Timur R Galimzyanov

List of Publications by Year
in descending order

75 papers	842 citations	471061 17 h-index	525886 27 g-index
85 all docs	85 docs citations	85 times ranked	608 citing authors

#	Article	IF	Citations
1	Pore formation in lipid membrane I: Continuous reversible trajectory from intact bilayer through hydrophobic defect to transversal pore. Scientific Reports, 2017, 7, 12152.	1.6	102
2	Pore formation in lipid membrane II: Energy landscape under external stress. Scientific Reports, 2017, 7, 12509.	1.6	73
3	Elastic Membrane Deformations Govern Interleaflet Coupling of Lipid-Ordered Domains. Physical Review Letters, 2015, 115, 088101.	2.9	66
4	Line Activity of Ganglioside GM1 Regulates the Raft Size Distribution in a Cholesterol-Dependent Manner. Langmuir, 2017, 33, 3517-3524.	1.6	37
5	Undulations Drive Domain Registration from theÂTwo Membrane Leaflets. Biophysical Journal, 2017, 112, 339-345.	0.2	34
6	Metabolic Precursor of Cholesterol Causes Formation of Chained Aggregates of Liquid-Ordered Domains. Langmuir, 2016, 32, 1591-1600.	1.6	30
7	Ordered Lipid Domains Assemble via Concerted Recruitment of Constituents from Both Membrane Leaflets. Physical Review Letters, 2020, 124, 108102.	2.9	29
8	Continuum Models of Membrane Fusion: Evolution of the Theory. International Journal of Molecular Sciences, 2020, 21, 3875.	1.8	27
9	Elastic deformations mediate interaction of the raft boundary with membrane inclusions leading to their effective lateral sorting. Scientific Reports, 2020, 10, 4087.	1.6	27
10	Membrane-mediated interaction of amphipathic peptides can be described by a one-dimensional approach. Physical Review E, 2019, 99, 022401.	0.8	26
11	Influenza virus Matrix Protein M1 preserves its conformation with pH, changing multimerization state at the priming stage due to electrostatics. Scientific Reports, 2017, 7, 16793.	1.6	25
12	Membrane Elastic Deformations Modulate Gramicidin A Transbilayer Dimerization and Lateral Clustering. Biophysical Journal, 2018, 115, 478-493.	0.2	25
13	Energy of the interaction between membrane lipid domains calculated from splay and tilt deformations. JETP Letters, 2013, 96, 681-686.	0.4	22
14	Lateral Membrane Heterogeneity Regulates Viral-Induced Membrane Fusion during HIV Entry. International Journal of Molecular Sciences, 2018, 19, 1483.	1.8	22
15	Lateral stress profile and fluorescent lipid probes. FRET pair of probes that introduces minimal distortions into lipid packing. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 2337-2347.	1.4	20
16	Electrolyte mixture based on acetonitrile and ethyl acetate for a wide temperature rangeÂperformance of the supercapacitors. Journal of Power Sources, 2021, 495, 229442.	4.0	19
17	Phospholipidic Colchicinoids as Promising Prodrugs Incorporated into Enzyme-Responsive Liposomes: Chemical, Biophysical, and Enzymological Aspects. Bioconjugate Chemistry, 2019, 30, 1098-1113.	1.8	18
18	Residence time of singlet oxygen in membranes. Scientific Reports, 2018, 8, 14000.	1.6	17

