Elizabeth Villa

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9420822/publications.pdf

Version: 2024-02-01

66 papers	22,378 citations	94269 37 h-index	161609 54 g-index
85 all docs	85 docs citations	85 times ranked	27811 citing authors

#	ARTICLE	IF	CITATIONS
1	Scalable molecular dynamics with NAMD. Journal of Computational Chemistry, 2005, 26, 1781-1802.	1.5	15,208
2	Flexible Fitting of Atomic Structures into Electron Microscopy Maps Using Molecular Dynamics. Structure, 2008, 16, 673-683.	1.6	833
3	Visualizing the molecular sociology at the HeLa cell nuclear periphery. Science, 2016, 351, 969-972.	6.0	493
4	Molecular architecture of the 26S proteasome holocomplex determined by an integrative approach. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1380-1387.	3.3	422
5	Focused ion beam micromachining of eukaryotic cells for cryoelectron tomography. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4449-4454.	3.3	356
6	The SARS-CoV-2 nucleocapsid phosphoprotein forms mutually exclusive condensates with RNA and the membrane-associated M protein. Nature Communications, 2021, 12, 502.	5.8	307
7	Molecular dynamics flexible fitting: A practical guide to combine cryo-electron microscopy and X-ray crystallography. Methods, 2009, 49, 174-180.	1.9	305
8	Structural Insight into Nascent Polypeptide Chainâ€“Mediated Translational Stalling. Science, 2009, 326, 1412-1415.	6.0	263
9	Architecture of the RNA polymerase IIâ€“Mediator core initiation complex. Nature, 2015, 518, 376-380.	13.7	259
10	Near-atomic resolution structural model of the yeast 26S proteasome. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14870-14875.	3.3	242
11	Native architecture of the Chlamydomonas chloroplast revealed by in situ cryo-electron tomography. ELife, 2015, 4, .	2.8	224
12	Ribosome-induced changes in elongation factor Tu conformation control GTP hydrolysis. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1063-1068.	3.3	219
13	Assembly of a nucleus-like structure during viral replication in bacteria. Science, 2017, 355, 194-197.	6.0	207
14	A photoactivable multi-inhibitor nanoliposome for tumour control and simultaneous inhibition of treatment escape pathways. Nature Nanotechnology, 2016, 11, 378-387.	15.6	201
15	HSP70 chaperones RNA-free TDP-43 into anisotropic intranuclear liquid spherical shells. Science, 2021, 371, .	6.0	200
16	Dynein achieves processive motion using both stochastic and coordinated stepping. Nature Structural and Molecular Biology, 2012, 19, 193-200.	3.6	198
17	Cryo-EM structure and rRNA model of a translating eukaryotic 80S ribosome at 5.5-â„« resolution. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19748-19753.	3.3	196
18	Opening windows into the cell: focused-ion-beam milling for cryo-electron tomography. Current Opinion in Structural Biology, 2013, 23, 771-777.	2.6	179

#	ARTICLE	IF	CITATIONS
19	Structure of the no-go mRNA decay complex Dom34â€“Hbs1 bound to a stalled 80S ribosome. Nature Structural and Molecular Biology, 2011, 18, 715-720.	3.6	150
20	Structure of LRRK2 in Parkinsonâ€™s disease and model for microtubule interaction. Nature, 2020, 588, 344-349.	13.7	147
21	Structural dynamics of the lac repressor-DNA complex revealed by a multiscale simulation. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 6783-6788.	3.3	135
22	The In Situ Structure of Parkinsonâ€™s Disease-Linked LRRK2. Cell, 2020, 182, 1508-1518.e16.	13.5	135
23	Localization of eukaryote-specific ribosomal proteins in a 5.5-â„« cryo-EM map of the 80S eukaryotic ribosome. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19754-19759.	3.3	122
24	Preparing samples from whole cells using focused-ion-beam milling for cryo-electron tomography. Nature Protocols, 2020, 15, 2041-2070.	5.5	114
25	Regulation of the Protein-Conducting Channel by a Bound Ribosome. Structure, 2009, 17, 1453-1464.	1.6	107
26	Comprehensive structure and functional adaptations of the yeast nuclear pore complex. Cell, 2022, 185, 361-378.e25.	13.5	87
27	Three-dimensional architecture of actin filaments in <i>Listeria monocytogenes</i> comet tails. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20521-20526.	3.3	81
28	Molecular mechanisms of cellular mechanics. Physical Chemistry Chemical Physics, 2006, 8, 3692.	1.3	76
29	Multiscale Method for Simulating Protein-DNA Complexes. Multiscale Modeling and Simulation, 2004, 2, 527-553.	0.6	68
30	Protein-Induced Membrane Curvature Investigated through Molecular Dynamics Flexible Fitting. Biophysical Journal, 2009, 97, 321-329.	0.2	68
31	Viral Capsid Trafficking along Treadmilling Tubulin Filaments in Bacteria. Cell, 2019, 177, 1771-1780.e12.	13.5	62
32	Visualizing cellular processes at the molecular level by cryo-electron tomography. Journal of Cell Science, 2010, 123, 7-12.	1.2	59
33	Integrative Approaches for Cellular Cryo-electron Tomography. Methods in Cell Biology, 2012, 111, 259-281.	0.5	59
34	Promiscuous behaviour of archaeal ribosomal proteins: Implications for eukaryotic ribosome evolution. Nucleic Acids Research, 2013, 41, 1284-1293.	6.5	59
35	Finding the right fit: chiseling structures out of cryo-electron microscopy maps. Current Opinion in Structural Biology, 2014, 25, 118-125.	2.6	49
36	Structural model and excitonic properties of the dimeric RCâ€“LH1â€“PufX complex from Rhodobacter sphaeroides. Chemical Physics, 2009, 357, 188-197.	0.9	48

