Glenn L Millhauser

List of Publications by Year
in descending order

114 papers	7,786 citations	57681 46 h-index	60403 85 g-index
117 all docs	117 docs citations	117 times ranked	8716 citing authors

#	Article	IF	Citations
1	EPR of copper centers in the prion protein. Methods in Enzymology, 2022, 666, 297-314.	0.4	0
2	Photodynamic Activity of Graphene Oxide/Polyaniline/Manganese Oxide Ternary Composites toward Both Gram-Positive and Gram-Negative Bacteria. ACS Applied Bio Materials, 2021, 4, 7025-7033.	2.3	8
3	Minority student and teaching assistant interactions in STEM. Economics of Education Review, 2021, 83, 102125.	0.7	2
4	NMR and EPR-DEER Structure of a Dimeric Guanylate Cyclase Activator Protein-5 from Zebrafish Photoreceptors. Biochemistry, 2021, 60, 3058-3070.	1.2	3
5	Production of Artificially Doubly Glycosylated, ¹⁵N Labeled Prion Protein for NMR Studies Using a pH-Scanning Volatile Buffer System. Journal of Organic Chemistry, 2020, 85, 1687-1690.	1.7	2
6	Membrane orientation and oligomerization of the melanocortin receptor accessory protein 2. Journal of Biological Chemistry, 2020, 295, 16370-16379.	1.6	10
7	Copper(II) Binding to PBT2 Differs from That of Other 8-Hydroxyquinoline Chelators: Implications for the Treatment of Neurodegenerative Protein Misfolding Diseases. Inorganic Chemistry, 2020, 59, 17519-17534.	1.9	15
8	Evidence for aggregation-independent, PrP ^C -mediated Aî² cellular internalization. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28625-28631.	3.3	26
9	Intrinsic toxicity of the cellular prion protein is regulated by its conserved central region. FASEB Journal, 2020, 34, 8734-8748.	0.2	2
10	Both N-Terminal and C-Terminal Histidine Residues of the Prion Protein Are Essential for Copper Coordination and Neuroprotective Self-Regulation. Journal of Molecular Biology, 2020, 432, 4408-4425.	2.0	28
11	The effects of male peers on the educational outcomes of female college students in STEM: Experimental evidence from partnerships in Chemistry courses. PLoS ONE, 2020, 15, e0235383.	1.1	2
12	First Synthesis of Mn-Doped Cesium Lead Bromide Perovskite Magic Sized Clusters at Room Temperature. Journal of Physical Chemistry Letters, 2020, 11, 1162-1169.	2.1	41
13	Determination of the melanocortin-4 receptor structure identifies Ca ²⁺ as a cofactor for ligand binding. Science, 2020, 368, 428-433.	6.0	89
14	Molecular Features of the Zn2+ Binding Site inÂtheÂPrion Protein Probed by 113Cd NMR. Biophysical Journal, 2019, 116, 610-620.	0.2	13
15	X-ray Absorption Spectroscopy Investigations of Copper(II) Coordination in the Human Amyloid î² Peptide. Inorganic Chemistry, 2019, 58, 6294-6311.	1.9	30
16	Altered Domain Structure of the Prion Protein Caused by Cu2+ Binding and Functionally Relevant Mutations: Analysis by Cross-Linking, MS/MS, and NMR. Structure, 2019, 27, 907-922.e5.	1.6	26
17	Charge Characteristics of Agouti-Related Protein Implicate Potent Involvement of Heparan Sulfate Proteoglycans in Metabolic Function. IScience, 2019, 22, 557-570.	1.9	1
18	Late onset obesity in mice with targeted deletion of potassium inward rectifier Kir7.1 from cells expressing the melanocortinâ€4 receptor. Journal of Neuroendocrinology, 2019, 31, e12670.	1.2	13

