Ralf Biehl

List of Publications by Year
in descending order

51 papers	1,220 citations	331538 21 h-index	377752 34 g-index
51 all docs	51 docs citations	51 times ranked	1378 citing authors

#	Article	IF	Citations
1	Coupled protein domain motion in Taq polymerase revealed by neutron spin-echo spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 17646-17651.	3.3	97
2	Novel Fusogenic Liposomes for Fluorescent Cell Labeling and Membrane Modification. Bioconjugate Chemistry, 2010, 21, 537-543.	1.8	96
3	Internal Nanosecond Dynamics in the Intrinsically Disordered Myelin Basic Protein. Journal of the American Chemical Society, 2014, 136, 6987-6994.	6.6	87
4	Direct Observation of Correlated Interdomain Motion in Alcohol Dehydrogenase. Physical Review Letters, 2008, 101, 138102.	2.9	75
5	Large Domain Fluctuations on 50-ns Timescale Enable Catalytic Activity inÂPhosphoglycerate Kinase. Biophysical Journal, 2010, 99, 2309-2317.	0.2	62
6	Conductivity of deionized two-component colloidal suspensions. Journal of Chemical Physics, 2001, 114, 7556-7562.	1.2	61
7	AÎ²42 pentamers/hexamers are the smallest detectable oligomers in solution. Scientific Reports, 2017, 7, 2493.	1.6	49
8	Functional Domain Motions in Proteins on the â¼1â€“100Âns Timescale: Comparison of Neutron Spin-Echo Spectroscopy of Phosphoglycerate Kinase with Molecular-Dynamics Simulation. Biophysical Journal, 2012, 102, 1108-1117.	0.2	42
9	Exploring internal protein dynamics by neutron spin echo spectroscopy. Soft Matter, 2011, 7, 1299-1307.	1.2	41
10	Fast Microscopic Method for Large Scale Determination of Structure, Morphology, and Quality of Thin Colloidal Crystals. Langmuir, 2006, 22, 1828-1838.	1.6	35
11	Bioactivity and properties of a dental adhesive functionalized with polyhedral oligomeric silsesquioxanes (POSS) and bioactive glass. Dental Materials, 2017, 33, 1056-1065.	1.6	33
12	Heterogeneous nucleation of colloidal melts under the influence of shearing fields. Journal of Physics Condensed Matter, 2004, 16, S3885-S3902.	0.7	31
13	Monomeric Amyloid Beta Peptide in Hexafluoroisopropanol Detected by Small Angle Neutron Scattering. PLoS ONE, 2016, 11, e0150267.	1.1	31
14	Structure of human telomere G-quadruplex in the presence of a model drug along the thermal unfolding pathway. Nucleic Acids Research, 2018, 46, 11927-11938.	6.5	31
15	Slow internal protein dynamics in solution. Journal of Physics Condensed Matter, 2014, 26, 503103.	0.7	30
16	Fast antibody fragment motion: flexible linkers act as entropic spring. Scientific Reports, 2016, 6, 22148.	1.6	30
17	Fast internal dynamics in alcohol dehydrogenase. Journal of Chemical Physics, 2015, 143, 075101.	1.2	28
18	Jscatter, a program for evaluation and analysis of experimental data. PLoS ONE, 2019, 14, e0218789.	1.1	27

