

Robert Holyst

List of Publications by Year in descending order

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256
papers

6,399
citations

66234

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times ranked

6299
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparative Analysis of Viscosity of Complex Liquids and Cytoplasm of Mammalian Cells at the Nanoscale. <i>Nano Letters</i> , 2011, 11, 2157-2163.	4.5	212
2	Scaling form of viscosity at all length-scales in poly(ethylene glycol) solutions studied by fluorescence correlation spectroscopy and capillary electrophoresis. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 9025.	1.3	160
3	Hydrogen storage in nanoporous carbon materials: myth and facts. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 1786-1792.	1.3	151
4	Density-Functional Theory for Nematic and Smectic ^A Ordering of Hard Spherocylinders. <i>Physical Review Letters</i> , 1988, 61, 2461-2464.	2.9	113
5	Landau-Peierls instability, x-ray-diffraction patterns, and surface freezing in thin smectic films. <i>Physical Review A</i> , 1991, 44, 3692-3709.	1.0	109
6	Triply periodic surfaces and multiply continuous structures from the Landau model of microemulsions. <i>Physical Review E</i> , 1996, 54, 5012-5027.	0.8	109
7	Storage of Hydrogen at 303 K in Graphite Slitlike Pores from Grand Canonical Monte Carlo Simulation. <i>Journal of Physical Chemistry B</i> , 2005, 109, 17174-17183.	1.2	101
8	Recent advances in bacteriophage-based methods for bacteria detection. <i>Drug Discovery Today</i> , 2018, 23, 448-455.	3.2	101
9	X-ray determination of the molecular tilt and layer fluctuation profiles of freely suspended liquid-crystal films. <i>Physical Review Letters</i> , 1990, 65, 2157-2160.	2.9	97
10	Diffusion and Viscosity in a Crowded Environment: From Nano- to Macroscale. <i>Journal of Physical Chemistry B</i> , 2006, 110, 25593-25597.	1.2	97
11	Crossover regime for the diffusion of nanoparticles in polyethylene glycol solutions: influence of the depletion layer. <i>Soft Matter</i> , 2011, 7, 7181.	1.2	94
12	Copolymers as amphiphiles in ternary mixtures: An analysis employing disorder, equimaxima, and Lifshitz lines. <i>Journal of Chemical Physics</i> , 1992, 96, 7728-7737.	1.2	91
13	Self-Assembly at Different Length Scales: Polyphilic Star-Branched Liquid Crystals and Miktoarm Star Copolymers. <i>Advanced Functional Materials</i> , 2011, 21, 1296-1323.	7.8	91
14	Evaporation of freely suspended single droplets: experimental, theoretical and computational simulations. <i>Reports on Progress in Physics</i> , 2013, 76, 034601.	8.1	83
15	Fluctuations in thin smectic-A films. <i>Physical Review Letters</i> , 1990, 65, 2153-2156.	2.9	82
16	Biological Diffusion coefficients for complete proteome of <i>Escherichia coli</i> . <i>Bioinformatics</i> , 2012, 28, 2971-2978.	1.8	81
17	TMA, A Forgotten Uremic Toxin, but Not TMAO, Is Involved in Cardiovascular Pathology. <i>Toxins</i> , 2019, 11, 490.	1.5	81
18	A Fleming-Viot Particle Representation of the Dirichlet Laplacian. <i>Communications in Mathematical Physics</i> , 2000, 214, 679-703.	1.0	80

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19	Coherent Soft-X-Ray Dynamic Light Scattering from Smectic-A Films. <i>Physical Review Letters</i> , 1999, 82, 755-758.	2.9	75
20	Meniscus and Dislocations in Free-Standing Films of Smectic-A Liquid Crystals. <i>Physical Review Letters</i> , 1997, 78, 1924-1927.	2.9	73
21	Heat Transfer at the Nanoscale: Evaporation of Nanodroplets. <i>Physical Review Letters</i> , 2008, 100, 055701.	2.9	71
22	Phase behavior of gradient copolymers. <i>Journal of Chemical Physics</i> , 1999, 111, 2329-2339.	1.2	68
23	Director orientation at the nematic-phase–isotropic-phase interface for the model of hard spherocylinders. <i>Physical Review A</i> , 1988, 38, 1527-1533.	1.0	67
24	Wetting on a spherical surface. <i>Physical Review B</i> , 1987, 36, 5628-5630.	1.1	66
25	The effect of macromolecular crowding on mobility of biomolecules, association kinetics, and gene expression in living cells. <i>Frontiers in Physics</i> , 2014, 2, .	1.0	66
26	Motion of nanoprobe in complex liquids within the framework of the length-scale dependent viscosity model. <i>Advances in Colloid and Interface Science</i> , 2015, 223, 55-63.	7.0	66
27	Highly reproducible, stable and multiply regenerated surface-enhanced Raman scattering substrate for biomedical applications. <i>Journal of Materials Chemistry</i> , 2011, 21, 8662.	6.7	65
28	A molecular dynamics test of the Hertz–Knudsen equation for evaporating liquids. <i>Soft Matter</i> , 2015, 11, 7201-7206.	1.2	63
29	Quantitative influence of macromolecular crowding on gene regulation kinetics. <i>Nucleic Acids Research</i> , 2014, 42, 727-738.	6.5	55
30	Scale-dependent diffusion of spheres in solutions of flexible and rigid polymers: mean square displacement and autocorrelation function for FCS and DLS measurements. <i>Soft Matter</i> , 2011, 7, 7366.	1.2	54
31	The structure and phase transitions in polymer blends, diblock copolymers and liquid crystalline polymers: The Landau-Ginzburg approach. <i>Macromolecular Theory and Simulations</i> , 1996, 5, 573-643.	0.6	52
32	Scattering Patterns of Self-Assembled Cubic Phases. 2. Analysis of the Experimental Spectra. <i>Langmuir</i> , 2002, 18, 2529-2537.	1.6	49
33	Surface-enhanced Raman spectroscopy introduced into the International Standard Organization (ISO) regulations as an alternative method for detection and identification of pathogens in the food industry. <i>Analytical and Bioanalytical Chemistry</i> , 2017, 409, 1555-1567.	1.9	49
34	High Genus Periodic Gyroid Surfaces of Nonpositive Gaussian Curvature. <i>Physical Review Letters</i> , 1996, 76, 2726-2729.	2.9	47
35	Diffusion on curved, periodic surfaces. <i>Physical Review E</i> , 1999, 60, 302-307.	0.8	47
36	Study of the Landau bicritical point in dense systems of hard biaxial molecules. <i>Molecular Physics</i> , 1990, 69, 193-197.	0.8	46

