David Eliezer

List of Publications by Year
in descending order

98 papers	9,412 citations	38742 50 h-index	40979 93 g-index
108 all docs	108 docs citations	108 times ranked	7903 citing authors

#	Article	IF	Citations
1	Conformational properties of Î±-synuclein in its free and lipid-associated states 1 1Edited by P. E. Wright. Journal of Molecular Biology, 2001, 307, 1061-1073.	4.2	980
2	Î±-Synuclein in Central Nervous System and from Erythrocytes, Mammalian Cells, and Escherichia coli Exists Predominantly as Disordered Monomer. Journal of Biological Chemistry, 2012, 287, 15345-15364.	3.4	466
3	A Structural and Functional Role for 11-mer Repeats in Î±-Synuclein and Other Exchangeable Lipid Binding Proteins. Journal of Molecular Biology, 2003, 329, 763-778.	4.2	404
4	Structural and dynamic characterization of partially folded states of apomyoglobin and implications for protein folding. Nature Structural Biology, 1998, 18, 148-155.	9.7	344
5	Biophysical characterization of intrinsically disordered proteins. Current Opinion in Structural Biology, 2009, 19, 23-30.	5.7	307
6	Phosphorylation at Ser-129 but Not the Phosphomimics S129E/D Inhibits the Fibrillation of Î±-Synuclein. Journal of Biological Chemistry, 2008, 283, 16895-16905.	3.4	302
7	Biophysics of Parkinsons Disease: Structure and Aggregation of α- Synuclein. Current Protein and Peptide Science, 2009, 10, 483-499.	1.4	292
8	Phosphorylation at S87 Is Enhanced in Synucleinopathies, Inhibits Î±-Synuclein Oligomerization, and Influences Synuclein-Membrane Interactions. Journal of Neuroscience, 2010, 30, 3184-3198.	3.6	271
9	Membrane-Bound Î±-Synuclein Forms an Extended Helix: Long-Distance Pulsed ESR Measurements Using Vesicles, Bicelles, and Rodlike Micelles. Journal of the American Chemical Society, 2008, 130, 12856-12857.	13.7	253
10	Quantification of Î±-Synuclein Binding to Lipid Vesicles Using Fluorescence Correlation Spectroscopy. Biophysical Journal, 2006, 90, 4692-4700.	0.5	235
11	Residual Structure and Dynamics in Parkinson's Disease-associated Mutants of Î±-Synuclein. Journal of Biological Chemistry, 2001, 276, 45996-46003.	3.4	233
12	NMR Structural and Dynamic Characterization of the Acid-Unfolded State of Apomyoglobin Provides Insights into the Early Events in Protein Foldingâ€,â€¡. Biochemistry, 2001, 40, 3561-3571.	2.5	212
13	The Impact of the E46K Mutation on the Properties of Î±-Synuclein in Its Monomeric and Oligomeric States. Biochemistry, 2007, 46, 7107-7118.	2.5	198
14	The novel Parkinson's disease linked mutation G51D attenuates in vitro aggregation and membrane binding of Â-synuclein, and enhances its secretion and nuclear localization in cells. Human Molecular Genetics, 2014, 23, 4491-4509.	2.9	194
15	Alpha-Synuclein Function and Dysfunction on Cellular Membranes. Experimental Neurobiology, 2014, 23, 292-313.	1.6	179
16	c-Abl phosphorylates Î±-synuclein and regulates its degradation: implication for Î±-synuclein clearance and contribution to the pathogenesis of Parkinson's disease. Human Molecular Genetics, 2014, 23, 2858-2879.	2.9	176
17	Folding and misfolding of alpha-synuclein on membranes. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 1013-1018.	2.6	167
18	Identification of a helical intermediate in trifluoroethanol-induced alpha-synuclein aggregation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18850-18855.	7.1	161

