Suren A Tatulian

List of Publications by Year
in descending order

80 papers	3,410 citations	136950 32 h-index	144013 57 g-index
80 all docs	80 docs citations	80 times ranked	3604 citing authors

#	Article	IF	Citations
1	Infrared spectroscopy of proteins and peptides in lipid bilayers. Quarterly Reviews of Biophysics, 1997, 30, 365-429.	5.7	609
2	Structure of a Peptide Adsorbed on Graphene and Graphite. Nano Letters, 2012, 12, 2342-2346.	9.1	134
3	Attenuated Total Reflection Fourier Transform Infrared Spectroscopy:Â A Method of Choice for Studying Membrane Proteins and Lipidsâ€. Biochemistry, 2003, 42, 11898-11907.	2.5	118
4	Effect of the N-terminal glycine on the secondary structure, orientation, and interaction of the influenza hemagglutinin fusion peptide with lipid bilayers. Biophysical Journal, 1996, 70, 2275-2286.	0.5	115
5	Secondary Structure, Orientation, Oligomerization, and Lipid Interactions of the Transmembrane Domain of Influenza Hemagglutinin. Biochemistry, 2000, 39, 496-507.	2.5	115
6	Effect of lipid phase transition on the binding of anions to dimyristoylphosphatidylcholine liposomes. Biochimica Et Biophysica Acta - Biomembranes, 1983, 736, 189-195.	2.6	113
7	Secondary Structure and Orientation of Phospholamban Reconstituted in Supported Bilayers from Polarized Attenuated Total Reflection FTIR Spectroscopy. Biochemistry, 1995, 34, 4448-4456.	2.5	112
8	Toward Understanding Interfacial Activation of Secretory Phospholipase A2 (PLA2): Membrane Surface Properties and Membrane-Induced Structural Changes in the Enzyme Contribute Synergistically to PLA2 Activation. Biophysical Journal, 2001, 80, 789-800.	0.5	109
9	Characterization of two membrane-bound forms of OmpA. Biochemistry, 1995, 34, 1921-1929.	2.5	101
10	Membrane Fluidity Is a Key Modulator of Membrane Binding, Insertion, and Activity of 5-Lipoxygenase. Biophysical Journal, 2005, 88, 4084-4094.	0.5	94
11	Challenges and hopes for Alzheimerâ€™s disease. Drug Discovery Today, 2022, 27, 1027-1043.	6.4	87
12	Functional Reconstitution of Recombinant Phospholamban with Rabbit Skeletal Ca2+-ATPase. Journal of Biological Chemistry, 1995, 270, 9390-9397.	3.4	78
13	Orientation of functional and nonfunctional PTS permease signal sequences in lipid bilayers. A polarized attenuated total reflection infrared study. Biochemistry, 1993, 32, 7720-7726.	2.5	76
14	Structural changes in a secretory phospholipase A2 Induced by membrane binding: a clue to interfacial activation?. Journal of Molecular Biology, 1997, 268, 809-815.	4.2	72
15	Structural Characterization of Membrane Proteins and Peptides by FTIR and ATR-FTIR Spectroscopy. Methods in Molecular Biology, 2013, 974, 177-218.	0.9	71
16	Conformational Instability of the Cholera Toxin A1 Polypeptide. Journal of Molecular Biology, 2007, 374, 1114-1128.	4.2	66
17	C2 Domain-Containing Phosphoprotein CDP138 Regulates GLUT4 Insertion into the Plasma Membrane. Cell Metabolism, 2011, 14, 378-389.	16.2	64
18	Membrane Binding and Pore Formation by a Cytotoxic Fragment of Amyloid Î² Peptide. Journal of Physical Chemistry B, 2017, 121, 10293-10305.	2.6	55