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37	Scattering Patterns of Self-Assembled Cubic Phases. 1. The Model. <i>Langmuir</i> , 2002, 18, 2519-2528.	1.6	45
38	Efficient Adsorption of Super Greenhouse Gas (Tetrafluoromethane) in Carbon Nanotubes. <i>Environmental Science & Technology</i> , 2008, 42, 2931-2936.	4.6	45
39	Evaporation into vacuum: Mass flux from momentum flux and the Hertz-Knudsen relation revisited. <i>Journal of Chemical Physics</i> , 2009, 130, 074707.	1.2	45
40	Size and Shape of Micelles Studied by Means of SANS, PCS, and FCS. <i>Langmuir</i> , 2010, 26, 9304-9314.	1.6	45
41	Close-packed monolayers of charged Janus-type nanoparticles at the air-water interface. <i>Journal of Colloid and Interface Science</i> , 2012, 375, 180-186.	5.0	45
42	Coupling between meniscus and smectic-A films: Circular and catenoid profiles, induced stress, and dislocation dynamics. <i>Physical Review E</i> , 2000, 62, 3747-3757.	0.8	44
43	Liquid-Crystalline Order in Polymer Systems: Basic Models. <i>Macromolecular Theory and Simulations</i> , 2001, 10, 1-16.	0.6	43
44	Polydispersity and Ordered Phases in Solutions of Rodlike Macromolecules. <i>Physical Review Letters</i> , 1996, 76, 1396-1399.	2.9	42
45	State of Hydrogen in Idealized Carbon Slitlike Nanopores at 77 K. <i>Langmuir</i> , 2006, 22, 1970-1972.	1.6	42
46	Recent Progress in the Detection of Bacteria Using Bacteriophages: A Review. <i>Viruses</i> , 2020, 12, 845.	1.5	42
47	Scaling properties of the morphological measures at the early and intermediate stages of the spinodal decomposition in homopolymer blends. <i>Journal of Chemical Physics</i> , 2000, 112, 6049-6062.	1.2	41
48	A "nano-windmill" driven by a flux of water vapour: a comparison to the rotating ATPase. <i>Nanoscale</i> , 2013, 5, 9732.	2.8	41
49	Configurational transition in a Fleming - Viot-type model and probabilistic interpretation of Laplacian eigenfunctions. <i>Journal of Physics A</i> , 1996, 29, 2633-2642.	1.6	40
50	Ionic Strength-Controlled Deposition of Charged Nanoparticles on a Solid Substrate. <i>Journal of Physical Chemistry C</i> , 2011, 115, 19096-19103.	1.5	40
51	Scaling of activation energy for macroscopic flow in poly(ethylene glycol) solutions: Entangled vs Non-entangled crossover. <i>Polymer</i> , 2014, 55, 4651-4657.	1.8	39
52	Apparent Anomalous Diffusion in the Cytoplasm of Human Cells: The Effect of Probes' Polydispersity. <i>Journal of Physical Chemistry B</i> , 2017, 121, 9831-9837.	1.2	39
53	Activation Energy for Mobility of Dyes and Proteins in Polymer Solutions: From Diffusion of Single Particles to Macroscale Flow. <i>Physical Review Letters</i> , 2013, 111, 228301.	2.9	38
54	Bacteriophage-Based Bioconjugates as a Flow Cytometry Probe for Fast Bacteria Detection. <i>Bioconjugate Chemistry</i> , 2017, 28, 419-425.	1.8	38

