Malgorzata Borwko

List of Publications by Citations

94 papers	**1,068** citations	**19** h-index	**27** g-index
100 ext. papers	**1,136** ext. citations	**4.6** avg, IF	**4.04** L-index

#	Paper	IF	Citations
94	Current state in adsorption from multicomponent solutions of nonelectrolytes on solids. *Advances in Colloid and Interface Science*, **1983**, 19, 137-177	14.3	50
93	Theoretical basis of liquid adsorption chromatography with mixed mobile phases and its connection with the theory of adsorption from multicomponent solutions. *Advances in Colloid and Interface Science*, **1985**, 22, 177-227	14.3	50
92	Dependence of the capacity ratio on mobile phase composition in liquid adsorption chromatography. *Chromatographia*, **1978**, 11, 581-585	2.1	45
91	Phase diagrams of heteronuclear dimers adsorbed on a square lattice. *Journal of Chemical Physics*, **2002**, 117, 4526-4531	3.9	43
90	Statistical Thermodynamics of Monolayer Adsorption from Gas and Liquid Mixtures on Homogeneous and Heterogeneous Solid Surfaces. *Progress in Surface and Membrane Science*, **1981**, 14, 1-68		43
89	Density functional approach to the adsorption of spherical molecules on a surface modified with attached short chains. *Journal of Chemical Physics*, **2007**, 126, 214703	3.9	36
88	Adsorption of multicomponent liquid mixtures on heterogeneous surfaces. *Journal of Colloid and Interface Science*, **1979**, 69, 311-317	9.3	31
87	Non-universal critical behaviour of heteronuclear dimers on a square lattice A Monte Carlo study. *Surface Science*, **2002**, 520, 151-157	1.8	28
86	Density functional approach to adsorption and retention of spherical molecules on surfaces modified with end-grafted polymers. *Journal of Physical Chemistry B*, **2009**, 113, 4763-70	3.4	26
85	Critical Behavior of Dimers in Monolayers Adsorbed on Heterogeneous Solid Surfaces. *Journal of Colloid and Interface Science*, **2001**, 244, 1-8	9.3	26
84	Chemical equilibria in slitlike pores. *Journal of Chemical Physics*, **2001**, 114, 5397-5403	3.9	26
83	Association effects in adsorption from multicomponent solutions on solids and liquid adsorption chromatography. *Journal of the Chemical Society Faraday Transactions I*, **1983**, 79, 363		24
82	Dependence of the distribution coefficient on the mobile phase composition in liquid adsorption chromatography. II. Analytical equations for the distribution coefficient involving non-ideality of the mobile phase and heterogeneity of the adsorbent surface. *Chromatographia*, **1979**, 12, 672-678	2.1	24
81	Gradient optimization in elution liquid chromatography. *Journal of Chromatography A*, **1978**, 153, 309-312	2.5	24
80	Phase behavior of unsymmetrical dimers on a square lattice. *Surface Science*, **2006**, 600, 890-896	1.8	23
79	Monte Carlo study of adsorption of heteronuclear dimers on heterogeneous surfaces. *Thin Solid Films*, **2003**, 425, 304-311	2.2	22
78	Statistical thermodynamics of adsorption from multicomponent liquid mixtures on heterogeneous solid surfaces. *Monatshefte Für Chemie*, **1981**, 112, 59-71	1.4	22

