

Yu Kalyuzhnyi

List of Publications by Year in descending order

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119
papers

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citations

196777

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docs citations

124
times ranked

912
citing authors

#	ARTICLE	IF	CITATIONS
1	Liquid-gas critical point of a two-dimensional system of hard ellipses with attractive wells. <i>Journal of Chemical Physics</i> , 2022, 156, 034102.	1.2	2
2	Empty liquid state and re-entrant phase behavior of the patchy colloids confined in porous media. <i>Journal of Chemical Physics</i> , 2022, 156, 161102.	1.2	4
3	Integral equation theory for mixtures of spherical and patchy colloids. 2. Numerical results. <i>Soft Matter</i> , 2021, 17, 3513-3519.	1.2	5
4	Liquid-vapor phase equilibrium of a simple liquid confined in a random porous media: Second-order Barker-Henderson perturbation theory and scaled particle theory. <i>Journal of Molecular Liquids</i> , 2020, 300, 112348.	2.3	7
5	Aggregation, liquid-liquid phase separation, and percolation behaviour of a model antibody fluid constrained by hard-sphere obstacles. <i>Soft Matter</i> , 2020, 16, 8432-8443.	1.2	9
6	Integral equation theory for a mixture of spherical and patchy colloids: analytical description. <i>Soft Matter</i> , 2020, 16, 3456-3465.	1.2	8
7	Thermodynamic perturbation theory for a valence-limited model of colloidal systems. <i>Molecular Physics</i> , 2019, 117, 3695-3702.	0.8	1
8	Analytic results for the three- and four-particle correlation functions of the fluid of hard disks. <i>Journal of Chemical Physics</i> , 2019, 150, 034502.	1.2	1
9	Phase Equilibria of Polydisperse Square-Well Chain Fluid Confined in Random Porous Media: TPT of Wertheim and Scaled Particle Theory. <i>Journal of Physical Chemistry B</i> , 2018, 122, 5458-5465.	1.2	6
10	Primitive models of room temperature ionic liquids. Liquid-gas phase coexistence. <i>Journal of Molecular Liquids</i> , 2018, 270, 7-13.	2.3	6
11	Controlling the viscosities of antibody solutions through control of their binding sites. <i>Journal of Molecular Liquids</i> , 2018, 270, 234-242.	2.3	39
12	Modeling the depletion effect caused by an addition of polymer to monoclonal antibody solutions. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 485101.	0.7	3
13	Two- and three-phase equilibria of polydisperse Yukawa hard-sphere fluids confined in random porous media: high temperature approximation and scaled particle theory. <i>Soft Matter</i> , 2017, 13, 1405-1412.	1.2	7
14	Melting upon cooling and freezing upon heating: fluid-solid phase diagram for Yukawa model of dimerizing hard spheres. <i>Soft Matter</i> , 2017, 13, 1156-1160.	1.2	4
15	Second-order thermodynamic perturbation theory for the inverse patchy colloids. <i>Journal of Molecular Liquids</i> , 2017, 228, 143-149.	2.3	3
16	Shielded attractive shell model of polymerizing hard spheres of different size. Resummed thermodynamic perturbation theory and computer simulation. <i>Journal of Molecular Liquids</i> , 2017, 228, 133-142.	2.3	3
17	Shielded attractive shell model again: resummed thermodynamic perturbation theory for central force potential. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 414011.	0.7	6
18	Explicit-water theory for the salt-specific effects and Hofmeister series in protein solutions. <i>Journal of Chemical Physics</i> , 2016, 144, 215101.	1.2	21

