

Tuomas P J Knowles

List of Publications by Citations

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295
papers

18,020
citations

65
h-index

127
g-index

316
ext. papers

22,705
ext. citations

10.2
avg, IF

7.13
L-index

#	Paper	IF	Citations
295	The amyloid state and its association with protein misfolding diseases. <i>Nature Reviews Molecular Cell Biology</i> , 2014 , 15, 384-96	48.7	1481
294	Proliferation of amyloid- β 2 aggregates occurs through a secondary nucleation mechanism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 9758-63	11.5	867
293	An analytical solution to the kinetics of breakable filament assembly. <i>Science</i> , 2009 , 326, 1533-7	33.3	804
292	Nanomechanics of functional and pathological amyloid materials. <i>Nature Nanotechnology</i> , 2011 , 6, 469-72	28.7	590
291	Direct observation of the interconversion of normal and toxic forms of β synuclein. <i>Cell</i> , 2012 , 149, 1048-56	36.2	588
290	On the lag phase in amyloid fibril formation. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 7606-18	3.6	421
289	Atomic structure and hierarchical assembly of a cross- β amyloid fibril. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 5468-73	11.5	401
288	Solution conditions determine the relative importance of nucleation and growth processes in β synuclein aggregation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 7671-6	11.5	395
287	Lipid vesicles trigger β synuclein aggregation by stimulating primary nucleation. <i>Nature Chemical Biology</i> , 2015 , 11, 229-34	11.7	355
286	Molecular mechanisms of protein aggregation from global fitting of kinetic models. <i>Nature Protocols</i> , 2016 , 11, 252-72	18.8	342
285	From macroscopic measurements to microscopic mechanisms of protein aggregation. <i>Journal of Molecular Biology</i> , 2012 , 421, 160-71	6.5	331
284	Metastability of native proteins and the phenomenon of amyloid formation. <i>Journal of the American Chemical Society</i> , 2011 , 133, 14160-3	16.4	305
283	Nanostructured films from hierarchical self-assembly of amyloidogenic proteins. <i>Nature Nanotechnology</i> , 2010 , 5, 204-7	28.7	301
282	Differences in nucleation behavior underlie the contrasting aggregation kinetics of the A β 40 and A β 42 peptides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 9384-9	11.5	294
281	Amyloid Fibrils as Building Blocks for Natural and Artificial Functional Materials. <i>Advanced Materials</i> , 2016 , 28, 6546-61	24	292
280	Structural characterization of toxic oligomers that are kinetically trapped during β synuclein fibril formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, E1994-2003	11.5	278
279	A molecular chaperone breaks the catalytic cycle that generates toxic A β oligomers. <i>Nature Structural and Molecular Biology</i> , 2015 , 22, 207-213	17.6	268

278	Nucleated polymerization with secondary pathways. I. Time evolution of the principal moments. <i>Journal of Chemical Physics</i> , 2011 , 135, 065105	3.9	226
277	A natural product inhibits the initiation of β synuclein aggregation and suppresses its toxicity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E1009-E1017	11.5	177
276	Secondary nucleation in amyloid formation. <i>Chemical Communications</i> , 2018 , 54, 8667-8684	5.8	174
275	Kinetics and thermodynamics of amyloid formation from direct measurements of fluctuations in fibril mass. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 10016-21	11.5	167
274	The role of stable β synuclein oligomers in the molecular events underlying amyloid formation. <i>Journal of the American Chemical Society</i> , 2014 , 136, 3859-68	16.4	163
273	Chemical kinetics for drug discovery to combat protein aggregation diseases. <i>Trends in Pharmacological Sciences</i> , 2014 , 35, 127-35	13.2	161
272	Mutations associated with familial Parkinson's disease alter the initiation and amplification steps of β synuclein aggregation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 10328-33	11.5	159
271	RNA Granules Hitchhike on Lysosomes for Long-Distance Transport, Using Annexin A11 as a Molecular Tether. <i>Cell</i> , 2019 , 179, 147-164.e20	56.2	158
270	Kinetic analysis reveals the diversity of microscopic mechanisms through which molecular chaperones suppress amyloid formation. <i>Nature Communications</i> , 2016 , 7, 10948	17.4	153
269	Ostwald's rule of stages governs structural transitions and morphology of dipeptide supramolecular polymers. <i>Nature Communications</i> , 2014 , 5, 5219	17.4	150
268	Half a century of amyloids: past, present and future. <i>Chemical Society Reviews</i> , 2020 , 49, 5473-5509	58.5	142
267	Systematic development of small molecules to inhibit specific microscopic steps of $A\beta$ 2 aggregation in Alzheimer's disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E200-E208	11.5	134
266	An anticancer drug suppresses the primary nucleation reaction that initiates the production of the toxic $A\beta$ 2 aggregates linked with Alzheimer's disease. <i>Science Advances</i> , 2016 , 2, e1501244	14.3	133
265	Nucleated polymerization with secondary pathways. II. Determination of self-consistent solutions to growth processes described by non-linear master equations. <i>Journal of Chemical Physics</i> , 2011 , 135, 065106	3.9	132
264	Kinetic model of the aggregation of alpha-synuclein provides insights into prion-like spreading. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, E1206-15	11.5	130
263	A mechanistic model of tau amyloid aggregation based on direct observation of oligomers. <i>Nature Communications</i> , 2015 , 6, 7025	17.4	129
262	Cholesterol catalyses $A\beta$ 2 aggregation through a heterogeneous nucleation pathway in the presence of lipid membranes. <i>Nature Chemistry</i> , 2018 , 10, 673-683	17.6	126
261	Nucleation and Growth of Amino Acid and Peptide Supramolecular Polymers through Liquid-Liquid Phase Separation. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 18116-18123	16.4	122