#	ARTICLE	IF	CITATIONS
37	Applications of the molecular dynamics flexible fitting method. Journal of Structural Biology, 2011, 173, 420-427.	1.3	44
38	Chromosome Translocation Inflates Bacillus Forespores and Impacts Cellular Morphology. Cell, 2018, 172, 758-770.e14.	13.5	42
39	The molecular architecture of engulfment during Bacillus subtilis sporulation. ELife, 2019, 8, .	2.8	34
40	Asymmetric localization of the cell division machinery during Bacillus subtilis sporulation. ELife, 2021, 10, .	2.8	24
41	A novel vibriophage exhibits inhibitory activity against host protein synthesis machinery. Scientific Reports, 2020, 10, 2347.	1.6	20
42	The Structure of Human Tripeptidyl Peptidase II as Determined by a Hybrid Approach. Structure, 2012, 20, 593-603.	1.6	19
43	Practical Approaches for Cryo-FIB Milling and Applications for Cellular Cryo-Electron Tomography. Methods in Molecular Biology, 2021, 2215, 49-82.	0.4	19
44	Subcellular organization of viral particles during maturation of nucleus-forming jumbo phage. Science Advances, 2022, 8, eabj9670.	4.7	18
45	Selective transport of fluorescent proteins into the phage nucleus. PLoS ONE, 2021, 16, e0251429.	1.1	16
46	Challenges of Integrating Stochastic Dynamics and Cryo-Electron Tomograms in Whole-Cell Simulations. Journal of Physical Chemistry B, 2017, 121, 3871-3881.	1.2	14
47	Generating Chromosome Geometries in a Minimal Cell From Cryo-Electron Tomograms and Chromosome Conformation Capture Maps. Frontiers in Molecular Biosciences, 2021, 8, 644133.	1.6	13
48	Integration of Cryo-EM with Atomic and Proteinâ€“Protein Interaction Data. Methods in Enzymology, 2010, 483, 47-72.	0.4	12
49	Revealing bacterial cell biology using cryo-electron tomography. Current Opinion in Structural Biology, 2022, 75, 102419.	2.6	12
50	The In situ Structure of Parkinson's Disease-Linked LRRK2. Biophysical Journal, 2020, 118, 486a.	0.2	11
51	Entropy-regularized deconvolution of cellular cryotransmission electron tomograms. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	11
52	Opening Windows into the Cell: Focused-Ion-Beam Milling for Cryo-Electron Tomography. Biophysical Journal, 2014, 106, 600a.	0.2	3
53	Hybrid Imaging-Novel Approaches and Recent Advances in Correlative Microscopy. Microscopy and Microanalysis, 2011, 17, 964-965.	0.2	1
54	1.14 Structure Determination of Macromolecular Complexes by Cryo-Electron Microscopy in vitro and in situ. , 2012, , 245-276.		1

#	ARTICLE	IF	CITATIONS
55	Opening Windows into the Cell: Focused Ion Beam Micromachining of Eukaryotic Cells for Cryo-Electron Tomography. Biophysical Journal, 2013, 104, 353a-354a.	0.2	1
56	Revealing the Native Molecular Architecture of the Nuclear Periphery using Cryo-Focused-Ion-Beam Milling, Light Microscopy and Electron Tomography. Microscopy and Microanalysis, 2017, 23, 1248-1249.	0.2	1
57	Structural Cell Biology: Preparing Specimens for Cryo-Electron Tomography Using Focused-Ion-Beam Milling. Microscopy and Microanalysis, 2014, 20, 1222-1223.	0.2	0
58	Optical probes for molecular-guided surgery: Using photomedicine to prevent recurrence in the surgical bed (Conference Presentation). , 2016, , .		0
59	Photodynamic therapy with simultaneous suppression of multiple treatment escape pathways (Conference Presentation). , 2016, , .		0
60	Biography of Klaus Schulten. Journal of Physical Chemistry B, 2017, 121, 3206-3206.	1.2	0
61	Stochastic Spatial Simulation of Genetic Information Processes in the Minimal Cell. Biophysical Journal, 2021, 120, 109a.	0.2	0
62	Generating Chromosome Geometries at the Single-Cell Level from Cryo-Electron Tomograms. Biophysical Journal, 2021, 120, 222a.	0.2	0
63	Merging data from cryo-EM and X-ray crystallography to reveal biomolecular function. Acta Crystallographica Section A: Foundations and Advances, 2008, 64, C47-C47.	0.3	0
64	Opening windows into the cell: bringing structure to cell biology using cryo-electron microscopy. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, a417-a417.	0.0	0
65	Chromosome Translocation Inflates <i>Bacillus subtilis</i> Forespores and Impacts Cellular Morphology. SSRN Electronic Journal, 0, , .	0.4	0
66	Flexible Fitting of Atomic Structures into Electron Microscopy Maps Using Molecular Dynamics. journal of hand surgery Asian-Pacific volume, The, 2018, , 433-443.	0.2	0