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19	Modeling phase transitions in mixtures of \hat{I}^2 lens crystallins. <i>Soft Matter</i> , 2016, 12, 7289-7298.	1.2	28
20	Two- and three-phase equilibria in polydisperse Yukawa hard-sphere mixture. High temperature and mean spherical approximations. <i>Condensed Matter Physics</i> , 2016, 19, 23603.	0.3	2
21	Fluid of fused spheres as a model for protein solution. <i>Condensed Matter Physics</i> , 2016, 19, 23801.	0.3	7
22	Inverse patchy colloids with small patches: fluid structure and dynamical slowing down. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 234104.	0.7	14
23	Theoretical and numerical investigations of inverse patchy colloids in the fluid phase. <i>Journal of Chemical Physics</i> , 2015, 142, 114108.	1.2	20
24	Protein aggregation in salt solutions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6766-6770.	3.3	102
25	Inverse patchy colloids with two and three patches. Analytical and numerical study. <i>Journal of Chemical Physics</i> , 2015, 143, 044904.	1.2	9
26	Second-order Barker-Henderson perturbation theory for the phase behavior of polydisperse Morse hard-sphere mixture. <i>Condensed Matter Physics</i> , 2015, 18, 13605.	0.3	3
27	Phase Behavior and Percolation Properties of the Patchy Colloidal Fluids in the Random Porous Media. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 4260-4264.	2.1	23
28	Model for a mixture of macroions, counterions, and co-ions in a waterlike fluid. <i>Physical Review E</i> , 2014, 90, 012308.	0.8	6
29	Re-entrant Phase Behavior in Confined Two-Patch Colloidal Particles. <i>Journal of Physical Chemistry B</i> , 2014, 118, 9076-9084.	1.2	15
30	Second-order resummed thermodynamic perturbation theory for central-force associating potential: Multi-patch colloidal models. <i>Journal of Chemical Physics</i> , 2013, 139, 044909.	1.2	19
31	Two-patch colloidal model with re-entrant phase behaviour. <i>Journal of Chemical Physics</i> , 2013, 139, 104905.	1.2	24
32	Closed-loop liquid-liquid immiscibility in mixture of particles with spherically symmetric interaction. <i>Condensed Matter Physics</i> , 2013, 16, 43606.	0.3	2
33	An improved thermodynamic perturbation theory for square-well m -point model of the patchy colloids. <i>Journal of Chemical Physics</i> , 2012, 137, 244910.	1.2	8
34	Liquid-gas phase behavior of polydisperse dipolar hard-sphere fluid: Extended thermodynamic perturbation theory for central force associating potential. <i>Condensed Matter Physics</i> , 2012, 15, 23605.	0.3	2
35	Resummed thermodynamic perturbation theory for central force associating potential. Multi-patch models. <i>Journal of Chemical Physics</i> , 2011, 135, 014501.	1.2	30
36	Network Forming Fluids: Yukawa Square-Well m -Point Model. <i>Journal of Statistical Physics</i> , 2011, 145, 481-506.	0.5	14

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37	Phase behavior of a simple model of ferrocolloidal fluid. <i>Chemical Physics Letters</i> , 2011, 503, 226-230.	1.2	0
38	Resummed thermodynamic perturbation theory for central force associating potential: One-patch model. <i>Journal of Chemical Physics</i> , 2010, 133, 044502.	1.2	34
39	Aqueous alkali halide solutions: can osmotic coefficients be explained on the basis of the ionic sizes alone?. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 6260.	1.3	30
40	Phase coexistence in the hard-sphere Yukawa chain fluid with chain length polydispersity: Dimer thermodynamic perturbation theory. <i>Journal of Chemical Physics</i> , 2008, 129, 224901.	1.2	5
41	Phase coexistence in polydisperse athermal polymer-colloidal mixture. <i>Journal of Chemical Physics</i> , 2008, 128, 154907.	1.2	8
42	Solvation phenomena in dilute multicomponent solutions I. Formal results and molecular outlook. <i>Journal of Chemical Physics</i> , 2008, 128, 214512.	1.2	9
43	Liquid-vapour coexistence in the dipolar Yukawa hard-sphere fluid. <i>Europhysics Letters</i> , 2008, 84, 26001.	0.7	17
44	Computer simulations and theoretical aspects of the depletion interaction in protein-oligomer mixtures. <i>Journal of Chemical Physics</i> , 2007, 127, 035103.	1.2	6
45	An improved thermodynamic perturbation theory for Mercedes-Benz water. <i>Journal of Chemical Physics</i> , 2007, 127, 174511.	1.2	35
46	Theory for the solvation of nonpolar solutes in water. <i>Journal of Chemical Physics</i> , 2007, 127, 174505.	1.2	32
47	Thermodynamic properties and liquid-gas phase diagram of the dipolar hard-sphere fluid. <i>Europhysics Letters</i> , 2007, 80, 56002.	0.7	26
48	Integral Equation Study of Particle Confinement Effects in a Polymer/Particle Mixture. <i>Journal of Physical Chemistry C</i> , 2007, 111, 15625-15633.	1.5	2
49	Modeling solution of flexible polyelectrolyte in explicit solvent. <i>Chemical Physics Letters</i> , 2007, 438, 238-243.	1.2	16
50	Phase coexistence in polydisperse mixture of hard-sphere colloidal and flexible chain particles. <i>Chemical Physics Letters</i> , 2007, 443, 243-247.	1.2	7
51	Phase coexistence in the hard-sphere Yukawa chain fluid with chain length polydispersity: High temperature approximation. <i>Chemical Physics Letters</i> , 2007, 446, 285-291.	1.2	3
52	Liquid-gas phase behavior of Stockmayer fluid with high dipolar moment. <i>Condensed Matter Physics</i> , 2007, 10, 553.	0.3	14
53	Phase coexistence in polydisperse multi-Yukawa hard-sphere fluid: High temperature approximation. <i>Journal of Chemical Physics</i> , 2006, 125, 034501.	1.2	7
54	Solution of the mean spherical approximation for polydisperse multi-Yukawa hard-sphere fluid mixture using orthogonal polynomial expansions. <i>Journal of Chemical Physics</i> , 2006, 124, 114509.	1.2	2

