Alexander J Dear

List of Publications by Year
in descending order

27 papers	1,083 citations	516215 16 h-index	500791 28 g-index
28 all docs	28 docs citations	28 times ranked	1470 citing authors

#	Article	IF	Citations
1	Dynamics of oligomer populations formed during the aggregation of Alzheimerâ€™s AÎ²42 peptide. Nature Chemistry, 2020, 12, 445-451.	6.6	223
2	Kinetic diversity of amyloid oligomers. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12087-12094.	3.3	103
3	Single-molecule FRET studies on alpha-synuclein oligomerization of Parkinsonâ€™s disease genetically related mutants. Scientific Reports, 2015, 5, 16696.	1.6	92
4	Fast Flow Microfluidics and Single-Molecule Fluorescence for the Rapid Characterization of Î±-Synuclein Oligomers. Analytical Chemistry, 2015, 87, 8818-8826.	3.2	81
5	Identification of on- and off-pathway oligomers in amyloid fibril formation. Chemical Science, 2020, 11, 6236-6247.	3.7	64
6	Electrostatically-guided inhibition of Curli amyloid nucleation by the CsgC-like family of chaperones. Scientific Reports, 2016, 6, 24656.	1.6	51
7	Oligomer Diversity during the Aggregation of the Repeat Region of Tau. ACS Chemical Neuroscience, 2018, 9, 3060-3071.	1.7	50
8	Quantitative analysis of co-oligomer formation by amyloid-beta peptide isoforms. Scientific Reports, 2016, 6, 28658.	1.6	45
9	Direct Observation of Oligomerization by Single Molecule Fluorescence Reveals a Multistep Aggregation Mechanism for the Yeast Prion Protein Ure2. Journal of the American Chemical Society, 2018, 140, 2493-2503.	6.6	44
10	Quantifying Co-Oligomer Formation by Î±-Synuclein. ACS Nano, 2018, 12, 10855-10866.	7.3	38
11	Direct measurement of lipid membrane disruption connects kinetics and toxicity of AÎ²42 aggregation. Nature Structural and Molecular Biology, 2020, 27, 886-891.	3.6	38
12	Fluctuations in the Kinetics of Linear Protein Self-Assembly. Physical Review Letters, 2016, 116, 258103.	2.9	32
13	Fabrication and Characterization of Reconstituted Silk Microgels for the Storage and Release of Small Molecules. Macromolecular Rapid Communications, 2019, 40, e1800898.	2.0	29
14	On the Mechanism of Self-Assembly by a Hydrogel-Forming Peptide. Biomacromolecules, 2020, 21, 4781-4794.	2.6	26
15	The catalytic nature of protein aggregation. Journal of Chemical Physics, 2020, 152, 045101.	1.2	24
16	Direct observation of prion protein oligomer formation reveals an aggregation mechanism with multiple conformationally distinct species. Chemical Science, 2019, 10, 4588-4597.	3.7	22
17	Amyloid-Î² peptide 37, 38 and 40 individually and cooperatively inhibit amyloid-Î² 42 aggregation. Chemical Science, 2022, 13, 2423-2439.	3.7	20
18	Stochastic calculus of protein filament formation under spatial confinement. New Journal of Physics, 2018, 20, 055007.	1.2	19

#	Article	IF	Citations
19	In situ kinetic measurements of Î±-synuclein aggregation reveal large population of short-lived oligomers. PLoS ONE, 2021, 16, e0245548.	1.1	16
20	Amelioration of aggregate cytotoxicity by catalytic conversion of protein oligomers into amyloid fibrils. Nanoscale, 2020, 12, 18663-18672.	2.8	13
21	Kinetic profiling of therapeutic strategies for inhibiting the formation of amyloid oligomers. Journal of Chemical Physics, 2022, 156, 164904.	1.2	13
22	Scaling and dimensionality in the chemical kinetics of protein filament formation. International Reviews in Physical Chemistry, 2016, 35, 679-703.	0.9	10
23	Statistical Mechanics of Globular Oligomer Formation by Protein Molecules. Journal of Physical Chemistry B, 2018, 122, 11721-11730.	1.2	9
24	Dynamics of heteromolecular filament formation. Journal of Chemical Physics, 2016, 145, 175101.	1.2	4
25	Universality of filamentous aggregation phenomena. Physical Review E, 2019, 99, 062415.	0.8	4
26	Feedback control of protein aggregation. Journal of Chemical Physics, 2021, 155, 064102.	1.2	4
27	Effect of disorder on condensation in the lattice gas model on a random graph. Physical Review E, 2014, 90, 012144.	0.8	2