Benedetta Mannini

List of Publications by Year
in descending order

43 papers	2,308 citations	304602 22 h-index	276775 41 g-index
47 all docs	47 docs citations	47 times ranked	3301 citing authors

#	Article	IF	Citations
1	A causative link between the structure of aberrant protein oligomers and their toxicity. Nature Chemical Biology, 2010, 6, 140-147.	3.9	499
2	Systematic development of small molecules to inhibit specific microscopic steps of Aî²42 aggregation in Alzheimerâ€™s disease. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E200-E208.	3.3	180
3	Toxicity of Protein Oligomers Is Rationalized by a Function Combining Size and Surface Hydrophobicity. ACS Chemical Biology, 2014, 9, 2309-2317.	1.6	166
4	Molecular mechanisms used by chaperones to reduce the toxicity of aberrant protein oligomers. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12479-12484.	3.3	137
5	Proteome-wide observation of the phenomenon of life on the edge of solubility. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1015-1020.	3.3	115
6	Trodusquemine enhances Aî²42 aggregation but suppresses its toxicity by displacing oligomers from cell membranes. Nature Communications, 2019, 10, 225.	5.8	111
7	Small-molecule sequestration of amyloid-î² as a drug discovery strategy for Alzheimerâ€™s disease. Science Advances, 2020, 6, .	4.7	95
8	Single molecule secondary structure determination of proteins through infrared absorption nanospectroscopy. Nature Communications, 2020, 11, 2945.	5.8	92
9	SERS Detection of Amyloid Oligomers on Metallorganic-Decorated Plasmonic Beads. ACS Applied Materials & Interfaces, 2015, 7, 9420-9428.	4.0	89
10	Multistep Inhibition of Î±-Synuclein Aggregation and Toxicity in Vitro and in Vivo by Trodusquemine. ACS Chemical Biology, 2018, 13, 2308-2319.	1.6	86
11	Transthyretin suppresses the toxicity of oligomers formed by misfolded proteins in vitro. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2013, 1832, 2302-2314.	1.8	67
12	Rational design of a conformation-specific antibody for the quantification of Aî² oligomers. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 13509-13518.	3.3	61
13	A comparison of the biochemical modifications caused by toxic and nonâ€toxic protein oligomers in cells. Journal of Cellular and Molecular Medicine, 2011, 15, 2106-2116.	1.6	53
14	Large Proteins Have a Great Tendency to Aggregate but a Low Propensity to Form Amyloid Fibrils. PLoS ONE, 2011, 6, e16075.	1.1	51
15	Chaperones as Suppressors of Protein Misfolded Oligomer Toxicity. Frontiers in Molecular Neuroscience, 2017, 10, 98.	1.4	44
16	Trodusquemine displaces protein misfolded oligomers from cell membranes and abrogates their cytotoxicity through a generic mechanism. Communications Biology, 2020, 3, 435.	2.0	44
17	Stabilization and Characterization of Cytotoxic Aî²₄₀ Oligomers Isolated from an Aggregation Reaction in the Presence of Zinc Ions. ACS Chemical Neuroscience, 2018, 9, 2959-2971.	1.7	42
18	Aî² Oligomers Dysregulate Calcium Homeostasis by Mechanosensitive Activation of AMPA and NMDA Receptors. ACS Chemical Neuroscience, 2021, 12, 766-781.	1.7	35