77	Adsorption of nitrogen and water vapor by alluvial soils. *Geoderma*, **2002**, 107, 33-54	6.7	21
76	Liquid adsorption chromatography with multicomponent mobile phase. *Journal of Colloid and Interface Science*, **1984**, 102, 519-526	9.3	20
75	Gradient optimization in elution liquid chromatography. *Journal of Chromatography A*, **1978**, 153, 321-328	4.5	19
74	Dependence of the capacity ratio on the composition of the binary mobile phase in liquid-solid adsorption chromatography. *Journal of Chromatography A*, **1978**, 157, 1-5	4.5	18
73	Janus particles at walls modified with tethered chains. *Journal of Physical Chemistry B*, **2013**, 117, 1166-75	3.4	17
72	Computer simulation of phase diagrams of trimers adsorbed on a square lattice. *Physical Review B*, **2003**, 67,	3.3	17
71	Numerical studies of gas adsorption on heterogeneous solid surfaces by using the model of associated adsorbate. *Journal of Colloid and Interface Science*, **1978**, 63, 362-368	9.3	16
70	Theory of Adsorption from a Dimer-Monomer Solution on a Patchwise Heterogeneous Surface. *Journal of Colloid and Interface Science*, **1996**, 182, 268-274	9.3	13
69	Consequences of assuming the Bragg-Williams approximation in mixed-gas adsorption. *Surface Science*, **1978**, 78, L501-L503	1.8	13
68	Phase transitions and self-organization of Janus disks in two dimensions studied by Monte Carlo simulations. *Physical Review E*, **2014**, 90, 062308	2.4	12
67	Adsorption of oligomers on the polymer-tethered surfaces. *Journal of Colloid and Interface Science*, **2011**, 356, 267-76	9.3	12
66	Adsorption of Nitrogen on Thermally Treated Peat Soils: The Role of Energetic and Geometric Heterogeneity. *Journal of Colloid and Interface Science*, **1999**, 219, 1-10	9.3	12
65	Adsorption from multicomponent solutions on homogeneous solid surfaces. *Journal of Colloid and Interface Science*, **1982**, 85, 540-548	9.3	12
64	Adsorption of ions on surfaces modified with brushes of polyampholytes. *Journal of Chemical Physics*, **2012**, 137, 074707	3.9	11
63	Chemical reactions at surfaces: Application of the reaction ensamble monte carlo method. *European Physical Journal D*, **1998**, 48, 371-388		11
62	Phase behavior of a fluid confined in slitlike pores with walls modified by preadsorbed chain molecules. *Journal of Chemical Physics*, **2008**, 128, 044702	3.9	11
61	Evaluation of liquid-vapour density profiles of associating fluids: A density-functional approach. *European Physical Journal D*, **1999**, 49, 1067-1075		11
60	Self-assembly of Janus disks induced by small molecules in two-dimensional systems. *Journal of Chemical Physics*, **2017**, 147, 014904	3.9	10

59 Adsorption from binary solutions on the polymer-tethered surfaces. *Journal of Physical Chemistry B*, **2012**, 116, 3115-24 — 3.4 — 10

58 A density functional approach to retention in chromatography with chemically bonded phases. *Journal of Chromatography A*, **2011**, 1218, 711-20 — 4.5 — 10

57 Fractal dimension of peat soils from adsorption and from water retention experiments. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2002**, 208, 289-301 — 5.1 — 10

56 The adsorbate-adsorbate association model in mixed gas adsorption on homogeneous solid surfaces. *Thin Solid Films*, **1980**, 69, 369-378 — 2.2 — 10

55 A Monte Carlo Study of Adsorption from Mixtures of Dimers and Monomers on Heterogeneous Solid Surfaces.*Langmuir*, **1997**, 13, 1073-1078 — 4 — 8

54 Phase behaviour of heteronuclear dimers adsorbed on square and triangular lattices.A Monte Carlo study. *Physica A: Statistical Mechanics and Its Applications*, **2003**, 326, 1-12 — 3.3 — 8

53 Modeling of Adsorption from Ternary Solutions on Solids: Isolines of Real and Excess Adsorption. *Journal of Colloid and Interface Science*, **1995**, 175, 173-180 — 9.3 — 8

52 Influence of a small amount of tethered chains on wetting transitions: A density functional approach. *Collection of Czechoslovak Chemical Communications*, **2010**, 75, 221-241 — — 8

51 Phase behavior of decorated soft disks in two dimensions. *Journal of Chemical Physics*, **2016**, 145, 224703. — 3.9 — 8

50 Self-assembly of hairy disks in two dimensions - insights from molecular simulations. *Soft Matter*, **2018**, 14, 3115-3126 — 3.6 — 7

49 Terminally grafted chain layers in oligomer-monomer solutions: predictions from a density functional theory. *Journal of Physical Chemistry B*, **2013**, 117, 10293-303 — 3.4 — 7

