

# Tuomas Knowles

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

388  
papers

22,646  
citations

73  
h-index

141  
g-index

446  
ext. papers

27,998  
ext. citations

9.9  
avg, IF

7.29  
L-index

#	Paper	IF	Citations
388	Surface Electrostatics Govern the Emulsion Stability of Biomolecular Condensates.. <i>Nano Letters</i> , <b>2022</b> ,	11.5	7
387	Microchip Free-Flow Electrophoresis for Bioanalysis, Sensing, and Purification.. <i>Methods in Molecular Biology</i> , <b>2022</b> , 2394, 249-266	1.4	
386	Kinetic profiling of therapeutic strategies for inhibiting the formation of amyloid oligomers.. <i>Journal of Chemical Physics</i> , <b>2022</b> , 156, 164904	3.9	0
385	The C-terminal tail of $\beta$ synuclein protects against aggregate replication but is critical for oligomerization.. <i>Communications Biology</i> , <b>2022</b> , 5, 123	6.7	3
384	Microfluidic Antibody Affinity Profiling Reveals the Role of Memory Reactivation and Cross-Reactivity in the Defense Against SARS-CoV-2.. <i>ACS Infectious Diseases</i> , <b>2022</b> , 8, 790-799	5.5	0
383	Micromechanics of soft materials using microfluidics. <i>MRS Bulletin</i> , <b>2022</b> , 47, 119	3.2	2
382	Proliferation of Tau 304-380 Fragment Aggregates through Autocatalytic Secondary Nucleation. <i>ACS Chemical Neuroscience</i> , <b>2021</b> , 12, 4406-4415	5.7	2
381	Kinetic and Thermodynamic Driving Factors in the Assembly of Phenylalanine-Based Modules. <i>ACS Nano</i> , <b>2021</b> ,	16.7	4
380	Accelerating Reaction Rates of Biomolecules by Using Shear Stress in Artificial Capillary Systems. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 16401-16410	16.4	3
379	The Hsc70 disaggregation machinery removes monomer units directly from $\beta$ synuclein fibril ends. <i>Nature Communications</i> , <b>2021</b> , 12, 5999	17.4	2
378	In vivo rate-determining steps of tau seed accumulation in Alzheimer's disease. <i>Science Advances</i> , <b>2021</b> , 7, eabh1448	14.3	10
377	Surface-Catalyzed Secondary Nucleation Dominates the Generation of Toxic IAPP Aggregates. <i>Frontiers in Molecular Biosciences</i> , <b>2021</b> , 8, 757425	5.6	6
376	Squalamine and trodusquemine: two natural products for neurodegenerative diseases, from physical chemistry to the clinic. <i>Natural Product Reports</i> , <b>2021</b> ,	15.1	5
375	Environmental Control of Amyloid Polymorphism by Modulation of Hydrodynamic Stress. <i>ACS Nano</i> , <b>2021</b> , 15, 944-953	16.7	7
374	The role of clearance mechanisms in the kinetics of pathological protein aggregation involved in neurodegenerative diseases. <i>Journal of Chemical Physics</i> , <b>2021</b> , 154, 125101	3.9	3
373	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> , <b>2021</b> , 118,	11.5	1
372	Rapid highly sensitive general protein quantification through on-chip chemiluminescence. <i>Biomicrofluidics</i> , <b>2021</b> , 15, 024113	3.2	1