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19	Uncovering a Calcium-Regulated Membrane-Binding Mechanism for Soybean Lipoxygenase-1. Biochemistry, 1998, 37, 15481-15490.	2.5	53
20	Structural Dynamics of Insulin Receptor and Transmembrane Signaling. Biochemistry, 2015, 54, 5523-5532.	2.5	51
21	Protein-disulfide Isomerase Displaces the Cholera Toxin A1 Subunit from the Holotoxin without Unfolding the A1 Subunit. Journal of Biological Chemistry, 2011, 286, 22090-22100.	3.4	48
22	The N-terminal Î±-Helix of Pancreatic Phospholipase A2 Determines Productive-mode Orientation of the Enzyme at the Membrane Surface. Journal of Molecular Biology, 2004, 344, 71-89.	4.2	46
23	Modulation of Human 5-Lipoxygenase Activity by Membrane Lipids. Biochemistry, 2004, 43, 14653-14666.	2.5	43
24	Stabilization of the Tertiary Structure of the Cholera Toxin A1 Subunit Inhibits Toxin Dislocation and Cellular Intoxication. Journal of Molecular Biology, 2009, 393, 1083-1096.	4.2	43
25	Structure of amyloid Î²25â€“35 in lipid environment and cholesterol-dependent membrane pore formation. Scientific Reports, 2019, 9, 2689.	3.3	43
26	Structural dynamics of theStreptomyces lividansK+channel (SKC1): secondary structure characterization from FTIR spectroscopy. FEBS Letters, 1998, 423, 205-212.	2.8	42
27	The Pertussis Toxin S1 Subunit Is a Thermally Unstable Protein Susceptible to Degradation by the 20S Proteasomeâ€. Biochemistry, 2006, 45, 13734-13740.	2.5	39
28	Positioning Membrane Proteins by Novel Protein Engineering and Biophysical Approaches. Journal of Molecular Biology, 2005, 351, 939-947.	4.2	38
29	Evidence for the Regulatory Role of the N-terminal Helix of Secretory Phospholipase A2 from Studies on Native and Chimeric Proteins. Journal of Biological Chemistry, 2005, 280, 36773-36783.	3.4	37
30	FTIR Analysis of Proteins and Proteinâ€“Membrane Interactions. Methods in Molecular Biology, 2019, 2003, 281-325.	0.9	35
31	The Inhibitory Action of Phospholamban Involves Stabilization of Î±-Helices within the Ca-ATPaseâ€. Biochemistry, 2002, 41, 741-751.	2.5	33
32	Structural Effects of Covalent Inhibition of Phospholipase A2 Suggest Allosteric Coupling between Membrane Binding and Catalytic Sites. Biophysical Journal, 2003, 84, 1773-1783.	0.5	33
33	Isoform-Specific Membrane Insertion of Secretory Phospholipase A2 and Functional Implications. Biochemistry, 2006, 45, 12436-12447.	2.5	33
34	A novel mode of translocation for cytolethal distending toxin. Biochimica Et Biophysica Acta - Molecular Cell Research, 2009, 1793, 489-495.	4.1	33
35	Co- and Post-translocation Roles for HSP90 in Cholera Intoxication. Journal of Biological Chemistry, 2014, 289, 33644-33654.	3.4	33
36	Effects of Lipid Phase Transition and Membrane Surface Charge on the Interfacial Activation of Phospholipase A₂. Biochemistry, 2007, 46, 13089-13100.	2.5	31

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37	Contribution of Subdomain Structure to the Thermal Stability of the Cholera Toxin A1 Subunit. Biochemistry, 2010, 49, 8839-8846.	2.5	29
38	Lipid Rafts Alter the Stability and Activity of the Cholera Toxin A1 Subunit*. Journal of Biological Chemistry, 2012, 287, 30395-30405.	3.4	29
39	Substrate-Induced Unfolding of Protein Disulfide Isomerase Displaces the Cholera Toxin A1 Subunit from Its Holotoxin. PLoS Pathogens, 2014, 10, e1003925.	4.7	29
40	A Therapeutic Chemical Chaperone Inhibits Cholera Intoxication and Unfolding/Translocation of the Cholera Toxin A1 Subunit. PLoS ONE, 2011, 6, e18825.	2.5	28
41	Effect of Guggulsterone and Cembranoids of<i>Commiphora mukul</i>on Pancreatic Phospholipase A₂: Role in Hypocholesterolemia. Journal of Natural Products, 2009, 72, 24-28.	3.0	24
42	Pyroglutamylated Amyloid-Î² Peptide Reverses Cross Î²-Sheets by a Prion-Like Mechanism. Journal of Physical Chemistry B, 2014, 118, 5637-5643.	2.6	22
43	Thermal Unfolding of the Pertussis Toxin S1 Subunit Facilitates Toxin Translocation to the Cytosol by the Mechanism of Endoplasmic Reticulum-Associated Degradation. Infection and Immunity, 2016, 84, 3388-3398.	2.2	22
44	Reversible pH-dependent Conformational Change of Reconstituted Influenza Hemagglutinin. Journal of Molecular Biology, 1996, 260, 312-316.	4.2	21
45	Transmembrane pore formation by the carboxyl terminus of Bax protein. Biochimica Et Biophysica Acta - Biomembranes, 2013, 1828, 732-742.	2.6	21
46	<scp>ADP</scp>â€ribosylation factor 6 acts as an allosteric activator for the folded but not disordered cholera toxin <scp>A</scp>1 polypeptide. Molecular Microbiology, 2014, 94, 898-912.	2.5	21
47	Molecular Basis for Membrane Pore Formation by Bax Protein Carboxyl Terminus. Biochemistry, 2012, 51, 9406-9419.	2.5	19
48	Structural and Functional Effects of Tryptophans Inserted into the Membrane-binding and Substrate-binding Sites of Human Group IIA Phospholipase A2. Biochemistry, 2006, 45, 12448-12460.	2.5	18
49	HSC70 and HSP90 chaperones perform complementary roles in translocation of the cholera toxin A1 subunit from the endoplasmic reticulum to the cytosol. Journal of Biological Chemistry, 2019, 294, 12122-12131.	3.4	18
50	Fluidity-dependence of membrane adhesiveness can be explained by thermotropic shifts in surface potential. Biochimica Et Biophysica Acta - Biomembranes, 1987, 901, 161-165.	2.6	16
51	Unmodified and pyroglutamylated amyloid Î² peptides form hypertoxic heteroâ€oligomers of unique secondary structure. FEBS Journal, 2017, 284, 1355-1369.	4.7	15
52	Isotope-edited FTIR reveals distinct aggregation and structural behaviors of unmodified and pyroglutamylated amyloid Î² peptides. Physical Chemistry Chemical Physics, 2015, 17, 32149-32160.	2.8	14
53	Interfacial Enzymes. Methods in Enzymology, 2017, 583, 197-230.	1.0	13
54	Structural Characteristics of the Plasmid-Encoded Toxin from Enteroaggregative Escherichia coli. Biochemistry, 2008, 47, 9582-9591.	2.5	11

