

# Piotr A Gauden

## List of Publications by Year in descending order

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157  
papers

3,266  
citations

159585

30  
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243625

44  
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158  
all docs

158  
docs citations

158  
times ranked

2774  
citing authors

#	ARTICLE	IF	CITATIONS
1	Water adsorption on carbons – Critical review of the most popular analytical approaches. <i>Advances in Colloid and Interface Science</i> , 2008, 137, 82-143.	14.7	109
2	Estimation of the pore-size distribution function from the nitrogen adsorption isotherm. Comparison of density functional theory and the method of Do and co-workers. <i>Carbon</i> , 2003, 41, 1113-1125.	10.3	78
3	Developing the solution analogue of the Toth adsorption isotherm equation. <i>Journal of Colloid and Interface Science</i> , 2003, 266, 473-476.	9.4	75
4	What kind of pore size distribution is assumed in the Dubinin–Astakhov adsorption isotherm equation?. <i>Carbon</i> , 2002, 40, 2879-2886.	10.3	73
5	Searching the most optimal model of water sorption on foodstuffs in the whole range of relative humidity. <i>Food Research International</i> , 2009, 42, 1203-1214.	6.2	72
6	How realistic is the pore size distribution calculated from adsorption isotherms if activated carbon is composed of fullerene-like fragments?. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 5919.	2.8	70
7	Estimating the pore size distribution of activated carbons from adsorption data of different adsorbates by various methods. <i>Journal of Colloid and Interface Science</i> , 2004, 273, 39-63.	9.4	66
8	Carbon Dioxide Adsorption-Induced Deformation of Microporous Carbons. <i>Journal of Physical Chemistry C</i> , 2010, 114, 5126-5133.	3.1	61
9	The general mechanism of water sorption on foodstuffs – Importance of the multitemperature fitting of data and the hierarchy of models. <i>Journal of Food Engineering</i> , 2007, 82, 528-535.	5.2	60
10	Thermodynamic properties of benzene adsorbed in activated carbons and multi-walled carbon nanotubes. <i>Chemical Physics Letters</i> , 2006, 421, 409-414.	2.6	59
11	Thermodynamics of Hydrogen Adsorption in Slit-like Carbon Nanopores at 77 K. Classical versus Path-Integral Monte Carlo Simulations. <i>Langmuir</i> , 2007, 23, 3666-3672.	3.5	56
12	Applicability of the generalised D <sup>TM</sup> Arcy and Watt model to description of water sorption on pineapple and other foodstuffs. <i>Journal of Food Engineering</i> , 2007, 79, 718-723.	5.2	50
13	Displacement of Methane by Coadsorbed Carbon Dioxide Is Facilitated In Narrow Carbon Nanopores. <i>Journal of Physical Chemistry C</i> , 2012, 116, 13640-13649.	3.1	48
14	Toward the Characterization of Microporosity of Carbonaceous Films. <i>Journal of Colloid and Interface Science</i> , 2001, 243, 183-192.	9.4	46
15	The comparative characterization of structural heterogeneity of mesoporous activated carbon fibers (ACFs). <i>Applied Surface Science</i> , 2003, 206, 67-77.	6.1	44
16	Hyper-parallel tempering Monte Carlo simulations of Ar adsorption in new models of microporous non-graphitizing activated carbon: effect of microporosity. <i>Journal of Physics Condensed Matter</i> , 2007, 19, 406208.	1.8	43
17	Heterogeneous Do – Do model of water adsorption on carbons. <i>Journal of Colloid and Interface Science</i> , 2005, 290, 1-13.	9.4	42
18	State of Hydrogen in Idealized Carbon Slitlike Nanopores at 77 K. <i>Langmuir</i> , 2006, 22, 1970-1972.	3.5	42

