic Approach and Density Functional Theory. Langmuir, 2011, 27, 6926-6931.	3.5	85
51	Characterization of the Pore Structure of Three-Dimensionally Ordered Mesoporous Carbons Using High Resolution Gas Sorption. Langmuir, 2012, 28, 12647-12654.	3.5	85
52	Deformation of Coal Induced by Methane Adsorption at Geological Conditions. Energy & Fuels, 2010, 24, 5955-5964.	5.1	82
53	Difference between Magainin-2 and Melittin Assemblies in Phosphatidylcholine Bilayers: Results from Coarse-Grained Simulations. Journal of Physical Chemistry B, 2012, 116, 3021-3030.	2.6	81
54	Experimental and theoretical studies of scanning adsorptionâ€“desorption isotherms. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 437, 76-89.	4.7	80

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55	Characterization of Micro-Mesoporous Materials from Nitrogen and Toluene Adsorption:â€‰ Experiment and Modeling. Langmuir, 2006, 22, 513-516.	3.5	79
56	Thermodynamic equilibrium and stability of liquid films and droplets on fibers. Journal of Adhesion Science and Technology, 1999, 13, 1137-1154.	2.6	78
57	Modeling Aggregation of Ionic Surfactants Using a Smeared Charge Approximation in Dissipative Particle Dynamics Simulations. Journal of Physical Chemistry B, 2015, 119, 11673-11683.	2.6	78
58	The characterization of macroporous solids: An overview of the methodology. Microporous and Mesoporous Materials, 2012, 154, 2-6.	4.4	76
59	Method of Discrimination of Surface Fractality. Journal of Colloid and Interface Science, 1993, 158, 412-419.	9.4	75
60	Foam in porous media: thermodynamic and hydrodynamic peculiarities. Advances in Colloid and Interface Science, 1999, 82, 127-187.	14.7	74
61	Mechanism of Breathing Transitions in Metalâ€“Organic Frameworks. Journal of Physical Chemistry Letters, 2011, 2, 2033-2037.	4.6	74
62	Adsorption induced transitions in soft porous crystals: An osmotic potential approach to multistability and intermediate structures. Journal of Chemical Physics, 2013, 138, 174706.	3.0	74
63	Inside the hysteresis loop: Multiplicity of internal states in confined fluids. Physical Review E, 2002, 65, 031505.	2.1	72
64	Self-Assembly in Nafion Membranes upon Hydration: Water Mobility and Adsorption Isotherms. Journal of Physical Chemistry B, 2014, 118, 11353-11364.	2.6	72
65	Spontaneous Penetration of Liquids into Capillaries and Porous Membranes Revisited. Journal of Colloid and Interface Science, 2001, 235, 101-113.	9.4	71
66	Adsorption of n-Pentane on Mesoporous Silica and Adsorbent Deformation. Langmuir, 2013, 29, 8601-8608.	3.5	71
67	Hierarchical Pore Structure and Wetting Properties of Single-Wall Carbon Nanotube Fibers. Nano Letters, 2003, 3, 419-423.	9.1	70
68	Simultaneous Transport of Water and Organic Molecules through Polyelectrolyte Membranes. Journal of Physical Chemistry B, 2004, 108, 8900-8909.	2.6	67
69	Phase Transitions and Criticality in Small Systems:Â Vaporâ"Liquid Transition in Nanoscale Spherical Cavities. Journal of Physical Chemistry B, 2006, 110, 9403-9412.	2.6	66
70	DPD Simulation of Protein Conformations: From Î±-Helices to Î²-Structures. Journal of Physical Chemistry Letters, 2012, 3, 3081-3087.	4.6	64
71	The birth of a bubble: A molecular simulation study. Journal of Chemical Physics, 2005, 122, 054707.	3.0	58
72	Melittin Creates Transient Pores in a Lipid Bilayer: Results from Computer Simulations. Journal of Physical Chemistry B, 2013, 117, 5031-5042.	2.6	58

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73	The Method of Indeterminate Lagrange Multipliers in Nonlocal Density Functional Theory. Langmuir, 1995, 11, 4183-4184.	3.5	56
74	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.	3.1	54