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55	Theoretical aspects and computer simulations of flexible charged oligomers in salt-free solutions. <i>Journal of Chemical Physics</i> , 2006, 125, 214907.	1.2	9
56	Analysis of osmotic pressure data for aqueous protein solutions via a multicomponent model. <i>Journal of Chemical Physics</i> , 2006, 124, 114902.	1.2	9
57	Phase coexistence in a polydisperse charged hard-sphere fluid: Polymer mean spherical approximation. <i>Journal of Chemical Physics</i> , 2005, 123, 124501.	1.2	8
58	Towards the phase diagram of a polydisperse mixture of charged hard spheres. <i>Europhysics Letters</i> , 2005, 72, 96-102.	0.7	5
59	Structure of a sheared soft-disk fluid from a nonequilibrium potential. <i>Physical Review E</i> , 2004, 70, 061204.	0.8	4
60	Short-range interactions: from simple ions to polyelectrolyte solutions. <i>Current Opinion in Colloid and Interface Science</i> , 2004, 9, 128-132.	3.4	14
61	Equation of state and liquid-vapor equilibria of one- and two-Yukawa hard-sphere chain fluids: Theory and simulation. <i>Journal of Chemical Physics</i> , 2004, 121, 8128.	1.2	17
62	Phase coexistence in polydisperse charged hard-sphere fluids: Mean spherical approximation. <i>Journal of Chemical Physics</i> , 2004, 120, 10133-10145.	1.2	12
63	Phase coexistence in polydisperse liquid mixtures: Beyond the van der Waals approximation. <i>Journal of Chemical Physics</i> , 2003, 119, 7335-7343.	1.2	18
64	Yukawa sticky m-point model of associating fluid. <i>Journal of Chemical Physics</i> , 2003, 118, 6437-6445.	1.2	20
65	Orientation-dependent integral equation theory for a two-dimensional model of water. <i>Journal of Chemical Physics</i> , 2003, 118, 5516-5525.	1.2	61
66	A two-dimensional model of water: Solvation of nonpolar solutes. <i>Journal of Chemical Physics</i> , 2002, 116, 723-729.	1.2	64
67	Structural and thermodynamic properties of a multicomponent freely jointed hard sphere multi-Yukawa chain fluid. <i>Molecular Physics</i> , 2002, 100, 2499-2517.	0.8	13
68	Thermodynamic properties of freely-jointed hard-sphere multi-Yukawa chain fluids: theory and simulation. <i>Fluid Phase Equilibria</i> , 2002, 194-197, 185-196.	1.4	10
69	Multicomponent mixture of charged hard-sphere chain molecules in the polymer mean-spherical approximation. <i>Journal of Chemical Physics</i> , 2001, 115, 540-551.	1.2	29
70	Structural and thermodynamic properties of a freely-jointed Yukawa hard-sphere chain fluid. <i>Journal of Molecular Liquids</i> , 2001, 92, 85-96.	2.3	8
71	Structure of a 3-component polyelectrolyte solution model with dimerizing counterions and coions. <i>Journal of Molecular Liquids</i> , 2001, 92, 97-103.	2.3	2
72	Structure and bridge functions of fused-sphere dimeric fluids. <i>Chemical Physics Letters</i> , 2001, 339, 89-95.	1.2	10