371	Shear-mediated sol-gel transition of regenerated silk allows the formation of Janus-like microgels. <i>Scientific Reports</i> , <b>2021</b> , 11, 6673	4.9	6
370	Comparative Studies in the A30P and A53T $\beta$ -Synuclein Strains to Investigate the Molecular Origins of Parkinson's Disease. <i>Frontiers in Cell and Developmental Biology</i> , <b>2021</b> , 9, 552549	5.7	5
369	From Protein Building Blocks to Functional Materials. <i>ACS Nano</i> , <b>2021</b> , 15, 5819-5837	16.7	24
368	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> , <b>2021</b> , 118,	11.5	21
367	Antibody Affinity Governs the Inhibition of SARS-CoV-2 Spike/ACE2 Binding in Patient Serum. <i>ACS Infectious Diseases</i> , <b>2021</b> , 7, 2362-2369	5.5	10
366	Interactions of $\beta$ -Synuclein oligomers with lipid membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>2021</b> , 1863, 183536	3.8	13
365	Pulsed Hydrogen-Deuterium Exchange Reveals Altered Structures and Mechanisms in the Aggregation of Familial Alzheimer's Disease Mutants. <i>ACS Chemical Neuroscience</i> , <b>2021</b> , 12, 1972-1982	5.7	1
364	pH-Responsive Capsules with a Fibril Scaffold Shell Assembled from an Amyloidogenic Peptide. <i>Small</i> , <b>2021</b> , 17, e2007188	11	4
363	In situ Sub-Cellular Identification of Functional Amyloids in Bacteria and Archaea by Infrared Nanospectroscopy.. <i>Small Methods</i> , <b>2021</b> , 5, e2001002	12.8	2
362	Squalamine and Its Derivatives Modulate the Aggregation of Amyloid- $\beta$ and $\beta$ -Synuclein and Suppress the Toxicity of Their Oligomers. <i>Frontiers in Neuroscience</i> , <b>2021</b> , 15, 680026	5.1	11
361	Controlled self-assembly of plant proteins into high-performance multifunctional nanostructured films. <i>Nature Communications</i> , <b>2021</b> , 12, 3529	17.4	10
360	Biomembranes in bioelectronic sensing. <i>Trends in Biotechnology</i> , <b>2021</b> ,	15.1	4
359	Evolution of Conformation, Nanomechanics, and Infrared Nanospectroscopy of Single Amyloid Fibrils Converting into Microcrystals. <i>Advanced Science</i> , <b>2021</b> , 8, 2002182	13.6	6
358	Unraveling the Physicochemical Determinants of Protein Liquid-liquid Phase Separation by Nanoscale Infrared Vibrational Spectroscopy. <i>Bio-protocol</i> , <b>2021</b> , 11, e4122	0.9	
357	Soluble amyloid beta-containing aggregates are present throughout the brain at early stages of Alzheimer's disease. <i>Brain Communications</i> , <b>2021</b> , 3, fcab147	4.5	2
356	Elongation rate and average length of amyloid fibrils in solution using isotope-labelled small-angle neutron scattering. <i>RSC Chemical Biology</i> , <b>2021</b> , 2, 1232-1238	3	1
355	Infrared nanospectroscopy reveals the molecular interaction fingerprint of an aggregation inhibitor with single A $\beta$ 2 oligomers. <i>Nature Communications</i> , <b>2021</b> , 12, 688	17.4	11
354	Machine learning-aided protein identification from multidimensional signatures. <i>Lab on A Chip</i> , <b>2021</b> , 21, 2922-2931	7.2	1

353	Supramolecular Peptide Nanofibrils with Optimized Sequences and Molecular Structures for Efficient Retroviral Transduction. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2009382	15.6	4
352	Reentrant liquid condensate phase of proteins is stabilized by hydrophobic and non-ionic interactions. <i>Nature Communications</i> , <b>2021</b> , 12, 1085	17.4	68
351	One-Step Generation of Multisomes from Lipid-Stabilized Double Emulsions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 6739-6747	9.5	3
350	Scaling analysis reveals the mechanism and rates of prion replication in vivo. <i>Nature Structural and Molecular Biology</i> , <b>2021</b> , 28, 365-372	17.6	7
349	Protein Conjugation by Electrophilic Alkynylation Using 5-(Alkynyl)dibenzothiophenium Triflates. <i>Bioconjugate Chemistry</i> , <b>2021</b> , 32, 1570-1575	6.3	1
348	LAG3 is not expressed in human and murine neurons and does not modulate $\beta$ -synucleinopathies. <i>EMBO Molecular Medicine</i> , <b>2021</b> , 13, e14745	12	13
347	Liquid-Liquid Phase-Separated Systems from Reversible Gel-Sol Transition of Protein Microgels. <i>Advanced Materials</i> , <b>2021</b> , 33, e2008670	24	5
346	Conformational Expansion of Tau in Condensates Promotes Irreversible Aggregation. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 13056-13064	16.4	13
345	Liquid-Liquid Phase-Separated Systems from Reversible Gel-Sol Transition of Protein Microgels (Adv. Mater. 33/2021). <i>Advanced Materials</i> , <b>2021</b> , 33, 2170258	24	0
344	Feedback control of protein aggregation. <i>Journal of Chemical Physics</i> , <b>2021</b> , 155, 064102	3.9	0
343	Sequential storage and release of microdroplets. <i>Microsystems and Nanoengineering</i> , <b>2021</b> , 7, 76	7.7	1
342	Liquid-liquid phase separation underpins the formation of replication factories in rotaviruses. <i>EMBO Journal</i> , <b>2021</b> , 40, e107711	13	17
341	Mechanism of Secondary Nucleation at the Single Fibril Level from Direct Observations of A $\beta$ 2 Aggregation. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 16621-16629	16.4	5
340	New Frontiers for Machine Learning in Protein Science. <i>Journal of Molecular Biology</i> , <b>2021</b> , 433, 167232	6.5	2
339	The binding of the small heat-shock protein $\beta$ -crystallin to fibrils of $\beta$ -synuclein is driven by entropic forces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	2
338	Deformable and Robust Core-Shell Protein Microcapsules Templated by Liquid-Liquid Phase-Separated Microdroplets. <i>Advanced Materials Interfaces</i> , <b>2021</b> , 8, 2101071	4.6	1
337	Label-Free Protein Analysis Using Liquid Chromatography with Gravimetric Detection. <i>Analytical Chemistry</i> , <b>2021</b> , 93, 2848-2853	7.8	3
336	The unhappy chaperone. <i>QRB Discovery</i> , <b>2021</b> , 2,	2.7	2

