

# Victor Pryamitsyn

## List of Publications by Year in descending order

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88  
papers

4,935  
citations

101384

36  
h-index

91712

69  
g-index

88  
all docs

88  
docs citations

88  
times ranked

4379  
citing authors

#	ARTICLE	IF	CITATIONS
1	Anisotropic self-assembly of spherical polymer-grafted nanoparticles. <i>Nature Materials</i> , 2009, 8, 354-359.	13.3	925
2	Coil-globule type transitions in polymers. 1. Collapse of layers of grafted polymer chains. <i>Macromolecules</i> , 1991, 24, 140-149.	2.2	380
3	Theory of steric stabilization of colloid dispersions by grafted polymers. <i>Journal of Colloid and Interface Science</i> , 1990, 137, 495-511.	5.0	329
4	Self-assembly of rod-coil block copolymers. <i>Journal of Chemical Physics</i> , 2004, 120, 5824-5838.	1.2	203
5	Origins of Linear Viscoelastic Behavior of Polymer-Nanoparticle Composites. <i>Macromolecules</i> , 2006, 39, 844-856.	2.2	158
6	Structure of densely grafted polymeric monolayers. <i>Polymer Science USSR</i> , 1988, 30, 1706-1715.	0.2	128
7	Structure and conformational transitions in grafted polymer chain layers. A new theory. <i>Polymer Science USSR</i> , 1989, 31, 205-216.	0.2	125
8	Coil-globule type transitions in polymers. 2. Theory of coil-globule transition in linear macromolecules. <i>Macromolecules</i> , 1991, 24, 1554-1560.	2.2	112
9	Modeling the anisotropic self-assembly of spherical polymer-grafted nanoparticles. <i>Journal of Chemical Physics</i> , 2009, 131, 221102.	1.2	111
10	Mean-field models of structure and dispersion of polymer-nanoparticle mixtures. <i>Soft Matter</i> , 2010, 6, 4010.	1.2	109
11	Origin of Dynamical Properties in PMMA-C60 Nanocomposites. <i>Macromolecules</i> , 2007, 40, 5424-5432.	2.2	106
12	Inhomogeneous Structure of Collapsed Polymer Brushes Under Deformation. <i>Macromolecules</i> , 1995, 28, 8612-8620.	2.2	97
13	Strong Segregation Theory of Block Copolymer-Nanoparticle Composites. <i>Macromolecules</i> , 2006, 39, 8499-8510.	2.2	87
14	Universality in Structure and Elasticity of Polymer-Nanoparticle Gels. <i>Physical Review Letters</i> , 2006, 96, 177805.	2.9	77
15	Noncontinuum effects in nanoparticle dynamics in polymers. <i>Journal of Chemical Physics</i> , 2006, 124, 221102.	1.2	74
16	Nanoparticles in Solutions of Adsorbing Polymers: Pair Interactions, Percolation, and Phase Behavior. <i>Langmuir</i> , 2006, 22, 969-981.	1.6	72
17	Theory of the Collapse of the Polyelectrolyte Brush. <i>Macromolecules</i> , 1996, 29, 8260-8270.	2.2	71
18	Mechanisms of steady-shear rheology in polymer-nanoparticle composites. <i>Journal of Rheology</i> , 2006, 50, 655-683.	1.3	67

#	ARTICLE	IF	CITATIONS
19	Relation between Glass Transition Temperatures in Polymer Nanocomposites and Polymer Thin Films. <i>Physical Review Letters</i> , 2008, 101, 075702.	2.9	66
20	Highly Asymmetric Lamellar Nanopatterns via Block Copolymer Blends Capable of Hydrogen Bonding. <i>ACS Nano</i> , 2012, 6, 7966-7972.	7.3	65
21	Self-Consistent Brownian Dynamics Simulation of Polymer Brushes under Shear. <i>Macromolecules</i> , 1998, 31, 6662-6668.	2.2	60
22	A coarse-grained explicit solvent simulation of rheology of colloidal suspensions. <i>Journal of Chemical Physics</i> , 2005, 122, 104906.	1.2	60
23	Polymer-bridged gels of nanoparticles in solutions of adsorbing polymers. <i>Journal of Chemical Physics</i> , 2006, 125, 064903.	1.2	58
24	Dispersion and Percolation Transitions of Nanorods in Polymer Solutions. <i>Macromolecules</i> , 2007, 40, 344-354.	2.2	58
25	A Model for Self-Assembly in Side Chain Liquid Crystalline Block Copolymers. <i>Macromolecules</i> , 2008, 41, 218-229.	2.2	53
26	Depletion and pair interactions of proteins in polymer solutions. <i>Journal of Chemical Physics</i> , 2005, 122, 154901.	1.2	50
27	Interfacial Phenomena in Polymer Blends: A Self-Consistent Brownian Dynamics Study. <i>Macromolecules</i> , 2004, 37, 10180-10194.	2.2	45
28	Theory of athermal lyotropic liquid crystal systems. <i>Polymer Science USSR</i> , 1988, 30, 316-324.	0.2	43
29	Phase Behavior of Binary Blends of Block Copolymers Having Hydrogen Bonding. <i>Macromolecules</i> , 2011, 44, 4970-4976.	2.2	43
30	Blockiness and Sequence Polydispersity Effects on the Phase Behavior and Interfacial Properties of Gradient Copolymers. <i>Macromolecules</i> , 2012, 45, 6281-6297.	2.2	43
31	Dynamical mean-field theory for inhomogeneous polymeric systems. <i>Journal of Chemical Physics</i> , 2003, 118, 4345-4348.	1.2	41
32	Dewetting of PMMA on PS-Brush Substrates. <i>Macromolecules</i> , 2009, 42, 7919-7923.	2.2	41
33	Modeling viscoelastic properties of triblock copolymers: A DPD simulation study. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2010, 48, 15-25.	2.4	40
34	Mechanisms Underlying Ionic Mobilities in Nanocomposite Polymer Electrolytes. <i>ACS Macro Letters</i> , 2013, 2, 1001-1005.	2.3	40
35	Theory of monolayers of non-Gaussian polymer chains grafted onto a surface. Part 1. "General theory. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1994, 90, 889-893.	1.7	38
36	Ionic Correlations in Random Ionomers. <i>ACS Nano</i> , 2018, 12, 2311-2318.	7.3	36