260	Binding of the molecular chaperone β -crystallin to A β amyloid fibrils inhibits fibril elongation. <i>Biophysical Journal</i> , 2011 , 101, 1681-9	2.9	122
259	Biomimetic peptide self-assembly for functional materials. <i>Nature Reviews Chemistry</i> , 2020 , 4, 615-634	34.6	121
258	The interaction of alpha β -crystallin with mature alpha-synuclein amyloid fibrils inhibits their elongation. <i>Biophysical Journal</i> , 2010 , 98, 843-51	2.9	120
257	Crucial role of nonspecific interactions in amyloid nucleation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 17869-74	11.5	116
256	Observation of spatial propagation of amyloid assembly from single nuclei. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 14746-51	11.5	108
255	Interaction of the molecular chaperone DNAJB6 with growing amyloid-beta 42 (A β 2) aggregates leads to sub-stoichiometric inhibition of amyloid formation. <i>Journal of Biological Chemistry</i> , 2014 , 289, 31066-76	5.4	106
254	Dynamics of oligomer populations formed during the aggregation of Alzheimer's A β 2 peptide. <i>Nature Chemistry</i> , 2020 , 12, 445-451	17.6	103
253	Secondary nucleation of monomers on fibril surface dominates β -synuclein aggregation and provides autocatalytic amyloid amplification. <i>Quarterly Reviews of Biophysics</i> , 2017 , 50, e6	7	102
252	Quantification of the concentration of A β 2 propagons during the lag phase by an amyloid chain reaction assay. <i>Journal of the American Chemical Society</i> , 2014 , 136, 219-25	16.4	102
251	Chemical Kinetics for Bridging Molecular Mechanisms and Macroscopic Measurements of Amyloid Fibril Formation. <i>Annual Review of Physical Chemistry</i> , 2018 , 69, 273-298	15.7	98
250	Targeting the intrinsically disordered structural ensemble of β -synuclein by small molecules as a potential therapeutic strategy for Parkinson's disease. <i>PLoS ONE</i> , 2014 , 9, e87133	3.7	98
249	Fabrication of fibrillosomes from droplets stabilized by protein nanofibrils at all-aqueous interfaces. <i>Nature Communications</i> , 2016 , 7, 12934	17.4	95
248	The A β 0 and A β 2 peptides self-assemble into separate homomolecular fibrils in binary mixtures but cross-react during primary nucleation. <i>Chemical Science</i> , 2015 , 6, 4215-4233	9.4	91
247	Distinct thermodynamic signatures of oligomer generation in the aggregation of the amyloid- β peptide. <i>Nature Chemistry</i> , 2018 , 10, 523-531	17.6	89
246	Detailed analysis of the energy barriers for amyloid fibril growth. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 5247-51	16.4	88
245	The S/T-Rich Motif in the DNAJB6 Chaperone Delays Polyglutamine Aggregation and the Onset of Disease in a Mouse Model. <i>Molecular Cell</i> , 2016 , 62, 272-283	17.6	87
244	Nucleated polymerization with secondary pathways. III. Equilibrium behavior and oligomer populations. <i>Journal of Chemical Physics</i> , 2011 , 135, 065107	3.9	82
243	Selective targeting of primary and secondary nucleation pathways in A β 2 aggregation using a rational antibody scanning method. <i>Science Advances</i> , 2017 , 3, e1700488	14.3	81

242	Conserved C-terminal charge exerts a profound influence on the aggregation rate of β -synuclein. <i>Journal of Molecular Biology</i> , 2011 , 411, 329-33	6.5	76
241	Secondary nucleation and elongation occur at different sites on Alzheimer's amyloid- β aggregates. <i>Science Advances</i> , 2019 , 5, eaau3112	14.3	74
240	Electrostatic effects in filamentous protein aggregation. <i>Biophysical Journal</i> , 2013 , 104, 1116-26	2.9	74
239	Enhancing power density of biophotovoltaics by decoupling storage and power delivery. <i>Nature Energy</i> , 2018 , 3, 75-81	62.3	73
238	Physical determinants of the self-replication of protein fibrils. <i>Nature Physics</i> , 2016 , 12, 874-880	16.2	73
237	Controlling the Physical Dimensions of Peptide Nanotubes by Supramolecular Polymer Coassembly. <i>ACS Nano</i> , 2016 , 10, 7436-42	16.7	73
236	Dynamic microfluidic control of supramolecular peptide self-assembly. <i>Nature Communications</i> , 2016 , 7, 13190	17.4	72
235	Different soluble aggregates of A β 2 can give rise to cellular toxicity through different mechanisms. <i>Nature Communications</i> , 2019 , 10, 1541	17.4	71
234	Single-molecule FRET studies on alpha-synuclein oligomerization of Parkinson's disease genetically related mutants. <i>Scientific Reports</i> , 2015 , 5, 16696	4.9	69
233	Trodusquemine enhances A β aggregation but suppresses its toxicity by displacing oligomers from cell membranes. <i>Nature Communications</i> , 2019 , 10, 225	17.4	69
232	Reentrant liquid condensate phase of proteins is stabilized by hydrophobic and non-ionic interactions. <i>Nature Communications</i> , 2021 , 12, 1085	17.4	68
231	Population of nonnative states of lysozyme variants drives amyloid fibril formation. <i>Journal of the American Chemical Society</i> , 2011 , 133, 7737-7743	16.4	67
230	Fast flow microfluidics and single-molecule fluorescence for the rapid characterization of β -synuclein oligomers. <i>Analytical Chemistry</i> , 2015 , 87, 8818-26	7.8	65
229	Silk micrococoon for protein stabilisation and molecular encapsulation. <i>Nature Communications</i> , 2017 , 8, 15902	17.4	65
228	The Amyloid Phenomenon and Its Significance in Biology and Medicine. <i>Cold Spring Harbor Perspectives in Biology</i> , 2020 , 12,	10.2	65
227	Quantitative analysis of intrinsic and extrinsic factors in the aggregation mechanism of Alzheimer-associated A β peptide. <i>Scientific Reports</i> , 2016 , 6, 18728	4.9	64
226	Microfluidic Diffusion Analysis of the Sizes and Interactions of Proteins under Native Solution Conditions. <i>ACS Nano</i> , 2016 , 10, 333-41	16.7	61
225	On the role of sidechain size and charge in the aggregation of A42 with familial mutations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, E5849-E5858	11.5	58