#	Article	IF	Citations
19	Confinement Facilitated Protein Stabilization As Investigated by Small-Angle Neutron Scattering. Journal of the American Chemical Society, 2018, 140, 12720-12723.	6.6	26
20	Sheared colloidal crystals in confined geometry: a real space study on stationary structures under shear. Faraday Discussions, 2003, 123, 133-143.	1.6	24
21	Drude-type conductivity of charged sphere colloidal crystals: Density and temperature dependence. Journal of Chemical Physics, 2005, 123, 104903.	1.2	24
22	Protein Entrapment in Polymeric Mesh: Diffusion in Crowded Environment with Fast Process on Short Scales. Macromolecules, 2016, 49, 1941-1949.	2.2	20
23	Investigation of Cytotoxicity, Oxidative Stress, and Inflammatory Responses of Tantalum Nanoparticles in THP-1-Derived Macrophages. Mediators of Inflammation, 2020, 2020, 1-14.	1.4	20
24	Structure and Dynamics of a Compact State of a Multidomain Protein, the Mercuric Ion Reductase. Biophysical Journal, 2014, 107, 393-400.	0.2	19
25	Structure and domain dynamics of human lactoferrin in solution and the influence of Fe(III)-ion ligand binding. BMC Biophysics, 2016, 9, 7.	4.4	19
26	Self assembling cluster crystals from DNA based dendritic nanostructures. Nature Communications, 2021, 12, 7167.	5.8	19
27	Modes of motion in a confined colloidal suspension under shear. Europhysics Letters, 2004, 66, 291-295.	0.7	17
28	Optical experiments on a crystallizing hard-sphereâ€“polymer mixture at coexistence. Physical Review E, 2010, 81, 051401.	0.8	16
29	Influence of PEGylation on Domain Dynamics of Phosphoglycerate Kinase: PEG Acts Like Entropic Spring for the Protein. Bioconjugate Chemistry, 2018, 29, 1950-1960.	1.8	16
30	Controlled LCST Behavior and Structure Formation of Alternating Amphiphilic Copolymers in Water. Macromolecules, 2022, 55, 1552-1565.	2.2	13
31	Real space and Fourier microscopy of colloidal suspensions confined to a parallel plate geometry. Review of Scientific Instruments, 2004, 75, 906-914.	0.6	12
32	Creating a synthetic platform for the encapsulation of nanocrystals with covalently bound polymer shells. Nanoscale, 2019, 11, 3847-3854.	2.8	12
33	Reduced Internal Friction by Osmolyte Interaction in Intrinsically Disordered Myelin Basic Protein. Journal of Physical Chemistry Letters, 2020, 11, 292-296.	2.1	10
34	Localised contacts lead to nanosecond hinge motions in dimeric bovine serum albumin. Physical Chemistry Chemical Physics, 2019, 21, 18477-18485.	1.3	9
35	Mineral precipitation, polymerization properties and bonding performance of universal dental adhesives doped with polyhedral oligomeric silsesquioxanes. International Journal of Adhesion and Adhesives, 2020, 100, 102573.	1.4	8
36	Observation of Protein Domain Motions by Neutron Spectroscopy. ChemPhysChem, 2010, 11, 1188-1194.	1.0	7

#	Article	IF	Citations
37	Bending elastic properties of a block copolymer-rich lamellar phase doped by a surfactant: a neutron spin-echo study. Soft Matter, 2014, 10, 6926-6930.	1.2	7
38	Diffusion of compact macromolecules through polymer meshes: mesh dynamics and probe dynamics. Physica B: Condensed Matter, 2004, 350, 76-78.	1.3	6
39	Expanding crystallization tools for nucleic acid complexes using U1A protein variants. Journal of Structural Biology, 2020, 210, 107480.	1.3	6
40	Fluctuations of bare membranes and their modification on incorporation of polymers having equally spaced anchors. Physica B: Condensed Matter, 2004, 350, 217-219.	1.3	5
41	In situ Ellipsometric Studies of the growth of a-Si:H films Prepared by the Hot wire Deposition. Materials Research Society Symposia Proceedings, 1996, 420, 425.	0.1	3
42	Neutron Spin-Echo and TOF Reveals Protein Dynamics in Solution. Journal of the Physical Society of Japan, 2013, 82, SA016.	0.7	3
43	Poly(propylene imine) dendrimers can bind to PEGylated albumin at PEG and albumin surface: Biophysical examination of a PEGylated platform to transport cationic dendritic nanoparticles. Biopolymers, 2020, 111, e23386.	1.2	3
44	Structure and Dynamics of Ribonuclease A during Thermal Unfolding: The Failure of the Zimm Model. Journal of Physical Chemistry B, 2021, 125, 780-788.	1.2	3
45	Spectroscopic and Small-angle X-ray scattering analysis of binding between Copper(II) â^'1-allylimidazole complex, a potential anti-tumor agent, and bovine serum albumin. Bioorganic Chemistry, 2021, 116, 105327.	2.0	3
46	Variation of Structural and Dynamical Flexibility of Myelin Basic Protein in Response to Guanidinium Chloride. International Journal of Molecular Sciences, 2022, 23, 6969.	1.8	2
47	Protein in action gefilmt. Physik in Unserer Zeit, 2009, 40, 9-10.	0.0	1
48	Domain Fluctuations Enable Catalytic Activity in Phosphoglycerate Kinase?. Biophysical Journal, 2011, 100, 171a.	0.2	1
49	Polymer Dynamics from Synthetic to Biological Macromolecules. AIP Conference Proceedings, 2008, , .	0.3	0
50	Mapping Motions and Structure to a State Necessary for Oligomerization of a Large GTPase: A Joint SAXS, NSE, EPR and FRET Study. Biophysical Journal, 2016, 110, 514a.	0.2	0
51	Structure and Dynamics of Intrinsically Disordered and Unfolded Proteins: Investigations using Small-Angle Scattering and Neutron Spin-Echo Spectroscopy. Biophysical Journal, 2019, 116, 490a-491a.	0.2	0