48 Adsorption from oligomer-monomer solutions on the surfaces modified with end-grafted chains. *Journal of Physical Chemistry B*, **2012**, 116, 12842-9 — 3.4 — 7

47 A critical behavior of the LennardJones dimeric fluid in two-dimensions.: A Monte Carlo study. *Surface Science*, **2011**, 605, 1219-1223 — 1.8 — 7

46 Adsorption from binary solution in slit shaped pores. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1997**, 101, 1050-1056 — — 7

45 Theory of retention in reversed phase liquid chromatography with ternary mobile phases. *Journal of Physical Chemistry B*, **2005**, 109, 21056-62 — 3.4 — 7

44 Supplementary note to the paper Adsorption of gas mixtures on heterogeneous surfaces.*Surface Science*, **1977**, 66, 652-654 — 1.8 — 7

43 Extension of the model of associated adsorbate to adsorption on patchwise heterogeneous surfaces. *Thin Solid Films*, **1977**, 46, 239-247 — 2.2 — 7

42 Complex phase behavior of a fluid in slits with semipermeable walls modified with tethered chains. *Journal of Chemical Physics*, **2011**, 134, 044705 — 3.9 — 6

41	Computer simulation of the chemical potential of binary Lennard-Jones mixtures. *Journal of Chemical Physics*, **2000**, 112, 2315-2318	3.9	6
40	Liquid Chromatography with Mixed Mobile Phases: Interpretation of the Model Chromatographic Data by Means of the Simple Linear Relationship. *Journal of Liquid Chromatography and Related Technologies*, **1985**, 8, 1965-1987		6
39	Determination of the capacity ratio and concentration-time function for stepwise elution with binary mobile phase with help of liquid chromatography data obtained from isocratic elution. *Chromatographia*, **1979**, 12, 29-32	2.1	6
38	Integral equations theory for two-dimensional systems involving nanoparticles*. *Molecular Physics*, **2017**, 115, 1065-1073	1.7	5
37	Adsorption of Rigid-Rod Trimers from Liquid Mixture with Monomers on Heterogeneous Surfaces. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1997**, 101, 84-90		5
36	Adsorption of short chains in slitlike pores: a quantitative comparison between density functional approach and Monte Carlo simulations. *Molecular Physics*, **2006**, 104, 3479-3489	1.7	5
35	Application of Soczewiński-type equation to study molecular interactions in liquid adsorption chromatography. *Chromatographia*, **2002**, 55, 491-495	2.1	5
34	Monte Carlo study of adsorption from binary solution on heterogeneous surfaces. *Journal of the Chemical Society, Faraday Transactions*, **1995**, 91, 3195-3200		5
33	Self-Assembly of Amphiphilic Janus Particles Confined between Two Solid Surfaces. *Journal of Physical Chemistry C*, **2020**, 124, 17556-17565	3.8	5
32	Self-assembly in two-dimensional mixtures of Janus disks and isotropic particles. *Journal of Chemical Physics*, **2019**, 150, 044705	3.9	4
31	Stretching tethered polymer chains: density functional approach. *Journal of Chemical Physics*, **2013**, 138, 204707	3.9	4
30	Monte Carlo studies of wetting behaviour of a model associating fluid. *Journal of the Chemical Society, Faraday Transactions*, **1998**, 94, 771-775		4
29	Adsorption of short heteropolymers in slitlike pores. *Journal of Colloid and Interface Science*, **2007**, 314, 349-57	9.3	4
28	Adsorption of Solvents and Molecular Interactions in LSC with a Ternary Mobile Phase. *Journal of Liquid Chromatography and Related Technologies*, **1991**, 14, 2633-2645		4
27	Adsorption from Multicomponent Mixtures on Heterogeneous Solid Surfaces. *Zeitschrift Fur Physikalische Chemie*, **1979**, 260O, 1027-1032	3.1	4
26	Amphiphilic Dimers at Liquid-Liquid Interfaces: A Density Functional Approach. *Journal of Physical Chemistry B*, **2019**, 123, 5962-5972	3.4	3
25	Adsorption on chemically bonded chain layers with embedded active groups. *Molecular Physics*, **2015**, 113, 1014-1021	1.7	3
24	Phase behavior of linear heterogeneous trimers on a square lattice. *Journal of Chemical Physics*, **2011**, 135, 194702	3.9	3