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19	Cryogenic Separation of Hydrogen Isotopes in Single-Walled Carbon and Boron-Nitride Nanotubes: Insight into the Mechanism of Equilibrium Quantum Sieving in Quasi-One-Dimensional Pores. <i>Journal of Physical Chemistry B</i> , 2008, 112, 8275-8284.	2.6	42
20	Synergetic effect of carbon nanopore size and surface oxidation on CO <sub>2</sub> capture from CO <sub>2</sub> /CH <sub>4</sub> mixtures. <i>Journal of Colloid and Interface Science</i> , 2013, 397, 144-153.	9.4	42
21	The new correlation between microporosity of strictly microporous activated carbons and fractal dimension on the basis of the Polanyi-Dubinin theory of adsorption. <i>Carbon</i> , 2001, 39, 267-278.	10.3	41
22	Fractal dimension of microporous carbon on the basis of Polanyi-Dubinin theory of adsorption. Part IV. The comparative analysis of two alternative solutions of the overall adsorption isotherm equation for microporous fractal solids. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1999, 152, 293-313.	4.7	39
23	Toward Solving the Unstable Linear Fredholm Equation of the First Kind: A New Procedure Called the Adsorption Stochastic Algorithm (ASA) and Its Properties. <i>Langmuir</i> , 2003, 19, 4253-4268.	3.5	38
24	Using in-situ adsorption dilatometry for assessment of micropore size distribution in monolithic carbons. <i>Carbon</i> , 2016, 103, 263-272.	10.3	36
25	Can carbon surface oxidation shift the pore size distribution curve calculated from Ar, N <sub>2</sub> and CO <sub>2</sub> adsorption isotherms? Simulation results for a realistic carbon model. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 315005.	1.8	35
26	Fullerene-Intercalated Graphene Nano-Containers – Mechanism of Argon Adsorption and High-Pressure CH <sub>4</sub> and CO <sub>2</sub> Storage Capacities. <i>Adsorption Science and Technology</i> , 2009, 27, 281-296.	3.2	35
27	Molecular dynamics simulation insight into the mechanism of phenol adsorption at low coverages from aqueous solutions on microporous carbons. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 812-817.	2.8	35
28	Super-sieving effect in phenol adsorption from aqueous solutions on nanoporous carbon beads. <i>Carbon</i> , 2018, 135, 12-20.	10.3	34
29	Numerical analysis of Horvath-Kawazoe equation. <i>Computers &amp; Chemistry</i> , 2002, 26, 125-130.	1.2	32
30	Influence of activated carbon surface oxygen functionalities on SO <sub>2</sub> physisorption – Simulation and experiment. <i>Chemical Physics Letters</i> , 2013, 578, 85-91.	2.6	32
31	Equilibrium clusters in concentrated lysozyme protein solutions. <i>Journal of Colloid and Interface Science</i> , 2011, 363, 579-584.	9.4	31
32	Fractal dimension of microporous carbon on the basis of Polanyi-Dubinin theory of adsorption. Dubinin-Radushkevich adsorption isotherm equation. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1996, 119, 175-181.	4.7	30
33	Removal of internal caps during hydrothermal treatment of bamboo-like carbon nanotubes and application of tubes in phenol adsorption. <i>Journal of Colloid and Interface Science</i> , 2012, 381, 36-42.	9.4	30
34	Molecular simulation aided nanoporous carbon design for highly efficient low-concentrated formaldehyde capture. <i>Carbon</i> , 2017, 124, 152-160.	10.3	30
35	CO <sub>2</sub> sorption on substituted carbon materials. <i>Applied Surface Science</i> , 2007, 253, 5726-5731.	6.1	29
36	Carbon Nanohorns as Reaction Nano-chambers – a Systematic Monte Carlo Study. <i>Scientific Reports</i> , 2018, 8, 15407.	3.3	29