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55	Structural analysis of proteins by isotope-edited FTIR spectroscopy. Spectroscopy, 2010, 24, 37-43.	0.8	11
56	Use of the amicyanin signal sequence for efficient periplasmic expression in E. coli of a human antibody light chain variable domain. Protein Expression and Purification, 2015, 108, 9-12.	1.3	11
57	Quercetin-3-Rutinoside Blocks the Disassembly of Cholera Toxin by Protein Disulfide Isomerase. Toxins, 2019, 11, 458.	3.4	11
58	Effects of AÎ²-derived peptide fragments on fibrillogenesis of AÎ². Scientific Reports, 2021, 11, 19262.	3.3	10
59	Evaluation of Divalent Cation Binding to Phosphatidylserine Membranes by an Analysis of Concentration Dependence of Surface Potential. Journal of Colloid and Interface Science, 1995, 175, 131-137.	9.4	9
60	Determination of helix orientations in proteins. Computational Biology and Chemistry, 2008, 32, 370-374.	2.3	9
61	Stability and Conformational Resilience of Protein Disulfide Isomerase. Biochemistry, 2019, 58, 3572-3584.	2.5	9
62	Holotoxin disassembly by protein disulfide isomerase is less efficient for Escherichia coli heat-labile enterotoxin than cholera toxin. Scientific Reports, 2022, 12, 34.	3.3	9
63	A host-specific factor is necessary for efficient folding of the autotransporter plasmid-encoded toxinâ˜†. Biochimie, 2010, 92, 171-177.	2.6	8
64	Protein disulfide isomerase does not act as an unfoldase in the disassembly of cholera toxin. Bioscience Reports, 2018, 38, .	2.4	8
65	Quantitative Characterization of Membrane Binding of Peripheral Proteins by Spin-Label EPR Spectroscopy. Journal of Physical Chemistry B, 2002, 106, 8870-8877.	2.6	7
66	The sole tryptophan of amicyanin enhances its thermal stability but does not influence the electronic properties of the type 1 copper site. Archives of Biochemistry and Biophysics, 2014, 550-551, 20-27.	3.0	7
67	Reversal of Alpha-Synuclein Fibrillization by Protein Disulfide Isomerase. Frontiers in Cell and Developmental Biology, 2020, 8, 726.	3.7	7
68	Modulation of Toxin Stability by 4-Phenylbutyric Acid and Negatively Charged Phospholipids. PLoS ONE, 2011, 6, e23692.	2.5	7
69	Membrane Pore Formation by Peptides Studied by Fluorescence Techniques. Methods in Molecular Biology, 2019, 2003, 449-464.	0.9	5
70	From the Wave Equation to Biomolecular Structure and Dynamics. Trends in Biochemical Sciences, 2018, 43, 749-751.	7.5	3
71	Mutual structural effects of unmodified and pyroglutamylated amyloid Î² peptides during aggregation. Journal of Peptide Science, 2021, 27, e3312.	1.4	3
72	Unusual Thermal Stability of Human Secreted Phospholipase A2 Enzymes. Biophysical Journal, 2010, 98, 86a-87a.	0.5	1

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73	Molecular-Scale GPS: Positioning a Biosensor Peptide on RyR. Biophysical Journal, 2014, 107, 2003-2005.	0.5	1
74	Morphology-Dependent HIV-Enhancing Effect of Semen-Derived Enhancer of Viral Infection. Biophysical Journal, 2015, 108, 2028-2037.	0.5	1
75	Mechanisms of Interfacial Activation of Human and Bee Venom Phospholipase A2 Enzymes. Biophysical Journal, 2011, 100, 509a.	0.5	0
76	Membrane Destabilization by Alzheimer's Amyloid Î² Peptide. Biophysical Journal, 2013, 104, 239a-240a.	0.5	0
77	Structural Transitions in Unmodified and Pyroglutamylated Amyloid Î² Peptides upon Hydration by Water Vapor. Biophysical Journal, 2016, 110, 218a-219a.	0.5	0
78	Biophysical Characterization of Membrane Pores Formed by Amyloid Beta(25-35). Biophysical Journal, 2017, 112, 226a.	0.5	0
79	INSR. , 2016, , 1-12.		0
80	INSR. , 2018, , 2608-2619.		0