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55	Interfacial properties of amphiphilic systems: The approach to Lifshitz points. <i>Physical Review A</i> , 1991, 43, 3157-3160.	1.0	37
56	Thinning transitions in free-standing liquid-crystal films as the successive formation of dislocation loops. <i>Physical Review E</i> , 1999, 60, R2456-R2459.	0.8	37
57	Phase Transition in Salt-Free Catanionic Surfactant Mixtures Induced by Temperature. <i>Langmuir</i> , 2010, 26, 34-40.	1.6	36
58	Dense Layer of Bacteriophages Ordered in Alternating Electric Field and Immobilized by Surface Chemical Modification as Sensing Element for Bacteria Detection. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 19622-19629.	4.0	36
59	Dynamic correlation functions for finite and infinite smectic-A systems: Theory and experiment. <i>Physical Review E</i> , 1998, 58, 2027-2040.	0.8	35
60	Scaling of the Euler Characteristic, Surface Area, and Curvatures in the Phase Separating or Ordering Systems. <i>Physical Review Letters</i> , 2001, 86, 240-243.	2.9	35
61	Insight into the fission mechanism by quantitative characterization of Drp1 protein distribution in the living cell. <i>Scientific Reports</i> , 2018, 8, 8122.	1.6	35
62	Small Crowders Slow Down Kinesin-1 Stepping by Hindering Motor Domain Diffusion. <i>Physical Review Letters</i> , 2015, 115, 218102.	2.9	34
63	Some features of soft matter systems. <i>Soft Matter</i> , 2005, 1, 329.	1.2	33
64	Formation and structure of PEI/DNA complexes: quantitative analysis. <i>Soft Matter</i> , 2011, 7, 6967.	1.2	33
65	Nanoscale Viscosity of Cytoplasm Is Conserved in Human Cell Lines. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 6914-6920.	2.1	33
66	From the plateau problem to periodic minimal surfaces in lipids, surfactants and diblock copolymers. <i>Macromolecular Theory and Simulations</i> , 1996, 5, 321-332.	0.6	32
67	Movement of Proteins in an Environment Crowded by Surfactant Micelles: Anomalous versus Normal Diffusion. <i>Journal of Physical Chemistry B</i> , 2006, 110, 7367-7373.	1.2	32
68	TMAO, a seafood-derived molecule, produces diuresis and reduces mortality in heart failure rats. <i>ELife</i> , 2020, 9, .	2.8	32
69	Front propagation into unstable and metastable states in smectic-C* liquid crystals: Linear and nonlinear marginal-stability analysis. <i>Physical Review E</i> , 1995, 52, 1773-1777.	0.8	31
70	Evaluation of Ligand-Selector Interaction from Effective Diffusion Coefficient. <i>Analytical Chemistry</i> , 2010, 82, 5463-5469.	3.2	31
71	Distribution of Carbon Nanotube Sizes from Adsorption Measurements and Computer Simulation. <i>Journal of Physical Chemistry B</i> , 2005, 109, 14659-14666.	1.2	30
72	Incorporation of Carbon Nanotubes into a Lyotropic Liquid Crystal by Phase Separation in the Presence of a Hydrophilic Polymer. <i>Langmuir</i> , 2010, 26, 3562-3568.	1.6	30

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73	Ordering of bacteriophages in the electric field: Application for bacteria detection. <i>Sensors and Actuators B: Chemical</i> , 2016, 224, 233-240.	4.0	30
74	Langmuir and Langmuir-Blodgett Films of Unsymmetrical and Fully Condensed Polyhedral Oligomeric Silsesquioxanes (POSS). <i>Journal of Physical Chemistry C</i> , 2015, 119, 27007-27017.	1.5	29
75	Adsorption of bacteriophages on polypropylene labware affects the reproducibility of phage research. <i>Scientific Reports</i> , 2021, 11, 7387.	1.6	29
76	Comparative study of the nematic phase-isotropic phase transition in systems of uniaxial hard cores. <i>Molecular Physics</i> , 1989, 68, 381-390.	0.8	28
77	Morphology of Surfaces in Mesoscopic Polymers, Surfactants, Electrons, or Reaction-Diffusion Systems: Methods, Simulations, and Measurements. <i>Advances in Chemical Physics</i> , 2002, , 141-239.	0.3	28
78	Manipulation of multiple-responsive fluorescent supramolecular materials based on the inclusion complexation of cyclodextrins with Tyloxapol. <i>Journal of Materials Chemistry C</i> , 2015, 3, 8104-8113.	2.7	28
79	Antibacterial and anticancer PDMS surface for mammalian cell growth using the Chinese herb extract paeonol(4-methoxy-2-hydroxyacetophenone). <i>Scientific Reports</i> , 2016, 6, 38973.	1.6	28
80	Electrodeposition for preparation of efficient surface-enhanced Raman scattering-active silver nanoparticle substrates for neurotransmitter detection. <i>Electrochimica Acta</i> , 2013, 89, 284-291.	2.6	27
81	Determination of oligomerization state of Drp1 protein in living cells at nanomolar concentrations. <i>Scientific Reports</i> , 2019, 9, 5906.	1.6	27
82	When Boundaries Dominate: Dislocation Dynamics in Smectic Films. <i>Physical Review Letters</i> , 2001, 88, 015503.	2.9	26
83	Evaporation of a Sub-Micrometer Droplet. <i>Journal of Physical Chemistry B</i> , 2005, 109, 11367-11372.	1.2	26
84	Dynamics of Phase Separation in Polymer Blends Revisited: Morphology, Spinodal, Noise, and Nucleation. <i>Macromolecular Theory and Simulations</i> , 2008, 17, 263-273.	0.6	26
85	Characterization of <i>Caulobacter crescentus</i> FtsZ Protein Using Dynamic Light Scattering. <i>Journal of Biological Chemistry</i> , 2012, 287, 23878-23886.	1.6	26
86	The effect of depletion layer on diffusion of nanoparticles in solutions of flexible and polydisperse polymers. <i>Soft Matter</i> , 2012, 8, 11173.	1.2	26
87	Dynamic critical behavior of the Landau-Peierls fluctuations: Scaling form of the dynamic density autocorrelation function for smectic-A films. <i>Physical Review E</i> , 1999, 59, 3048-3058.	0.8	24
88	Photonic properties of multicontinuous cubic phases. <i>Physical Review B</i> , 2002, 66, .	1.1	24
89	Single-Walled Carbon Nanotube/Lyotropic Liquid Crystal Hybrid Materials Fabricated by a Phase Separation Method in the Presence of Polyelectrolyte. <i>Langmuir</i> , 2010, 26, 8821-8828.	1.6	24
90	Kinetics and equilibrium constants of oligonucleotides at low concentrations. Hybridization and melting study. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 10798-10807.	1.3	24