224	Connecting macroscopic observables and microscopic assembly events in amyloid formation using coarse grained simulations. <i>PLoS Computational Biology</i> , 2012 , 8, e1002692	5	58
223	Budding-like division of all-aqueous emulsion droplets modulated by networks of protein nanofibrils. <i>Nature Communications</i> , 2018 , 9, 2110	17.4	58
222	Atomic force microscopy for single molecule characterisation of protein aggregation. <i>Archives of Biochemistry and Biophysics</i> , 2019 , 664, 134-148	4.1	57
221	Kinetic diversity of amyloid oligomers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 12087-12094	11.5	55
220	Frequency factors in a landscape model of filamentous protein aggregation. <i>Physical Review Letters</i> , 2010 , 104, 228101	7.4	55
219	The component polypeptide chains of bovine insulin nucleate or inhibit aggregation of the parent protein in a conformation-dependent manner. <i>Journal of Molecular Biology</i> , 2006 , 360, 497-509	6.5	54
218	Determination of Polypeptide Conformation with Nanoscale Resolution in Water. <i>ACS Nano</i> , 2018 , 12, 6612-6619	16.7	52
217	Multistep Inhibition of β Synuclein Aggregation and Toxicity in Vitro and in Vivo by Trodusquemine. <i>ACS Chemical Biology</i> , 2018 , 13, 2308-2319	4.9	52
216	Ultrasensitive Measurement of Ca Influx into Lipid Vesicles Induced by Protein Aggregates. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 7750-7754	16.4	51
215	Identification and nanomechanical characterization of the fundamental single-strand protofilaments of amyloid β Synuclein fibrils. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 7230-7235	11.5	51
214	Kinetics of spontaneous filament nucleation via oligomers: Insights from theory and simulation. <i>Journal of Chemical Physics</i> , 2016 , 145, 211926	3.9	50
213	Origin of metastable oligomers and their effects on amyloid fibril self-assembly. <i>Chemical Science</i> , 2018 , 9, 5937-5948	9.4	48
212	Self-assembly of MPG1, a hydrophobin protein from the rice blast fungus that forms functional amyloid coatings, occurs by a surface-driven mechanism. <i>Scientific Reports</i> , 2016 , 6, 25288	4.9	48
211	Twisting transition between crystalline and fibrillar phases of aggregated peptides. <i>Physical Review Letters</i> , 2012 , 109, 158101	7.4	47
210	Nanobodies raised against monomeric β -synuclein inhibit fibril formation and destabilize toxic oligomeric species. <i>BMC Biology</i> , 2017 , 15, 57	7.3	46
209	Inhibition of β Synuclein Fibril Elongation by Hsp70 Is Governed by a Kinetic Binding Competition between β Synuclein Species. <i>Biochemistry</i> , 2017 , 56, 1177-1180	3.2	45
208	β Synuclein suppresses both the initiation and amplification steps of β Synuclein aggregation via competitive binding to surfaces. <i>Scientific Reports</i> , 2016 , 6, 36010	4.9	45
207	Latent analysis of unmodified biomolecules and their complexes in solution with attomole detection sensitivity. <i>Nature Chemistry</i> , 2015 , 7, 802-9	17.6	44

206	Scaling behaviour and rate-determining steps in filamentous self-assembly. <i>Chemical Science</i> , 2017 , 8, 7087-7097	9.4	43
205	Modulation of electrostatic interactions to reveal a reaction network unifying the aggregation behaviour of the A β 2 peptide and its variants. <i>Chemical Science</i> , 2017 , 8, 4352-4362	9.4	42
204	The physical chemistry of the amyloid phenomenon: thermodynamics and kinetics of filamentous protein aggregation. <i>Essays in Biochemistry</i> , 2014 , 56, 11-39	7.6	42
203	Phage display and kinetic selection of antibodies that specifically inhibit amyloid self-replication. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 6444-6449	11.5	41
202	Nanoscale spatially resolved infrared spectra from single microdroplets. <i>Lab on A Chip</i> , 2014 , 14, 1315-9	7.2	41
201	Physical Determinants of Amyloid Assembly in Biofilm Formation. <i>MBio</i> , 2019 , 10,	7.8	40
200	Electrostatically-guided inhibition of Curli amyloid nucleation by the CsgC-like family of chaperones. <i>Scientific Reports</i> , 2016 , 6, 24656	4.9	39
199	Quantitative analysis of co-oligomer formation by amyloid-beta peptide isoforms. <i>Scientific Reports</i> , 2016 , 6, 28658	4.9	38
198	Nucleation and Growth of Amino Acid and Peptide Supramolecular Polymers through Liquid-Liquid Phase Separation. <i>Angewandte Chemie</i> , 2019 , 131, 18284-18291	3.6	37
197	Quantitative thermophoretic study of disease-related protein aggregates. <i>Scientific Reports</i> , 2016 , 6, 22829	4.9	37
196	Dynamics of protein aggregation and oligomer formation governed by secondary nucleation. <i>Journal of Chemical Physics</i> , 2015 , 143, 054901	3.9	36
195	Enzymatically Active Microgels from Self-Assembling Protein Nanofibrils for Microflow Chemistry. <i>ACS Nano</i> , 2015 , 9, 5772-81	16.7	36
194	Massively parallel C. elegans tracking provides multi-dimensional fingerprints for phenotypic discovery. <i>Journal of Neuroscience Methods</i> , 2018 , 306, 57-67	3	35
193	Soluble aggregates present in cerebrospinal fluid change in size and mechanism of toxicity during Alzheimer's disease progression. <i>Acta Neuropathologica Communications</i> , 2019 , 7, 120	7.3	35
192	Kinetic fingerprints differentiate the mechanisms of action of anti-A β antibodies. <i>Nature Structural and Molecular Biology</i> , 2020 , 27, 1125-1133	17.6	35
191	Single molecule secondary structure determination of proteins through infrared absorption nanospectroscopy. <i>Nature Communications</i> , 2020 , 11, 2945	17.4	34
190	Nucleation-conversion-polymerization reactions of biological macromolecules with prenucleation clusters. <i>Physical Review E</i> , 2014 , 89, 032712	2.4	34
189	C-terminal truncation of β synuclein promotes amyloid fibril amplification at physiological pH. <i>Chemical Science</i> , 2018 , 9, 5506-5516	9.4	34

