Fajun Zhang

List of Publications by Year
in descending order

95 papers	3,506 citations	126907 33 h-index	155660 55 g-index
95 all docs	95 docs citations	95 times ranked	3131 citing authors

#	Article	IF	Citations
1	Protein Interactions Studied by SAXS:Â Effect of Ionic Strength and Protein Concentration for BSA in Aqueous Solutions. Journal of Physical Chemistry B, 2007, 111, 251-259.	2.6	252
2	Protein self-diffusion in crowded solutions. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11815-11820.	7.1	207
3	Reentrant Condensation of Proteins in Solution Induced by Multivalent Counterions. Physical Review Letters, 2008, 101, 148101.	7.8	184
4	Real-Time Observation of Nonclassical Protein Crystallization Kinetics. Journal of the American Chemical Society, 2015, 137, 1485-1491.	13.7	112
5	Universality of protein reentrant condensation in solution induced by multivalent metal ions. Proteins: Structure, Function and Bioinformatics, 2010, 78, 3450-3457.	2.6	106
6	Observation of Inverted Phases in Poly(styrene-b-butadiene-b-styrene) Triblock Copolymer by Solvent-Induced Orderâˆ'Disorder Phase Transition. Macromolecules, 2000, 33, 9561-9567.	4.8	101
7	Interplay of pH and Binding of Multivalent Metal Ions: Charge Inversion and Reentrant Condensation in Protein Solutions. Journal of Physical Chemistry B, 2013, 117, 5777-5787.	2.6	97
8	Proteinâˆ'Protein Interactions in Ovalbumin Solutions Studied by Small-Angle Scattering: Effect of Ionic Strength and the Chemical Nature of Cations. Journal of Physical Chemistry B, 2010, 114, 3776-3783.	2.6	95
9	Ion-activated attractive patches as a mechanism for controlled protein interactions. Scientific Reports, 2014, 4, 7016.	3.3	94
10	Viscosity and diffusion: crowding and salt effects in protein solutions. Soft Matter, 2012, 8, 1404-1419.	2.7	86
11	Charge-controlled metastable liquidâ€"liquid phase separation in protein solutions as a universal pathway towards crystallization. Soft Matter, 2012, 8, 1313-1316.	2.7	83
12	Hydration and interactions in protein solutions containing concentrated electrolytes studied by small-angle scattering. Physical Chemistry Chemical Physics, 2012, 14, 2483.	2.8	82
13	Dynamics of proteins in solution. Quarterly Reviews of Biophysics, 2019, 52, .	5.7	78
14	The role of cluster formation and metastable liquidâ€"liquid phase separation in protein crystallization. Faraday Discussions, 2012, 159, 313.	3.2	70
15	Effects of Casting Solvents on the Formation of Inverted Phase in Block Copolymer Thin Films. Macromolecules, 2004, 37, 6523-6530.	4.8	68
16	Novel approach to controlled protein crystallization through ligandation of yttrium cations. Journal of Applied Crystallography, 2011, 44, 755-762.	4.5	57
17	On the question of two-step nucleation in protein crystallization. Faraday Discussions, 2015, 179, 41-58.	3.2	56
18	Reentrant condensation, liquidâ€"liquid phase separation and crystallization in protein solutions induced by multivalent metal ions. Pure and Applied Chemistry, 2014, 86, 191-202.	1.9	55