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91	Influence of nano-viscosity and depletion interactions on cleavage of DNA by enzymes in glycerol and poly(ethylene glycol) solutions: qualitative analysis. <i>Soft Matter</i> , 2011, 7, 3092-3099.	1.2	23
92	Gold Micro-Flowers: One-Step Fabrication of Efficient, Highly Reproducible Surface-Enhanced Raman Spectroscopy Platform. <i>Plasmonics</i> , 2011, 6, 697-704.	1.8	23
93	Nanoscale transport of energy and mass flux during evaporation of liquid droplets into inert gas: computer simulations and experiments. <i>Soft Matter</i> , 2013, 9, 7766.	1.2	23
94	Electrodeposition of Well-Adhered Multifarious Au Particles at a Solid Toluene Aqueous Electrolyte Three-Phase Junction. <i>Journal of Physical Chemistry C</i> , 2012, 116, 22476-22485.	1.5	22
95	Transport of Mass at the Nanoscale during Evaporation of Droplets: the Hertz-Knudsen Equation at the Nanoscale. <i>Journal of Physical Chemistry C</i> , 2013, 117, 1146-1150.	1.5	22
96	Towards Organized Hybrid Nanomaterials at the Air/Water Interface Based on Liquid-Crystal/ZnO Nanocrystals. <i>Chemistry - A European Journal</i> , 2015, 21, 16941-16947.	1.7	22
97	Denaturation of proteins by surfactants studied by the Taylor dispersion analysis. <i>PLoS ONE</i> , 2017, 12, e0175838.	1.1	22
98	Exact sum rules and geometrical packing effects in the system of hard rods near a hard wall in three dimensions. <i>Molecular Physics</i> , 1989, 68, 391-400.	0.8	21
99	Evaporation of liquid droplets of nano- and micro-meter size as a function of molecular mass and intermolecular interactions: experiments and molecular dynamics simulations. <i>Soft Matter</i> , 2017, 13, 5858-5864.	1.2	21
100	Scattering on triply periodic minimal surfaces—the effect of the topology, Debye-Waller, and molecular form factors. <i>Journal of Chemical Physics</i> , 2000, 113, 3772-3779.	1.2	20
101	Photoactive Langmuir-Blodgett, Freely Suspended and Free Standing Films of Carboxylate Ligand-Coated ZnO Nanocrystals. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 13532-13541.	4.0	20
102	Determination of equilibrium and rate constants for complex formation by fluorescence correlation spectroscopy supplemented by dynamic light scattering and Taylor dispersion analysis. <i>Soft Matter</i> , 2016, 12, 8186-8194.	1.2	20
103	Fluorescence correlation spectroscopy for multiple-site equilibrium binding: a case of doxorubicin-DNA interaction. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 1572-1577.	1.3	20
104	Diffusion and flow in complex liquids. <i>Soft Matter</i> , 2020, 16, 114-124.	1.2	20
105	Large-scale molecular dynamics verification of the Rayleigh-Plesset approximation for collapse of nanobubbles. <i>Physical Review E</i> , 2010, 82, 066309.	0.8	19
106	Implications of macromolecular crowding for protein-protein association kinetics in the cytoplasm of living cells. <i>Soft Matter</i> , 2013, 9, 4386.	1.2	19
107	How can macromolecular crowding inhibit biological reactions? The enhanced formation of DNA nanoparticles. <i>Scientific Reports</i> , 2016, 6, 22033.	1.6	19
108	Phenotypic plasticity of <i>Escherichia coli</i> upon exposure to physical stress induced by ZnO nanorods. <i>Scientific Reports</i> , 2019, 9, 8575.	1.6	19

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109	Morphological changes during the order-disorder transition in the two- and three-dimensional systems of scalar nonconserved order parameters. <i>Physical Review E</i> , 2002, 66, 046121.	0.8	18
110	Infinite networks of surfaces. <i>Nature Materials</i> , 2005, 4, 510-511.	13.3	18
111	Taylor Dispersion Analysis in Coiled Capillaries at High Flow Rates. <i>Analytical Chemistry</i> , 2013, 85, 4051-4056.	3.2	18
112	Sterilization of polydimethylsiloxane surface with Chinese herb extract: a new antibiotic mechanism of chlorogenic acid. <i>Scientific Reports</i> , 2015, 5, 10464.	1.6	18
113	Influence of nanomechanical stress induced by ZnO nanoparticles of different shapes on the viability of cells. <i>Soft Matter</i> , 2016, 12, 4162-4169.	1.2	18
114	Fast and efficient deposition of broad range of analytes on substrates for surface enhanced Raman spectroscopy. <i>Biosensors and Bioelectronics</i> , 2020, 156, 112124.	5.3	18
115	Quenchâ€jump sequence in phase separation in polymer blends. <i>Journal of Chemical Physics</i> , 2002, 117, 1886-1892.	1.2	17
116	Scaling Equation for Viscosity of Polymer Mixtures in Solutions with Application to Diffusion of Molecular Probes. <i>Macromolecules</i> , 2017, 50, 4555-4561.	2.2	17
117	Ions in an AC Electric Field: Strong Long-Range Repulsion between Oppositely Charged Surfaces. <i>Physical Review Letters</i> , 2020, 125, 056001.	2.9	17
118	Growth of Polystyrene Domains in Isotropic, Nematic and Smectic Phase of 8CB Liquid Crystal. <i>Macromolecules</i> , 2003, 36, 6903-6913.	2.2	16
119	From complex structures to complex processes: Percolation theory applied to the formation of a city. <i>Physical Review E</i> , 2009, 80, 037102.	0.8	16
120	Eu(III)-coupled luminescent multi-walled carbon nanotubes in surfactant solutions. <i>Carbon</i> , 2012, 50, 436-443.	5.4	16
121	Goldâ€Oxoborate Nanocomposites and Their Biomedical Applications. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 3931-3939.	4.0	16
122	Coupling of Polarization and Dislocation in Ferroelectric Smectic Liquid-Crystal Films. <i>Physical Review Letters</i> , 1998, 81, 5848-5851.	2.9	15
123	Single-chain statistics in polymer systems. <i>Progress in Polymer Science</i> , 1999, 24, 1045-1093.	11.8	15
124	Periodic surfaces of simple and complex topology: Comparison of scattering patterns. <i>Physical Review E</i> , 2001, 64, 021501.	0.8	15
125	Contact Angle between Smectic Film and Its Meniscus. <i>Langmuir</i> , 2002, 18, 1511-1517.	1.6	15
126	Multiple photonic band gaps in the structures composed of core-shell particles. <i>Journal of Applied Physics</i> , 2003, 94, 4244-4247.	1.1	15

