Valentina V Vasilevskaya

List of Publications by Year
in descending order

108	2,499	304368 22	214527 47
papers	citations	h-index	g-index

108	108	108	1452
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Large Discrete Transition in a Single DNA Molecule Appears Continuous in the Ensemble. Physical Review Letters, 1996, 76, 3029-3031.	2.9	297
2	Collapse of single DNA molecule in poly(ethylene glycol) solutions. Journal of Chemical Physics, 1995, 102, 6595-6602.	1.2	293
3	Discrete Coilâ^'Globule Transition of Single Duplex DNAs Induced by Polyamines. Journal of Physical Chemistry B, 1997, 101, 9396-9401.	1.2	192
4	Conformational transitions in polymer gels: Theory and experiment. Advances in Polymer Science, 1993, , 123-171.	0.4	188
5	Conformational Polymorphism of Amphiphilic Polymers in a Poor Solvent. Macromolecules, 2003, 36, 10103-10111.	2.2	139
6	Structure of collapsed persistent macromolecule: Toroid vs. spherical globule. Biopolymers, 1997, 41, 51-60.	1.2	108
7	HA (Hydrophobic/Amphiphilic) Copolymer Model:Â Coilâ^'Globule Transition versus Aggregation. Macromolecules, 2004, 37, 5444-5460.	2.2	73
8	Associating polyelectrolytes: Finite size cluster stabilization versus physical gel formation. Journal of Chemical Physics, 1999, 111, 2809-2817.	1.2	66
9	Structures of stiff macromolecules of finite chain length near the coil-globule transition: A Monte Carlo simulation. Macromolecular Theory and Simulations, 2000, 9, 488-499.	0.6	61
10	Marked discreteness on the coilâ€globule transition of single duplex DNA. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1996, 100, 876-880.	0.9	47
11	DNA Compaction in a Crowded Environment with Negatively Charged Proteins. Physical Review Letters, 2010, 105, 128302.	2.9	46
12	Swelling and collapse of polymer gel in polymer solutions and melts. Macromolecules, 1992, 25, 384-390.	2.2	45
13	Influence of Migrating Ionic Groups on the Solubility of Polyelectrolytes:Â Phase Behavior of Ionic Poly(N-isopropylacrylamide) Copolymers in Water. Macromolecules, 2000, 33, 9757-9763.	2.2	39
14	Swelling and Collapse of Physical Gels Formed by Associating Telechelic Polyelectrolytes. Langmuir, 1999, 15, 7918-7924.	1.6	33
15	Microphase Separation within a Comb Copolymer with Attractive Side Chains: A Computer Simulation Study. Macromolecular Theory and Simulations, 2001, 10, 389-394.	0.6	33
16	Polyelectrolyte Complexes Consisting of Macromolecules With Varied Stiffness: Computer Simulation. Macromolecular Theory and Simulations, 2012, 21, 328-339.	0.6	33
17	Semiflexible amphiphilic polymers: Cylindrical-shaped, collagenlike, and toroidal structures. Journal of Chemical Physics, 2006, 124, 144914.	1.2	30
18	Hollow and Vesicle Particles from Macromolecules with Amphiphilic Monomer Units. Polymer Reviews, 2019, 59, 625-650.	5.3	28

