

# Anton Arkhipov

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7710901/publications.pdf>

Version: 2024-02-01

44  
papers

5,250  
citations

186209

28  
h-index

345118

36  
g-index

59  
all docs

59  
docs citations

59  
times ranked

5839  
citing authors

#	ARTICLE	IF	CITATIONS
1	Conformational Coupling across the Plasma Membrane in Activation of the EGF Receptor. <i>Cell</i> , 2013, 152, 543-556.	13.5	423
2	Architecture and Membrane Interactions of the EGF Receptor. <i>Cell</i> , 2013, 152, 557-569.	13.5	417
3	Classification of electrophysiological and morphological neuron types in the mouse visual cortex. <i>Nature Neuroscience</i> , 2019, 22, 1182-1195.	7.1	333
4	Oncogenic Mutations Counteract Intrinsic Disorder in the EGFR Kinase and Promote Receptor Dimerization. <i>Cell</i> , 2012, 149, 860-870.	13.5	304
5	Integrated Morphoelectric and Transcriptomic Classification of Cortical GABAergic Cells. <i>Cell</i> , 2020, 183, 935-953.e19.	13.5	290
6	Survey of spiking in the mouse visual system reveals functional hierarchy. <i>Nature</i> , 2021, 592, 86-92.	13.7	284
7	Imaging the Migration Pathways for O <sub>2</sub> , CO, NO, and Xe Inside Myoglobin. <i>Biophysical Journal</i> , 2006, 91, 1844-1857.	0.2	258
8	Four-Scale Description of Membrane Sculpting by BAR Domains. <i>Biophysical Journal</i> , 2008, 95, 2806-2821.	0.2	251
9	Stability and Dynamics of Virus Capsids Described by Coarse-Grained Modeling. <i>Structure</i> , 2006, 14, 1767-1777.	1.6	245
10	Coarse Grained Protein-Lipid Model with Application to Lipoprotein Particles. <i>Journal of Physical Chemistry B</i> , 2006, 110, 3674-3684.	1.2	244
11	Transitions to catalytically inactive conformations in EGFR kinase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 7270-7275.	3.3	186
12	Systematic Integration of Structural and Functional Data into Multi-scale Models of Mouse Primary Visual Cortex. <i>Neuron</i> , 2020, 106, 388-403.e18.	3.8	163
13	Human neocortical expansion involves glutamatergic neuron diversification. <i>Nature</i> , 2021, 598, 151-158.	13.7	160
14	EGFR oligomerization organizes kinase-active dimers into competent signalling platforms. <i>Nature Communications</i> , 2016, 7, 13307.	5.8	146
15	Simulations of Membrane Tubulation by Lattices of Amphiphysin N-BAR Domains. <i>Structure</i> , 2009, 17, 882-892.	1.6	131
16	Local connectivity and synaptic dynamics in mouse and human neocortex. <i>Science</i> , 2022, 375, eabj5861.	6.0	124
17	Systematic generation of biophysically detailed models for diverse cortical neuron types. <i>Nature Communications</i> , 2018, 9, 710.	5.8	123
18	Assembly of lipoprotein particles revealed by coarse-grained molecular dynamics simulations. <i>Journal of Structural Biology</i> , 2007, 157, 579-592.	1.3	115

#	ARTICLE	IF	CITATIONS
19	Membrane-Bending Mechanism of Amphiphysin N-BAR Domains. <i>Biophysical Journal</i> , 2009, 97, 2727-2735.	0.2	101
20	Elucidating the Mechanism behind Irreversible Deformation of Viral Capsids. <i>Biophysical Journal</i> , 2009, 97, 2061-2069.	0.2	94
21	Coarse-Grained Molecular Dynamics Simulations of a Rotating Bacterial Flagellum. <i>Biophysical Journal</i> , 2006, 91, 4589-4597.	0.2	93
22	Inferring cortical function in the mouse visual system through large-scale systems neuroscience. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 7337-7344.	3.3	82
23	Visual physiology of the layer 4 cortical circuit in silico. <i>PLoS Computational Biology</i> , 2018, 14, e1006535.	1.5	75
24	The role of molecular modeling in bionanotechnology. <i>Physical Biology</i> , 2006, 3, S40-S53.	0.8	68
25	Her2 activation mechanism reflects evolutionary preservation of asymmetric ectodomain dimers in the human EGFR family. <i>ELife</i> , 2013, 2, e00708.	2.8	62
26	Assembly of Lipids and Proteins into Lipoprotein Particles. <i>Journal of Physical Chemistry B</i> , 2007, 111, 11095-11104.	1.2	60
27	BioNet: A Python interface to NEURON for modeling large-scale networks. <i>PLoS ONE</i> , 2018, 13, e0201630.	1.1	58
28	Membrane Interaction of Bound Ligands Contributes to the Negative Binding Cooperativity of the EGF Receptor. <i>PLoS Computational Biology</i> , 2014, 10, e1003742.	1.5	39
29	Brain Modeling Toolkit: An open source software suite for multiscale modeling of brain circuits. <i>PLoS Computational Biology</i> , 2020, 16, e1008386.	1.5	34
30	The SONATA data format for efficient description of large-scale network models. <i>PLoS Computational Biology</i> , 2020, 16, e1007696.	1.5	32
31	Consistent cross-modal identification of cortical neurons with coupled autoencoders. <i>Nature Computational Science</i> , 2021, 1, 120-127.	3.8	29
32	Continuous Fluorescence Microphotolysis and Correlation Spectroscopy Using 4Pi Microscopy. <i>Biophysical Journal</i> , 2007, 93, 4006-4017.	0.2	20
33	Chapter 11 Molecular Modeling of the Structural Properties and Formation of High-Density Lipoprotein Particles. <i>Current Topics in Membranes</i> , 2008, 60, 313-342.	0.5	8
34	Limits for reduction of effective focal volume in multiple-beam light microscopy. <i>Optics Express</i> , 2009, 17, 2861.	1.7	8
35	The SONATA Data Format for Efficient Description of Large-Scale Network Models. <i>SSRN Electronic Journal</i> , 0, , .	0.4	6
36	Systematic Integration of Structural and Functional Data into Multi-Scale Models of Mouse Primary Visual Cortex. <i>SSRN Electronic Journal</i> , 0, , .	0.4	6

#	ARTICLE	IF	CITATIONS
37	Application of Residue-Based and Shape-Based Coarse-Graining to Biomolecular Simulations. , 2008, , 299-315.		5
38	Measuring Stimulus-Evoked Neurophysiological Differentiation in Distinct Populations of Neurons in Mouse Visual Cortex. ENeuro, 2022, 9, ENEURO.0280-21.2021.	0.9	5
39	Multi-scale Simulations of Membrane Sculpting by N-BAR Domains. RSC Biomolecular Sciences, 2010, , 146-176.	0.4	1
40	Mobility Analysis in Living Yeast using 4Pi CFM. Biophysical Journal, 2010, 98, 580a.	0.2	0
41	Simulation of Membrane Sculpting by EFC F-BAR Domain Lattices. Biophysical Journal, 2010, 98, 632a.	0.2	0
42	Computer Simulation of Membrane Tubulation by EFC F-BAR Domain Lattices. Biophysical Journal, 2012, 102, 237a.	0.2	0
43	How Synaptotagmin I, N-BAR and F-BAR Domains Generate Membrane Curvature. Biophysical Journal, 2015, 108, 555a.	0.2	0
44	Oligomerization of the Epidermal Growth Factor Receptor Organizes Kinase-Active Dimers into Competent Signaling Platforms. Biophysical Journal, 2017, 112, 26a-27a.	0.2	0