

# Milka Doktorova

## List of Publications by Year in descending order

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Version: 2024-02-01

48  
papers

1,383  
citations

471371

17  
h-index

434063

31  
g-index

54  
all docs

54  
docs citations

54  
times ranked

1397  
citing authors

#	ARTICLE	IF	CITATIONS
1	How cholesterol stiffens unsaturated lipid membranes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21896-21905.	3.3	212
2	Preparation of asymmetric phospholipid vesicles for use as cell membrane models. Nature Protocols, 2018, 13, 2086-2101.	5.5	128
3	Structural and functional consequences of reversible lipid asymmetry in living membranes. Nature Chemical Biology, 2020, 16, 1321-1330.	3.9	121
4	Subnanometer Structure of an Asymmetric Model Membrane: Interleaflet Coupling Influences Domain Properties. Langmuir, 2016, 32, 5195-5200.	1.6	105
5	Regulation of lipid saturation without sensing membrane fluidity. Nature Communications, 2020, 11, 756.	5.8	105
6	Determination of bending rigidity and tilt modulus of lipid membranes from real-space fluctuation analysis of molecular dynamics simulations. Physical Chemistry Chemical Physics, 2017, 19, 16806-16818.	1.3	98
7	Direct label-free imaging of nanodomains in biomimetic and biological membranes by cryogenic electron microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 19943-19952.	3.3	81
8	Hybrid and Nonhybrid Lipids Exert Common Effects on Membrane Raft Size and Morphology. Journal of the American Chemical Society, 2013, 135, 14932-14935.	6.6	73
9	A New Computational Method for Membrane Compressibility: Bilayer Mechanical Thickness Revisited. Biophysical Journal, 2019, 116, 487-502.	0.2	53
10	Ca <sup>2+</sup> -dependent mechanism of membrane insertion and destabilization by the SARS-CoV-2 fusion peptide. Biophysical Journal, 2021, 120, 1105-1119.	0.2	53
11	Computational modeling of the N-terminus of the human dopamine transporter and its interaction with PIP <sub>2</sub> -containing membranes. Proteins: Structure, Function and Bioinformatics, 2015, 83, 952-969.	1.5	47
12	Gramicidin Increases Lipid Flip-Flop in Symmetric and Asymmetric Lipid Vesicles. Biophysical Journal, 2019, 116, 860-873.	0.2	44
13	Accurate In Silico Modeling of Asymmetric Bilayers Based on Biophysical Principles. Biophysical Journal, 2018, 115, 1638-1643.	0.2	41
14	Peptide-Induced Lipid Flip-Flop in Asymmetric Liposomes Measured by Small Angle Neutron Scattering. Langmuir, 2019, 35, 11735-11744.	1.6	41
15	Cholesterol Promotes Protein Binding by Affecting Membrane Electrostatics and Solvation Properties. Biophysical Journal, 2017, 113, 2004-2015.	0.2	38
16	Molecular Structure of Sphingomyelin in Fluid Phase Bilayers Determined by the Joint Analysis of Small-Angle Neutron and X-ray Scattering Data. Journal of Physical Chemistry B, 2020, 124, 5186-5200.	1.2	24
17	Model Membrane Systems Used to Study Plasma Membrane Lipid Asymmetry. Symmetry, 2021, 13, 1356.	1.1	23
18	Reply to Nagle et al.: The universal stiffening effects of cholesterol on lipid membranes. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	18