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19	Study of Interpolymer Complexes of Oppositely Charged Macromolecules with Different Affinity to Solvent. Macromolecules, 2007, 40, 5934-5940.	2.2	27
20	Self-Organization in Solutions of Stiff-Chain Amphiphilic Macromolecules. Macromolecules, 2008, 41, 7722-7728.	2.2	27
21	Computer simulation of macromolecular systems with amphiphilic monomer units: Biomimetic models. Polymer Science - Series A, 2011, 53, 846-866.	0.4	26
22	Conformation of a polymer chain near the solvent critical region. I. The integral equation theory. Journal of Chemical Physics, 1998, 109, 5108-5118.	1.2	25
23	Influence of cross-linking rate on the structure of hypercrosslinked networks: Multiscale computer simulation. Polymer, 2016, 86, 168-175.	1.8	21
24	Single polyelectrolyte macromolecule in the salt solution: Effect of escaped counter ions. Macromolecular Theory and Simulations, 2000, 9, 600-607.	0.6	19
25	Morphological diagram of amphiphilic H-graft-P macromolecules: Theory and computer experiment. Polymer, 2018, 146, 230-241.	1.8	19
26	Vesicleâ€Like Globules of Amphiphilic Macromolecules. Macromolecular Theory and Simulations, 2015, 24, 393-398.	0.6	18
27	New strategy to create ultra-thin surface layer of grafted amphiphilic macromolecules. Journal of Chemical Physics, 2015, 142, 184904.	1.2	18
28	Conformation of a polymer chain near the solvent critical region. II. Monte Carlo simulation. Journal of Chemical Physics, 1998, 109, 5119-5125.	1.2	17
29	Salt Effects on Complexes of Oppositely Charged Macromolecules Having Different Affinity to Water. Macromolecules, 2009, 42, 7495-7503.	2.2	17
30	Control of reactions between surfactant reagents in miniemulsions. Surface nanoreactors. Colloid and Polymer Science, 2006, 284, 459-467.	1.0	16
31	Hypercrosslinked polystyrene networks: An atomistic molecular dynamics simulation combined with a mapping/reverse mapping procedure. Journal of Chemical Physics, 2014, 140, 134903.	1.2	16
32	Self-Assembly into Strands in Amphiphilic Polymer Brushes. Langmuir, 2016, 32, 7000-7008.	1.6	15
33	Self-assembly in Solutions of Amphiphilic Homopolymers: Computer Modeling and Analytical Theory. Macromolecules, 2020, 53, 4783-4795.	2.2	15
34	Swelling and Collapse of Swiss-Cheese Polyelectrolyte Gels in Salt Solutions. Macromolecular Theory and Simulations, 2002, 11, 623.	0.6	14
35	Conformational properties of rigid-chain amphiphilic macromolecules: The phase diagram. Polymer Science - Series A, 2008, 50, 621-629.	0.4	14
36	Self-organization of amphiphilic macromolecules with local helix structure in concentrated solutions. Journal of Chemical Physics, 2012, 137, 084901.	1.2	14

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37	Amphiphilic comb macromolecules with different distribution statistics of side-chain grafting sites: Mathematical modeling. Polymer Science - Series A, 2008, 50, 1008-1017.	0.4	13
38	Void Microstructuring in Lamellar Phase of Amphiphilic Macromolecules. Macromolecular Theory and Simulations, 2013, 22, 31-35.	0.6	13
39	Macroscopic Properties of Hypercrosslinked Polystyrene Networks: An Atomistic and Coarseâ€Grained Molecular Dynamics Simulation. Macromolecular Symposia, 2015, 348, 14-24.	0.4	13
40	Self-assembly in densely grafted macromolecules with amphiphilic monomer units: diagram of states. Soft Matter, 2017, 13, 8525-8533.	1.2	13
41	Secondary globular structure of copolymers containing amphiphilic and hydrophilic units: Computer simulation analysis. Polymer Science - Series A, 2007, 49, 89-96.	0.4	12
42	Compactization of rigid-chain amphiphilic macromolecules with local helical structure. Polymer Science - Series A, 2010, 52, 761-774.	0.4	12
43	The effect of low-molecular weight salts on the collapse of charged polymeric networks. Polymer Science USSR, 1986, 28, 348-353.	0.2	11
44	Diagram of State of Stiff Amphiphilic Macromolecules. Macromolecular Symposia, 2007, 252, 24-35.	0.4	11
45	Microphase separation in the melts of diblock copolymers composed of linear and amphiphilic blocks. Polymer Science - Series A, 2010, 52, 182-190.	0.4	11
46	Experimental and Theoretical Studies of Polyanionâ€“Polycation Complexation in Salted Media in the Context of Nonviral Gene Transfection. Macromolecules, 2014, 47, 3574-3581.	2.2	11
47	Multichain adsorption at fluid interfaces: Amphiphilic homopolymers vs copolymers. Journal of Colloid and Interface Science, 2021, 585, 408-419.	5.0	10
48	Neutral glycolipids of atherosclerotic plaques and unaffected human aorta tissue. FEBS Journal, 1989, 180, 167-171.	0.2	9
49	Domains in Melts of Combâ”Coil Diblock Copolymers:â€‰ Superstrong Segregation Regime. Macromolecules, 2001, 34, 5019-5022.	2.2	9
50	Catalytic Reactions of a Surface-Active Catalyst and a Surface-Active Substrate in Emulsions: The Optimal Drop Size. Doklady Physical Chemistry, 2004, 398, 258-261.	0.2	9
51	Self-assembly of an amphiphilic macromolecule under spherical confinement: An efficient route to generate hollow nanospheres. Journal of Chemical Physics, 2013, 139, 244901.	1.2	9
52	Salt effects on macrophase separations in nonâ€stoichiometric mixtures of oppositely charged macromolecules: Theory and experiment. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 1717-1730.	2.4	9
53	Macromolecules with amphiphilic monomer units at interface of two immiscible liquids. Journal of Chemical Physics, 2017, 147, 184902.	1.2	9
54	Coarseâ€grained Aâ€graftâ€B model of poly(lactic acid) for molecular dynamics simulations. Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 604-612.	2.4	9