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73	Structures of fused-dimer fluids: A new closure based on the potential distribution theorems. <i>Journal of Chemical Physics</i> , 2001, 114, 8484-8491.	1.2	9
74	Applications of Integral Equation Calculations to High-Temperature Solvation Phenomena. <i>Journal of Statistical Physics</i> , 2000, 100, 167-199.	0.5	12
75	Highly Asymmetric Electrolytes in the Associative Mean-Spherical Approximation. <i>Journal of Statistical Physics</i> , 2000, 100, 243-265.	0.5	32
76	Distribution functions of a simple fluid under shear. II. High shear rates. <i>Physical Review E</i> , 2000, 63, 011209.	0.8	5
77	A two-dimensional model of water: Theory and computer simulations. <i>Journal of Chemical Physics</i> , 2000, 112, 2843-2848.	1.2	71
78	Structural and thermodynamic properties of freely-jointed hard-sphere rings and chains. <i>Journal of Chemical Physics</i> , 2000, 112, 3071-3081.	1.2	17
79	Solution of the associative mean spherical approximation for a multicomponent dimerizing hard-sphere multi-Yukawa fluid. <i>Journal of Chemical Physics</i> , 2000, 113, 1135-1142.	1.2	15
80	Distribution functions of a simple fluid under shear: Low shear rates. <i>Physical Review E</i> , 1999, 60, 1716-1723.	0.8	9
81	Equations of state of freely jointed hard-sphere chain fluids: Numerical results. <i>Journal of Chemical Physics</i> , 1999, 110, 5458-5468.	1.2	23
82	Equations of state of freely jointed hard-sphere chain fluids: Theory. <i>Journal of Chemical Physics</i> , 1999, 110, 5444-5457.	1.2	25
83	Chandler-Silbey-Ladanyi integral equation theory for semiflexible molecules. <i>Molecular Physics</i> , 1999, 96, 1289-1294.	0.8	4
84	Solvation effect on kinetic rate constant of reactions in supercritical solvents. <i>AIChE Journal</i> , 1998, 44, 667-680.	1.8	42
85	Primitive models of chemical association. III. Totally flexible sticky two-point model for multicomponent heteronuclear fixed-chain-length polymerization. <i>Journal of Chemical Physics</i> , 1998, 108, 6513-6524.	1.2	24
86	Thermodynamics of the associative mean spherical approximation for the fluid of dimerizing particles. <i>Journal of Chemical Physics</i> , 1998, 108, 3709-3715.	1.2	21
87	Primitive models of chemical association. IV. Polymer Percus-Yevick ideal-chain approximation for heteronuclear hard-sphere chain fluids. <i>Journal of Chemical Physics</i> , 1998, 108, 6525-6534.	1.2	38
88	Study of a model polyelectrolyte solution with directional attractive forces between the macroions. <i>Journal of Chemical Physics</i> , 1998, 108, 7870-7875.	1.2	12
89	Thermodynamics of the polymer mean-spherical ideal chain approximation for a fluid of linear chain molecules. <i>Molecular Physics</i> , 1998, 94, 735-742.	0.8	23
90	Primitive models of chemical association. II. Polymerization into flexible chain molecules of prescribed length. <i>Journal of Chemical Physics</i> , 1997, 106, 1940-1949.	1.2	36