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19	Photo-enhanced antibacterial activity of ZnO/graphene quantum dot nanocomposites. Nanoscale, 2018, 10, 158-166.	2.8	132
20	Prion Protein's Zn2+Driven CIS Interaction Weakened by N-Terminal Deletions. Biophysical Journal, 2018, 114, 569a.	0.2	0
21	Retinal guanylyl cyclase activating protein 1 forms a functional dimer. PLoS ONE, 2018, 13, e0193947.	1.1	23
22	The agouti-related peptide binds heparan sulfate through segments critical for its orexigenic effects. Journal of Biological Chemistry, 2017, 292, 7651-7661.	1.6	7
23	Rare Variant Analysis of Human and Rodent Obesity Genes in Individuals with Severe Childhood Obesity. Scientific Reports, 2017, 7, 4394.	1.6	50
24	Copper- and Zinc-Promoted Interdomain Structure in the Prion Protein: A Mechanism for Autoinhibition of the Neurotoxic N-Terminus. Progress in Molecular Biology and Translational Science, 2017, 150, 35-56.	0.9	17
25	Ethanol Oxidation Reaction Catalyzed by Palladium Nanoparticles Supported on Hydrogenâ€Treated TiO 2 Nanobelts: Impact of Oxygen Vacancies. ChemElectroChem, 2017, 4, 2211-2217.	1.7	9
26	The N-terminus of the prion protein is a toxic effector regulated by the C-terminus. ELife, 2017, 6, .	2.8	68
27	Impacts of oxygen vacancies on the electrocatalytic activity of AuTiO2 nanocomposites towards oxygen reduction. International Journal of Hydrogen Energy, 2016, 41, 18005-18014.	3.8	22
28	Interaction between Prion Protein's Copper-Bound Octarepeat Domain and a Charged C-Terminal Pocket Suggests a Mechanism for N-Terminal Regulation. Structure, 2016, 24, 1057-1067.	1.6	71
29	nâ€Dopants Based on Dimers of Benzimidazoline Radicals: Structures and Mechanism of Redox Reactions. Chemistry - A European Journal, 2015, 21, 10878-10885.	1.7	31
30	Octarepeat region flexibility impacts prion function, endoproteolysis and disease manifestation. EMBO Molecular Medicine, 2015, 7, 339-356.	3.3	26
31	G-protein-independent coupling of MC4R to Kir7.1 in hypothalamic neurons. Nature, 2015, 520, 94-98.	13.7	152
32	Genetic Incorporation of the Unnatural Amino Acid p-Acetyl Phenylalanine into Proteins for Site-Directed Spin Labeling. Methods in Enzymology, 2015, 563, 503-527.	0.4	19
33	Electrostatic Similarity Analysis of Human Î²-Defensin Binding in the Melanocortin System. Biophysical Journal, 2015, 109, 1946-1958.	0.2	6
34	Human Î²-D-3 Exacerbates MDA5 but Suppresses TLR3 Responses to the Viral Molecular Pattern Mimic Polyinosinic:Polycytidylic Acid. PLoS Genetics, 2015, 11, e1005673.	1.5	20
35	PrP overdrive. Prion, 2014, 8, 183-191.	0.9	27
36	Adapter reagents for protein site specific dye labeling. Biopolymers, 2014, 102, 273-279.	1.2	3