#	Article	IF	Citations
19	Protein cluster formation in aqueous solution in the presence of multivalent metal ions â€“ a light scattering study. Soft Matter, 2014, 10, 894-902.	2.7	55
20	Study on the Origin of Inverted Phase in Drying Solution-Cast Block Copolymer Films. Macromolecules, 2003, 36, 4084-4092.	4.8	53
21	Kinetics of liquidâ€“liquid phase separation in protein solutions exhibiting LCST phase behavior studied by time-resolved USAXS and VSANS. Soft Matter, 2016, 12, 9334-9341.	2.7	53
22	Gold Nanoparticles Decorated with Oligo(ethylene glycol) Thiols:Â Protein Resistance and Colloidal Stabilityâ€. Journal of Physical Chemistry A, 2007, 111, 12229-12237.	2.5	50
23	Effective interactions in proteinâ€“salt solutions approaching liquidâ€“liquid phase separation. Journal of Molecular Liquids, 2014, 200, 20-27.	4.9	50
24	Cation-Induced Hydration Effects Cause Lower Critical Solution Temperature Behavior in Protein Solutions. Journal of Physical Chemistry B, 2016, 120, 7731-7736.	2.6	49
25	Hierarchical molecular dynamics of bovine serum albumin in concentrated aqueous solution below and above thermal denaturation. Physical Chemistry Chemical Physics, 2015, 17, 4645-4655.	2.8	48
26	Diffusion and Dynamics of Î³-Globulin in Crowded Aqueous Solutions. Journal of Physical Chemistry B, 2014, 118, 7203-7209.	2.6	47
27	Crowding-Controlled Cluster Size in Concentrated Aqueous Protein Solutions: Structure, Self- and Collective Diffusion. Journal of Physical Chemistry Letters, 2017, 8, 2590-2596.	4.6	39
28	Strong Isotope Effects on Effective Interactions and Phase Behavior in Protein Solutions in the Presence of Multivalent Ions. Journal of Physical Chemistry B, 2017, 121, 1731-1739.	2.6	38
29	Microscopic Dynamics of Liquid-Liquid Phase Separation and Domain Coarsening in a Protein Solution Revealed by X-Ray Photon Correlation Spectroscopy. Physical Review Letters, 2021, 126, 138004.	7.8	38
30	Protein diffusion in crowded electrolyte solutions. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2010, 1804, 68-75.	2.3	37
31	Nonclassical nucleation pathways in protein crystallization. Journal of Physics Condensed Matter, 2017, 29, 443002.	1.8	37
32	Tuning phase transitions of aqueous protein solutions by multivalent cations. Physical Chemistry Chemical Physics, 2018, 20, 27214-27225.	2.8	36
33	Improved thermal fractionation technique for chain structure analysis of ethylene/Î±-olefin copolymers. Polymer, 2002, 43, 1031-1034.	3.8	35
34	Competing Salt Effects on Phase Behavior of Protein Solutions: Tailoring of Protein Interaction by the Binding of Multivalent Ions and Charge Screening. Journal of Physical Chemistry B, 2014, 118, 11365-11374.	2.6	35
35	Human versus Bovine Serum Albumin: A Subtle Difference in Hydrophobicity Leads to Large Differences in Bulk and Interface Behavior. Crystal Growth and Design, 2021, 21, 5451-5459.	3.0	34
36	Multivalent-Ion-Activated Protein Adsorption Reflecting Bulk Reentrant Behavior. Physical Review Letters, 2017, 119, 228001.	7.8	33

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37	Reentrant Phase Behavior in Protein Solutions Induced by Multivalent Salts: Strong Effect of Anions Cl^{â€“} Versus NO₃^{â€“}. Journal of Physical Chemistry B, 2018, 122, 11978-11985.	2.6	33
38	Dynamics of highly concentrated protein solutions around the denaturing transition. Soft Matter, 2012, 8, 1628-1633.	2.7	32
39	Salt-Induced Universal Slowing Down of the Short-Time Self-Diffusion of a Globular Protein in Aqueous Solution. Journal of Physical Chemistry Letters, 2015, 6, 2577-2582.	4.6	30
40	Protein Short-Time Diffusion in a Naturally Crowded Environment. Journal of Physical Chemistry Letters, 2019, 10, 1709-1715.	4.6	30
41	Kinetics of Network Formation and Heterogeneous Dynamics of an Egg White Gel Revealed by Coherent X-Ray Scattering. Physical Review Letters, 2021, 126, 098001.	7.8	28
42	Structural Evolution of Metastable Protein Aggregates in the Presence of Trivalent Salt Studied by (V)SANS and SAXS. Journal of Physical Chemistry B, 2016, 120, 5564-5571.	2.6	27
43	Partial Dewetting of Polyethylene Thin Films on Rough Silicon Dioxide Surfaces. Langmuir, 2005, 21, 7427-7432.	3.5	26
44	Effective Interactions and Colloidal Stability of Bovine Î³-Globulin in Solution. Journal of Physical Chemistry B, 2017, 121, 5759-5769.	2.6	26
45	Effect of Crystallization on the Lamellar Orientation in Thin Films of Symmetric Poly(styrene)-b-poly(l-lactide) Diblock Copolymer. Macromolecules, 2006, 39, 4101-4107.	4.8	25
46	Gold Nanoparticles Decorated with Oligo(ethylene glycol) Thiols: Enhanced Hofmeister Effects in Colloidâˆ'Protein Mixtures. Journal of Physical Chemistry C, 2009, 113, 4839-4847.	3.1	25
47	Nonclassical Pathways of Protein Crystallization in the Presence of Multivalent Metal Ions. Crystal Growth and Design, 2014, 14, 6357-6366.	3.0	25
48	Polydispersity of ethylene sequence length in metallocene ethylene/?-olefin copolymers. I. Characterized by thermal-fractionation technique. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 813-821.	2.1	24
49	Gold nanoparticles decorated with oligo(ethylene glycol) thiols: Surface charges and interactions with proteins in solution. Journal of Colloid and Interface Science, 2014, 426, 31-38.	9.4	24
50	Boundary Effect of Relief Structure on Crystallization of Diblock Copolymer in Thin Films. Langmuir, 2003, 19, 5563-5566.	3.5	23
51	Competition of Lamellar Orientation in Thin Films of a Symmetric Poly(styrene)-<i>b</i>-poly(<scp>l</scp>-lactide) Diblock Copolymer in Melt State. Macromolecules, 2007, 40, 6631-6637.	4.8	22
52	Gold nanoparticles decorated with oligo(ethylene glycol) thiols: kinetics of colloid aggregation driven by depletion forces. European Biophysics Journal, 2008, 37, 551-561.	2.2	22
53	Bulk Phase Behavior vs Interface Adsorption: Specific Multivalent Cation and Anion Effects on BSA Interactions. Langmuir, 2021, 37, 139-150.	3.5	22
54	Crystallization of Weakly Segregated Poly(styrene-b-Îµ-caprolactone) Diblock Copolymer in Thin Films. Langmuir, 2003, 19, 10100-10108.	3.5	21