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55	Orientation- and cosolvent-induced self-assembly of amphiphilic homopolymers in selective solvents. Polymer, 2021, 232, 124160.	1.8	9
56	Computer simulation analysis of microstructure formation in monomer and polymer blends involving a glassy component. Macromolecular Theory and Simulations, 1994, 3, 939-961.	0.6	8
57	â€œSwiss-cheeseâ€•polyelectrolyte gels as media with extremely inhomogeneous distribution of charged species. Journal of Chemical Physics, 2004, 120, 9321-9329.	1.2	8
58	Reactions in surface microreactors: Computer simulation. Colloid Journal, 2007, 69, 265-271.	0.5	8
59	Effect of Induced Self-Organization in Mixtures of Amphiphilic Macromolecules with Different Stiffness. Macromolecules, 2015, 48, 3767-3774.	2.2	8
60	Induced liquid-crystalline ordering in solutions of stiff and flexible amphiphilic macromolecules: Effect of mixture composition. Journal of Chemical Physics, 2016, 145, 044904.	1.2	8
61	Formation of a vesicle-like globule under steric restrictions. Polymer Science - Series A, 2016, 58, 292-301.	0.4	8
62	Flowerlike Multipetal Structures of Nanoparticles Decorated by Amphiphilic Homopolymers. Macromolecules, 2021, 54, 6285-6295.	2.2	8
63	Segmentation of Heteropolymer Sequences Specifying Subsequences with Different Composition and Statistical Properties. Macromolecular Theory and Simulations, 2003, 12, 604-613.	0.6	7
64	The effect of a low-molecular-mass salt on stoichiometric polyelectrolyte complexes composed of oppositely charged macromolecules with different solvent affinities. Polymer Science - Series A, 2009, 51, 1075-1082.	0.4	7
65	Formation of fibrillar aggregates in concentrated solutions of rigid-chain amphiphilic macromolecules with fixed torsion and bend angles. Polymer Science - Series A, 2011, 53, 733-743.	0.4	7
66	Marked difference in conformational fluctuation between giant DNA molecules in circular and linear forms. Journal of Chemical Physics, 2015, 142, 145101.	1.2	7
67	Structures of stiff macromolecules of finite chain length near the coil-globule transition: A Monte Carlo simulation. , 2000, 9, 488.		7
68	Coarse-grained simulation of molecular ordering in polylactic blends under uniaxial strain. Polymer, 2020, 190, 122232.	1.8	7
69	Collapse of polymeric networks in a mixed solvent. Polymer Science USSR, 1989, 31, 784-791.	0.2	6
70	Secondary structure of globules of copolymers consisting of amphiphilic and hydrophilic units: Effect of potential range. Polymer Science - Series A, 2010, 52, 317-327.	0.4	6
71	Lamellaeâ€”Parking Garage Structureâ€”Lamellae Transition in Densely Grafted Layers of Amphiphilic Homopolymers: Impact of Polymerization Degree. ACS Omega, 2018, 3, 12967-12974.	1.6	6
72	Lamellae and parking garage structures in amphiphilic homopolymer brushes with different grafting densities. Journal of Chemical Physics, 2019, 151, 154903.	1.2	6