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37	<i>In silico</i> study on the effects of carbonyl groups on chemical equilibrium of reactions with a polar product occurring under confinement in pores of activated carbons. <i>Chemical Engineering Communications</i> , 2021, 208, 171-182.	2.6	29
38	Evaluation of the Structural and Energetic Heterogeneity of Microporous Carbons by Means of Novel Numerical Methods and Genetic Algorithms. <i>Journal of Colloid and Interface Science</i> , 2002, 256, 378-395.	9.4	28
39	Fractal dimension of microporous carbon on the basis of the Polanyi-Dubinin theory of adsorption. Part 2: Dubinin-Astakhov adsorption isotherm equation. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1997, 126, 67-73.	4.7	26
40	Optimal Single-Walled Carbon Nanotube Vessels for Short-Term Reversible Storage of Carbon Dioxide at Ambient Temperatures. <i>Journal of Physical Chemistry C</i> , 2010, 114, 21465-21473.	3.1	26
41	Screening of carbonaceous nanoporous materials for capture of nerve agents. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 291-298.	2.8	25
42	New insights into the ideal adsorbed solution theory. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 7232-7247.	2.8	25
43	Morphologically disordered pore model for characterization of micro-mesoporous carbons. <i>Carbon</i> , 2017, 111, 358-370.	10.3	25
44	The effects of confinement in pores built of folded graphene sheets on the equilibrium of nitrogen monoxide dimerisation reaction. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 135001.	1.8	25
45	Bimodal pore size distributions for carbons: Experimental results and computational studies. <i>Journal of Colloid and Interface Science</i> , 2007, 310, 205-216.	9.4	24
46	The influence of carbon surface oxygen groups on Dubinin-Astakhov equation parameters calculated from CO <sub>2</sub> adsorption isotherm. <i>Journal of Physics Condensed Matter</i> , 2010, 22, 085003.	1.8	24
47	Methane-Induced Deformation of Porous Carbons: From Normal to High-Pressure Operating Conditions. <i>Journal of Physical Chemistry C</i> , 2012, 116, 1740-1747.	3.1	24
48	Fractal dimension of microporous carbon on the basis of the Polanyi-Dubinin theory of adsorption. Part 3: Adsorption and adsorption thermodynamics in the micropores of fractal carbons. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1998, 136, 245-261.	4.7	23
49	The Application of a CONTIN Package for the Evaluation of Micropore Size Distribution Functions. <i>Langmuir</i> , 2002, 18, 5406-5413.	3.5	23
50	Effect of the Carbon Surface Layer Chemistry on Benzene Adsorption from the Vapor Phase and from Dilute Aqueous Solutions. <i>Langmuir</i> , 2005, 21, 12257-12267.	3.5	23
51	Determination of the space between closed multiwalled carbon nanotubes by GCMC simulation of nitrogen adsorption. <i>Journal of Colloid and Interface Science</i> , 2008, 317, 442-448.	9.4	23
52	Simple model of adsorption on external surface of carbon nanotubes—a new analytical approach basing on molecular simulation data. <i>Adsorption</i> , 2010, 16, 197-213.	3.0	23
53	BET surface area of carbonaceous adsorbents—Verification using geometric considerations and GCMC simulations on virtual porous carbon models. <i>Applied Surface Science</i> , 2010, 256, 5204-5209.	6.1	23
54	Phenol adsorption on closed carbon nanotubes. <i>Journal of Colloid and Interface Science</i> , 2011, 361, 288-292.	9.4	23

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55	The Finite Pore Volume GAB Adsorption Isotherm Model as a Simple Tool to Estimate a Diameter of Cylindrical Nanopores. <i>Molecules</i> , 2021, 26, 1509.	3.8	23
56	First Molecular Dynamics simulation insight into the mechanism of organics adsorption from aqueous solutions on microporous carbons. <i>Chemical Physics Letters</i> , 2011, 515, 102-108.	2.6	22
57	Simulating the effect of carbon nanotube curvature on adsorption of polycyclic aromatic hydrocarbons. <i>Adsorption</i> , 2011, 17, 1-4.	3.0	22
58	THE SIMPLE PROCEDURE OF THE CALCULATION OF DIFFUSION COEFFICIENT FOR ADSORPTION ON SPHERICAL AND CYLINDRICAL ADSORBENT PARTICLES. <i>Separation Science and Technology</i> , 2001, 36, 513-525.	2.5	21
59	Impact of the carbon pore size and topology on the equilibrium quantum sieving of hydrogen isotopes at zero coverage and finite pressures. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 144210.	1.8	21
60	Carbon Molecular Sieves: Reconstruction of Atomistic Structural Models with Experimental Constraints. <i>Journal of Physical Chemistry C</i> , 2014, 118, 12996-13007.	3.1	21
61	Changes of the porous structure of activated carbons applied in a filter bed pilot operation. <i>Journal of Colloid and Interface Science</i> , 2006, 295, 327-347.	9.4	20
62	Some remarks on the calculation of the pore size distribution function of activated carbons. <i>Journal of Colloid and Interface Science</i> , 2006, 300, 453-474.	9.4	20
63	Simple models of adsorption in nanotubes. <i>Journal of Colloid and Interface Science</i> , 2006, 295, 310-317.	9.4	20
64	Adsorption from aqueous solutions on opened carbon nanotubes—organic compounds speed up delivery of water from inside. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 9341.	2.8	20
65	New relationships between the characteristic energy of nitrogen adsorption (at 77.5 K) and the average effective diameter of carbon slit-like micropores. <i>Carbon</i> , 1998, 36, 1703-1706.	10.3	19
66	New relationships between the characteristic energy of adsorption and the average effective diameter of carbon slit-like micropores—the dependence on the type of an adsorbate. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2001, 177, 57-68.	4.7	19
67	Does the Dubinin–Serpinsky theory adequately describe water adsorption on adsorbents with high-energy centers?. <i>Journal of Colloid and Interface Science</i> , 2005, 282, 249-260.	9.4	19
68	Ar, CCl <sub>4</sub> and C <sub>6</sub> H <sub>6</sub> adsorption outside and inside of the bundles of multi-walled carbon nanotubes—simulation study. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 4982.	2.8	19
69	Enhanced adsorption of paracetamol on closed carbon nanotubes by formation of nanoaggregates: Carbon nanotubes as potential materials in hot-melt drug deposition-experiment and simulation. <i>Journal of Colloid and Interface Science</i> , 2012, 376, 209-216.	9.4	19
70	Atomic-scale molecular models of oxidized activated carbon fibre nanoregions: Examining the effects of oxygen functionalities on wet formaldehyde adsorption. <i>Carbon</i> , 2020, 165, 67-81.	10.3	19
71	Testing isotherm models and recovering empirical relationships for adsorption in microporous carbons using virtual carbon models and grand canonical Monte Carlo simulations. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 385212.	1.8	18
72	Some Remarks on the Classification of Water Vapor Sorption Isotherms and Blahovec and Yanniotis Isotherm Equation. <i>Drying Technology</i> , 2011, 29, 984-991.	3.1	18