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37	Theory of Polymer Brushes of Liquid-Crystalline Polymers. <i>Macromolecules</i> , 1996, 29, 7240-7250.	2.2	32
38	Interplay between Depletion and Electrostatic Interactions in Polyelectrolyte–Nanoparticle Systems. <i>Macromolecules</i> , 2014, 47, 6095-6112.	2.2	31
39	Effect of the Degree of Hydrogen Bonding on Asymmetric Lamellar Microdomains in Binary Block Copolymer Blends. <i>Macromolecules</i> , 2015, 48, 6347-6352.	2.2	31
40	Influence of molecular weight and degree of segregation on local segmental dynamics of ordered block copolymers. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 859-864.	2.4	31
41	Screening of hydrodynamic interactions in Brownian rod suspensions. <i>Journal of Chemical Physics</i> , 2008, 128, 134901.	1.2	30
42	Equilibrium characteristics of semiflexible polymer solutions near probe particles. <i>Physical Review E</i> , 2008, 78, 051804.	0.8	28
43	Many-body interactions and coarse-grained simulations of structure of nanoparticle-polymer melt mixtures. <i>Journal of Chemical Physics</i> , 2010, 133, 144904.	1.2	28
44	Phase Behavior of Binary Blend Consisting of Asymmetric Polystyrene- <i>block</i> -poly(2-vinylpyridine) Copolymer and Asymmetric Deuterated Polystyrene- <i>block</i> -poly(4-hydroxystyrene) Copolymer. <i>Macromolecules</i> , 2015, 48, 1262-1266.	2.2	27
45	Thermodynamics of Associative Polymer Blends. <i>Macromolecules</i> , 2018, 51, 5918-5932.	2.2	27
46	Curvature Modification of Block Copolymer Microdomains Using Blends of Block Copolymers with Hydrogen Bonding Interactions. <i>Macromolecules</i> , 2012, 45, 8729-8742.	2.2	26
47	Phase behavior of gradient copolymer solutions: a Monte Carlo simulation study. <i>Soft Matter</i> , 2012, 8, 6471.	1.2	24
48	Computer Simulations of Gas Diffusion in Polystyrene- $C_{60}$ Fullerene Nanocomposites Using Trajectory Extending Kinetic Monte Carlo Method. <i>Journal of Physical Chemistry B</i> , 2012, 116, 95-103.	1.2	24
49	Multibody Interactions, Phase Behavior, and Clustering in Nanoparticle–Polyelectrolyte Mixtures. <i>Journal of Physical Chemistry B</i> , 2015, 119, 14536-14550.	1.2	24
50	Liquid-crystalline ordering in polymer brushes. <i>Macromolecular Theory and Simulations</i> , 1996, 5, 215-223.	0.6	23
51	Dynamics of Probe Diffusion in Rod Solutions. <i>Physical Review Letters</i> , 2008, 100, 128302.	2.9	23
52	A Comparison of the Dynamical Relaxations in a Model for Glass Transition in Polymer Nanocomposites and Polymer Thin Films. <i>Macromolecules</i> , 2010, 43, 5851-5862.	2.2	23
53	Anomalous Phase Behavior of Ionic Polymer Blends and Ionic Copolymers. <i>Macromolecules</i> , 2017, 50, 5194-5207.	2.2	22
54	Phase transitions in polymer brushes. <i>Macromolecular Symposia</i> , 1997, 113, 151-161.	0.4	20