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37	A New Paradigm for Enzymatic Control of Î±-Cleavage and Î²-Cleavage of the Prion Protein. Journal of Biological Chemistry, 2014, 289, 803-813.	1.6	100
38	Copperâ€“zinc cross-modulation in prion protein binding. European Biophysics Journal, 2014, 43, 631-642.	1.2	15
39	Combined EXAFS and DFT Structure Calculations Provide Structural Insights into the 1:1 Multiâ€Histidine Complexes of Cu^{II}, Cu^I, and Zn^{II} with the Tandem Octarepeats of the Mammalian Prion Protein. Chemistry - A European Journal, 2014, 20, 9770-9783.	1.7	21
40	Tyrosine nitration in peptides by peroxynitrite generated in situ in a light-controlled platform: Effects of pH and thiols. Journal of Inorganic Biochemistry, 2014, 138, 24-30.	1.5	3
41	Mechanistic Study on the Solution-Phase n-Doping of 1,3-Dimethyl-2-aryl-2,3-dihydro-1<i>H</i>-benzoimidazole Derivatives. Journal of the American Chemical Society, 2013, 135, 15018-15025.	6.6	202
42	Molecular and Functional Analysis of Human Î²-Defensin 3 Action at Melanocortin Receptors. Chemistry and Biology, 2013, 20, 784-795.	6.2	30
43	New Insights into Metal Interactions with the Prion Protein: EXAFS Analysis and Structure Calculations of Copper Binding to a Single Octarepeat from the Prion Protein. Journal of Physical Chemistry B, 2013, 117, 13822-13841.	1.2	21
44	Zinc Drives a Tertiary Fold in the Prion Protein with Familial Disease Mutation Sites at the Interface. Structure, 2013, 21, 236-246.	1.6	79
45	Probing the Nature of Bandgap States in Hydrogen-Treated TiO₂ Nanowires. Journal of Physical Chemistry C, 2013, 117, 26821-26830.	1.5	54
46	Coordination of Copper to the Membrane-Bound Form of Î±-Synuclein. Biochemistry, 2013, 52, 53-60.	1.2	41
47	Defining MC1R Regulation in Human Melanocytes by Its Agonist Î±-Melanocortin and Antagonists Agouti Signaling Protein and Î²-Defensin 3. Journal of Investigative Dermatology, 2012, 132, 2255-2262.	0.3	87
48	Targeting protein-trafficking pathways alters melanoma treatment sensitivity. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 553-558.	3.3	41
49	Copper sensing with a prion protein modified nanopipette. RSC Advances, 2012, 2, 11638.	1.7	19
50	Agouti-Related Protein Segments Outside of the Receptor Binding Core Are Required for Enhanced Short- and Long-term Feeding Stimulation. ACS Chemical Biology, 2012, 7, 395-402.	1.6	7
51	The rich electrochemistry and redox reactions of the copper sites in the cellular prion protein. Coordination Chemistry Reviews, 2012, 256, 2285-2296.	9.5	39
52	Mechanism of N-terminal modulation of activity at the melanocortin-4 receptor GPCR. Nature Chemical Biology, 2012, 8, 725-730.	3.9	59
53	Melanocortinâ€1 receptorâ€mediated signalling pathways activated by NDPâ€MSH and HBD3 ligands. Pigment Cell and Melanoma Research, 2012, 25, 370-374.	1.5	22
54	Copper Redox Cycling in the Prion Protein Depends Critically on Binding Mode. Journal of the American Chemical Society, 2011, 133, 12229-12237.	6.6	86

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55	Conserved C-Terminal Charge Exerts a Profound Influence on the Aggregation Rate of Î±-Synuclein. Journal of Molecular Biology, 2011, 411, 329-333.	2.0	92
56	Zinc modulates copper coordination mode in prion protein octa-repeat subdomains. European Biophysics Journal, 2011, 40, 1259-1270.	1.2	36
57	Human Î²â€defensin 3 affects the activity of proâ€inflammatory pathways associated with MyD88 and TRIF. European Journal of Immunology, 2011, 41, 3291-3300.	1.6	122
58	Pineal-specific agouti protein regulates teleost background adaptation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 20164-20171.	3.3	65
59	Quantification of the Binding Properties of Cu2+ to the Amyloid Beta Peptide: Coordination Spheres for Human and Rat Peptides and Implication on Cu2+-Induced Aggregation. Journal of Physical Chemistry B, 2010, 114, 11261-11271.	1.2	65
60	Loop-Swapped Chimeras of the Agouti-Related Protein and the Agouti Signaling Protein Identify Contacts Required for Melanocortin 1 Receptor Selectivity and Antagonism. Journal of Molecular Biology, 2010, 404, 45-55.	2.0	28
61	Distance-Dependent Fluorescence Quenching and Binding of CdSe Quantum Dots by Functionalized Nitroxide Radicals. Journal of Physical Chemistry C, 2010, 114, 7793-7805.	1.5	80
62	Early Onset Prion Disease from Octarepeat Expansion Correlates with Copper Binding Properties. PLoS Pathogens, 2009, 5, e1000390.	2.1	70
63	EPR of Cu2+ Prion Protein Constructs at 2 GHz Using the gâŠ¥ Region to Characterize Nitrogen Ligation. Biophysical Journal, 2009, 96, 3354-3362.	0.2	15
64	Copper Binding Extrinsic to the Octarepeat Region in the Prion Protein. Current Protein and Peptide Science, 2009, 10, 529-535.	0.7	65
65	A Proximal Bisnitroxide Initiator:Â Studies in Low-Temperature Nitroxide-Mediated Polymerizations. Macromolecules, 2008, 41, 1972-1982.	2.2	28
66	Probing the Role of PrP Repeats in Conformational Conversion and Amyloid Assembly of Chimeric Yeast Prions. Journal of Biological Chemistry, 2007, 282, 34204-34212.	1.6	30
67	Chemical disulfide mapping identifies an inhibitor cystine knot in the agouti signaling protein. FEBS Letters, 2007, 581, 5561-5565.	1.3	9
68	A Î²-Defensin Mutation Causes Black Coat Color in Domestic Dogs. Science, 2007, 318, 1418-1423.	6.0	311
69	The Prion Protein is a Combined Zinc and Copper Binding Protein:â€‰ Zn²⁺ Alters the Distribution of Cu²⁺ Coordination Modes. Journal of the American Chemical Society, 2007, 129, 15440-15441.	6.6	130
70	Copper and the Prion Protein: Methods, Structures, Function, and Disease. Annual Review of Physical Chemistry, 2007, 58, 299-320.	4.8	247
71	Competitive binding effects on surface-enhanced Raman scattering of peptide molecules. Chemical Physics Letters, 2007, 447, 335-339.	1.2	28
72	Testing the Conformational Hypothesis of Passive Membrane Permeability Using Synthetic Cyclic Peptide Diastereomers. Journal of the American Chemical Society, 2006, 128, 2510-2511.	6.6	415