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127	Net Charge and Electrophoretic Mobility of Lysozyme Charge Ladders in Solutions of Nonionic Surfactant. <i>Journal of Physical Chemistry B</i> , 2007, 111, 5503-5510.	1.2	15
128	Thermodynamics for Chemists, Physicists and Engineers. , 2012, , .		15
129	Length-scale dependent transport properties of colloidal and protein solutions for prediction of crystal nucleation rates. <i>Nanoscale</i> , 2014, 6, 10340-10346.	2.8	15
130	Quasi-wetting on a sphere. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1988, 149, 622-630.	1.2	14
131	Smectic-A, crystalline and columnar ordering in the system of hard parallel cylinders. <i>Molecular Physics</i> , 1990, 71, 561-566.	0.8	14
132	Dislocations in lamellar and liquid crystal films: Equilibrium location, edge profiles, and phase transitions. <i>Physical Review Letters</i> , 1994, 72, 4097-4100.	2.9	14
133	Scattering Patterns of Multiply Continuous Cubic Phases in Block Copolymers. I. The Model. <i>Macromolecules</i> , 2003, 36, 9181-9190.	2.2	14
134	Percolation-to-droplets transition during spinodal decomposition in polymer blends, morphology analysis. <i>Journal of Chemical Physics</i> , 2004, 121, 1141-1147.	1.2	14
135	Minimization of the Renyi entropy production in the space-partitioning process. <i>Physical Review E</i> , 2005, 71, 046130.	0.8	14
136	Aggregation and Layering Transitions in Thin Films of X- and T-shaped Bolaamphiphiles at the Air-Water Interface. <i>Chemistry - A European Journal</i> , 2011, 17, 5861-5873.	1.7	14
137	Three Steps of Hierarchical Self Assembly Toward a Stable and Efficient Surface Enhanced Raman Spectroscopy Platform. <i>Chemistry of Materials</i> , 2012, 24, 3667-3673.	3.2	14
138	A "wrap-and-wrest" mechanism of fluorescence quenching of CdSe/ZnS quantum dots by surfactant molecules. <i>Nanoscale</i> , 2013, 5, 9908.	2.8	14
139	Tracking structural transitions of bovine serum albumin in surfactant solutions by fluorescence correlation spectroscopy and fluorescence lifetime analysis. <i>Soft Matter</i> , 2015, 11, 2512-2518.	1.2	14
140	Confinement Induced Topological Fluctuations in a System with Internal Surfaces. <i>Physical Review Letters</i> , 1997, 79, 1499-1502.	2.9	13
141	Reversible aggregation of X-Shaped bolaamphiphiles with partially fluorinated lateral chains at the air/water interface. <i>Chemical Communications</i> , 2010, 46, 1896-1898.	2.2	13
142	GaN-based platforms with Au-Ag alloyed metal layer for surface enhanced Raman scattering. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	13
143	Formation of net-like patterns of gold nanoparticles in liquid crystal matrix at the air-water interface. <i>Journal of Nanoparticle Research</i> , 2012, 14, 826.	0.8	13
144	Towards improved precision in the quantification of surface-enhanced Raman scattering (SERS) enhancement factors: a renewed approach. <i>Analyst</i> , The, 2015, 140, 489-496.	1.7	13

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145	Flux and storage of energy in nonequilibrium stationary states. <i>Physical Review E</i> , 2019, 99, 042118.	0.8	13
146	Photoluminescent, Ferromagnetic, and Hydrophobic Sponges for Oil/Water Separation. <i>ACS Omega</i> , 2020, 5, 15077-15082.	1.6	13
147	Single-chain statistics and the upper wave-vector cutoff in polymer blends. <i>Physical Review E</i> , 1994, 50, 2087-2092.	0.8	12
148	Photonic properties of an inverted face centered cubic opal under stretch and shear. <i>Applied Physics Letters</i> , 2003, 82, 1553-1555.	1.5	12
149	Evaporation of a thin liquid film. <i>Journal of Chemical Physics</i> , 2005, 122, 024713.	1.2	12
150	Micro- and macro-shear viscosity in dispersed lamellar phases. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2008, 148, 134-140.	1.0	12
151	Self-Assembly of Gold Nanoparticles into 2D Arrays Induced by Bolaamphiphilic Ligands. <i>Journal of Physical Chemistry C</i> , 2013, 117, 24056-24062.	1.5	12
152	Quantifying Nanoscale Viscosity and Structures of Living Cells Nucleus from Mobility Measurements. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 294-301.	2.1	12
153	Reorientational angle distribution and diffusion coefficient for nodal and cylindrical surfaces. <i>Journal of Chemical Physics</i> , 2000, 113, 9920-9929.	1.2	11
154	Scattering patterns of self-assembled gyroid cubic phases in amphiphilic systems. <i>Journal of Chemical Physics</i> , 2001, 115, 1095-1099.	1.2	11
155	Demixing/Mixing of Polystyrene with Poly(methylphenylsiloxane) in a Two-Step Cooling/Heating Process: A Jump Spinodal Specification Method. <i>Macromolecules</i> , 2002, 35, 9117-9129.	2.2	11
156	Ordering in Surfactant Mixtures Induced by Polymers. <i>Journal of Physical Chemistry B</i> , 2005, 109, 4881-4886.	1.2	11
157	Modeling of the Hysteresis Phenomena in Finite-Sized Slitlike Nanopores. Revision of the Recent Results by Rigorous Numerical Analysis. <i>Langmuir</i> , 2005, 21, 6613-6627.	1.6	11
158	Accurate Genetic Switch in <i>Escherichia coli</i> : Novel Mechanism of Regulation by Co-repressor. <i>Journal of Molecular Biology</i> , 2008, 377, 1002-1014.	2.0	11
159	Collective Rotations of Ferroelectric Liquid Crystals at the Air/Water Interface. <i>Langmuir</i> , 2008, 24, 12354-12363.	1.6	11
160	Polymer-induced ordering and phase separation in ionic surfactants. <i>Journal of Colloid and Interface Science</i> , 2010, 342, 93-102.	5.0	11
161	Ionic polarization of liquid-liquid interfaces; dynamic control of the rate of electro-coalescence. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	11
162	Quantitative fluorescence correlation spectroscopy in three-dimensional systems under stimulated emission depletion conditions. <i>Optica</i> , 2017, 4, 982.	4.8	11