75	Determination of Isosteric Heat of Adsorption by Quenched Solid Density Functional Theory. Langmuir, 2017, 33, 1769-1779.	3.5	52
76	Coarse-grained model of nanoscale segregation, water diffusion, and proton transport in Nafion membranes. Journal of Chemical Physics, 2018, 148, 024108.	3.0	52
77	Dissipative particle dynamics simulations in colloid and Interface science: a review. Advances in Colloid and Interface Science, 2021, 298, 102545.	14.7	51
78	Carbon Nanotube Fibers Are Compatible With Mammalian Cells and Neurons. IEEE Transactions on Nanobioscience, 2008, 7, 11-14.	3.3	50
79	Capillary condensation as a morphological transition. Advances in Colloid and Interface Science, 2002, 96, 143-167.	14.7	49
80	Deformation of Microporous Carbons during N₂, Ar, and CO₂ Adsorption: Insight from the Density Functional Theory. Langmuir, 2016, 32, 8265-8274.	3.5	49
81	Fractal analysis of the distribution of high-viscosity fluids in porous supports. The Journal of Physical Chemistry, 1993, 97, 6011-6015.	2.9	47
82	Specifics of freezing of Lennard-Jones fluid confined to molecularly thin layers. Journal of Chemical Physics, 2003, 118, 7585.	3.0	47
83	Adsorption-Induced Deformation of Hierarchically Structured Mesoporous Silicaâ€"Effect of Pore-Level Anisotropy. Langmuir, 2017, 33, 5592-5602.	3.5	47
84	Calculations of pore size distributions in nanoporous materials from adsorption and desorption isotherms. Studies in Surface Science and Catalysis, 2000, 129, 597-606.	1.5	45
85	Nitrogen and Carbon Dioxide Adsorption by Soils. Environmental Science & Technology, 2005, 39, 4990-4995.	10.0	44
86	A simulation method for the calculation of chemical potentials in small, inhomogeneous, and dense systems. Journal of Chemical Physics, 2005, 122, 234108.	3.0	43
87	Deformation of Microporous Carbon during Adsorption of Nitrogen, Argon, Carbon Dioxide, and Water Studied by in Situ Dilatometry. Langmuir, 2015, 31, 12512-12519.	3.5	42
88	Phase Behavior and Capillary Condensation Hysteresis of Carbon Dioxide in Mesopores. Langmuir, 2019, 35, 11291-11298.	3.5	42
89	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.	3.1	41
90	Insight into the Effect of Dealumination on Mordenite Using Experimentally Validated Simulations. Journal of Physical Chemistry C, 2010, 114, 2056-2065.	3.1	41

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91	Effects of CO₂adsorption on coal deformation during geological sequestration. Journal of Geophysical Research, 2011, 116, .	3.3	41
92	Coarse-grained model of water diffusion and proton conductivity in hydrated polyelectrolyte membrane. Journal of Chemical Physics, 2016, 144, 014902.	3.0	41
93	Shock wave interaction with a phospholipid membrane: Coarse-grained computer simulations. Journal of Chemical Physics, 2014, 140, 054906.	3.0	40
94	Percolation Theory of Capillary Hysteresis Phenomena and Its Application for Characterization of Porous Solids. Studies in Surface Science and Catalysis, 1991, 62, 67-74.	1.5	39
95	Advanced Physical Adsorption Characterization of Nanoporous Carbons. , 2012, , 107-145.		38
96	Specifics of solvation of sulfonated polyelectrolytes in water, dimethylmethylphosphonate, and their mixture: A molecular simulation study. Journal of Chemical Physics, 2008, 128, 164902.	3.0	37
97	Parametrization of Chain Molecules in Dissipative Particle Dynamics. Journal of Physical Chemistry B, 2016, 120, 4980-4991.	2.6	37
98	Statistical geometry of cavities in a metastable confined fluid. Physical Review E, 2000, 62, 538-544.	2.1	36
99	Using in-situ adsorption dilatometry for assessment of micropore size distribution in monolithic carbons. Carbon, 2016, 103, 263-272.	10.3	36