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19	Photoswitching of model ion channels in lipid bilayers. Journal of Photochemistry and Photobiology B: Biology, 2021, 224, 112320.	1.7	17
20	Switching between Successful and Dead-End Intermediates in Membrane Fusion. International Journal of Molecular Sciences, 2017, 18, 2598.	1.8	15
21	GalimzyanovetÂal.Reply:. Physical Review Letters, 2016, 116, 079802.	2.9	14
22	Monolayerwise application of linear elasticity theory well describes strongly deformed lipid membranes and the effect of solvent. Soft Matter, 2020, 16, 1179-1189.	1.2	14
23	Analytical calculation of the lipid bilayer bending modulus. Physical Review E, 2016, 94, 042415.	0.8	13
24	Elastic deformations of bolalipid membranes. Soft Matter, 2016, 12, 2357-2364.	1.2	13
25	Stabilization of bilayer structure of raft due to elastic deformations of membrane. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2011, 5, 286-292.	0.3	12
26	Additional contributions to elastic energy of lipid membranes: Tilt-curvature coupling and curvature gradient. Physical Review E, 2020, 102, 042406.	0.8	11
27	Amphipathic Peptides Impede Lipid Domain Fusion in Phase-Separated Membranes. Membranes, 2021, 11, 797.	1.4	10
28	Model of membrane fusion: Continuous transition to fusion pore with regard of hydrophobic and hydration interactions. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2014, 8, 153-161.	0.3	9
29	The Effect of Transmembrane Protein Shape on Surrounding Lipid Domain Formation by Wetting. Biomolecules, 2019, 9, 729.	1.8	9
30	Phase separation in lipid membranes induced by the elastic properties of components. JETP Letters, 2011, 93, 463-469.	0.4	8
31	Interaction of amphipathic peptides mediated by elastic membrane deformations. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2017, 11, 206-216.	0.3	7
32	Heterogeneity in Lateral Distribution of Polycations at the Surface of Lipid Membrane: From the Experimental Data to the Theoretical Model. Materials, 2021, 14, 6623.	1.3	7
33	Determinants of Lipid Domain Size. International Journal of Molecular Sciences, 2022, 23, 3502.	1.8	7
34	Polypeptides on the Surface of Lipid Membranes. Theoretical Analysis of Electrokinetic Data. Colloid Journal, 2019, 81, 125-135.	0.5	6
35	Membrane-Mediated Lateral Interactions Regulate the Lifetime of Gramicidin Channels. Membranes, 2020, 10, 368.	1.4	6
36	Classes of metastable thermodynamic quantum time crystals. Physical Review B, 2019, 100, .	1.1	5

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37	Nonlinear material and ionic transport through membrane nanotubes. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183677.	1.4	5
38	Microscopic Description of the Thermodynamics of a Lipid Membrane at a Liquidâ€"Gel Phase Transition. JETP Letters, 2018, 107, 718-724.	0.4	4
39	Origin of lipid tilt in flat monolayers and bilayers. Physical Review E, 2019, 100, 062405.	0.8	4
40	Mechanism of pore formation in stearoyl-oleoyl-phosphatidylcholine membranes subjected to lateral tension. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2017, 11, 193-205.	0.3	3
41	Detection of DNA molecules in a lipid nanotube channel in the low ion strength conditions. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2017, 11, 217-224.	0.3	3
42	Cyclopentane rings in hydrophobic chains of a phospholipid enhance the bilayer stability to electric breakdown. Soft Matter, 2020, 16, 3216-3223.	1.2	3
43	Inhomogeneity of polylysine adsorption layers on lipid membranes revealed by theoretical analysis of electrokinetic data and molecular dynamics simulations. Bioelectrochemistry, 2021, 141, 107828.	2.4	3
44	Single fermion Green's function in the quantum ordered Fermi-system: Analytic solution. Physica B: Condensed Matter, 2012, 407, 1882-1884.	1.3	2
45	Lipid lateral self-diffusion drop at liquid-gel phase transition. Physical Review E, 2019, 99, 012414.	0.8	2
46	Archaeal cyclopentane fragment in a surfactant's hydrophobic tail decreases the Krafft point. Soft Matter, 2020, 16, 1333-1341.	1.2	2
47	Line tension and structure of raft boundary calculated from bending, tilt, and lateral compression/stretching. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2011, 5, 385-391.	0.3	1
48	Bolalipid Membranes: Elasticity Theory Approach. Biophysical Journal, 2015, 108, 88a.	0.2	1
49	Lateral redistribution of transmembrane proteins and liquid-ordered domains in lipid membranes with inhomogeneous curvature. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2016, 10, 259-268.	0.3	1
50	Normal Fluctuations of Biological Membrane Shape as a Coupling Factor for Ordered Monolayer Domains. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2019, 13, 205-211.	0.3	1
51	Interaction of Peptides Containing CRAC Motifs with Lipids in Membranes of Various Composition. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2021, 15, 120-129.	0.3	1
52	Influence of Ionic Strength on Adsorption of Polypeptides on Lipid Membranes: Theoretical Analysis. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2021, 15, 175-183.	0.3	1
53	Configurations of Ordered Domain Boundary in Lipid Membrane on Solid Support. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2021, 15, 239-248.	0.3	1
54	Interaction of Ordered Lipid Domains in the Presence of Amphipatic Peptides. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2021, 15, 219-229.	0.3	1