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73	Structural properties of amorphous diamond-like carbon: percolation, cluster, and pair correlation analysis. <i>RSC Advances</i> , 2012, 2, 4292.	3.6	18
74	The Normalization of the Micropore-Size Distribution Function in the Polanyi–Dubinin Type of Adsorption Isotherm Equations. <i>Journal of Colloid and Interface Science</i> , 2000, 227, 482-494.	9.4	17
75	The Simple Procedure of the Calculation of Diffusion Coefficient for Adsorption on Spherical and Cylindrical Adsorbent Particles—Experimental Verification. <i>Journal of Colloid and Interface Science</i> , 2002, 249, 256-261.	9.4	17
76	Microscopic model of carbonaceous nanoporous molecular sieves—“anomalous transport in molecularly confined spaces. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 11351.	2.8	17
77	Simulating the changes in carbon structure during the burn-off process. <i>Journal of Colloid and Interface Science</i> , 2011, 360, 211-219.	9.4	17
78	Energetics of water adsorption and immersion on carbons. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1999, 148, 271-281.	4.7	16
79	Comments on “An Isotherm Equation for Adsorption on Fractal Surfaces of Heterogeneous Porous Materials”. <i>Langmuir</i> , 1999, 15, 285-288.	3.5	16
80	New approach to determination of surface heterogeneity of adsorbents and catalysts from the temperature programmed desorption (TPD) technique: One step beyond the condensation approximation (CA) method. <i>Journal of Colloid and Interface Science</i> , 2005, 291, 334-344.	9.4	16
81	Improvement of the Derjaguin-Broekhoff-de Boer Theory for the Capillary Condensation/Evaporation of Nitrogen in Spherical Cavities and Its Application for the Pore Size Analysis of Silicas with Ordered Cage-like Mesopores. <i>Langmuir</i> , 2005, 21, 10530-10536.	3.5	16
82	Pearson's Hard-Soft Acid-Base Principle as a Means of Interpreting the Reactivity of Carbon Materials. <i>Adsorption Science and Technology</i> , 2006, 24, 389-402.	3.2	16
83	Intrinsic $D_{2,2}/H_{2,2}$ Selectivity of NaX Zeolite: Interplay between Adsorption and Kinetic Factors. <i>Journal of Physical Chemistry C</i> , 2015, 119, 15373-15380.	3.1	16
84	New relationships between the characteristic energy of adsorption and the average effective diameter of carbon slit-like micropores. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2002, 201, 17-30.	4.7	15
85	The evaluation of the surface heterogeneity of carbon blacks from the lattice density functional theory. <i>Carbon</i> , 2004, 42, 1813-1823.	10.3	15
86	Simulation of SF <sub>6</sub> adsorption on the bundles of single walled carbon nanotubes. <i>Microporous and Mesoporous Materials</i> , 2012, 154, 51-55.	4.4	15
87	Separation of CO <sub>2</sub> –CH <sub>4</sub> mixtures on defective single walled carbon nanohorns—“tip does matter. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 16468.	2.8	15
88	Nuclear Quantum Effects in the Layering and Diffusion of Hydrogen Isotopes in Carbon Nanotubes. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 3367-3372.	4.6	15
89	Impact of an adsorbed phase nonideality in the calculation of the filling pressure of carbon slit-like micropores. <i>Carbon</i> , 2004, 42, 573-583.	10.3	14
90	Properties of Phenol Confined in Realistic Carbon Micropore Model: Experiment and Simulation. <i>Journal of Physical Chemistry C</i> , 2015, 119, 19987-19995.	3.1	14