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73	Catalytic reactions in emulsions in the presence of a polymeric catalyst. Polymer Science - Series A, 2007, 49, 729-736.	0.4	5
74	Destruction of globules of Co- and homopolymer macromolecules in the presence of an amphiphilic substrate. Polymer Science - Series A, 2009, 51, 424-429.	0.4	5
75	Polymer globule with fractal properties caused by intramolecular nanostructuring and spatial constrains. Soft Matter, 2016, 12, 5138-5145.	1.2	5
76	Domains in mixtures of amphiphilic macromolecules with different stiffness of backbone. Polymer, 2017, 125, 234-240.	1.8	5
77	Self-assembly in amphiphilic spherical brushes. Journal of Chemical Physics, 2020, 152, 234903.	1.2	5
78	Unusual Structures of Interpolyelectrolyte Complexes: Vesicles and Perforated Vesicles. Polymers, 2020, 12, 871.	2.0	5
79	Fibrillar gel self-assembly via cononsolvency of amphiphilic polymer. Journal of Colloid and Interface Science, 2022, 614, 181-193.	5.0	5
80	Kinetics of polyelectrolyte network swelling and collapse. Polymer Gels and Networks, 1998, 6, 149-161.	0.6	4
81	Adsorption of amphiphilic comb-shaped macromolecules on a patterned surface. Polymer Science - Series A, 2011, 53, 344-353.	0.4	4
82	Self-assembly of polymer layers with mobile grafting points: Computer simulation. Polymer Science - Series A, 2012, 54, 767-777.	0.4	4
83	Atomistic simulation of poly (lactic acid) of different regioregularity. Polymer, 2021, 221, 123577.	1.8	4
84	Matrix free polymer nanocomposites from amphiphilic hairy nanoparticles: Solvent selectivity and mechanical properties. Polymer, 2022, 255, 125172.	1.8	4
85	Protein Sequences as Literature Text. Macromolecular Theory and Simulations, 2006, 15, 425-431.	0.6	3
86	The formation of interpolymer complexes in mixtures of weak polyelectrolytes. Polymer Science - Series A, 2016, 58, 606-612.	0.4	3
87	Computer synthesis of hypercrosslinked polystyrene: All-atom simulations. Low Temperature Physics, 2017, 43, 244-247.	0.2	3
88	Parking Garage Bicontinuous Structures of Densely Grafted Layers of Amphiphilic Homopolymers. Polymer Science - Series C, 2018, 60, 56-65.	0.8	3
89	Effect of Nanoparticles Surface Bonding and Aspect Ratio on Mechanical Properties of Highly Cross-Linked Epoxy Nanocomposites: Mesoscopic Simulations. Materials, 2021, 14, 6637.	1.3	3
90	Compaction of DNA in solutions of highly charged proteins carrying the same charge as DNA. Polymer Science - Series C, 2012, 54, 21-29.	0.8	2

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91	Liquid-Crystalline Ordering of Filaments Formed by Bidisperse Amphiphilic Macromolecules. Polymer Science - Series C, 2018, 60, 39-47.	0.8	2
92	Fibril Assembly and Gelation of Macromolecules with Amphiphilic Repeating Units. Langmuir, 2021, 37, 12377-12387.	1.6	2
93	Reverse Mapping Algorithm for Multi-scale Numerical Simulation of Polylactic Acid. Supercomputing Frontiers and Innovations, 2018, 5, .	0.5	2
94	Swelling and collapse of polymer networks in contact with polymer melts and solutions. Polymer Science USSR, 1991, 33, 805-811.	0.2	1
95	Association of diphilic chains near the solvent critical region. Journal of Chemical Physics, 1999, 111, 2340-2344.	1.2	1
96	Protein Sequences as a â€œLiteraryâ€•Text. Doklady Biochemistry and Biophysics, 2004, 397, 235-238.	0.3	1
97	Helix-coil transition in DNA in the presence of a denaturating agent. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2007, 62, 99-103.	0.1	1
98	Effect of correlations in the interaction along polymer chain on the globule structure. Doklady Physical Chemistry, 2017, 472, 6-9.	0.2	1
99	On Conditions of Formation of Hollow Particles by an Interpolylectrolyte Complex. Polymer Science - Series A, 2019, 61, 780-788.	0.4	1
100	Microphase separation in helixâ€“coil block copolymer melts: computer simulation. Soft Matter, 2021, 17, 8331-8342.	1.2	1
101	Self-Assembly of Gel-Like Particles and Vesicles in Solutions of Polymers with Amphiphilic Repeat Unit. Polymer Science - Series A, 2022, 64, 220-231.	0.4	1
102	Theory of the collapse of polyelectrolyte networks in solutions of ionogenic surfactants. Polymer Science USSR, 1991, 33, 974-982.	0.2	0
103	Analysis of correlations in location of hydrophobic and hydrophilic monomers in protein sequences. Doklady Biochemistry and Biophysics, 2006, 411, 361-364.	0.3	0
104	Hybrids of Synthetic Polymers and Biopolymers. , 2015, , 953-958.		0
105	Conformational Transitions in Cross-Linked Ionic Gels. , 2007, , 81-114.		0
106	Hybrids of Synthetic Polymers and Biopolymers. , 2014, , 1-6.		0
107	Monte Carlo simulation of association of diphilic chains near the solvent critical region. , 1999, , .		0
108	Structured globules with twisted arrangement of helical blocks: Computer simulation. Polymer, 2022, , 124974.	1.8	0