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73	The Affinity of Copper Binding to the Prion Protein Octarepeat Domain:Â Evidence for Negative Cooperativityâ€. Biochemistry, 2006, 45, 13083-13092.	1.2	128
74	A POMC variant implicates Î²-melanocyte-stimulating hormone in the control of human energy balance. Cell Metabolism, 2006, 3, 135-140.	7.2	207
75	Structural and Molecular Evolutionary Analysis of Agouti and Agouti-Related Proteins. Chemistry and Biology, 2006, 13, 1297-1305.	6.2	49
76	Melanoma prevention strategy based on using tetrapeptide Î±â€MSH analogs that protect human melanocytes from UVâ€induced DNA damage and cytotoxicity. FASEB Journal, 2006, 20, 1561-1563.	0.2	67
77	Functional analysis of the Ala67Thr polymorphism in agouti related protein associated with anorexia nervosa and leanness. Biochemical Pharmacology, 2005, 70, 308-316.	2.0	18
78	The Octarepeat Domain of the Prion Protein Binds Cu(II) with Three Distinct Coordination Modes at pH 7.4. Journal of the American Chemical Society, 2005, 127, 12647-12656.	6.6	212
79	Structures of the Agouti Signaling Protein. Journal of Molecular Biology, 2005, 346, 1059-1070.	2.0	77
80	Chimeras of the agouti-related protein: Insights into agonist and antagonist selectivity of melanocortin receptors. Peptides, 2005, 26, 1978-1987.	1.2	19
81	Copper Binding in the Prion Protein. Accounts of Chemical Research, 2004, 37, 79-85.	7.6	372
82	Loops and Links: Structural Insights into the Remarkable Function of the Agoutiâ€Related Protein. Annals of the New York Academy of Sciences, 2003, 994, 27-35.	1.8	14
83	Peptoid mimics of agouti related protein. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 1409-1413.	1.0	22
84	Copper Coordination in the Full-Length, Recombinant Prion Proteinâ€. Biochemistry, 2003, 42, 6794-6803.	1.2	278
85	Inverse agonist activity of agouti and agouti-related protein. Peptides, 2003, 24, 603-609.	1.2	77
86	Design, Pharmacology, and NMR Structure of a Minimized Cystine Knot with Agouti-Related Protein Activityâ€. Biochemistry, 2002, 41, 7565-7572.	1.2	70
87	Molecular Features of the Copper Binding Sites in the Octarepeat Domain of the Prion Proteinâ€. Biochemistry, 2002, 41, 3991-4001.	1.2	407
88	Dap-SL: a new site-directed nitroxide spin labeling approach for determining structure and motions in synthesized peptides and proteins. FEBS Letters, 2002, 529, 243-248.	1.3	21
89	High-Resolution NMR Structure of the Chemically-Synthesized Melanocortin Receptor Binding Domain AGRP(87â^'132) of the Agouti-Related Protein,. Biochemistry, 2001, 40, 15520-15527.	1.2	82
90	Identification of the Cu2+Binding Sites in the N-Terminal Domain of the Prion Protein by EPR and CD Spectroscopyâ€. Biochemistry, 2000, 39, 13760-13771.	1.2	342