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91	Energetics of water adsorption and immersion on carbons. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2001, 179, 39-55.	4.7	13
92	Description of benzene adsorption in slit-like pores. Theoretical foundations of the improved Horvath-Kawazoe method. <i>Carbon</i> , 2004, 42, 851-864.	10.3	13
93	Thermodynamics of the CMMS Approach and Carbon Surface Chemistry in SO <sub>2</sub> Adsorption. <i>Langmuir</i> , 2006, 22, 6887-6892.	3.5	13
94	Static and thermodynamic properties of low-density supercritical 4He breakdown of the Feynman-Hibbs approximation. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 9182.	2.8	13
95	Detecting adsorption space in carbon nanotubes by benzene uptake. <i>Journal of Colloid and Interface Science</i> , 2013, 391, 74-85.	9.4	13
96	Effective Synthesis of Carbon Hybrid Materials Containing Oligothiophene Dyes. <i>Materials</i> , 2019, 12, 3354.	2.9	13
97	Water nanodroplet on a graphene surface—a new old system. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 495002.	1.8	13
98	Numerical Analysis of the Horvath-Kawazoe Equation – The Adsorption of Nitrogen, Argon, Benzene, Carbon Tetrachloride and Sulphur Hexafluoride. <i>Adsorption Science and Technology</i> , 2002, 20, 295-305.	3.2	12
99	Parameterization of the corrected Dubinin-Serpinsky adsorption isotherm equation. <i>Journal of Colloid and Interface Science</i> , 2005, 291, 600-605.	9.4	12
100	Carbon surface chemical composition in para-nitrophenol adsorption determined under real oxic and anoxic conditions. <i>Journal of Colloid and Interface Science</i> , 2008, 320, 40-51.	9.4	12
101	Nano-Structured Carbon Matrixes Obtained from Chitin and Chitosan by a Novel Method. <i>Journal of Nanoscience and Nanotechnology</i> , 2016, 16, 2623-2631.	0.9	12
102	Benzene adsorption on carbonaceous materials: The influence of pore structure on the state of the adsorbate. <i>Applied Surface Science</i> , 2006, 253, 2525-2539.	6.1	11
103	The HSAB principle as a means to interpret the reactivity of carbon nanotubes. <i>Applied Surface Science</i> , 2009, 255, 4782-4786.	6.1	11
104	Nanoporous Quantum Filters: Inside Vapor-Liquid Transitions of Quantum Fluids in Nanopores. <i>Journal of Physical Chemistry B</i> , 2010, 114, 5047-5052.	2.6	11
105	Constant Pressure Path Integral Gibbs Ensemble Monte Carlo Method. <i>Journal of Chemical Theory and Computation</i> , 2013, 9, 2922-2929.	5.3	11
106	Synthesis of carbon nanotubes and nanotube forests on copper catalyst. <i>Materials Research Express</i> , 2014, 1, 035040.	1.6	11
107	Role of Short-Range Directional Interactions in Coarse-Graining of Protic/Aprotic Liquids. <i>Journal of Physical Chemistry B</i> , 2009, 113, 12988-12998.	2.6	10
108	Molecular dynamics of zigzag single walled carbon nanotube immersion in water. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 5621.	2.8	10