100	Characterization of Worm-Like Micro- and Mesoporous Silicas by Small-Angle Scattering and High-Resolution Adsorption Porosimetry. Adsorption, 2005, 11, 653-655.	3.0	35
101	Absorption and transport properties of ultra-fine cellulose webs. Journal of Colloid and Interface Science, 2011, 353, 290-293.	9.4	35
102	Understanding adsorption-induced structural transitions in metal-organic frameworks: From the unit cell to the crystal. Journal of Chemical Physics, 2012, 137, 184702.	3.0	35
103	A model for polybutadiene coatings on porous silica. Chromatographia, 1993, 35, 403-409.	1.3	34
104	Evidence of Large Voids in Pureâ€Silicaâ€Zeolite Lowâ€k Dielectrics Synthesized by Spinâ€on of Nanoparticle Suspensions. Advanced Materials, 2008, 20, 3110-3116.	21.0	34
105	Carbon Nanotube Composites as Multifunctional Substrates for In Situ Actuation of Differentiation of Human Neural Stem Cells. Advanced Healthcare Materials, 2014, 3, 1745-1752.	7.6	34
106	Oxygen Incorporation in Rubrene Single Crystals. Scientific Reports, 2014, 4, 4753.	3.3	34
107	Super-sieving effect in phenol adsorption from aqueous solutions on nanoporous carbon beads. Carbon, 2018, 135, 12-20.	10.3	34
108	Monte Carlo simulation study of droplet nucleation. Journal of Chemical Physics, 2005, 122, 174508.	3.0	33

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109	Modeling Proton Dissociation and Transfer Using Dissipative Particle Dynamics Simulation. Journal of Chemical Theory and Computation, 2015, 11, 4395-4403.	5.3	33
110	Modeling of spontaneous penetration of viscoelastic fluids and biofluids into capillaries. Journal of Colloid and Interface Science, 2003, 262, 253-262.	9.4	31
111	Molecular Model of Dimethylmethylphosphonate and Its Interactions with Water. Journal of Physical Chemistry A, 2004, 108, 1435-1439.	2.5	30
112	Molecular simulation aided nanoporous carbon design for highly efficient low-concentrated formaldehyde capture. Carbon, 2017, 124, 152-160.	10.3	30
113	Deciphering the Relations between Pore Structure and Adsorption Behavior in Metalâ€“Organic Frameworks: Unexpected Lessons from Argon Adsorption on Copperâ€“Benzene-1,3,5-tricarboxylate. Journal of the American Chemical Society, 2019, 141, 8397-8401.	13.7	30
114	Diffusion-Controlled Hysteresis. Adsorption, 2005, 11, 265-270.	3.0	29
115	Morphological Transformations in Polymer Brushes in Binary Mixtures: DPD Study. Langmuir, 2014, 30, 12932-12940.	3.5	29
116	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, 8879-8889.	2.6	28
117	Modeling Gasâ€“Liquid Interfaces by Dissipative Particle Dynamics: Adsorption and Surface Tension of Cetyl Trimethyl Ammonium Bromide at the Airâ€“Water Interface. Langmuir, 2020, 36, 14686-14698.	3.5	28
118	Interaction of water vapour at 298K with Al-MCM-41 materials synthesised at room temperature. Microporous and Mesoporous Materials, 2007, 103, 82-93.	4.4	27
119	Vapor-to-Droplet Transition in a Lennard-Jones Fluid:Â Simulation Study of Nucleation Barriers Using the Ghost Field Method. Journal of Physical Chemistry B, 2005, 109, 5962-5976.	2.6	26
120	Capillary Condensation Hysteresis in Overlapping Spherical Pores:A Monte Carlo Simulation Study. Langmuir, 2012, 28, 12100-12107.	3.5	26
121	Self-assembly in block polyelectrolytes. Journal of Chemical Physics, 2011, 134, 054104.	3.0	25
122	Screening of carbonaceous nanoporous materials for capture of nerve agents. Physical Chemistry Chemical Physics, 2013, 15, 291-298.	2.8	25
123	Polymer Translocation through a Nanopore: DPD Study. Journal of Physical Chemistry B, 2013, 117, 3648-3658.	2.6	25
124	Morphologically disordered pore model for characterization of micro-mesoporous carbons. Carbon, 2017, 111, 358-370.	10.3	25