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55	Theory of Liquid-Crystalline (LC) Polymer Brushes: Interpenetrating Brushes. <i>Macromolecules</i> , 1998, 31, 3720-3730.	2.2	20
56	Surface Energies and Self-Assembly of Block Copolymers on Grafted Surfaces. <i>Physical Review Letters</i> , 2011, 107, 148304.	2.9	20
57	Influence of nanoparticle-ion and nanoparticle-polymer interactions on ion transport and viscoelastic properties of polymer electrolytes. <i>Journal of Chemical Physics</i> , 2016, 144, 154905.	1.2	20
58	Coarse-Grained Simulations of Penetrant Transport in Polymer Nanocomposites. <i>Macromolecules</i> , 2011, 44, 9839-9851.	2.2	19
59	Self-Consistent Brownian Dynamics Simulation of Bimodal Polymer Brushes under Shear. <i>Macromolecules</i> , 2000, 33, 2740-2747.	2.2	18
60	Interfacial properties of statistical copolymer brushes in contact with homopolymer melts. <i>Journal of Chemical Physics</i> , 2011, 134, 154903.	1.2	18
61	Dynamics of the Most Probable Composition Fluctuations of Diblock Copolymers near the Ordering Transition. <i>Macromolecules</i> , 2001, 34, 2156-2171.	2.2	17
62	Interactions and Aggregation of Charged Nanoparticles in Uncharged Polymer Solutions. <i>Langmuir</i> , 2015, 31, 12328-12338.	1.6	17
63	Self-Assembly of Diblock Copolymer on Substrates Modified by Random Copolymer Brushes. <i>Macromolecules</i> , 2011, 44, 9867-9881.	2.2	16
64	Brush Theory of Tethered Chains with a Charged Group at the Free End. <i>Macromolecules</i> , 1997, 30, 584-589.	2.2	15
65	Evaluating the Role of Additive pKa on the Proton Conductivities of Blended Sulfonated Poly(ether) Tj ETQq1 1 0.784314 rgBT <sub>15</sub> /Overlo	1.2	15
66	Effect of confinement on polymer-induced depletion interactions between nanoparticles. <i>Journal of Chemical Physics</i> , 2013, 138, 234905.	1.2	15
67	Noncontinuum effects on the mobility of nanoparticles in unentangled polymer solutions. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 2145-2150.	2.4	14
68	Mean field theory of charged dendrimer molecules. <i>Journal of Chemical Physics</i> , 2011, 135, 204902.	1.2	13
69	Theory of the coil-globule transition. <i>Polymer Science USSR</i> , 1987, 29, 2039-2046.	0.2	12
70	Free Energy of a Non-Gaussian Polymer Brush. <i>Macromolecular Theory and Simulations</i> , 2003, 12, 223-228.	0.6	12
71	Pair interactions in polyelectrolyte-nanoparticle systems: Influence of dielectric inhomogeneities and the partial dissociation of polymers and nanoparticles. <i>Journal of Chemical Physics</i> , 2015, 143, 164904.	1.2	12
72	Shear-Induced Phase Transitions in Ternary Polymer Blends. <i>Physical Review Letters</i> , 2006, 96, 028302.	2.9	11

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73	Effect of anisotropic charge transport on device characteristics of polymer solar cells. Applied Physics Letters, 2009, 95, 194101.	1.5	11
74	Computer simulation of polymer brushes under shear. Rheologica Acta, 2000, 39, 469-475.	1.1	7
75	Entanglements in Inhomogeneous Polymeric Phases. Macromolecules, 2002, 35, 9219-9231.	2.2	7
76	Structure of Aggregating Rod Suspensions Under Combined Shear and Electric Fields. Macromolecules, 2009, 42, 7184-7193.	2.2	6
77	Solubility and interfacial segregation of salts in ternary polyelectrolyte blends. Soft Matter, 2017, 13, 4830-4840.	1.2	6
78	Strain-Dependent Nanowrinkle Confinement of Block Copolymers. Nano Letters, 2020, 20, 1433-1439.	4.5	6
79	Correlations in Block Copolymers under Shear. Macromolecules, 2002, 35, 9847-9850.	2.2	5
80	Metop First Generation AVHRR FRAC SST Reanalysis Version 1. Remote Sensing, 2021, 13, 4046.	1.8	4
81	Normal Modes and Dielectric Spectra of Diblock Copolymers in Lamellar Phases. Macromolecules, 2016, 49, 2821-2831.	2.2	3
82	Instabilities in Block Copolymer Films Induced by Compressible Solvents. Journal of Physical Chemistry B, 2007, 111, 402-407.	1.2	2
83	Molecular mass dependence of point-to-set correlation length scale in polymers. Journal of Chemical Physics, 2012, 137, 084904.	1.2	2
84	Filtering cold outliers in SSTs retrieved from early AVHRRs for the second AVHRR GAC reanalysis. , 2021, , .		2
85	AVHRR GAC Sea Surface Temperature Reanalysis Version 2. Remote Sensing, 2022, 14, 3165.	1.8	2
86	Kinetics of microphase segregation in one-dimensional symmetric diblock copolymer systems. European Physical Journal E, 2001, 4, 161-171.	0.7	1
87	Historical and near-real time SST retrievals from MetOp AVHRR FRAC with the advanced clear-sky processor for ocean. , 2021, , .		1
88	Evaluation of the initial NOAA AVHRR GAC SST reanalysis version 2 (RAN2 B01). , 2020, , .		1