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91	Determining the occurrence of a 3 10 -helix and an Î±-helix in two different segments of a lipopeptaibol antibiotic using TOAC, a nitroxide spin-labeled C Î± -tetrasubstituted Î±-aminoacid. Bioorganic and Medicinal Chemistry, 1999, 7, 119-131.	1.4	68
92	First Interchain Peptide Interaction Detected by ESR in Fully Synthetic, Template-Assisted, Two-Helix Bundles. Journal of the American Chemical Society, 1999, 121, 11071-11078.	6.6	16
93	The effect of mutations on peptide models of the DNA binding helix of p53: Evidence for a correlation between structure and tumorigenesis. Biopolymers, 1999, 49, 215-224.	1.2	4
94	Orientation and immersion depth of a helical lipopeptaibol in membranes using TOAC as an ESR probe. , 1999, 50, 239-253.		86
95	NMR structure of a minimized human agouti related protein prepared by total chemical synthesis. FEBS Letters, 1999, 451, 125-131.	1.3	75
96	Solution Structures of TOAC-Labeled Trichogin GA IV Peptides from Allowed (g â‰ˆ 2) and Half-Field Electron Spin Resonance. Journal of the American Chemical Society, 1999, 121, 6919-6927.	6.6	42
97	Î± and 310:â€‰ The Split Personality of Polypeptide Helices. Accounts of Chemical Research, 1999, 32, 1027-1033.	7.6	182
98	Electron spin resonance and structural analysis of water soluble, alanine-rich peptides incorporating TO AC. Molecular Physics, 1998, 95, 957-966.	0.8	43
99	ESR STUDIES OF PIG CITRATE SYNTHASE. Biochemical Society Transactions, 1997, 25, 380S-380S.	1.6	0
100	Estimating the relative populations of 310-helix and Î±-helix in Ala-rich peptides: a hydrogen exchange and high field NMR study. Journal of Molecular Biology, 1997, 267, 963-974.	2.0	116
101	Kinetics and mechanism of amyloid formation by the prion protein H1 peptide as determined by time-dependent ESR. Chemistry and Biology, 1997, 4, 345-355.	6.2	55
102	ESR Characterization of Hexameric, Helical Peptides Using Double TOAC Spin Labeling. Journal of the American Chemical Society, 1996, 118, 7618-7625.	6.6	116
103	Distinguishing Helix Conformations in Alanine-Rich Peptides Using the Unnatural Amino Acid TOAC and Electron Spin Resonance. Journal of the American Chemical Society, 1996, 118, 271-272.	6.6	85
104	Local helix content in an alanine-rich peptide as determined by the complete set of 3JHNÎ± coupling constants. Journal of Biomolecular NMR, 1996, 7, 331-334.	1.6	24
105	Synthesis and conformational studies of peptides containing TOAC, a spin-labelled CÎ±,Î±-disubstituted glycine. Journal of Peptide Science, 1995, 1, 45-57.	0.8	103
106	[24] Electron spin labels. Methods in Enzymology, 1995, 246, 589-610.	0.4	24
107	A single carboxy-terminal arginine determines the amino-terminal helix conformation of an alanine-based peptide. Nature Structural and Molecular Biology, 1994, 1, 374-377.	3.6	38
108	Selective placement of electron spin resonance spin labels: new structural methods for peptides and proteins. Trends in Biochemical Sciences, 1992, 17, 448-452.	3.7	67

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109	Short alanine-based peptides may form 310-helices and not Î±-helices in aqueous solution. Nature, 1992, 359, 653-655.	13.7	226
110	Position-dependent local motions in spin-labeled analogs of a short .alpha.-helical peptide determined by electron spin resonance. Biochemistry, 1991, 30, 9498-9503.	1.2	37
111	A reevaluation of the mathematical models for simulating single-channel and whole-cell ionic currents. Synapse, 1988, 2, 97-103.	0.6	8
112	Structural and Functional Responses of Enzymes to Immobilization:.. Annals of the New York Academy of Sciences, 1987, 501, 80-84.	1.8	5
113	Application of EPR Methods in Studies of Immobilized Enzyme Systems. Annals of the New York Academy of Sciences, 1986, 469, 253-258.	1.8	14
114	Twoâ€dimensional electron spin echo spectroscopy and slow motions. Journal of Chemical Physics, 1984, 81, 37-48.	1.2	132