125	Polyoxometalate hybrid catalyst for detection and photodecomposition of mustard gas surrogate vapors. Applied Surface Science, 2019, 467-468, 428-438.	6.1	25
126	Pore size characterization of micro-mesoporous carbons using CO2 adsorption. Carbon, 2021, 173, 842-848.	10.3	25

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127	Density Functional Theory of Adsorption Hysteresis and Nanopore Characterization. Studies in Surface Science and Catalysis, 2000, , 51-60.	1.5	24
128	Extended Characterization of Combustion-Generated Aggregates: Self-Affinity and Lacunarities. Journal of Colloid and Interface Science, 1996, 180, 590-597.	9.4	23
129	Interactions of Phosphororganic Agents with Water and Components of Polyelectrolyte Membranes. Journal of Physical Chemistry B, 2011, 115, 13617-13623.	2.6	23
130	Solvation forces between molecularly rough surfaces. Journal of Colloid and Interface Science, 2011, 362, 382-388.	9.4	23
131	Molecular Dynamics Simulation of Nanoscale Distribution and Mobility of Water and Dimethylmethylphosphonate in Sulfonated Polystyrene. Journal of Physical Chemistry B, 2008, 112, 14905-14910.	2.6	22
132	Molecular Modeling of Organophosphorous Agents and Their Aqueous Solutions. Journal of Physical Chemistry A, 2011, 115, 5201-5209.	2.5	22
133	Comparative analysis of essential collective dynamics and NMR-derived flexibility profiles in evolutionarily diverse prion proteins. Prion, 2011, 5, 188-200.	1.8	22
134	Adsorption-driven translocation of polymer chain into nanopores. Journal of Chemical Physics, 2012, 136, 214901.	3.0	22
135	Monte Carlo Simulation of Cavitation in Pores with Nonwetting Defects. Langmuir, 2012, 28, 4702-4711.	3.5	22
136	Adhesion of nanoparticles to polymer brushes studied with the ghost tweezers method. Journal of Chemical Physics, 2015, 142, 034705.	3.0	22
137	Structural mechanism of reactivation with steam of pitch-based activated carbon fibers. Journal of Colloid and Interface Science, 2020, 578, 422-430.	9.4	22
138	Carbon Molecular Sieves: Reconstruction of Atomistic Structural Models with Experimental Constraints. Journal of Physical Chemistry C, 2014, 118, 12996-13007.	3.1	21
139	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.	4.8	21
140	Spontaneous absorption of viscous and viscoelastic fluids by capillaries and porous substrates. Journal of Colloid and Interface Science, 2003, 262, 16-24.	9.4	20
141	A Standâ€Alone Mesoporous Crystal Structure Model from in situ Xâ€ray Diffraction: Nitrogen Adsorption on 3â€‰D Cagelike Mesoporous Silica SBAâ€16. Chemistry - A European Journal, 2012, 18, 10300-10311.	3.3	20
142	Pore opening and breathing transitions in metal-organic frameworks: Coupling adsorption and deformation. Journal of Colloid and Interface Science, 2020, 578, 77-88.	9.4	20
143	The Wicking Kinetics of Liquid Droplets into Yarns. Textile Reseach Journal, 2001, 71, 862-869.	2.2	19
144	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.	10.3	19

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145	â€œHumic Coverage Indexâ€•as a Determining Factor Governing Strain-Specific Hydrocarbon Availability to Contaminant-Degrading Bacteria in Soils. Environmental Science & Technology, 2003, 37, 5168-5174.	10.0	18
146	Translocation dynamics of freely jointed Lennard-Jones chains into adsorbing pores. Journal of Chemical Physics, 2012, 137, 144903.	3.0	18
147	Adsorption-Induced Deformation of Microporous Solids: A New Insight from a Century-Old Theory. Journal of Physical Chemistry C, 2020, 124, 749-755.	3.1	18
148	Meniscus motion in a prewetted capillary. Physics of Fluids, 2003, 15, 3134.	4.0	17
149	Multicomponent gauge cell method. Journal of Chemical Physics, 2009, 130, 224103.	3.0	17