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91	Structure and Thermodynamics of Micellar Solutions in Isotropic and Cell Models. <i>Langmuir</i> , 1997, 13, 3646-3651.	1.6	18
92	Primitive model for highly asymmetric electrolytes. Associative mean spherical approximation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1997, 236, 85-96.	1.2	21
93	Analytical treatment of the fused hard-sphere chain model. $0.5 < L < 1$. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1997, 245, 393-410.	1.2	4
94	Dilute solutions of highly asymmetrical electrolytes in the primitive model approximation. <i>Journal of Molecular Liquids</i> , 1997, 73-74, 277-289.	2.3	16
95	Ion-ion correlations in highly asymmetrical electrolytes. <i>Molecular Physics</i> , 1996, 87, 1317-1331.	0.8	36
96	Phase diagram for the Lennard-Jones fluid modelled by the hard-core Yukawa fluid. <i>Molecular Physics</i> , 1996, 87, 1459-1462.	0.8	22
97	Solvation thermodynamics of gas solubility at sub- and near-critical conditions. <i>AIChE Journal</i> , 1996, 42, 571-584.	1.8	34
98	Solution of the associative mean spherical approximation for the shielded sticky point electrolyte model. <i>Journal of Chemical Physics</i> , 1996, 104, 1081-1089.	1.2	17
99	On the relation between the Wertheim's two-density integral equation theory for associating fluids and Chandler-Silbey-Ladanyi integral equation theory for site-site molecular fluids. <i>Journal of Chemical Physics</i> , 1996, 104, 3325-3328.	1.2	28
100	Solution of the Chandler-Silbey-Ladanyi equation for the multicomponent hard-sphere site-site molecular fluid: Percus-Yevick approximation. <i>Journal of Chemical Physics</i> , 1996, 105, 2011-2019.	1.2	16
101	Phase diagram for the dimerizing hard-core Yukawa fluid. <i>Molecular Physics</i> , 1996, 87, 249-255.	0.8	6
102	Sticky charged spheres in the mean-spherical approximation: a model for colloids and polyelectrolytes. <i>Journal of Physics Condensed Matter</i> , 1996, 8, A143-A167.	0.7	33
103	Analytical solution of the multidensity OZ equation for polymerizing fluid. <i>Chemical Physics Letters</i> , 1995, 235, 355-364.	1.2	19
104	Solution of the polymer MSA for the polymerizing primitive model of electrolytes. <i>Chemical Physics Letters</i> , 1995, 240, 157-164.	1.2	35
105	Density profiles of one-component shielded sticky point fluid near a hard wall. <i>Chemical Physics Letters</i> , 1995, 242, 297-303.	1.2	10
106	Solution of the polymer Percus-Yevick approximation for the multicomponent totally flexible sticky two-point model of polymerizing fluid. <i>Journal of Chemical Physics</i> , 1995, 103, 3265-3267.	1.2	33
107	Multidensity integral equation theory for highly asymmetric electrolyte solutions. <i>Journal of Chemical Physics</i> , 1995, 102, 5770-5780.	1.2	69
108	Primitive models of chemical association. I. Theory and simulation for dimerization. <i>Journal of Chemical Physics</i> , 1994, 101, 7939-7952.	1.2	79

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109	Integral equation theory for highly asymmetric electrolyte solutions. <i>Chemical Physics Letters</i> , 1993, 215, 518-522.	1.2	44
110	Solution of the associative Percus-Yevick approximation for the n-component mixture of dimerizing hard spheres. <i>Chemical Physics Letters</i> , 1993, 215, 1-4.	1.2	31
111	An analytical study of the effects of association in a 2-2 electrolyte solution. <i>Molecular Physics</i> , 1993, 80, 1165-1176.	0.8	58
112	On the effects of association in fluids with spherically symmetric interactions. <i>Molecular Physics</i> , 1993, 78, 1247-1258.	0.8	96
113	Analytical solution of Wertheim's OZ equation for the Smith-Nezbeda model of associated liquids. <i>Molecular Physics</i> , 1991, 73, 703-713.	0.8	39
114	Computer simulation of a model 2 ⁺ electrolyte: Multiple time-step molecular dynamics. <i>Journal of Chemical Physics</i> , 1991, 95, 9165-9171.	1.2	22
115	Integral equation theory for associating liquids: Weakly associating 2 ⁺ electrolytes. <i>Journal of Chemical Physics</i> , 1991, 95, 9151-9164.	1.2	67
116	On the effects of association in the statistical theory of ionic systems. Analytic solution of the PY-MSA version of the Wertheim theory. <i>Molecular Physics</i> , 1991, 73, 1145-1157.	0.8	107
117	Analytic solution of the RISM equation for s-atomic symmetric molecules. <i>European Physical Journal D</i> , 1990, 40, 1098-1106.	0.4	3
118	On the application of the EXP-like approximation for the description of the site-site ion-molecular models. <i>Molecular Physics</i> , 1989, 68, 1239-1253.	0.8	20
119	Primitive model of water. <i>Molecular Physics</i> , 1989, 68, 143-160.	0.8	118