335	In situ kinetic measurements of $\beta$ -Synuclein aggregation reveal large population of short-lived oligomers. <i>PLoS ONE</i> , <b>2021</b> , 16, e0245548	3.7	4
334	A dopamine metabolite stabilizes neurotoxic amyloid- $\beta$ oligomers. <i>Communications Biology</i> , <b>2021</b> , 4, 19	6.7	6
333	Small-molecule sequestration of amyloid- $\beta$ as a drug discovery strategy for Alzheimer's disease. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	28
332	Kinetic diversity of amyloid oligomers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 12087-12094	11.5	55
331	Assessing motor-related phenotypes of <i>Caenorhabditis elegans</i> with the wide field-of-view nematode tracking platform. <i>Nature Protocols</i> , <b>2020</b> , 15, 2071-2106	18.8	8
330	Single molecule secondary structure determination of proteins through infrared absorption nanospectroscopy. <i>Nature Communications</i> , <b>2020</b> , 11, 2945	17.4	34
329	Rational design of a conformation-specific antibody for the quantification of A $\beta$ oligomers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 13509-13518	11.5	26
328	Templating S100A9 amyloids on A $\beta$ fibrillar surfaces revealed by charge detection mass spectrometry, microscopy, kinetic and microfluidic analyses. <i>Chemical Science</i> , <b>2020</b> , 11, 7031-7039	9.4	6
327	Identification of on- and off-pathway oligomers in amyloid fibril formation. <i>Chemical Science</i> , <b>2020</b> , 11, 6236-6247	9.4	23
326	Microfluidic Templating of Spatially Inhomogeneous Protein Microgels. <i>Small</i> , <b>2020</b> , 16, e2000432	11	4
325	The Influence of Pathogenic Mutations in $\beta$ -Synuclein on Biophysical and Structural Characteristics of Amyloid Fibrils. <i>ACS Nano</i> , <b>2020</b> , 14, 5213-5222	16.7	24
324	Multi-scale microporous silica microcapsules from gas-in water-in oil emulsions. <i>Soft Matter</i> , <b>2020</b> , 16, 3082-3087	3.6	7
323	Ultrathin Polydopamine Films with Phospholipid Nanodiscs Containing a Glycophorin A Domain. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2000378	15.6	14
322	Complexity in Lipid Membrane Composition Induces Resilience to A $\beta$ Aggregation. <i>ACS Chemical Neuroscience</i> , <b>2020</b> , 11, 1347-1352	5.7	10
321	Half a century of amyloids: past, present and future. <i>Chemical Society Reviews</i> , <b>2020</b> , 49, 5473-5509	58.5	142
320	Continuous Flow Reactors from Microfluidic Compartmentalization of Enzymes within Inorganic Microparticles. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 32951-32960	9.5	9
319	Multidimensional protein characterisation using microfluidic post-column analysis. <i>Lab on A Chip</i> , <b>2020</b> , 20, 2663-2673	7.2	2
318	The molecular processes underpinning prion-like spreading and seed amplification in protein aggregation. <i>Current Opinion in Neurobiology</i> , <b>2020</b> , 61, 58-64	7.6	15