188	Stabilization and Characterization of Cytotoxic A β Oligomers Isolated from an Aggregation Reaction in the Presence of Zinc Ions. <i>ACS Chemical Neuroscience</i> , 2018 , 9, 2959-2971	5.7	33
187	Role of filament annealing in the kinetics and thermodynamics of nucleated polymerization. <i>Journal of Chemical Physics</i> , 2014 , 140, 214904	3.9	33
186	Biomolecular condensates undergo a generic shear-mediated liquid-to-solid transition. <i>Nature Nanotechnology</i> , 2020 , 15, 841-847	28.7	33
185	Microfluidics for Protein Biophysics. <i>Journal of Molecular Biology</i> , 2018 , 430, 565-580	6.5	32
184	SAR by kinetics for drug discovery in protein misfolding diseases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 10245-10250	11.5	32
183	Identification of Oxidative Stress in Red Blood Cells with Nanoscale Chemical Resolution by Infrared Nanospectroscopy. <i>International Journal of Molecular Sciences</i> , 2018 , 19,	6.3	32
182	Oligomer Diversity during the Aggregation of the Repeat Region of Tau. <i>ACS Chemical Neuroscience</i> , 2018 , 9, 3060-3071	5.7	32
181	Microfluidic devices fabricated using fast wafer-scale LED-lithography patterning. <i>Biomicrofluidics</i> , 2017 , 11, 014113	3.2	31
180	Direct Observation of Oligomerization by Single Molecule Fluorescence Reveals a Multistep Aggregation Mechanism for the Yeast Prion Protein Ure2. <i>Journal of the American Chemical Society</i> , 2018 , 140, 2493-2503	16.4	31
179	Elastic instability-mediated actuation by a supra-molecular polymer. <i>Nature Physics</i> , 2016 , 12, 926-930	16.2	31
178	Self-Assembly of Amyloid Fibrils That Display Active Enzymes. <i>ChemCatChem</i> , 2014 , 6, 1961-1968	5.2	30
177	Quantifying Co-Oligomer Formation by β Synuclein. <i>ACS Nano</i> , 2018 , 12, 10855-10866	16.7	30
176	Real-Time Intrinsic Fluorescence Visualization and Sizing of Proteins and Protein Complexes in Microfluidic Devices. <i>Analytical Chemistry</i> , 2018 , 90, 3849-3855	7.8	29
175	A Fragment-Based Method of Creating Small-Molecule Libraries to Target the Aggregation of Intrinsically Disordered Proteins. <i>ACS Combinatorial Science</i> , 2016 , 18, 144-53	3.9	29
174	Scalable integration of nano-, and microfluidics with hybrid two-photon lithography. <i>Microsystems and Nanoengineering</i> , 2019 , 5, 40	7.7	28
173	Quaternization of Vinyl/Alkynyl Pyridine Enables Ultrafast Cysteine-Selective Protein Modification and Charge Modulation. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 6640-6644	16.4	28
172	Small-molecule sequestration of amyloid- β as a drug discovery strategy for Alzheimer's disease. <i>Science Advances</i> , 2020 , 6,	14.3	28
171	Transthyretin Inhibits Primary and Secondary Nucleations of Amyloid- β Peptide Aggregation and Reduces the Toxicity of Its Oligomers. <i>Biomacromolecules</i> , 2020 , 21, 1112-1125	6.9	28

170	Autocatalytic amplification of Alzheimer-associated A β 2 peptide aggregation in human cerebrospinal fluid. <i>Communications Biology</i> , 2019 , 2, 365	6.7	28
169	On-chip label-free protein analysis with downstream electrodes for direct removal of electrolysis products. <i>Lab on A Chip</i> , 2017 , 18, 162-170	7.2	28
168	Molecular Rotors Provide Insights into Microscopic Structural Changes During Protein Aggregation. <i>Journal of Physical Chemistry B</i> , 2015 , 119, 10170-9	3.4	27
167	Monomeric and fibrillar β synuclein exert opposite effects on the catalytic cycle that promotes the proliferation of A β 2 aggregates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 8005-8010	11.5	27
166	Rational design of a conformation-specific antibody for the quantification of A β oligomers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 13509-13518	11.5	26
165	Biophotonics of Native Silk Fibrils. <i>Macromolecular Bioscience</i> , 2018 , 18, e1700295	5.5	26
164	Relationship between prion propensity and the rates of individual molecular steps of fibril assembly. <i>Journal of Biological Chemistry</i> , 2011 , 286, 12101-7	5.4	25
163	Hierarchical Biomolecular Emulsions Using 3-D Microfluidics with Uniform Surface Chemistry. <i>Biomacromolecules</i> , 2017 , 18, 3642-3651	6.9	24
162	Thermodynamics of Polypeptide Supramolecular Assembly in the Short-Chain Limit. <i>Journal of the American Chemical Society</i> , 2017 , 139, 16134-16142	16.4	24
161	The Influence of Pathogenic Mutations in β synuclein on Biophysical and Structural Characteristics of Amyloid Fibrils. <i>ACS Nano</i> , 2020 , 14, 5213-5222	16.7	24
160	Fluctuations in the Kinetics of Linear Protein Self-Assembly. <i>Physical Review Letters</i> , 2016 , 116, 258103	7.4	24
159	From Protein Building Blocks to Functional Materials. <i>ACS Nano</i> , 2021 , 15, 5819-5837	16.7	24
158	Observation of molecular self-assembly events in massively parallel microdroplet arrays. <i>Lab on A Chip</i> , 2018 , 18, 3303-3309	7.2	24
157	Fabrication and Characterization of Reconstituted Silk Microgels for the Storage and Release of Small Molecules. <i>Macromolecular Rapid Communications</i> , 2019 , 40, e1800898	4.8	23
156	Identification of on- and off-pathway oligomers in amyloid fibril formation. <i>Chemical Science</i> , 2020 , 11, 6236-6247	9.4	23
155	Water-Dispersible Polydopamine-Coated Nanofibers for Stimulation of Neuronal Growth and Adhesion. <i>Advanced Healthcare Materials</i> , 2018 , 7, e1701485	10.1	23
154	Consistent Treatment of Hydrophobicity in Protein Lattice Models Accounts for Cold Denaturation. <i>Physical Review Letters</i> , 2016 , 116, 078101	7.4	23
153	Aggregation-Prone Amyloid- β Cu(II) Species Formed on the Millisecond Timescale under Mildly Acidic Conditions. <i>ChemBioChem</i> , 2015 , 16, 1293-7	3.8	23