150	Berechnung der Fraktaldimension einiger porÃ¶ser Feststoffe aus der Stickstoff-Adsorptionsisotherme. Zeitschrift Fur Physikalische Chemie, 1994, 187, 265-280.	2.8	16
151	Ribbon-to-Fiber Transformation in the Process of Spinning of Carbon-Nanotube Dispersion. Physical Review Letters, 2006, 97, 188303.	7.8	16
152	Calculation of chemical potentials of chain molecules by the incremental gauge cell method. Journal of Chemical Physics, 2011, 135, 214109.	3.0	16
153	Bioactive agarose carbonâ€nanotube composites are capable of manipulating brainâ€“implant interface. Journal of Applied Polymer Science, 2014, 131, .	2.6	16
154	Impact of the adsorbate compressibility on the calculation of the micropore volume. Carbon, 1993, 31, 1015-1018.	10.3	15
155	Adsorption characterization of mesoporous molecular sieves. Studies in Surface Science and Catalysis, 1998, 117, 77-84.	1.5	14
156	Hydrodynamic Instability of Liquid Films on Moving Fibers. Journal of Colloid and Interface Science, 1999, 215, 381-396.	9.4	14
157	In Situ Growth and Characterization of Metal Oxide Nanoparticles within Polyelectrolyte Membranes. Angewandte Chemie - International Edition, 2016, 55, 11522-11527.	13.8	14
158	Adsorption deformation of microporous composites. Dalton Transactions, 2016, 45, 4136-4140.	3.3	14
159	Adhesion of Phospholipid Bilayers to Hydroxylated Silica: Existence of Nanometer-Thick Water Interlayers. Langmuir, 2017, 33, 13148-13156.	3.5	14
160	Adhesion, intake, and release of nanoparticles by lipid bilayers. Journal of Colloid and Interface Science, 2020, 561, 58-70.	9.4	14
161	Electrophysical properties of metalâ€“solid-electrolyte composites. Physical Review B, 1995, 52, 927-938.	3.2	13
162	Analysis of the drying stage in the technology of supported catalysts. Reaction Kinetics and Catalysis Letters, 1976, 5, 67-72.	0.6	12

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163	Potential Theory of Adsorption and Adsorbate Compressibility. Journal of Colloid and Interface Science, 1994, 165, 91-96.	9.4	12
164	Variations from the Plateau law in foams. Physical Review E, 1995, 51, 788-791.	2.1	12
165	Classification of Equilibrium Configurations of Wetting Films on Planar Substrates. Langmuir, 2000, 16, 5526-5529.	3.5	12
166	Nanoparticle-Engendered Rupture of Lipid Membranes. Journal of Physical Chemistry Letters, 2018, 9, 4872-4877.	4.6	12
167	Mechanical Characterization of Hierarchical Structured Porous Silica by in Situ Dilatometry Measurements during Gas Adsorption. Langmuir, 2019, 35, 2948-2956.	3.5	12
168	Coupling Structural and Adsorption Properties of Metalâ€“Organic Frameworks: From Pore Size Distribution to Pore Type Distribution. ACS Applied Materials & Interfaces, 2020, 12, 15595-15605.	8.0	12
169	Characterization of self-affinity in the global regime. Physical Review B, 1994, 50, 15435-15438.	3.2	11
170	Positive curvature effects and interparticle capillary condensation during nitrogen adsorption in particulate porous materials. Journal of Colloid and Interface Science, 2007, 314, 415-421.	9.4	11
171	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, 12673-12679.	2.6	11
172	Mechanisms of chain adsorption on porous substrates and critical conditions of polymer chromatography. Journal of Colloid and Interface Science, 2016, 481, 181-193.	9.4	11
173	Critical conditions of polymer adsorption and chromatography on non-porous substrates. Journal of Colloid and Interface Science, 2016, 474, 25-33.	9.4	11
174	In Situ Small-Angle Neutron Scattering Investigation of Adsorption-Induced Deformation in Silica with Hierarchical Porosity. Langmuir, 2019, 35, 11590-11600.	3.5	11
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