Patrick F J Fuchs

List of Publications by Year
in descending order

35 papers	1,668 citations	394421 19 h-index	377865 34 g-index
36 all docs	36 docs citations	36 times ranked	2302 citing authors

#	Article	IF	Citations
1	Amphipathic Lipid Packing Sensor Motifs: Probing Bilayer Defects with Hydrophobic Residues. Biophysical Journal, 2013, 104, 575-584.	0.5	171
2	Conformational Dependence of Collagenase (Matrix Metalloproteinase-1) Up-regulation by Elastin Peptides in Cultured Fibroblasts. Journal of Biological Chemistry, 2001, 276, 5222-5227.	3.4	153
3	Conical Lipids in Flat Bilayers Induce Packing Defects Similar to that Induced by Positive Curvature. Biophysical Journal, 2013, 104, 585-593.	0.5	149
4	A GROMOS-Compatible Force Field for Small Organic Molecules in the Condensed Phase: The 2016H66 Parameter Set. Journal of Chemical Theory and Computation, 2016, 12, 3825-3850.	5.3	118
5	New Interaction Parameters for Oxygen Compounds in the GROMOS Force Field: Improved Pure-Liquid and Solvation Properties for Alcohols, Ethers, Aldehydes, Ketones, Carboxylic Acids, and Esters. Journal of Chemical Theory and Computation, 2011, 7, 1016-1031.	5.3	112
6	Toward Atomistic Resolution Structure of Phosphatidylcholine Headgroup and Glycerol Backbone at Different Ambient Conditions. Journal of Physical Chemistry B, 2015, 119, 15075-15088.	2.6	109
7	Interdigitation between Triglycerides and Lipids Modulates Surface Properties of Lipid Droplets. Biophysical Journal, 2017, 112, 1417-1430.	0.5	102
8	High accuracy prediction of Î²-turns and their types using propensities and multiple alignments. Proteins: Structure, Function and Bioinformatics, 2005, 59, 828-839.	2.6	101
9	On the Orientation of a Designed Transmembrane Peptide:â€‰ Toward the Right Tilt Angle?. Journal of the American Chemical Society, 2007, 129, 15174-15181.	13.7	96
10	Coarse-Grained Simulations of the HIV-1 Matrix Protein Anchoring: Revisiting Its Assembly on Membrane Domains. Biophysical Journal, 2014, 106, 577-585.	0.5	71
11	A GROMOS Parameter Set for Vicinal Diether Functions: Properties of Polyethyleneoxide and Polyethyleneglycol. Journal of Chemical Theory and Computation, 2012, 8, 3943-3963.	5.3	61
12	Kinetics and Thermodynamics of Type VIII Î²-Turn Formation: A CD, NMR, and Microsecond Explicit Molecular Dynamics Study of the GDNP Tetrapeptide. Biophysical Journal, 2006, 90, 2745-2759.	0.5	44
13	Interpretation of 2H-NMR Experiments on the Orientation of the Transmembrane Helix WALP23 by Computer Simulations. Biophysical Journal, 2010, 99, 1455-1464.	0.5	43
14	The heptad repeat domain 1 of Mitofusin has membrane destabilization function in mitochondrial fusion. EMBO Reports, 2018, 19, .	4.5	39
15	Amphipathic-Lipid-Packing-Sensor interactions with lipids assessed by atomistic molecular dynamics. Biochimica Et Biophysica Acta - Biomembranes, 2011, 1808, 2119-2127.	2.6	35
16	Modeling and Molecular Dynamics of HPA-1a and -1b Polymorphisms: Effects on the Structure of the Î²3 Subunit of the Î±IIbÎ²3 Integrin. PLoS ONE, 2012, 7, e47304.	2.5	33
17	Nuclear pore targeting of the yeast Pom33 nucleoporin depends on karyopherin- and lipid-binding. Journal of Cell Science, 2015, 128, 305-16.	2.0	29
18	Influence of the Treatment of Nonbonded Interactions on the Thermodynamic and Transport Properties of Pure Liquids Calculated Using the 2016H66 Force Field. Journal of Chemical Theory and Computation, 2019, 15, 1806-1826.	5.3	28

#	Article	IF	Citations
19	NMR and molecular dynamics studies of an autoimmune myelin basic protein peptide and its antagonist. FEBS Journal, 2004, 271, 3399-3413.	0.2	20
20	Modeling and molecular dynamics simulations of the V33 variant of the integrin subunit Î²3: Structural comparison with the L33 (HPA-1a) and P33 (HPA-1b) variants. Biochimie, 2014, 105, 84-90.	2.6	20
21	Inverse Conformational Selection in Lipidâ€“Protein Binding. Journal of the American Chemical Society, 2021, 143, 13701-13709.	13.7	16
22	Biophysical Insight on the Membrane Insertion of an Arginine-Rich Cell-Penetrating Peptide. International Journal of Molecular Sciences, 2019, 20, 4441.	4.1	14
23	CX3CL1 homo-oligomerization drives cell-to-cell adherence. Scientific Reports, 2020, 10, 9069.	3.3	13
24	Simulating Bilayers of Nonionic Surfactants with the GROMOS-Compatible 2016H66 Force Field. Langmuir, 2017, 33, 10225-10238.	3.5	12
25	Effect of Dimethyl Sulfoxide on the Binding of 1-Adamantane Carboxylic Acid to Î²- and Î³-Cyclodextrins. ACS Omega, 2018, 3, 1014-1021.	3.5	12
26	On the Effect of the Various Assumptions and Approximations used in Molecular Simulations on the Properties of Bioâ€Molecular Systems: Overview and Perspective on Issues. ChemPhysChem, 2021, 22, 264-282.	2.1	12
27	Cooperation of Conical and Polyunsaturated Lipids to Regulate Initiation and Processing of Membrane Fusion. Frontiers in Molecular Biosciences, 2021, 8, 763115.	3.5	11
28	Insights on pH-dependent conformational changes of mosquito odorant binding proteins by molecular dynamics simulations. Journal of Biomolecular Structure and Dynamics, 2014, 32, 1742-1751.	3.5	10
29	How to best estimate the viscosity of lipid bilayers. Biophysical Chemistry, 2022, 281, 106732.	2.8	8
30	Molecular Study of Ultrasound-Triggered Release of Fluorescein from Liposomes. Langmuir, 2021, 37, 3868-3881.	3.5	7
31	Structural Bases for the Involvement of Phosphatidylinositol-4,5-bisphosphate in the Internalization of the Cell-Penetrating Peptide Penetratin. ACS Chemical Biology, 2022, 17, 1427-1439.	3.4	6
32	Targeting surface voids to counter membrane disorders in lipointoxication-related diseases. Journal of Cell Science, 2016, 129, 2368-81.	2.0	5
33	Molecular Dynamics of Membrane Peptides and Proteins: Principles and Comparison to Experimental Data. Methods in Molecular Biology, 2010, 654, 403-421.	0.9	4
34	Meet-U: Educating through research immersion. PLoS Computational Biology, 2018, 14, e1005992.	3.2	4
35	buildH: Build hydrogen atoms from united-atom molecular dynamics of lipids and calculate the order parameters. Journal of Open Source Software, 2021, 6, 3521.	4.6	0