152	Trodusquemine displaces protein misfolded oligomers from cell membranes and abrogates their cytotoxicity through a generic mechanism. <i>Communications Biology</i> , 2020 , 3, 435	6.7	23
151	Coating and Stabilization of Liposomes by Clathrin-Inspired DNA Self-Assembly. <i>ACS Nano</i> , 2020 , 14, 2316-2323	16.7	22
150	Hamiltonian Dynamics of Protein Filament Formation. <i>Physical Review Letters</i> , 2016 , 116, 038101	7.4	22
149	A Microfluidic Platform for Real-Time Detection and Quantification of Protein-Ligand Interactions. <i>Biophysical Journal</i> , 2016 , 110, 1957-66	2.9	22
148	Label-Free Analysis of Protein Aggregation and Phase Behavior. <i>ACS Nano</i> , 2019 , 13, 13940-13948	16.7	22
147	Digital Sensing and Molecular Computation by an Enzyme-Free DNA Circuit. <i>ACS Nano</i> , 2020 , 14, 5763-5771	17.7	22
146	Asymptotic solutions of the Oosawa model for the length distribution of biofilaments. <i>Journal of Chemical Physics</i> , 2014 , 140, 194906	3.9	21
145	The role of fibril structure and surface hydrophobicity in secondary nucleation of amyloid fibrils. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 25272-25283	11.5	21
144	Learning the molecular grammar of protein condensates from sequence determinants and embeddings. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	21
143	Synthesis of Nonequilibrium Supramolecular Peptide Polymers on a Microfluidic Platform. <i>Journal of the American Chemical Society</i> , 2016 , 138, 9589-96	16.4	21
142	Particle-Based Monte-Carlo Simulations of Steady-State Mass Transport at Intermediate Péclet Numbers. <i>International Journal of Nonlinear Sciences and Numerical Simulation</i> , 2016 , 17, 175-183	1.8	20
141	Microfluidic Diffusion Viscometer for Rapid Analysis of Complex Solutions. <i>Analytical Chemistry</i> , 2016 , 88, 3488-93	7.8	20
140	Single point mutations induce a switch in the molecular mechanism of the aggregation of the Alzheimer's disease associated A β 2 peptide. <i>ACS Chemical Biology</i> , 2014 , 9, 378-82	4.9	20
139	Direct observation of prion protein oligomer formation reveals an aggregation mechanism with multiple conformationally distinct species. <i>Chemical Science</i> , 2019 , 10, 4588-4597	9.4	19
138	Micro- and nanoscale hierarchical structure of core-shell protein microgels. <i>Journal of Materials Chemistry B</i> , 2016 , 4, 7989-7999	7.3	19
137	Gradient-free determination of isoelectric points of proteins on chip. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 23060-23067	3.6	19
136	Kinetic theory of protein filament growth: Self-consistent methods and perturbative techniques. <i>International Journal of Modern Physics B</i> , 2015 , 29, 1530002	1.1	19
135	Microfluidic deposition for resolving single-molecule protein architecture and heterogeneity. <i>Nature Communications</i> , 2018 , 9, 3890	17.4	19

134	Force generation by the growth of amyloid aggregates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 9524-9	11.5	18
133	Modulating the Mechanical Performance of Macroscale Fibers through Shear-Induced Alignment and Assembly of Protein Nanofibrils. <i>Small</i> , 2020 , 16, e1904190	11	18
132	Direct Observation of Murine Prion Protein Replication in Vitro. <i>Journal of the American Chemical Society</i> , 2018 , 140, 14789-14798	16.4	18
131	Microfluidic approaches for the analysis of protein-protein interactions in solution. <i>Biophysical Reviews</i> , 2020 , 12, 575-585	3.7	17
130	Biocompatible Hybrid Organic/Inorganic Microhydrogels Promote Bacterial Adherence and Eradication and. <i>Nano Letters</i> , 2020 , 20, 1590-1597	11.5	16
129	The catalytic nature of protein aggregation. <i>Journal of Chemical Physics</i> , 2020 , 152, 045101	3.9	16
128	Microfluidic Diffusion Platform for Characterizing the Sizes of Lipid Vesicles and the Thermodynamics of Protein-Lipid Interactions. <i>Analytical Chemistry</i> , 2018 , 90, 3284-3290	7.8	16
127	Ultrastructural evidence for self-replication of Alzheimer-associated A β 2 amyloid along the sides of fibrils. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 11265-11273	11.5	16
126	Enhancing the Resolution of Micro Free Flow Electrophoresis through Spatially Controlled Sample Injection. <i>Analytical Chemistry</i> , 2018 , 90, 8998-9005	7.8	16
125	Absolute Quantification of Amyloid Propagons by Digital Microfluidics. <i>Analytical Chemistry</i> , 2017 , 89, 12306-12313	7.8	15
124	A microfluidic platform for quantitative measurements of effective protein charges and single ion binding in solution. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 12161-7	3.6	15
123	Microfluidic approaches for probing amyloid assembly and behaviour. <i>Lab on A Chip</i> , 2018 , 18, 999-1016	7.2	15
122	The length distribution of frangible biofilaments. <i>Journal of Chemical Physics</i> , 2015 , 143, 164901	3.9	15
121	Thermodynamic and kinetic design principles for amyloid-aggregation inhibitors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 24251-24257	11.5	15
120	Ultrathin Polydopamine Films with Phospholipid Nanodiscs Containing a Glycophorin A Domain. <i>Advanced Functional Materials</i> , 2020 , 30, 2000378	15.6	14
119	Extrinsic Amyloid-Binding Dyes for Detection of Individual Protein Aggregates in Solution. <i>Analytical Chemistry</i> , 2018 , 90, 10385-10393	7.8	14
118	Combining Affinity Selection and Specific Ion Mobility for Microchip Protein Sensing. <i>Analytical Chemistry</i> , 2018 , 90, 10302-10310	7.8	14
117	Kinetic Analysis of Amyloid Formation. <i>Methods in Molecular Biology</i> , 2018 , 1779, 181-196	1.4	14