23	Adsorption model for retention in normal-phase liquid chromatography with ternary mobile phases. *Advances in Colloid and Interface Science*, **2005**, 118, 113-24	14.3	3
22	On Application of the Snyder-Soczewinski Equation for Describing of LSC Process with a Ternary Mobile Phase. *Journal of Liquid Chromatography and Related Technologies*, **1991**, 14, 1247-1256		3
21	Reversed-Phase Liquid Chromatography with Mixed Eluents: Partition Model of Retention for Ionogenic Solutes. *Journal of Liquid Chromatography and Related Technologies*, **1987**, 10, 2033-2045		3
20	Self-organisation in two dimensional system involving patchy and isotropic disks. *Molecular Physics*, **2019**, 117, 2802-2813	1.7	3
19	Self-assembly of Janus disks confined in a slit. *Journal of Chemical Physics*, **2019**, 151, 104703	3.9	2
18	Self-assembly of rod-coil copolymer tethered disks on surfaces. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2019**, 570, 499-509	5.1	2
17	Adsorption of hairy particles with mobile ligands: Molecular dynamics and density functional study. *Journal of Chemical Physics*, **2018**, 148, 044705	3.9	2
16	Unusual mechanism of capillary condensation in pores modified with chains forming pillars. *Journal of Chemical Physics*, **2011**, 135, 054703	3.9	2
15	Phase behavior of linear trimers confined to a narrow slit. *Physical Review B*, **2004**, 69,	3.3	2
14	A Simple Dependence of the Capacity Ratio on the Composition of the Mobile Phase in Liquid-Solid Chromatography. *Journal of Liquid Chromatography and Related Technologies*, **1986**, 9, 1837-1847		2
13	Studies of adsorption and partition effects in liquid chromatography with mixed mobile phases. *Journal of Chromatography A*, **1988**, 452, 131-135	4.5	2
12	Janus dumbbells near surfaces modified with tethered chains. *Adsorption*, **2019**, 25, 459-468	2.6	2
11	Adsorption-induced co-assembly of hairy and isotropic particles. *Physical Chemistry Chemical Physics*, **2020**, 22, 8757-8767	3.6	1
10	Selectivity in normal-phase liquid chromatography with binary mobile phase. *Adsorption*, **2010**, 16, 397-405	2.6	1
9	Adsorption of fluids in slitlike pores containing a small amount of mobile ions. *Journal of Colloid and Interface Science*, **2005**, 291, 223-8	9.3	1
8	Adsorption-driven retention in normal-phase chromatography with ternary mobile phases. *Journal of Chromatographic Science*, **2005**, 43, 126-32	1.4	1
7	Wetting of Crystalline Solids by Associating Fluids. *Journal of Colloid and Interface Science*, **2000**, 225, 147-153	9.3	1
6	The structure of associating hard spheres adsorbed on crystalline solids: a density functional approach. *Molecular Physics*, **1999**, 96, 885-892	1.7	1

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5	Solute Dissociation Effects in Reversed Phase Liquid Chromatography with Mixed Eluents. *Journal of Liquid Chromatography and Related Technologies*, **1986**, 9, 1951-1969		1
4	Multilayer effects in liquid adsorption chromatography with mixed mobile phases. *Journal of High Resolution Chromatography*, **1984**, 7, 203-207		1
3	Molecular dynamics simulations of mono-tethered particles at solid surfaces. *Physical Chemistry Chemical Physics*, **2018**, 20, 20194-20204	3.6	0
2	Adsorption-induced changes of the structure of the tethered chain layers in a simple fluid. *Journal of Chemical Physics*, **2014**, 140, 234904	3.9	0
1	Molecular dynamics and density functional study of the structure of hairy particles at a hard wall. *Journal of Molecular Liquids*, **2018**, 270, 191-202	6	0