#	ARTICLE	IF	CITATIONS
163	Confined complex liquids: Passages, droplets, permanent deformations, and order–disorder transitions. <i>Journal of Chemical Physics</i> , 1998, 109, 11051-11060.	1.2	10
164	Minimization of the Renyi entropy production in the stationary states of the Brownian process with matched death and birth rates. <i>Physical Review E</i> , 2004, 69, 016110.	0.8	10
165	Three-dimensional space partition based on the first Laplacian eigenvalues in cells. <i>Physical Review E</i> , 2008, 77, 056101.	0.8	10
166	Selected optical properties of core/shell ZnMnTe/ZnO nanowire structures. <i>Physica Status Solidi (B): Basic Research</i> , 2011, 248, 1592-1595.	0.7	10
167	Autonomous Self-Assembly of Ionic Nanoparticles into Hexagonally Close-Packed Lattices at a Planar Oil–Water Interface. <i>Chemistry - A European Journal</i> , 2012, 18, 2235-2238.	1.7	10
168	Analysis of Brightness of a Single Fluorophore for Quantitative Characterization of Biochemical Reactions. <i>Journal of Physical Chemistry B</i> , 2020, 124, 1941-1948.	1.2	10
169	Generalized Ornstein-Zernike approach to many-particle equilibrium correlation functions. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1989, 157, 857-890.	1.2	9
170	Kinetics of the droplet formation at the early and intermediate stages of the spinodal decomposition in homopolymer blends. <i>Macromolecular Theory and Simulations</i> , 2000, 9, 661-674.	0.6	9
171	Annihilation of point defects on a line. <i>Physical Review E</i> , 2002, 65, 041711.	0.8	9
172	A method for rapid screening of interactions of pharmacologically active compounds with albumin. <i>Analytica Chimica Acta</i> , 2015, 855, 51-59.	2.6	9
173	Stability of cytoplasmic nanoviscosity during cell cycle of HeLa cells synchronized with Aphidicolin. <i>Scientific Reports</i> , 2019, 9, 16486.	1.6	9
174	Transport of nanoprobe in multicellular spheroids. <i>Nanoscale</i> , 2020, 12, 19880-19887.	2.8	9
175	Scattering Patterns of Multiply Continuous Cubic Phases in Block Copolymers. II. Application to Various Triply Periodic Architectures. <i>Macromolecules</i> , 2003, 36, 9191-9198.	2.2	8
176	Pattern formation in nonextensive thermodynamics: Selection criterion based on the Renyi entropy production. <i>Journal of Chemical Physics</i> , 2005, 122, 174105.	1.2	8
177	Influence of Poly(ethylene glycol) Molecular Mass on Separation and Ordering in Solutions of Cationic Nonionic Surfactants: A Depletion Interactions and Steric Effects. <i>Journal of Physical Chemistry B</i> , 2007, 111, 7948-7953.	1.2	8
178	Collapse of a nanoscopic void triggered by a spherically symmetric traveling sound wave. <i>Physical Review E</i> , 2012, 85, 056303.	0.8	8
179	A depletion layer in polymer solutions at an interface oscillating at the subnano- to submicrometer scale. <i>Soft Matter</i> , 2014, 10, 7762-7768.	1.2	8
180	Nanoscope Approach to Quantification of Equilibrium and Rate Constants of Complex Formation at Single-Molecule Level. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 5785-5791.	2.1	8

#	ARTICLE	IF	CITATIONS
181	Nematic-wall surface tension for perfectly aligned hard linear molecules. <i>Molecular Physics</i> , 1988, 65, 1081-1087.	0.8	7
182	Memory Effects in Homopolymer Blends during Annealing. <i>Macromolecules</i> , 2002, 35, 7718-7724.	2.2	7
183	Late Stage of the Phase-Separation Process: Coalescence-Induced Coalescence, Gravitational Sedimentation, and Collective Evaporation Mechanisms. <i>Langmuir</i> , 2008, 24, 6433-6440.	1.6	7
184	Stable, ordered multilayers of partially fluorinated bolaamphiphiles at the air-water interface. <i>Soft Matter</i> , 2012, 8, 5262.	1.2	7
185	Motion of Molecular Probes and Viscosity Scaling in Polyelectrolyte Solutions at Physiological Ionic Strength. <i>PLoS ONE</i> , 2016, 11, e0161409.	1.1	7
186	Quantitative analysis of biochemical processes in living cells at a single-molecule level: a case of olaparib-PARP1 (DNA repair protein) interactions. <i>Analyst</i> , The, 2021, 146, 7131-7143.	1.7	7
187	Phase Separation in Binary Polymer/Liquid Crystal Mixtures: Network Breaking and Domain Growth by Coalescence-induced Coalescence. <i>Journal of Physical Chemistry B</i> , 2006, 110, 9869-9875.	1.2	6
188	Kinetic Trapping of Large Amount of Long Polymers in Nanopores. <i>Journal of the American Chemical Society</i> , 2007, 129, 13398-13399.	6.6	6
189	Single-molecule brightness analysis for the determination of anticancer drug interactions with DNA. <i>Analyst</i> , The, 2020, 145, 6600-6606.	1.7	6
190	Cellular delivery of dinucleotides by conjugation with small molecules: targeting translation initiation for anticancer applications. <i>Chemical Science</i> , 2021, 12, 10242-10251.	3.7	6
191	Macroscopic Viscosity of Polymer Solutions from the Nanoscale Analysis. <i>ACS Applied Polymer Materials</i> , 2021, 3, 2813-2822.	2.0	6
192	The Hinge Region Strengthens the Nonspecific Interaction between Lac-Repressor and DNA: A Computer Simulation Study. <i>PLoS ONE</i> , 2016, 11, e0152002.	1.1	6
193	Topological Lifshitz Line, Off-Specular Scattering, and Mesoporous Materials. <i>Physical Review Letters</i> , 2000, 85, 130-133.	2.9	5
194	Approach to equilibrium of particles diffusing on curved surfaces. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2001, 295, 371-378.	1.2	5
195	Hidden Minima of the Gibbs Free Energy Revealed in a Phase Separation in Polymer/Surfactant/Water Mixture. <i>Journal of Physical Chemistry B</i> , 2005, 109, 8533-8537.	1.2	5
196	Binary and graded evolution in time in a simple model of gene induction. <i>Physical Review E</i> , 2010, 82, 052902.	0.8	5
197	Immobilization of galactose oxidase on self-assembled monolayers of thiols on Au and Ag surfaces. <i>Journal of Raman Spectroscopy</i> , 2012, 43, 959-962.	1.2	5
198	Electrochemical pathway for the quantification of SERS enhancement factor. <i>Electrochemistry Communications</i> , 2014, 49, 103-106.	2.3	5