317	Autoantibodies against the prion protein in individuals with mutations. <i>Neurology</i> , <b>2020</b> , 95, e2028-e2037.	7.5	5
316	Lipid-Stabilized Double Emulsions Generated in Planar Microfluidic Devices. <i>Langmuir</i> , <b>2020</b> , 36, 2349-2356	4	11
315	Biocompatible Hybrid Organic/Inorganic Microhydrogels Promote Bacterial Adherence and Eradication and. <i>Nano Letters</i> , <b>2020</b> , 20, 1590-1597	11.5	16
314	Coating and Stabilization of Liposomes by Clathrin-Inspired DNA Self-Assembly. <i>ACS Nano</i> , <b>2020</b> , 14, 2316-2323	16.7	22
313	The catalytic nature of protein aggregation. <i>Journal of Chemical Physics</i> , <b>2020</b> , 152, 045101	3.9	16
312	Transthyretin Inhibits Primary and Secondary Nucleations of Amyloid- $\beta$ Peptide Aggregation and Reduces the Toxicity of Its Oligomers. <i>Biomacromolecules</i> , <b>2020</b> , 21, 1112-1125	6.9	28
311	Chris Dobson (1949-2019). <i>Nature Chemical Biology</i> , <b>2020</b> , 16, 105	11.7	
310	Microfluidic approaches for the analysis of protein-protein interactions in solution. <i>Biophysical Reviews</i> , <b>2020</b> , 12, 575-585	3.7	17
309	Dynamics of oligomer populations formed during the aggregation of Alzheimer's A $\beta$ 2 peptide. <i>Nature Chemistry</i> , <b>2020</b> , 12, 445-451	17.6	103
308	Attoliter protein nanogels from droplet nanofluidics for intracellular delivery. <i>Science Advances</i> , <b>2020</b> , 6, eaay7952	14.3	27
307	Screening of small molecules using the inhibition of oligomer formation in $\beta$ -synuclein aggregation as a selection parameter. <i>Communications Chemistry</i> , <b>2020</b> , 3,	6.3	4
306	Ultrastructural evidence for self-replication of Alzheimer-associated A $\beta$ 2 amyloid along the sides of fibrils. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 11265-11273	11.5	16
305	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> , <b>2020</b> , 117, 25272-25283	11.5	21
304	Physical mechanisms of amyloid nucleation on fluid membranes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 33090-33098	11.5	10
303	Modulating the Mechanical Performance of Macroscale Fibers through Shear-Induced Alignment and Assembly of Protein Nanofibrils. <i>Small</i> , <b>2020</b> , 16, e1904190	11	18
302	Kinetic fingerprints differentiate the mechanisms of action of anti-A $\beta$ antibodies. <i>Nature Structural and Molecular Biology</i> , <b>2020</b> , 27, 1125-1133	17.6	35
301	Rapid Structural, Kinetic, and Immunochemical Analysis of Alpha-Synuclein Oligomers in Solution. <i>Nano Letters</i> , <b>2020</b> , 20, 8163-8169	11.5	5
300	Biomolecular condensates undergo a generic shear-mediated liquid-to-solid transition. <i>Nature Nanotechnology</i> , <b>2020</b> , 15, 841-847	28.7	33