#	Article	IF	Citations
19	N-terminal Acetylation Stabilizes N-terminal Helicity in Lipid- and Micelle-bound Î±-Synuclein and Increases Its Affinity for Physiological Membranes. Journal of Biological Chemistry, 2014, 289, 3652-3665.	3.4	157
20	The H50Q Mutation Enhances Î±-Synuclein Aggregation, Secretion, and Toxicity. Journal of Biological Chemistry, 2014, 289, 21856-21876.	3.4	152
21	Characterization of Semisynthetic and Naturally NÎ±-Acetylated Î±-Synuclein in Vitro and in Intact Cells. Journal of Biological Chemistry, 2012, 287, 28243-28262.	3.4	148
22	Helix periodicity, topology, and dynamics of membrane-associated Â-Synuclein. Protein Science, 2005, 14, 862-872.	7.6	140
23	Residual Structure, Backbone Dynamics, and Interactions within the Synuclein Family. Journal of Molecular Biology, 2007, 372, 689-707.	4.2	137
24	Effects of Parkinson's Disease-Linked Mutations on the Structure of Lipid-Associated Î±-Synucleinâ€. Biochemistry, 2004, 43, 4810-4818.	2.5	135
25	The Lipid-binding Domain of Wild Type and Mutant Î±-Synuclein. Journal of Biological Chemistry, 2010, 285, 28261-28274.	3.4	132
26	Discovery and characterization of stable and toxic Tau/phospholipid oligomeric complexes. Nature Communications, 2017, 8, 1678.	12.8	117
27	Exposure to bacterial endotoxin generates a distinct strain of Î±-synuclein fibril. Scientific Reports, 2016, 6, 30891.	3.3	113
28	STARD4 abundance regulates sterol transport and sensing. Molecular Biology of the Cell, 2011, 22, 4004-4015.	2.1	108
29	Residual Structure in the Repeat Domain of Tau:Â Echoes of Microtubule Binding and Paired Helical Filament Formationâ€. Biochemistry, 2005, 44, 1026-1036.	2.5	105
30	NMR mapping of copper binding sites in alpha-synuclein. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2006, 1764, 5-12.	2.3	105
31	Structure activity relationship of phenolic acid inhibitors of ÃŽÂ±-synuclein fibril formation and toxicity. Frontiers in Aging Neuroscience, 2014, 6, 197.	3.4	103
32	Oligomerization and Membrane-binding Properties of Covalent Adducts Formed by the Interaction of Î±-Synuclein with the Toxic Dopamine Metabolite 3,4-Dihydroxyphenylacetaldehyde (DOPAL). Journal of Biological Chemistry, 2015, 290, 27660-27679.	3.4	100
33	Tau Binds to Lipid Membrane Surfaces via Short Amphipathic Helices Located in Its Microtubule-Binding Repeats. Biophysical Journal, 2014, 107, 1441-1452.	0.5	97
34	Elucidating the Role of C-Terminal Post-Translational Modifications Using Protein Semisynthesis Strategies: Î±-Synuclein Phosphorylation at Tyrosine 125. Journal of the American Chemical Society, 2012, 134, 5196-5210.	13.7	95
35	E46K Parkinsonâ€™s-Linked Mutation Enhances C-Terminal-to-N-Terminal Contacts in Î±-Synuclein. Journal of Molecular Biology, 2009, 388, 1022-1032.	4.2	92
36	Ginsenoside Rb1 inhibits fibrillation and toxicity of alpha-synuclein and disaggregates preformed fibrils. Neurobiology of Disease, 2015, 74, 89-101.	4.4	90

#	Article	IF	Citations
37	Inter-Helix Distances in Lysophospholipid Micelle-Bound Î±-Synuclein from Pulsed ESR Measurements. Journal of the American Chemical Society, 2006, 128, 10004-10005.	13.7	89
38	Charge neutralization and collapse of the Câ€terminal tail of alphaâ€synuclein at low pH. Protein Science, 2009, 18, 1531-1540.	7.6	83
39	Synaptic Vesicles Position Complexin to Block Spontaneous Fusion. Neuron, 2013, 77, 323-334.	8.1	83
40	Tau induces PSD95â€“neuronal NOS uncoupling and neurovascular dysfunction independent of neurodegeneration. Nature Neuroscience, 2020, 23, 1079-1089.	14.8	78
41	Parkinsonâ€™s Disease and Melanoma: Co-Occurrence and Mechanisms. Journal of Parkinson's Disease, 2018, 8, 385-398.	2.8	72
42	Membrane curvature sensing by the C-terminal domain of complexin. Nature Communications, 2014, 5, 4955.	12.8	71
43	3â€‹<i>O</i>â€Sulfation of Heparan Sulfate Enhances Tau Interaction and Cellular Uptake. Angewandte Chemie - International Edition, 2020, 59, 1818-1827.	13.8	71
44	Binding of the three-repeat domain of tau to phospholipid membranes induces an aggregated-like state of the protein. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 2302-2313.	2.6	70
45	Structural effects of Parkinson's disease linked DJâ€1 mutations. Protein Science, 2008, 17, 855-868.	7.6	68
46	Glycan Determinants of Heparin-Tau Interaction. Biophysical Journal, 2017, 112, 921-932.	0.5	68
47	Semisynthetic and <i>in Vitro</i> Phosphorylation of Alpha-Synuclein at Y39 Promotes Functional Partly Helical Membrane-Bound States Resembling Those Induced by PD Mutations. ACS Chemical Biology, 2016, 11, 2428-2437.	3.4	64
48	Folding of the Repeat Domain of Tau Upon Binding to Lipid Surfaces. Journal of Molecular Biology, 2006, 362, 312-326.	4.2	61
49	Characterizing Residual Structure in Disordered Protein States Using Nuclear Magnetic Resonance. , 2007, 350, 49-68.		60
50	Structural transitions in tau k18 on micelle binding suggest a hierarchy in the efficacy of individual microtubuleâ€binding repeats in filament nucleation. Protein Science, 2013, 22, 1037-1048.	7.6	57
51	Intrinsically disordered proteins in synaptic vesicle trafficking and release. Journal of Biological Chemistry, 2019, 294, 3325-3342.	3.4	56
52	Populating the equilibrium molten globule state of apomyoglobin under conditions suitable for structural characterization by NMR. FEBS Letters, 1997, 417, 92-96.	2.8	53
53	STARD4 Membrane Interactions and Sterol Binding. Biochemistry, 2015, 54, 4623-4636.	2.5	52
54	Secondary structure and dynamics of micelle bound Î²- and Î³-synuclein. Protein Science, 2006, 15, 1162-1174.	7.6	46