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109	Virtual Porous Carbons. , 2012, , 61-104.		10
110	The first atomistic modelling-aided reproduction of morphologically defective single walled carbon nanohorns. Physical Chemistry Chemical Physics, 2013, 15, 1232-1240.	2.8	10
111	Applicability of molecular simulations for modelling the adsorption of the greenhouse gas CF <sub>4</sub> on carbons. Journal of Physics Condensed Matter, 2013, 25, 015004.	1.8	10
112	MD simulation of organics adsorption from aqueous solution in carbon slit-like pores. Foundations of the pore blocking effect. Journal of Physics Condensed Matter, 2014, 26, 055008.	1.8	10
113	Water at Curved Carbon Surface: Mechanisms of Adsorption Revealed by First Calorimetric Study. Journal of Physical Chemistry C, 2015, 119, 2703-2715.	3.1	10
114	Carbon materials as new nanovehicles in hot-melt drug deposition. Journal of Physics Condensed Matter, 2013, 25, 355002.	1.8	9
115	The applicability of the numerical algorithm for the evaluation of isosteric heat of adsorption. Carbon, 2004, 42, 53-58.	10.3	8
116	Effects of Critical Fluctuations on Adsorption-Induced Deformation of Microporous Carbons. Journal of Physical Chemistry C, 2015, 119, 6111-6120.	3.1	8
117	The influence of geometric heterogeneity of closed carbon nanotube bundles on benzene adsorption from the gaseous phase-Monte Carlo simulations. Adsorption, 2016, 22, 639-651.	3.0	8
118	Corrected thermodynamic description of adsorption via formalism of the theory of volume filling of micropores. Journal of Colloid and Interface Science, 2006, 298, 66-73.	9.4	7
119	Activated carbon immersed in water—the origin of linear correlation between enthalpy of immersion and oxygen content studied by molecular dynamics simulation. Physical Chemistry Chemical Physics, 2010, 12, 10701.	2.8	7
120	Optimization of Coarse-Grained Interaction Potential: Inside Inherent Limitations of Coarse-Graining Methods. Journal of Physical Chemistry B, 2011, 115, 6985-6994.	2.6	7
121	Folding of graphene slit like pore walls—a simple method of improving CO <sub>2</sub> separation from mixtures with CH <sub>4</sub> or N <sub>2</sub> . Journal of Physics Condensed Matter, 2014, 26, 485006.	1.8	7
122	Surface to volume ratio of carbon nanohorn — A crucial factor in CO <sub>2</sub> /CH <sub>4</sub> mixture separation. Chemical Physics Letters, 2014, 595-596, 67-72.	2.6	7
123	Impact of the interaction with the positive charge in adsorption of benzene and other organic compounds from aqueous solutions on carbons. Applied Surface Science, 2007, 253, 4006-4009.	6.1	6
124	Effective diffusion coefficient determination within cylindrical granules of adsorbents using a direct simulation method. Journal of Colloid and Interface Science, 2007, 313, 449-453.	9.4	6
125	Argon adsorption in channel-like mesoporous carbons at 77K: Grand Canonical Monte Carlo simulations and pore size analysis. Microporous and Mesoporous Materials, 2008, 116, 665-669.	4.4	6
126	Adsorption potential distributions for carbons having defined pore structure—GCMC simulations of the effect of heterogeneity. Adsorption, 2009, 15, 99-113.	3.0	6