299	On the Mechanism of Self-Assembly by a Hydrogel-Forming Peptide. <i>Biomacromolecules</i> , <b>2020</b> , 21, 4781-4794	4.9	9
298	Direct measurement of lipid membrane disruption connects kinetics and toxicity of A $\beta$ 2 aggregation. <i>Nature Structural and Molecular Biology</i> , <b>2020</b> , 27, 886-891	17.6	12
297	Phase Transition and Crystallization Kinetics of a Supramolecular System in a Microfluidic Platform. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 8342-8349	9.6	9
296	A microfluidic strategy for the detection of membrane protein interactions. <i>Lab on A Chip</i> , <b>2020</b> , 20, 3230-3238	9.3	5
295	Amelioration of aggregate cytotoxicity by catalytic conversion of protein oligomers into amyloid fibrils. <i>Nanoscale</i> , <b>2020</b> , 12, 18663-18672	7.7	7
294	A rationally designed bicyclic peptide remodels A $\beta$ 2 aggregation in vitro and reduces its toxicity in a worm model of Alzheimer's disease. <i>Scientific Reports</i> , <b>2020</b> , 10, 15280	4.9	4
293	Converting lateral scanning into axial focusing to speed up three-dimensional microscopy. <i>Light: Science and Applications</i> , <b>2020</b> , 9, 165	16.7	12
292	Thermodynamic and kinetic design principles for amyloid-aggregation inhibitors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 24251-24257	11.5	15
291	Biomimetic peptide self-assembly for functional materials. <i>Nature Reviews Chemistry</i> , <b>2020</b> , 4, 615-634	34.6	121
290	Microfluidic Templating: Microfluidic Templating of Spatially Inhomogeneous Protein Microgels (Small 32/2020). <i>Small</i> , <b>2020</b> , 16, 2070178	11	1
289	Trodusquemine displaces protein misfolded oligomers from cell membranes and abrogates their cytotoxicity through a generic mechanism. <i>Communications Biology</i> , <b>2020</b> , 3, 435	6.7	23
288	The Amyloid Phenomenon and Its Significance in Biology and Medicine. <i>Cold Spring Harbor Perspectives in Biology</i> , <b>2020</b> , 12,	10.2	65
287	Controllable coacervation of recombinantly produced spider silk protein using kosmotropic salts. <i>Journal of Colloid and Interface Science</i> , <b>2020</b> , 560, 149-160	9.3	4
286	Digital Sensing and Molecular Computation by an Enzyme-Free DNA Circuit. <i>ACS Nano</i> , <b>2020</b> , 14, 5763-5771	17.1	22
285	Effects of sedimentation, microgravity, hydrodynamic mixing and air-water interface on $\beta$ synuclein amyloid formation. <i>Chemical Science</i> , <b>2020</b> , 11, 3687-3693	9.4	7
284	Mechanism of droplet-formation in a supersonic microfluidic spray device. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 153702	3.4	5
283	A Microfluidic Co-Flow Route for Human Serum Albumin-Drug-Nanoparticle Assembly. <i>Chemistry - A European Journal</i> , <b>2020</b> , 26, 5965-5969	4.8	8
282	Scalable integration of nano-, and microfluidics with hybrid two-photon lithography. <i>Microsystems and Nanoengineering</i> , <b>2019</b> , 5, 40	7.7	28



281	RNA Granules Hitchhike on Lysosomes for Long-Distance Transport, Using Annexin A11 as a Molecular Tether. <i>Cell</i> , <b>2019</b> , 179, 147-164.e20	56.2	158
280	Characterizing Individual Protein Aggregates by Infrared Nanospectroscopy and Atomic Force Microscopy. <i>Journal of Visualized Experiments</i> , <b>2019</b> ,	1.6	5
279	Programmable On-Chip Artificial Cell Producing Post-Translationally Modified Ubiquitinated Protein. <i>Small</i> , <b>2019</b> , 15, e1901780	11	3
278	Analysis of B-crystallin polydispersity in solution through native microfluidic electrophoresis. <i>Analyst, The</i> , <b>2019</b> , 144, 4413-4424	5	3
277	Secondary nucleation and elongation occur at different sites on Alzheimer's amyloid- $\beta$ aggregates. <i>Science Advances</i> , <b>2019</b> , 5, eaau3112	14.3	74
276	Quaternization of Vinyl/Alkynyl Pyridine Enables Ultrafast Cysteine-Selective Protein Modification and Charge Modulation. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 6640-6644	16.4	28
275	Fabrication and Characterization of Reconstituted Silk Microgels for the Storage and Release of Small Molecules. <i>Macromolecular Rapid Communications</i> , <b>2019</b> , 40, e1800898	4.8	23
274	Direct observation of prion protein oligomer formation reveals an aggregation mechanism with multiple conformationally distinct species. <i>Chemical Science</i> , <b>2019</b> , 10, 4588-4597	9.4	19
273	A method of predicting the in vitro fibril formation propensity of A $\beta$ 0 mutants based on their inclusion body levels in E. coli. <i>Scientific Reports</i> , <b>2019</b> , 9, 3680	4.9	4
272	Sequence-Optimized Peptide Nanofibers as Growth Stimulators for Regeneration of Peripheral Neurons. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1809112	15.6	9
271	Quaternization of Vinyl/Alkynyl Pyridine Enables Ultrafast Cysteine-Selective Protein Modification and Charge Modulation. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 6712-6716	3.6	7
270	Different soluble aggregates of A $\beta$ 2 can give rise to cellular toxicity through different mechanisms. <i>Nature Communications</i> , <b>2019</b> , 10, 1541	17.4	71
269	Increased Secondary Nucleation Underlies Accelerated Aggregation of the Four-Residue N-Terminally Truncated A $\beta$ 2 Species A $\beta$ -42. <i>ACS Chemical Neuroscience</i> , <b>2019</b> , 10, 2374-2384	5.7	11
268	Atomic force microscopy for single molecule characterisation of protein aggregation. <i>Archives of Biochemistry and Biophysics</i> , <b>2019</b> , 664, 134-148	4.1	57
267	Enhancement of the Anti-Aggregation Activity of a Molecular Chaperone Using a Rationally Designed Post-Translational Modification. <i>ACS Central Science</i> , <b>2019</b> , 5, 1417-1424	16.8	11
266	Soluble aggregates present in cerebrospinal fluid change in size and mechanism of toxicity during Alzheimer's disease progression. <i>Acta Neuropathologica Communications</i> , <b>2019</b> , 7, 120	7.3	35
265	Universality of filamentous aggregation phenomena. <i>Physical Review E</i> , <b>2019</b> , 99, 062415	2.4	4
264	Rapid two-dimensional characterisation of proteins in solution. <i>Microsystems and Nanoengineering</i> , <b>2019</b> , 5, 33	7.7	6