#	ARTICLE	IF	CITATIONS
199	Propagation of Oscillating Chemical Signals through Reaction Networks. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 4520-4525.	7.2	5
200	Scaling equation for viscosity of polydimethylsiloxane in ethyl acetate: From dilute to concentrated solutions. <i>Polymer</i> , 2020, 203, 122779.	1.8	5
201	Continuous nonequilibrium transition driven by heat flow. <i>Physical Review E</i> , 2021, 104, 024102.	0.8	5
202	Swelling and shrinking of polymer chains in homopolymer blends. <i>Macromolecular Theory and Simulations</i> , 1998, 7, 447-456.	0.6	4
203	Morphology from the maximum entropy principle: Domains in a phase ordering system and a crack pattern in broken glass. <i>Physical Review E</i> , 2002, 65, 057105.	0.8	4
204	Comment on "Tracer Diffusion in a Dislocated Lamellar System" Physical Review Letters, 2003, 91, 039801; author reply 039802.	2.9	4
205	A Morphological Study of the Formation of PdH _x on Thin Palladium Films. <i>Journal of Physical Chemistry B</i> , 2004, 108, 7373-7376.	1.2	4
206	Condensation of a vapor bubble in submicrometer container. <i>Journal of Chemical Physics</i> , 2005, 123, 104705.	1.2	4
207	Tiling a Plane in a Dynamical Process and its Applications to Arrays of Quantum Dots, Drums, and Heat Transfer. <i>Physical Review Letters</i> , 2005, 95, 088304.	2.9	4
208	Coalescence-Induced Coalescence and Dimensional Crossover during the Phase Separation in Ternary Surfactant/Polymer/Water Mixtures. <i>Journal of Physical Chemistry B</i> , 2005, 109, 4419-4424.	1.2	4
209	Brownian motion with inert drift, but without flux: A model. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2007, 384, 278-284.	1.2	4
210	Spontaneous self-assembly of partially fluorinated bolaamphiphiles into ordered layered structures. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 14365.	1.3	4
211	Structural evolution of reverse vesicles from a salt-free catanionic surfactant system in toluene. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013, 436, 49-56.	2.3	4
212	Fluorescence correlation spectroscopy analysis for accurate determination of proportion of doubly labeled DNA in fluorescent DNA pool for quantitative biochemical assays. <i>Biosensors and Bioelectronics</i> , 2014, 51, 8-15.	5.3	4
213	Method for the analysis of contribution of sliding and hopping to a facilitated diffusion of DNA-binding protein: Application to in vivo data. <i>Physical Review E</i> , 2015, 92, 022721.	0.8	4
214	Analytical form of the autocorrelation function for the fluorescence correlation spectroscopy. <i>Soft Matter</i> , 2017, 13, 1267-1275.	1.2	4
215	Storage of Energy in Constrained Non-Equilibrium Systems. <i>Entropy</i> , 2020, 22, 557.	1.1	4
216	Joint effect of surfactants and cephalixin on the formation of Escherichia coli filament. <i>Ecotoxicology and Environmental Safety</i> , 2020, 199, 110750.	2.9	4