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55	Elastic Deformations at a Boundary Stabilizes Opposion of Monolayer Rafts in the Structure of a Bilayer Raft. Biophysical Journal, 2012, 102, 295a.	0.2	0
56	High Superconducting T c and Suppressed Isotope Effect in the Instantonic Condensate State of the Fermi-System: Analytic Solution. Journal of Superconductivity and Novel Magnetism, 2013, 26, 2679-2683.	0.8	0
57	Raft Boundary Structure is Responsible for Monolayer Domains Coupling and Line Activity of Non-Bilayer Components. Biophysical Journal, 2014, 106, 93a.	0.2	0
58	Phenomenological Elasticity Theory Approach to Bolalipid Membranes. Biophysical Journal, 2014, 106, 287a.	0.2	0
59	Flexible String Model Analytical Description of Main Phase Transition in Lipid Bilayers. Biophysical Journal, 2016, 110, 73a.	0.2	0
60	Mechanism of Line Activity of Ganglioside GM1 on Liquid-Ordered Domains. Biophysical Journal, 2016, 110, 582a.	0.2	0
61	Transbilayer Registration of Liquid-Ordered Domains: No Interactions at the Membrane Midplane Required. Biophysical Journal, 2016, 110, 579a.	0.2	0
62	Liquid Membrane Fluctuations Drive Ordered Monolayer Domain Alignment and Raft Stacking. Biophysical Journal, 2017, 112, 383a.	0.2	0
63	Energy Landscape of Pore Formation in Bilayer Lipid Membrane. Biophysical Journal, 2017, 112, 468a.	0.2	0
64	Energy Landscape of Membrane Deformations Predicts Mechanism of Pore Formation by Antimicrobial Peptides. Biophysical Journal, 2018, 114, 260a.	0.2	0
65	Modulation of Ionic Conductivity of Lipid Bilayer-Based Nanoscopic Channels by Pre-adsorbed Charged Macromolecules as a Tool for their Detection and Quantification. Biophysical Journal, 2018, 114, 686a-687a.	0.2	0
66	Leaky Intermediates and Possible Dead-End Configurations in Membrane Fusion. Biophysical Journal, 2018, 114, 606a.	0.2	0
67	Lipid Domain Boundary as Universal Attractor. Biophysical Journal, 2018, 114, 102a.	0.2	0
68	Modeling of the Interaction of Viral Fusion Peptides with the Domains of Liquid-Ordered Phase in a Lipid Membrane. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2018, 12, 352-359.	0.3	0
69	Gangliosides and Lysolipids Regulate the Size of Membrane Rafts Depending on the Membrane Composition. Biophysical Journal, 2018, 114, 271a.	0.2	0
70	Membrane-Mediated Gramicidin Interactions Determine Peptide Clustering and Enhance Channel Formation. Biophysical Journal, 2018, 114, 277a-278a.	0.2	0
71	Modeling of the Initial Stage of Fusion of Influenza Virus with Liposomes. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2019, 13, 120-129.	0.3	0
72	Ordered Lipid Domains Assemble via Concerted Recruitment of Constituents from Both Membrane Leaflets. Biophysical Journal, 2019, 116, 328a.	0.2	0

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73	Origin of Lipid Tilt in Flat Lipid Monolayers and Bilayers. Biophysical Journal, 2020, 118, 390a.	0.2	0
74	Effect of Lipid Structure and Material Properties on the Membrane Stability to Pore Formation. Biophysical Journal, 2020, 118, 390a.	0.2	0
75	Interleaflet Interaction in Phase Separated Asymmetric Lipid Bilayers. Biophysical Journal, 2020, 118, 388a.	0.2	0