263	Nucleation and Growth of Amino Acid and Peptide Supramolecular Polymers through Liquid-Liquid Phase Separation. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 18116-18123	16.4	122
262	Autocatalytic amplification of Alzheimer-associated A $\beta$ 2 peptide aggregation in human cerebrospinal fluid. <i>Communications Biology</i> , <b>2019</b> , 2, 365	6.7	28
261	Nucleation and Growth of Amino Acid and Peptide Supramolecular Polymers through Liquid-Liquid Phase Separation. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 18284-18291	3.6	37
260	Dynamics and Control of Peptide Self-Assembly and Aggregation. <i>Advances in Experimental Medicine and Biology</i> , <b>2019</b> , 1174, 1-33	3.6	5
259	Protein Microgels from Amyloid Fibril Networks. <i>Advances in Experimental Medicine and Biology</i> , <b>2019</b> , 1174, 223-263	3.6	2
258	Label-Free Analysis of Protein Aggregation and Phase Behavior. <i>ACS Nano</i> , <b>2019</b> , 13, 13940-13948	16.7	22
257	Homage to Chris Dobson. <i>Frontiers in Molecular Biosciences</i> , <b>2019</b> , 6, 137	5.6	
256	Physical Determinants of Amyloid Assembly in Biofilm Formation. <i>MBio</i> , <b>2019</b> , 10,	7.8	40
255	Trodusquemine enhances A $\beta$ aggregation but suppresses its toxicity by displacing oligomers from cell membranes. <i>Nature Communications</i> , <b>2019</b> , 10, 225	17.4	69
254	Resolving protein mixtures using microfluidic diffusional sizing combined with synchrotron radiation circular dichroism. <i>Lab on A Chip</i> , <b>2018</b> , 19, 50-58	7.2	6
253	Chemical Kinetics for Bridging Molecular Mechanisms and Macroscopic Measurements of Amyloid Fibril Formation. <i>Annual Review of Physical Chemistry</i> , <b>2018</b> , 69, 273-298	15.7	98
252	FUS Phase Separation Is Modulated by a Molecular Chaperone and Methylation of Arginine Cation- $\pi$ Interactions. <i>Cell</i> , <b>2018</b> , 173, 720-734.e15	56.2	409
251	Water-Dispersible Polydopamine-Coated Nanofibers for Stimulation of Neuronal Growth and Adhesion. <i>Advanced Healthcare Materials</i> , <b>2018</b> , 7, e1701485	10.1	23
250	Massively parallel C. elegans tracking provides multi-dimensional fingerprints for phenotypic discovery. <i>Journal of Neuroscience Methods</i> , <b>2018</b> , 306, 57-67	3	35
249	Real-Time Intrinsic Fluorescence Visualization and Sizing of Proteins and Protein Complexes in Microfluidic Devices. <i>Analytical Chemistry</i> , <b>2018</b> , 90, 3849-3855	7.8	29
248	On-chip measurements of protein unfolding from direct observations of micron-scale diffusion. <i>Chemical Science</i> , <b>2018</b> , 9, 3503-3507	9.4	5
247	Biophotonics of Native Silk Fibrils. <i>Macromolecular Bioscience</i> , <b>2018</b> , 18, e1700295	5.5	26
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15	Autoantibodies against the prion protein in individuals with PRNP mutations		1
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13	Dynamics of oligomer populations formed during the aggregation of Alzheimer's A $\beta$ 2 peptide		5
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