Asstâ€Profâ€Dr Felix Roosen-Runge

List of Publications by Year
in descending order

44 papers	1,880 citations	201385 27 h-index	253896 43 g-index
45 all docs	45 docs citations	45 times ranked	1828 citing authors

#	Article	IF	Citations
1	Protein self-diffusion in crowded solutions. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11815-11820.	3.3	207
2	Real-Time Observation of Nonclassical Protein Crystallization Kinetics. Journal of the American Chemical Society, 2015, 137, 1485-1491.	6.6	112
3	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.	1.2	97
4	Ion-activated attractive patches as a mechanism for controlled protein interactions. Scientific Reports, 2014, 4, 7016.	1.6	94
5	Viscosity and diffusion: crowding and salt effects in protein solutions. Soft Matter, 2012, 8, 1404-1419.	1.2	86
6	Charge-controlled metastable liquidâ€“liquid phase separation in protein solutions as a universal pathway towards crystallization. Soft Matter, 2012, 8, 1313-1316.	1.2	83
7	Hydration and interactions in protein solutions containing concentrated electrolytes studied by small-angle scattering. Physical Chemistry Chemical Physics, 2012, 14, 2483.	1.3	82
8	Dynamics of proteins in solution. Quarterly Reviews of Biophysics, 2019, 52, .	2.4	78
9	The role of cluster formation and metastable liquidâ€”liquid phase separation in protein crystallization. Faraday Discussions, 2012, 159, 313.	1.6	70
10	On the question of two-step nucleation in protein crystallization. Faraday Discussions, 2015, 179, 41-58.	1.6	56
11	Reentrant condensation, liquidâ€“liquid phase separation and crystallization in protein solutions induced by multivalent metal ions. Pure and Applied Chemistry, 2014, 86, 191-202.	0.9	55
12	Protein cluster formation in aqueous solution in the presence of multivalent metal ions â€“ a light scattering study. Soft Matter, 2014, 10, 894-902.	1.2	55
13	Effective interactions in proteinâ€“salt solutions approaching liquidâ€“liquid phase separation. Journal of Molecular Liquids, 2014, 200, 20-27.	2.3	50
14	Multivalent ions and biomolecules: Attempting a comprehensive perspective. ChemPhysChem, 2020, 21, 1742-1767.	1.0	50
15	Cation-Induced Hydration Effects Cause Lower Critical Solution Temperature Behavior in Protein Solutions. Journal of Physical Chemistry B, 2016, 120, 7731-7736.	1.2	49
16	Hierarchical molecular dynamics of bovine serum albumin in concentrated aqueous solution below and above thermal denaturation. Physical Chemistry Chemical Physics, 2015, 17, 4645-4655.	1.3	48
17	Diffusion and Dynamics of Î³-Globulin in Crowded Aqueous Solutions. Journal of Physical Chemistry B, 2014, 118, 7203-7209.	1.2	47
18	Crowding-Controlled Cluster Size in Concentrated Aqueous Protein Solutions: Structure, Self- and Collective Diffusion. Journal of Physical Chemistry Letters, 2017, 8, 2590-2596.	2.1	39

#	Article	IF	Citations
19	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.	1.2	38
20	Protein diffusion in crowded electrolyte solutions. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2010, 1804, 68-75.	1.1	37
21	Tuning phase transitions of aqueous protein solutions by multivalent cations. Physical Chemistry Chemical Physics, 2018, 20, 27214-27225.	1.3	36
22	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.	1.2	35
23	Anomalous and anisotropic nanoscale diffusion of hydration water molecules in fluid lipid membranes. Soft Matter, 2015, 11, 8354-8371.	1.2	34
24	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.	1.2	33
25	Dynamics of highly concentrated protein solutions around the denaturing transition. Soft Matter, 2012, 8, 1628-1633.	1.2	32
26	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.	2.1	30
27	Protein Short-Time Diffusion in a Naturally Crowded Environment. Journal of Physical Chemistry Letters, 2019, 10, 1709-1715.	2.1	30
28	Effective Interactions and Colloidal Stability of Bovine Î³-Globulin in Solution. Journal of Physical Chemistry B, 2017, 121, 5759-5769.	1.2	26
29	Effect of Phosphorylation on a Human-like Osteopontin Peptide. Biophysical Journal, 2017, 112, 1586-1596.	0.2	25
30	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.	5.0	24
31	Evolution of the structure and dynamics of bovine serum albumin induced by thermal denaturation. Physical Chemistry Chemical Physics, 2020, 22, 18507-18517.	1.3	20
32	High-resolution neutron spectroscopy on protein solution samples. EPJ Web of Conferences, 2015, 83, 02005.	0.1	19
33	Analytical correlation functions for motion through diffusivity landscapes. Journal of Chemical Physics, 2016, 144, 204109.	1.2	16
34	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.	1.2	16
35	Weak Shape Anisotropy Leads to a Nonmonotonic Contribution to Crowding, Impacting Protein Dynamics under Physiologically Relevant Conditions. Journal of Physical Chemistry B, 2018, 122, 12396-12402.	1.2	15
36	Molecular Flexibility of Antibodies Preserved Even in the Dense Phase after Macroscopic Phase Separation. Molecular Pharmaceutics, 2021, 18, 4162-4169.	2.3	10

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37	Following Protein Dynamics in Real Time during Crystallization. Crystal Growth and Design, 2019, 19, 7036-7045.	1.4	8
38	Self-diffusion of nonspherical particles fundamentally conflicts with effective sphere models. Journal of Physics Condensed Matter, 2021, 33, 154002.	0.7	8
39	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.	1.2	7
40	Temperature and salt controlled tuning of protein clusters. Soft Matter, 2021, 17, 8506-8516.	1.2	7
41	ApoE and ApoE Nascent-Like HDL Particles at Model Cellular Membranes: Effect of Protein Isoform and Membrane Composition. Frontiers in Chemistry, 2021, 9, 630152.	1.8	6
42	A generalized mean-squared displacement from inelastic fixed window scans of incoherent neutron scattering as a model-free indicator of anomalous diffusion confinement. EPJ Web of Conferences, 2015, 83, 02015.	0.1	4
43	Crowding in the Eye Lens: Modeling the Multisubunit Protein Î²-Crystallin with a Colloidal Approach. Biophysical Journal, 2020, 119, 2483-2496.	0.2	4
44	Neutron spectroscopy on protein solutions employing backscattering with an increased energy range. Physica B: Condensed Matter, 2019, 562, 31-35.	1.3	1