#	Article	IF	Citations
55	Structural basis of sterol binding and transport by a yeast StARkin domain. Journal of Biological Chemistry, 2018, 293, 5522-5531.	3.4	42
56	Altered succinylation of mitochondrial proteins, APP and tau in Alzheimerâ€™s disease. Nature Communications, 2022, 13, 159.	12.8	42
57	The accessory helix of complexin functions by stabilizing central helix secondary structure. ELife, 2014, 3, .	6.0	38
58	Membrane interactions of intrinsically disordered proteins: The example of alpha-synuclein. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2019, 1867, 879-889.	2.3	35
59	Phosphorylation of the overlooked tyrosine 310 regulates the structure, aggregation, and microtubule- and lipid-binding properties of Tau. Journal of Biological Chemistry, 2020, 295, 7905-7922.	3.4	32
60	Use of paramagnetic 19F NMR to monitor domain movement in a glutamate transporter homolog. Nature Chemical Biology, 2020, 16, 1006-1012.	8.0	31
61	Assigning Backbone NMR Resonances for Full Length Tau Isoforms: Efficient Compromise between Manual Assignments and Reduced Dimensionality. PLoS ONE, 2012, 7, e34679.	2.5	31
62	Unique Structural Features of Membrane-Bound C-Terminal Domain Motifs Modulate Complexin Inhibitory Function. Frontiers in Molecular Neuroscience, 2017, 10, 154.	2.9	30
63	Amyloid Ion Channels: A Porous Argument or a Thin Excuse?. Journal of General Physiology, 2006, 128, 631-633.	1.9	29
64	Evolutionary Divergence of the C-terminal Domain of Complexin Accounts for Functional Disparities between Vertebrate and Invertebrate Complexins. Frontiers in Molecular Neuroscience, 2017, 10, 146.	2.9	29
65	Role of Parkinsonâ€™s Disease-Linked Mutations and N-Terminal Acetylation on the Oligomerization of Î±-Synuclein Induced by 3,4-Dihydroxyphenylacetaldehyde. ACS Chemical Neuroscience, 2019, 10, 690-703.	3.5	27
66	Fisetin inhibits tau aggregation by interacting with the protein and preventing the formation of Î²-strands. International Journal of Biological Macromolecules, 2021, 178, 381-393.	7.5	27
67	Synaptic vesicle binding of Î±-synuclein is modulated by Î²- and Î³-synucleins. Cell Reports, 2022, 39, 110675.	6.4	25
68	Regulation of exocytosis and mitochondrial relocalization by Alpha-synuclein in a mammalian cell model. Npj Parkinson's Disease, 2019, 5, 12.	5.3	23
69	Inhibition of alpha-synuclein seeded fibril formation and toxicity by herbal medicinal extracts. BMC Complementary Medicine and Therapies, 2020, 20, 73.	2.7	22
70	The Mysterious C-Terminal Tail of Alpha-Synuclein: Nanobody's Guess. Journal of Molecular Biology, 2013, 425, 2393-2396.	4.2	20
71	Conformational heterogeneity in closed and open states of the KcsA potassium channel in lipid bicelles. Journal of General Physiology, 2016, 148, 119-132.	1.9	20
72	Phosphorylation regulates the secondary structure and function of dentin phosphoprotein peptides. Bone, 2017, 95, 65-75.	2.9	18