116	Mechanobiology of Protein Droplets: Force Arises from Disorder. <i>Cell</i> , 2018 , 175, 1457-1459	56.2	14
115	Kinetic barriers to β synuclein protofilament formation and conversion into mature fibrils. <i>Chemical Communications</i> , 2018 , 54, 7854-7857	5.8	14
114	Enhanced Quality Factor Label-free Biosensing with Micro-Cantilevers Integrated into Microfluidic Systems. <i>Analytical Chemistry</i> , 2017 , 89, 11929-11936	7.8	13
113	Interactions of β synuclein oligomers with lipid membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2021 , 1863, 183536	3.8	13
112	Reaction rate theory for supramolecular kinetics: application to protein aggregation. <i>Molecular Physics</i> , 2018 , 116, 3055-3065	1.7	13
111	LAG3 is not expressed in human and murine neurons and does not modulate β synucleinopathies. <i>EMBO Molecular Medicine</i> , 2021 , 13, e14745	12	13
110	Conformational Expansion of Tau in Condensates Promotes Irreversible Aggregation. <i>Journal of the American Chemical Society</i> , 2021 , 143, 13056-13064	16.4	13
109	Kinetic constraints on self-assembly into closed supramolecular structures. <i>Scientific Reports</i> , 2017 , 7, 12295	4.9	12
108	Polymer physics inspired approaches for the study of the mechanical properties of amyloid fibrils. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2014 , 52, 281-292	2.6	12
107	Direct measurement of lipid membrane disruption connects kinetics and toxicity of A β 2 aggregation. <i>Nature Structural and Molecular Biology</i> , 2020 , 27, 886-891	17.6	12
106	Converting lateral scanning into axial focusing to speed up three-dimensional microscopy. <i>Light: Science and Applications</i> , 2020 , 9, 165	16.7	12
105	Increased Secondary Nucleation Underlies Accelerated Aggregation of the Four-Residue N-Terminally Truncated A β 2 Species A β -42. <i>ACS Chemical Neuroscience</i> , 2019 , 10, 2374-2384	5.7	11
104	Lipid-Stabilized Double Emulsions Generated in Planar Microfluidic Devices. <i>Langmuir</i> , 2020 , 36, 2349-2356	11	11
103	Self-Assembly-Mediated Release of Peptide Nanoparticles through Jets Across Microdroplet Interfaces. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 27578-27583	9.5	11
102	Enhancement of the Anti-Aggregation Activity of a Molecular Chaperone Using a Rationally Designed Post-Translational Modification. <i>ACS Central Science</i> , 2019 , 5, 1417-1424	16.8	11
101	Squalamine and Its Derivatives Modulate the Aggregation of Amyloid- β and β synuclein and Suppress the Toxicity of Their Oligomers. <i>Frontiers in Neuroscience</i> , 2021 , 15, 680026	5.1	11
100	Infrared nanospectroscopy reveals the molecular interaction fingerprint of an aggregation inhibitor with single A β 2 oligomers. <i>Nature Communications</i> , 2021 , 12, 688	17.4	11
99	Complexity in Lipid Membrane Composition Induces Resilience to A β Aggregation. <i>ACS Chemical Neuroscience</i> , 2020 , 11, 1347-1352	5.7	10

98	Protein Aggregate-Ligand Binding Assays Based on Microfluidic Diffusional Separation. <i>ChemBioChem</i> , 2016 , 17, 1920-1924	3.8	10
97	Automated Ex Situ Assays of Amyloid Formation on a Microfluidic Platform. <i>Biophysical Journal</i> , 2016 , 110, 555-560	2.9	10
96	Sequential Release of Proteins from Structured Multishell Microcapsules. <i>Biomacromolecules</i> , 2017 , 18, 3052-3059	6.9	10
95	In vivo rate-determining steps of tau seed accumulation in Alzheimer's disease. <i>Science Advances</i> , 2021 , 7, eabh1448	14.3	10
94	Physical mechanisms of amyloid nucleation on fluid membranes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 33090-33098	11.5	10
93	Antibody Affinity Governs the Inhibition of SARS-CoV-2 Spike/ACE2 Binding in Patient Serum. <i>ACS Infectious Diseases</i> , 2021 , 7, 2362-2369	5.5	10
92	Controlled self-assembly of plant proteins into high-performance multifunctional nanostructured films. <i>Nature Communications</i> , 2021 , 12, 3529	17.4	10
91	Analysis of the length distribution of amyloid fibrils by centrifugal sedimentation. <i>Analytical Biochemistry</i> , 2016 , 504, 7-13	3.1	10
90	Sequence-Optimized Peptide Nanofibers as Growth Stimulators for Regeneration of Peripheral Neurons. <i>Advanced Functional Materials</i> , 2019 , 29, 1809112	15.6	9
89	Continuous Flow Reactors from Microfluidic Compartmentalization of Enzymes within Inorganic Microparticles. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 32951-32960	9.5	9
88	Nanoscale click-reactive scaffolds from peptide self-assembly. <i>Journal of Nanobiotechnology</i> , 2017 , 15, 70	9.4	9
87	Mechanism of biosurfactant adsorption to oil/water interfaces from millisecond scale tensiometry measurements. <i>Interface Focus</i> , 2017 , 7, 20170013	3.9	9
86	On the Mechanism of Self-Assembly by a Hydrogel-Forming Peptide. <i>Biomacromolecules</i> , 2020 , 21, 4781-4794	6.9	9
85	Assessing motor-related phenotypes of <i>Caenorhabditis elegans</i> with the wide field-of-view nematode tracking platform. <i>Nature Protocols</i> , 2020 , 15, 2071-2106	18.8	8
84	The Kinetics and Mechanisms of Amyloid Formation 2013 , 183-209		8
83	A Microfluidic Co-Flow Route for Human Serum Albumin-Drug-Nanoparticle Assembly. <i>Chemistry - A European Journal</i> , 2020 , 26, 5965-5969	4.8	8
82	Statistical Mechanics of Globular Oligomer Formation by Protein Molecules. <i>Journal of Physical Chemistry B</i> , 2018 , 122, 11721-11730	3.4	8
81	Cooperative Assembly of Hsp70 Subdomain Clusters. <i>Biochemistry</i> , 2018 , 57, 3641-3649	3.2	8