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127	The system of carbon tetrachloride and closed carbon nanotubes analyzed by a combination of molecular simulations, analytical modeling, and adsorption calorimetry. <i>Journal of Colloid and Interface Science</i> , 2010, 349, 321-330.	9.4	6
128	Cryogenic Noble Gas Separation without Distillation: The Effect of Carbon Surface Curvature on Adsorptive Separation. <i>Journal of Physical Chemistry C</i> , 2012, 116, 19363-19371.	3.1	6
129	To the pore and through the pore: thermodynamics and kinetics of helium in exotic cubic carbon polymorphs. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 17366.	2.8	6
130	Monte Carlo study of chemical reaction equilibria in pores of activated carbons. <i>RSC Advances</i> , 2017, 7, 53667-53679.	3.6	6
131	Thermodynamics of Adsorption on Microporous Fractal Solids. <i>Magyar Árvad Kzlemnyek</i> , 1998, 54, 351-361.	1.4	5
132	Characterization of Microporous Carbon Materials by Means of a New Gamma-Type Adsorption Isotherm Equation. <i>Journal of Colloid and Interface Science</i> , 2001, 243, 300-305.	9.4	5
133	Heterogeneity on high-resolution $\hat{\pm}s$ plots for carbon nanotubesâ€”GCMC study. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 4551.	2.8	5
134	Frequency-Dependent Diffusion Constant of Quantum Fluids from Path Integral Monte Carlo and Tikhonovâ€™s Regularizing Functional. <i>Journal of Chemical Theory and Computation</i> , 2009, 5, 1990-1996.	5.3	5
135	Studies of the reactivity of carbon nanotubes towards selected alkali cations and chlorides based on the HSAB theory. <i>Catalysis Today</i> , 2010, 150, 147-150.	4.4	5
136	Surface area of closed carbon nanotubes determined from room temperature measurements of alcohols adsorption. <i>Chemical Physics Letters</i> , 2010, 499, 141-145.	2.6	5
137	The influence of the carbon surface chemical composition on Dubininâ€™Astakhov equation parameters calculated from SF <sub>6</sub> adsorption dataâ€”grand canonical Monte Carlo simulation. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 395005.	1.8	5
138	Carbon nanotubes as potential material for drug deliveryâ€”experiment and simulation. <i>Adsorption</i> , 2013, 19, 269-272.	3.0	5
139	Toward in silico modeling of palladiumâ€™hydrogenâ€™ carbon nanohorn nanocomposites. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 11763-11769.	2.8	5
140	The Comparative Analysis of the Properties of Two Micropore-Size Distribution Functions: The Pfeiferâ€™Avnir Function and the Gamma-Type One. <i>Journal of Colloid and Interface Science</i> , 2001, 244, 439-443.	9.4	4
141	Homogeneous and Heterogeneous Micropore Structures in Carbonaceous Adsorbentsâ€”Twenty Years Later. <i>Journal of Colloid and Interface Science</i> , 2002, 254, 242-249.	9.4	4
142	Grand Canonical Monte Carlo Simulation Study of Hydrogen Storage in Ordered Mesoporous Carbons at 303 K. <i>Adsorption Science and Technology</i> , 2006, 24, 411-426.	3.2	4
143	Quantum fluctuations increase the self-diffusive motion of para-hydrogen in narrow carbon nanotubes. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 9824.	2.8	4
144	Porosity of closed carbon nanotubes compressed using hydraulic pressure. <i>Adsorption</i> , 2013, 19, 785-793.	3.0	4

#	ARTICLE	IF	CITATIONS
145	New findings on the influence of carbon surface curvature on energetics of benzene adsorption from gaseous phase. <i>Chemical Physics Letters</i> , 2016, 645, 157-163.	2.6	4
146	Monolayer aspects of high-resolution $\hat{\mu}$ s-plots. <i>Applied Surface Science</i> , 2010, 256, 5285-5291.	6.1	3
147	Cryogenic Helium Adsorbed in Zeolite Rho: Inside Localization Controlled Self-Diffusion of Confined Quantum Particles. <i>Journal of Physical Chemistry C</i> , 2011, 115, 18105-18110.	3.1	3
148	Some remarks on the link between the adsorption potential distribution and energetic heterogeneity of an adsorbent. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1996, 111, 147-149.	4.7	2
149	Gyroidal nanoporous carbons - Adsorption and separation properties explored using computer simulations. <i>Condensed Matter Physics</i> , 2016, 19, 13003.	0.7	2
150	The Characterization of Microporous Activated Carbons Utilizing a Simple Adsorption Genetic Algorithm (SAGA). <i>Journal of Colloid and Interface Science</i> , 2001, 239, 591-594.	9.4	1
151	One-Step Steam Pyrolysis Preparation and Characterization of Spherical Carbon Adsorbents Obtained from Ion-Exchange Resins. <i>Adsorption Science and Technology</i> , 2008, 26, 407-413.	3.2	1
152	To what extent can mutual shifting of folded carbonaceous walls in slit-like pores affect their adsorption properties?. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 015002.	1.8	1
153	Carbon Nanohorns. , 2016, , 75-114.		1
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155	The use of mathematical models for modelling sulphur dioxide sorption on materials produced from fly ashes. <i>Energetika</i> , 2018, 64, .	0.6	1
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