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19	Squalamine and Its Derivatives Modulate the Aggregation of Amyloid-Î² and Î±-Synuclein and Suppress the Toxicity of Their Oligomers. Frontiers in Neuroscience, 2021, 15, 680026.	1.4	34
20	Amyloid-Î² oligomer synaptotoxicity is mimicked by oligomers of the model protein HypF-N. Neurobiology of Aging, 2013, 34, 2100-2109.	1.5	31
21	A dopamine metabolite stabilizes neurotoxic amyloid-Î² oligomers. Communications Biology, 2021, 4, 19.	2.0	25
22	Salt Anions Promote the Conversion of HypF-N into Amyloid-Like Oligomers and Modulate the Structure of the Oligomers and the Monomeric Precursor State. Journal of Molecular Biology, 2012, 424, 132-149.	2.0	24
23	Surface-Catalyzed Secondary Nucleation Dominates the Generation of Toxic IAPP Aggregates. Frontiers in Molecular Biosciences, 2021, 8, 757425.	1.6	24
24	Therapeutic Strategies to Reduce the Toxicity of Misfolded Protein Oligomers. International Journal of Molecular Sciences, 2020, 21, 8651.	1.8	23
25	Low-Level Expression of a Folding-Incompetent Protein in Escherichia coli: Search for the Molecular Determinants of Protein Aggregation In Vivo. Journal of Molecular Biology, 2010, 398, 600-613.	2.0	21
26	Bis(indolyl)phenylmethane derivatives are effective small molecules for inhibition of amyloid fibril formation by hen lysozyme. European Journal of Medicinal Chemistry, 2016, 124, 361-371.	2.6	19
27	Effect of molecular chaperones on aberrant protein oligomers in vitro: super-versus sub-stoichiometric chaperone concentrations. Biological Chemistry, 2016, 397, 401-415.	1.2	19
28	Glycosaminoglycans (GAGs) Suppress the Toxicity of HypF-N Prefibrillar Aggregates. Journal of Molecular Biology, 2012, 421, 616-630.	2.0	17
29	Delivery of Native Proteins into C. elegans Using a Transduction Protocol Based on Lipid Vesicles. Scientific Reports, 2017, 7, 15045.	1.6	16
30	A rationally designed bicyclic peptide remodels AÎ²42 aggregation in vitro and reduces its toxicity in a worm model of Alzheimerâ€™s disease. Scientific Reports, 2020, 10, 15280.	1.6	15
31	Rationally Designed Antibodies as Research Tools to Study the Structureâ€“Toxicity Relationship of Amyloid-Î² Oligomers. International Journal of Molecular Sciences, 2020, 21, 4542.	1.8	12
32	The induction of Â-helical structure in partially unfolded HypF-N does not affect its aggregation propensity. Protein Engineering, Design and Selection, 2011, 24, 553-563.	1.0	9
33	Toxic HypF-N Oligomers Selectively Bind the Plasma Membrane to Impair Cell Adhesion Capability. Biophysical Journal, 2018, 114, 1357-1367.	0.2	8
34	Differential Interactome and Innate Immune Response Activation of Two Structurally Distinct Misfolded Protein Oligomers. ACS Chemical Neuroscience, 2019, 10, 3464-3478.	1.7	7
35	Distinct responses of human peripheral blood cells to different misfolded protein oligomers. Immunology, 2021, 164, 358-371.	2.0	7
36	Two human metabolites rescue a C. elegans model of Alzheimerâ€™s disease via a cytosolic unfolded protein response. Communications Biology, 2021, 4, 843.	2.0	6

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37	Exogenous misfolded protein oligomers can cross the intestinal barrier and cause a disease phenotype in C. elegans. Scientific Reports, 2021, 11, 14391.	1.6	6
38	The Pathological G51D Mutation in Alpha-Synuclein Oligomers Confers Distinct Structural Attributes and Cellular Toxicity. Molecules, 2022, 27, 1293.	1.7	6
39	Systematic Development of Small Molecules to Inhibit Specific Microscopic Steps of Amyloid-Beta42 Aggregation in Alzheimer's Disease. Biophysical Journal, 2018, 114, 225a.	0.2	2
40	Modulating Amyloid-Beta Aggregation to Reduce the Toxicity of its Oligomeric Aggregates. Biophysical Journal, 2018, 114, 430a.	0.2	2
41	Attenuating the Toxicity of Amyloid-Beta Aggregation with Specific Species. Biophysical Journal, 2017, 112, 494a.	0.2	1
42	O2â€02â€02: TARGETING AMYLOID FORMATION USING RATIONALLY DESIGNED ANTIBODIES. Alzheimer's and Dementia, 2018, 14, P611.	0.4	0
43	Therapeutics Against Protein Misfolded Oligomers in Neurodegenerative Diseases. Biophysical Journal, 2021, 120, 286a.	0.2	0