80	Quaternization of Vinyl/Alkynyl Pyridine Enables Ultrafast Cysteine-Selective Protein Modification and Charge Modulation. <i>Angewandte Chemie</i> , 2019 , 131, 6712-6716	3.6	7
79	Preventing peptide and protein misbehavior. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 5267-8	11.5	7
78	Multi-scale microporous silica microcapsules from gas-in water-in oil emulsions. <i>Soft Matter</i> , 2020 , 16, 3082-3087	3.6	7
77	Quantitative Analysis of Diffusive Reactions at the Solid-Liquid Interface in Finite Systems. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 695-9	6.4	7
76	Surface Electrostatics Govern the Emulsion Stability of Biomolecular Condensates.. <i>Nano Letters</i> , 2022 ,	11.5	7
75	Environmental Control of Amyloid Polymorphism by Modulation of Hydrodynamic Stress. <i>ACS Nano</i> , 2021 , 15, 944-953	16.7	7
74	Amelioration of aggregate cytotoxicity by catalytic conversion of protein oligomers into amyloid fibrils. <i>Nanoscale</i> , 2020 , 12, 18663-18672	7.7	7
73	Effects of sedimentation, microgravity, hydrodynamic mixing and air-water interface on β -synuclein amyloid formation. <i>Chemical Science</i> , 2020 , 11, 3687-3693	9.4	7
72	Scaling analysis reveals the mechanism and rates of prion replication in vivo. <i>Nature Structural and Molecular Biology</i> , 2021 , 28, 365-372	17.6	7
71	Templating S100A9 amyloids on A β fibrillar surfaces revealed by charge detection mass spectrometry, microscopy, kinetic and microfluidic analyses. <i>Chemical Science</i> , 2020 , 11, 7031-7039	9.4	6
70	Rapid two-dimensional characterisation of proteins in solution. <i>Microsystems and Nanoengineering</i> , 2019 , 5, 33	7.7	6
69	Ultrasensitive Measurement of Ca ²⁺ Influx into Lipid Vesicles Induced by Protein Aggregates. <i>Angewandte Chemie</i> , 2017 , 129, 7858-7862	3.6	6
68	Surface-Catalyzed Secondary Nucleation Dominates the Generation of Toxic IAPP Aggregates. <i>Frontiers in Molecular Biosciences</i> , 2021 , 8, 757425	5.6	6
67	Microfluidic Antibody Affinity Profiling for In-Solution Characterisation of Alloantibody - HLA Interactions in Human Serum		6
66	Shear-mediated sol-gel transition of regenerated silk allows the formation of Janus-like microgels. <i>Scientific Reports</i> , 2021 , 11, 6673	4.9	6
65	Automated Behavioral Analysis of Large <i>C. elegans</i> Populations Using a Wide Field-of-view Tracking Platform. <i>Journal of Visualized Experiments</i> , 2018 ,	1.6	6
64	Rapid Growth of Acetylated A β (16-20) into Macroscopic Crystals. <i>ACS Nano</i> , 2018 , 12, 5408-5416	16.7	6
63	A dopamine metabolite stabilizes neurotoxic amyloid- β oligomers. <i>Communications Biology</i> , 2021 , 4, 19	6.7	6

62	Characterizing Individual Protein Aggregates by Infrared Nanospectroscopy and Atomic Force Microscopy. <i>Journal of Visualized Experiments</i> , 2019 ,	1.6	5
61	On-chip measurements of protein unfolding from direct observations of micron-scale diffusion. <i>Chemical Science</i> , 2018 , 9, 3503-3507	9.4	5
60	Squalamine and trodusquemine: two natural products for neurodegenerative diseases, from physical chemistry to the clinic. <i>Natural Product Reports</i> , 2021 ,	15.1	5
59	Dynamics and Control of Peptide Self-Assembly and Aggregation. <i>Advances in Experimental Medicine and Biology</i> , 2019 , 1174, 1-33	3.6	5
58	Rapid Structural, Kinetic, and Immunochemical Analysis of Alpha-Synuclein Oligomers in Solution. <i>Nano Letters</i> , 2020 , 20, 8163-8169	11.5	5
57	A microfluidic strategy for the detection of membrane protein interactions. <i>Lab on A Chip</i> , 2020 , 20, 3230-3238	5	5
56	Comparative Studies in the A30P and A53T β -Synuclein Strains to Investigate the Molecular Origins of Parkinson's Disease. <i>Frontiers in Cell and Developmental Biology</i> , 2021 , 9, 552549	5.7	5
55	Oligomers of Heat-Shock Proteins: Structures That Don't Imply Function. <i>PLoS Computational Biology</i> , 2016 , 12, e1004756	5	5
54	Liquid-Liquid Phase-Separated Systems from Reversible Gel-Sol Transition of Protein Microgels. <i>Advanced Materials</i> , 2021 , 33, e2008670	24	5
53	Mechanism of Secondary Nucleation at the Single Fibril Level from Direct Observations of A β 2 Aggregation. <i>Journal of the American Chemical Society</i> , 2021 , 143, 16621-16629	16.4	5
52	Exciton Coupling of Phenylalanine Reveals Conformational Changes of Cationic Peptides. <i>ChemistrySelect</i> , 2017 , 2, 2476-2479	1.8	4
51	A method of predicting the in vitro fibril formation propensity of A β 0 mutants based on their inclusion body levels in E. coli. <i>Scientific Reports</i> , 2019 , 9, 3680	4.9	4
50	Microfluidic Templating of Spatially Inhomogeneous Protein Microgels. <i>Small</i> , 2020 , 16, e2000432	11	4
49	Universality of filamentous aggregation phenomena. <i>Physical Review E</i> , 2019 , 99, 062415	2.4	4
48	Analyse der Energiebarrieren für das Wachstum von Amyloidfibrillen. <i>Angewandte Chemie</i> , 2012 , 124, 5339-5344	3.6	4
47	Kinetic and Thermodynamic Driving Factors in the Assembly of Phenylalanine-Based Modules. <i>ACS Nano</i> , 2021 ,	16.7	4
46	Screening of small molecules using the inhibition of oligomer formation in β -Synuclein aggregation as a selection parameter. <i>Communications Chemistry</i> , 2020 , 3,	6.3	4
45	A rationally designed bicyclic peptide remodels A β 2 aggregation in vitro and reduces its toxicity in a worm model of Alzheimer's disease. <i>Scientific Reports</i> , 2020 , 10, 15280	4.9	4