#	ARTICLE	IF	CITATIONS
19	Membrane lipids are both the substrates and a mechanistically responsive environment of TMEM16 scramblase proteins. <i>Journal of Computational Chemistry</i> , 2020, 41, 538-551.	1.5	15
20	Structure and Interdigitation of Chain-Asymmetric Phosphatidylcholines and Milk Sphingomyelin in the Fluid Phase. <i>Symmetry</i> , 2021, 13, 1441.	1.1	9
21	Vesicle Viewer: Online visualization and analysis of Åsmall-angle scattering from lipid vesicles. <i>Biophysical Journal</i> , 2021, 120, 4639-4648.	0.2	6
22	On the Long and Winding Road to a Perfect Membrane Model. <i>Biophysical Journal</i> , 2020, 118, 273-275.	0.2	4
23	Probing the Link between Pancratistatin and Mitochondrial Apoptosis through Changes in the Membrane Dynamics on the Nanoscale. <i>Molecular Pharmaceutics</i> , 2022, 19, 1839-1852.	2.3	4
24	Challenging the Dogma - Cell Plasma Membranes are Asymmetric not only in Phospholipid Composition but also Abundance. <i>Biophysical Journal</i> , 2021, 120, 147a.	0.2	3
25	Computational prediction of hinge axes in proteins. <i>BMC Bioinformatics</i> , 2014, 15, S2.	1.2	2
26	Computational Modeling of the N-Terminus of the Human Dopamine Transporter (hDAT). <i>Biophysical Journal</i> , 2015, 108, 252a.	0.2	2
27	Interleaflet Coupling in Asymmetric Membranes: Protocols and Revelations. <i>Biophysical Journal</i> , 2018, 114, 604a.	0.2	2
28	Cholesterol Affects the Bending Rigidity of DOPC Membranes. <i>Biophysical Journal</i> , 2019, 116, 328a.	0.2	2
29	Stiffening of Phosphocholine Membranes by Cholesterol. <i>Biophysical Journal</i> , 2020, 118, 86a.	0.2	1
30	Membrane Deformation Modulated by Hydration and Cholesterol Unveiled by Solid-State 2H NMR Spectroscopy. <i>Biophysical Journal</i> , 2021, 120, 41a.	0.2	1
31	Cholesterol stiffening of lipid membranes and drug interactions: Insights from neutron spin echo and deuterium NMR spectroscopy. , 2022, , 771-796.		1
32	Computational prediction of hinge axes in proteins. , 2013, , .		0
33	Hybrid and Nonhybrid Lipids Exert Common Effects on Membrane Raft Size and Morphology. <i>Biophysical Journal</i> , 2014, 106, 501a.	0.2	0
34	The Interaction of Proteins with Asymmetric Lipid Bilayers. <i>Biophysical Journal</i> , 2016, 110, 419a.	0.2	0
35	Cholesterol Promotes the Peripheral Binding of Retroviral Proteins to Lipid Bilayers. <i>Biophysical Journal</i> , 2016, 110, 356a.	0.2	0
36	A Demonstration of Lipid Flip-Flip in Free-Floating Liposomes. <i>Biophysical Journal</i> , 2016, 110, 17a.	0.2	0

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37	Structural Characterization on Asymmetric Lipid Vesicles at Subnanometer Resolution. Biophysical Journal, 2016, 110, 36a.	0.2	0
38	The Molecular Structure of Sphingomyelin in Fluid Phase Bilayers Determined by the Joint Analysis of Neutron and X-Ray Scattering Data. Biophysical Journal, 2017, 112, 223a.	0.2	0
39	Calculating Membrane Area Compressibility from MD Simulations: a Novel Computational Framework. Biophysical Journal, 2017, 112, 467a.	0.2	0
40	Utilizing Asymmetric GUVs to Inspect Plasma Membrane Phase Behavior and Binding of Polybasic Proteins. Biophysical Journal, 2017, 112, 84a.	0.2	0
41	Investigating the Transbilayer Distribution of Cholesterol in Asymmetric Unilamellar Vesicles using Small-Angle Scattering. Biophysical Journal, 2018, 114, 599a-600a.	0.2	0
42	The Relationship between the Compressibility Moduli of the Bilayer and its Leaflets - Not Simple but Important. Biophysical Journal, 2020, 118, 85a.	0.2	0
43	Direct Imaging of Nanoscale Lipid Organization in Probe-Free Biomimetic Membranes. Biophysical Journal, 2020, 118, 386a.	0.2	0
44	Coupling of Leaflet Structure in Asymmetric Lipid Vesicles. Biophysical Journal, 2020, 118, 90a.	0.2	0
45	Phospholipid Translocation as Driver of Cholesterol (Re)Distribution. Biophysical Journal, 2020, 118, 185a.	0.2	0
46	Simulations of an Asymmetric Mammalian Lipidome. Biophysical Journal, 2020, 118, 389a.	0.2	0
47	Local Stiffening Effects of Cholesterol in Saturated and Unsaturated Phosphatidylcholine Membranes. Biophysical Journal, 2021, 120, 44a.	0.2	0
48	Using Molecular Dynamics to Gain Atomic-Level Insight into Bilayer Properties Measured with NMR and Neutron Spin-Echo Spectroscopy. Biophysical Journal, 2021, 120, 224a-225a.	0.2	0