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55	Evolution of the structure and dynamics of bovine serum albumin induced by thermal denaturation. Physical Chemistry Chemical Physics, 2020, 22, 18507-18517.	2.8	20
56	Multiple melting behavior of isotactic polypropylene and poly(propylene-co-ethylene) after stepwise isothermal crystallization. European Polymer Journal, 2003, 39, 2315-2322.	5.4	19
57	High-resolution neutron spectroscopy on protein solution samples. EPJ Web of Conferences, 2015, 83, 02005.	0.3	19
58	Polydispersity of ethylene sequence length in metallocene ethylene/?-olefin copolymers. II. Influence on crystallization and melting behavior. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 822-830.	2.1	17
59	The polydispersity of ethylene sequence in metallocene ethylene/Î±-olefin copolymers III: crystallization and melting behavior of short ethylene sequence. Polymer, 2002, 43, 1453-1460.	3.8	17
60	Composition fluctuation and domain spacing of low molar weight PEOâ€"PPOâ€"PEO triblock copolymers in the melt, during crystallization and in the solid state. Colloid and Polymer Science, 2006, 284, 823-833.	2.1	17
61	Interplay between Glass Formation and Liquidâ€"Liquid Phase Separation Revealed by the Scattering Invariant. Journal of Physical Chemistry Letters, 2020, 11, 7273-7278.	4.6	17
62	Protein Crystallization in the Presence of a Metastable Liquidâ€"Liquid Phase Separation. Crystal Growth and Design, 2020, 20, 7951-7962.	3.0	17
63	Nanosecond Tracer Diffusion as a Probe of the Solution Structure and Molecular Mobility of Protein Assemblies: The Case of Ovalbumin. Journal of Physical Chemistry B, 2018, 122, 8343-8350.	2.6	16
64	Morphology and Structures of Self-Assembled Symmetric Poly(di-n-alkylsilanes). Langmuir, 2003, 19, 9013-9017.	3.5	15
65	Observation of Twisting Growth of Branched Polyethylene Single Crystals Formed from the Melt. Macromolecular Rapid Communications, 2001, 22, 1340-1343.	3.9	14
66	Arrested and temporarily arrested states in a proteinâ€"polymer mixture studied by USAXS and VSANS. Soft Matter, 2017, 13, 8756-8765.	2.7	14
67	The role of serum proteins in Staphylococcus aureus adhesion to ethylene glycol coated surfaces. International Journal of Medical Microbiology, 2014, 304, 949-957.	3.6	13
68	Interplay between Stereocomplexation and Microphase Separation in PS-<i>b</i>-PLLA-<i>b</i>-PDLA Triblock Copolymers. Macromolecules, 2019, 52, 1004-1012.	4.8	13
69	Morphology and Structure of Poly(di-n-butylsilane) Single Crystals Prepared by Controlling Kinetic Process of Solvent Evaporation. Macromolecules, 2004, 37, 3310-3318.	4.8	12
70	Phase-Separation Kinetics in Proteinâ€"Salt Mixtures with Compositionally Tuned Interactions. Journal of Physical Chemistry B, 2019, 123, 1913-1919.	2.6	12
71	Melting and van der Waals Stabilization of PE Single Crystals Grown from Ultrathin Films. Macromolecules, 2011, 44, 7752-7757.	4.8	11
72	Enhanced protein adsorption upon bulk phase separation. Scientific Reports, 2020, 10, 10349.	3.3	11