#	ARTICLE	IF	CITATIONS
73	Exchange of water for sterol underlies sterol egress from a StARkin domain. ELife, 2019, 8, .	6.0	18
74	Proteins hunt and gather. Nature, 2007, 447, 920-921.	27.8	17
75	Distance Information for Disordered Proteins from NMR and ESR Measurements Using Paramagnetic Spin Labels. Methods in Molecular Biology, 2012, 895, 127-138.	0.9	17
76	Post-translational modifications within tau paired helical filament nucleating motifs perturb microtubule interactions and oligomer formation. Journal of Biological Chemistry, 2022, 298, 101442.	3.4	16
77	Protein Folding and Aggregation in in vitro Models of Parkinson's Disease. , 2008, , 575-595.		11
78	Structure and dynamics of the extendedâ€helix state of alphaâ€synuclein: Intrinsic lability of the linker region. Protein Science, 2018, 27, 1314-1324.	7.6	11
79	Homogalacturonan from squash: Characterization and tau-binding pattern of a sulfated derivative. Carbohydrate Polymers, 2022, 285, 119250.	10.2	11
80	Exploring the role of methionine residues on the oligomerization and neurotoxic properties of DOPAL-modified Î±-synuclein. Biochemical and Biophysical Research Communications, 2018, 505, 295-301.	2.1	10
81	A Protofilament-Protofilament Interface in the Structure of Mouse Î±-Synuclein Fibrils. Biophysical Journal, 2018, 114, 2811-2819.	0.5	10
82	Chemoenzymatic Semiâ€synthesis Enables Efficient Production of Isotopically Labeled Î±â€Synuclein with Siteâ€Specific Tyrosine Phosphorylation. ChemBioChem, 2021, 22, 1440-1447.	2.6	10
83	Structural Characterization of Two Alternate Conformations in a Calbindin D_{9k}-Based Molecular Switch. Biochemistry, 2011, 50, 5583-5589.	2.5	9
84	Molecular and functional interactions of alpha-synuclein with Rab3a. Journal of Biological Chemistry, 2022, 298, 102239.	3.4	7
85	Interactions of IDPs with Membranes Using Dark-State Exchange NMR Spectroscopy. Methods in Molecular Biology, 2020, 2141, 585-608.	0.9	5
86	Proteins acting out of (dis)order. ELife, 2017, 6, .	6.0	5
87	Visualizing Amyloid Assembly. Science, 2012, 336, 308-309.	12.6	4
88	Probing Structural Changes in Alpha-Synuclein by Nuclear Magnetic Resonance Spectroscopy. Methods in Molecular Biology, 2019, 1948, 157-181.	0.9	4
89	Membrane Binding Induces Distinct Structural Signatures in the Mouse Complexin-1C-Terminal Domain. Journal of Molecular Biology, 2022, , 167710.	4.2	4
90	Synuclein Structure and Function in Parkinsonâ€™s Disease. Focus on Structural Biology, 2009, , 159-174.	0.1	3

#	ARTICLE	IF	CITATIONS
91	1H, 13C, and 15N backbone resonance assignments of the L124D mutant of StAR-related lipid transfer domain protein 4 (StARD4). Biomolecular NMR Assignments, 2013, 7, 245-8.	0.8	3
92	Spectroscopic Characterization of Structureâ€“Function Relationships in the Intrinsically Disordered Protein Complexin. Methods in Enzymology, 2018, 611, 227-286.	1.0	3
93	3â€•O â€•Sulfation of Heparan Sulfate Enhances Tau Interaction and Cellular Uptake. Angewandte Chemie, 2020, 132, 1834-1843.	2.0	2
94	Probing IDP Interactions with Membranes by Fluorescence Spectroscopy. Methods in Molecular Biology, 2020, 2141, 555-567.	0.9	2
95	The dopamine receptor agonist apomorphine stabilizes neurotoxic Î±â€•synuclein oligomers. FEBS Letters, 2022, 596, 309-322.	2.8	1
96	Frontispiz: 3â€•<i>O</i>â€•Sulfation of Heparan Sulfate Enhances Tau Interaction and Cellular Uptake. Angewandte Chemie, 2020, 132, .	2.0	0
97	Frontispiece: 3â€•<i>O</i>â€•Sulfation of Heparan Sulfate Enhances Tau Interaction and Cellular Uptake. Angewandte Chemie - International Edition, 2020, 59, .	13.8	0
98	Functional Interactions of Diseaseâ€•Linked Disordered Proteins: Alphaâ€•Synuclein, Tau and Complexin. FASEB Journal, 2015, 29, 226.1.	0.5	0