44	pH-Responsive Capsules with a Fibril Scaffold Shell Assembled from an Amyloidogenic Peptide. <i>Small</i> , 2021 , 17, e2007188	11	4
43	Dynamics of heteromolecular filament formation. <i>Journal of Chemical Physics</i> , 2016 , 145, 175101	3.9	4
42	Controllable coacervation of recombinantly produced spider silk protein using kosmotropic salts. <i>Journal of Colloid and Interface Science</i> , 2020 , 560, 149-160	9.3	4
41	Supramolecular Peptide Nanofibrils with Optimized Sequences and Molecular Structures for Efficient Retroviral Transduction. <i>Advanced Functional Materials</i> , 2021 , 31, 2009382	15.6	4
40	In situ kinetic measurements of β synuclein aggregation reveal large population of short-lived oligomers. <i>PLoS ONE</i> , 2021 , 16, e0245548	3.7	4
39	Acceleration of β synuclein aggregation. <i>Amyloid: the International Journal of Experimental and Clinical Investigation: the Official Journal of the International Society of Amyloidosis</i> , 2017 , 24, 20-21	2.7	3
38	Programmable On-Chip Artificial Cell Producing Post-Translationally Modified Ubiquitinated Protein. <i>Small</i> , 2019 , 15, e1901780	11	3
37	Analysis of B-crystallin polydispersity in solution through native microfluidic electrophoresis. <i>Analyst, The</i> , 2019 , 144, 4413-4424	5	3
36	An Environmentally Sensitive Fluorescent Dye as a Multidimensional Probe of Amyloid Formation. <i>Journal of Physical Chemistry B</i> , 2016 , 120, 2087-94	3.4	3
35	The C-terminal tail of β synuclein protects against aggregate replication but is critical for oligomerization.. <i>Communications Biology</i> , 2022 , 5, 123	6.7	3
34	Accelerating Reaction Rates of Biomolecules by Using Shear Stress in Artificial Capillary Systems. <i>Journal of the American Chemical Society</i> , 2021 , 143, 16401-16410	16.4	3
33	One-Step Generation of Multisomes from Lipid-Stabilized Double Emulsions. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 6739-6747	9.5	3
32	Label-Free Protein Analysis Using Liquid Chromatography with Gravimetric Detection. <i>Analytical Chemistry</i> , 2021 , 93, 2848-2853	7.8	3
31	Intra-chain organisation of hydrophobic residues controls inter-chain aggregation rates of amphiphilic polymers. <i>Journal of Chemical Physics</i> , 2017 , 146, 135102	3.9	2
30	Multidimensional protein characterisation using microfluidic post-column analysis. <i>Lab on A Chip</i> , 2020 , 20, 2663-2673	7.2	2
29	Thermodynamic and kinetic design principles for protein aggregation inhibitors		2
28	Proliferation of Tau 304-380 Fragment Aggregates through Autocatalytic Secondary Nucleation. <i>ACS Chemical Neuroscience</i> , 2021 , 12, 4406-4415	5.7	2
27	The Hsc70 disaggregation machinery removes monomer units directly from β synuclein fibril ends. <i>Nature Communications</i> , 2021 , 12, 5999	17.4	2

26	Protein Microgels from Amyloid Fibril Networks. <i>Advances in Experimental Medicine and Biology</i> , 2019 , 1174, 223-263	3.6	2
25	Rapid Fractionation and Characterisation of Alpha-Synuclein Oligomers in Solution		2
24	In situ Sub-Cellular Identification of Functional Amyloids in Bacteria and Archaea by Infrared Nanospectroscopy.. <i>Small Methods</i> , 2021 , 5, e2001002	12.8	2
23	Soluble amyloid beta-containing aggregates are present throughout the brain at early stages of Alzheimer's disease. <i>Brain Communications</i> , 2021 , 3, fcb147	4.5	2
22	New Frontiers for Machine Learning in Protein Science. <i>Journal of Molecular Biology</i> , 2021 , 433, 167232	6.5	2
21	The binding of the small heat-shock protein B-crystallin to fibrils of β -synuclein is driven by entropic forces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	2
20	The unhappy chaperone. <i>QRB Discovery</i> , 2021 , 2,	2.7	2
19	Micromechanics of soft materials using microfluidics. <i>MRS Bulletin</i> , 2022 , 47, 119	3.2	2
18	Sonochemically-induced spectral shift as a probe of green fluorescent protein release from nano capsules. <i>RSC Advances</i> , 2014 , 4, 10303-10309	3.7	1
17	Amplification, not spreading limits rate of tau aggregate accumulation in Alzheimer's disease		1
16	Microfluidic Templating: Microfluidic Templating of Spatially Inhomogeneous Protein Microgels (Small 32/2020). <i>Small</i> , 2020 , 16, 2070178	11	1
15	Kinetic analysis reveals that independent nucleation events determine the progression of polyglutamine aggregation in. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	1
14	Pulsed Hydrogen-Deuterium Exchange Reveals Altered Structures and Mechanisms in the Aggregation of Familial Alzheimer's Disease Mutants. <i>ACS Chemical Neuroscience</i> , 2021 , 12, 1972-1982	5.7	1
13	Elongation rate and average length of amyloid fibrils in solution using isotope-labelled small-angle neutron scattering. <i>RSC Chemical Biology</i> , 2021 , 2, 1232-1238	3	1
12	Machine learning-aided protein identification from multidimensional signatures. <i>Lab on A Chip</i> , 2021 , 21, 2922-2931	7.2	1
11	Protein Conjugation by Electrophilic Alkynylation Using 5-(Alkynyl)dibenzothiophenium Triflates. <i>Bioconjugate Chemistry</i> , 2021 , 32, 1570-1575	6.3	1
10	Sequential storage and release of microdroplets. <i>Microsystems and Nanoengineering</i> , 2021 , 7, 76	7.7	1
9	Deformable and Robust Core-shell Protein Microcapsules Templated by Liquid-liquid Phase-Separated Microdroplets. <i>Advanced Materials Interfaces</i> , 2021 , 8, 2101071	4.6	1

8	Kinetic profiling of therapeutic strategies for inhibiting the formation of amyloid oligomers.. <i>Journal of Chemical Physics</i> , 2022 , 156, 164904	3.9	○
7	Liquid-Liquid Phase-Separated Systems from Reversible Gel-Sol Transition of Protein Microgels (Adv. Mater. 33/2021). <i>Advanced Materials</i> , 2021 , 33, 2170258	24	○
6	Feedback control of protein aggregation. <i>Journal of Chemical Physics</i> , 2021 , 155, 064102	3.9	○
5	Chris Dobson (1949-2019). <i>Nature Chemical Biology</i> , 2020 , 16, 105	11.7	
4	Innenstruktur: Nucleation and Growth of Amino Acid and Peptide Supramolecular Polymers through Liquid-Liquid Phase Separation (Angew. Chem. 50/2019). <i>Angewandte Chemie</i> , 2019 , 131, 18463-18463	3.6	
3	Quantitative approaches for characterising fibrillar protein nanostructures. <i>Materials Research Society Symposia Proceedings</i> , 2010 , 1274, 1		
2	Microchip Free-Flow Electrophoresis for Bioanalysis, Sensing, and Purification.. <i>Methods in Molecular Biology</i> , 2022 , 2394, 249-266	1.4	
1	Homage to Chris Dobson. <i>Frontiers in Molecular Biosciences</i> , 2019 , 6, 137	5.6	