#	ARTICLE	IF	CITATIONS
217	Determination of the mean-field stability temperature in polymer blends. <i>Physical Review Letters</i> , 1994, 72, 2304-2304.	2.9	3
218	Single chain conformations in the system of symmetric and asymmetric diblock copolymers. <i>Macromolecular Theory and Simulations</i> , 1999, 8, 328-342.	0.6	3
219	Mechanisms for facilitated target location and the optimal number of molecules in the diffusion search process. <i>Physical Review E</i> , 2001, 64, 011914.	0.8	3
220	The unphysical pinning of the domain growth during the separation of homopolymer blends near the spinodal. <i>Journal of Chemical Physics</i> , 2004, 120, 5802-5808.	1.2	3
221	Chirality-Biased Point Defects Dynamics on a Disclination Line in a Nematic Liquid Crystal. <i>Journal of Physical Chemistry B</i> , 2005, 109, 9712-9718.	1.2	3
222	Kinetics and Dynamics of Dissolution/Mixing of a High-Viscosity Liquid Phase in a Low-Viscosity Solvent Phase. <i>Journal of Physical Chemistry B</i> , 2007, 111, 11907-11914.	1.2	3
223	Challenges in thermodynamics: Irreversible processes, nonextensive entropies, and systems without equilibrium states. <i>Pure and Applied Chemistry</i> , 2009, 81, 1719-1726.	0.9	3
224	Dynamic charge separation in a liquid crystalline meniscus. <i>Soft Matter</i> , 2009, 5, 2352-2360.	1.2	3
225	New One-Pot Technique to Introduce Charged Nanoparticles into a Lyotropic Liquid Crystal Matrix. <i>Langmuir</i> , 2011, 27, 3937-3944.	1.6	3
226	Micro-engineered liquid flow dissolves solids without dispersing them. <i>Nature</i> , 2019, 574, 181-182.	18.7	3
227	Ion Complexation Explains Orders of Magnitude Changes in the Equilibrium Constant of Biochemical Reactions in Buffers Crowded by Nonionic Compounds. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 112-117.	2.1	3
228	Transient dynamics in the outflow of energy from a system in a nonequilibrium stationary state. <i>Physical Review E</i> , 2022, 105, .	0.8	3
229	Polymer Domain Growth in Ordered Liquid Crystalline Matrices. <i>Physical Review Letters</i> , 2003, 90, 115504.	2.9	2
230	Relaxation processes in mixtures of liquid crystals and polymers near phase boundaries and during phase separation. <i>Journal of Chemical Physics</i> , 2004, 120, 8277-8282.	1.2	2
231	Global symmetry breaking in the nonconserved order parameter system during phase ordering. <i>European Physical Journal E</i> , 2005, 16, 247-251.	0.7	2
232	Relaxation Processes in Semidilute Solutions of Polymers in Liquid Crystal Solvents. <i>Journal of Physical Chemistry B</i> , 2005, 109, 16252-16262.	1.2	2
233	Hollow microtubes made of carbon, boron and gold: novel semiconducting nanocomposite material for applications in electrochemistry and temperature sensing. <i>RSC Advances</i> , 2015, 5, 64083-64090.	1.7	2
234	Propagation of Oscillating Chemical Signals through Reaction Networks. <i>Angewandte Chemie</i> , 2019, 131, 4568-4573.	1.6	2

#	ARTICLE	IF	CITATIONS
235	Energy storage in steady states under cyclic local energy input. <i>Physical Review E</i> , 2020, 101, 012127.	0.8	2
236	Influence of the Electric Field on Edge Dislocations in Smectics. <i>Journal De Physique II</i> , 1995, 5, 1525-1532.	0.9	2
237	Entanglement of polymer chains in hypertonic medium enhances the delivery of DNA and other biomacromolecules into cells. <i>Journal of Colloid and Interface Science</i> , 2022, 627, 270-282.	5.0	2
238	Orientation of Liquid-Crystal Molecules at the Nematic-Isotropic Interface and the Nematic Free Surface. <i>Molecular Crystals and Liquid Crystals Incorporating Nonlinear Optics</i> , 1990, 192, 65-67.	0.3	1
239	Dislocations as Flexible Objects: Interactions and Unbinding Transition. <i>Europhysics Letters</i> , 1994, 28, 647-652.	0.7	1
240	Edge profiles at lamellar phase/melt interfaces. <i>Macromolecular Theory and Simulations</i> , 1994, 3, 817-824.	0.6	1
241	SERS Active Surface Based on Au-Coated Porous GaN. , 2010, , .		1
242	Fractal trace of earthworms. <i>Physical Review E</i> , 2013, 87, 052120.	0.8	1
243	A flexible fluorescence correlation spectroscopy based method for quantification of the DNA double labeling efficiency with precision control. <i>Laser Physics Letters</i> , 2014, 11, 085602.	0.6	1
244	Go with the flow. <i>Nature Physics</i> , 2015, 11, 305-306.	6.5	1
245	Cell extract gels as an example of active matter. <i>Rheologica Acta</i> , 2020, 59, 575-582.	1.1	1
246	Influence of molecular rebinding on the reaction rate of complex formation. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 19343-19351.	1.3	1
247	Two Intercalation Mechanisms of Oxazole Yellow Dimer (YOYO-1) into DNA. <i>Molecules</i> , 2021, 26, 3748.	1.7	1
248	Internal energy in compressible Poiseuille flow. <i>Physical Review E</i> , 2021, 104, 055107.	0.8	1
249	2D Brownian motion in a system of reflecting barriers: effective diffusivity by a sampling method. <i>Journal of Physics A</i> , 1994, 27, 631-644.	1.6	0
250	Phase behavior of gradient copolymers. <i>AIP Conference Proceedings</i> , 2000, , .	0.3	0
251	Influence of the free-energy functional form on simulated morphology of spinodally decomposing blends. <i>Physical Review E</i> , 2000, 62, 6821-6830.	0.8	0
252	Liquids with internal surfaces at and out of equilibrium: the homogeneity index. <i>Journal of Molecular Liquids</i> , 2004, 112, 29-35.	2.3	0

#	ARTICLE	IF	CITATIONS
253	Publisher's Note: From complex structures to complex processes: Percolation theory applied to the formation of a city [Phys. Rev. E80, 037102 (2009)]. Physical Review E, 2009, 80, .	0.8	0
254	ZnTe nanowires overgrown by atomic layer deposited (Zn,Co) oxides: Raman scattering studies. , 2012, , .		0
255	Self-Stabilized Giant Aggregates in Water from Room-Temperature Ionic Liquids with an Asymmetric Polarâ€“Apolarâ€“Polar Architecture. Journal of Physical Chemistry B, 2020, 124, 4651-4660.	1.2	0
256	Abstract P3021: Trimethylamine but Not Trimethylamine N-Oxide Increases Blood Pressure in Rats, Affects Viability of Vascular Smooth Muscle Cells and Degrades Protein Structure. Hypertension, 2019, 74, .	1.3	0