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73	Molecular self-assembly and clustering in nucleation processes: general discussion. Faraday Discussions, 2015, 179, 155-197.	3.2	10
74	Molecular Flexibility of Antibodies Preserved Even in the Dense Phase after Macroscopic Phase Separation. Molecular Pharmaceutics, 2021, 18, 4162-4169.	4.6	10
75	Unification of lower and upper critical solution temperature phase behavior of globular protein solutions in the presence of multivalent cations. Soft Matter, 2020, 16, 2128-2134.	2.7	9
76	Following Protein Dynamics in Real Time during Crystallization. Crystal Growth and Design, 2019, 19, 7036-7045.	3.0	8
77	Interplay between Kinetics and Dynamics of Liquidâ€“Liquid Phase Separation in a Protein Solution Revealed by Coherent X-ray Spectroscopy. Journal of Physical Chemistry Letters, 2021, 12, 7085-7090.	4.6	8
78	Two time scales for self and collective diffusion near the critical point in a simple patchy model for proteins with floating bonds. Soft Matter, 2018, 14, 8006-8016.	2.7	7
79	Temperature and salt controlled tuning of protein clusters. Soft Matter, 2021, 17, 8506-8516.	2.7	7
80	Molecular Basis of Rhodomyrtone Resistance in Staphylococcus aureus. MBio, 2022, 13, e0383321.	4.1	7
81	Nonclassical Nucleationâ€”Role of Metastable Intermediate Phase in Crystal Nucleation: An Editorial Prefix. Crystals, 2021, 11, 174.	2.2	6
82	Automated matching of two-time X-ray photon correlation maps from phase-separating proteins with Cahnâ€“Hilliard-type simulations using auto-encoder networks. Journal of Applied Crystallography, 2022, 55, 751-757.	4.5	6
83	Influence of particle size and tunable interactions on isotropicâ€“nematic transition of block copolymer single crystal platelet suspensions. Journal of Colloid and Interface Science, 2013, 411, 53-60.	9.4	5
84	Switchable <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si32.svg"><mml:mrow><mml:mi>Î²</mml:mi></mml:mrow></mml:math>-lactoglobulin (BLG) adsorption on protein resistant oligo (ethylene glycol) (OEG) self-assembled monolayers (SAMs). Journal of Colloid and Interface Science, 2022, 606, 1673-1683.	9.4	5
85	Protein Crystallization from a Preordered Metastable Intermediate Phase Followed by Real-Time Small-Angle Neutron Scattering. Crystal Growth and Design, 2021, 21, 6971-6980.	3.0	5
86	Lateral habits of single crystals of metallocene-catalyzed low molecular weight short chain branched polyethylene from the melt. Polymer, 2000, 41, 8573-8577.	3.8	4
87	Thickness-dependent molecular chain and lamellar crystal orientation in ultrathin poly(di-n-hexylsilane) films. Langmuir, 2004, 20, 3271-7.	3.5	4
88	Reverse-engineering method for XPCS studies of non-equilibrium dynamics. IUCrJ, 2022, 9, 439-448.	2.2	4
89	Morphologies of metallocene-catalyzed short chain branched polyethylene single crystals formed from the melt at higher temperature. Polymer, 2001, 42, 5449-5452.	3.8	3
90	Bulk phase behaviour vs interface adsorption: Effects of anions and isotopes on Î²-lactoglobulin (BLG) interactions. Journal of Colloid and Interface Science, 2021, 598, 430-443.	9.4	3

#	ARTICLE	IF	CITATIONS
91	In situ study of nanostructure and morphological development during the crystalâ€“mesophase transition of poly(di-n-hexylsilane) and poly(di-n-butylsilane) by X-ray and hot-stage AFM. Polymer, 2002, 43, 6005-6012.	3.8	2
92	Study on single crystals of butyl branched polyethylene in the presence of electric field. Polymer, 2002, 43, 1903-1906.	3.8	2
93	Neutron spectroscopy on protein solutions employing backscattering with an increased energy range. Physica B: Condensed Matter, 2019, 562, 31-35.	2.7	1
94	Nematic Phase of Plate-like Semicrystalline Block Copolymer Single Crystals in Solution Studied by Small-Angle X-Ray Scattering. Langmuir, 2021, 37, 2397-2405.	3.5	1
95	Packing and dynamics of a protein solution approaching the jammed state. Soft Matter, 2020, 16, 7751-7759.	2.7	0