Mateusz Chwastyk

List of Publications by Year
in descending order

21	403	758635 12	794141 19
papers	citations	h-index	g-index

22	22	22	567
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quantitative determination of mechanical stability in the novel coronavirus spike protein. Nanoscale, 2020, 12, 16409-16413.	2.8	49
2	Cotranslational folding of deeply knotted proteins. Journal of Physics Condensed Matter, 2015, 27, 354105.	0.7	40
3	Polysaccharideâ€“Protein Complexes in a Coarse-Grained Model. Journal of Physical Chemistry B, 2015, 119, 12028-12041.	1.2	38
4	Structureâ€based analysis of thermodynamic and mechanical properties of cavityâ€containing proteinsÂâ€“Âcase study of plant pathogenesisâ€related proteins of class 10. FEBS Journal, 2014, 281, 416-429.	2.2	30
5	Synthesis of ZnAl₂O₄:(Er³⁺,Yb³⁺) spinel-type nanocrystalline upconverting luminescent marker in HeLa carcinoma cells, using a combustion aerosol method route. RSC Advances, 2014, 4, 56596-56604.	1.7	29
6	Coarse-grained model of the native cellulose $$hbox {I}alpha$$ and the transformation pathways to the $$hbox {I}eta$$ allomorph. Cellulose, 2016, 23, 1573-1591.	2.4	29
7	Elastic moduli of biological fibers in a coarse-grained model: crystalline cellulose and Î²-amyloids. Physical Chemistry Chemical Physics, 2017, 19, 28195-28206.	1.3	27
8	Multiple folding pathways of proteins with shallow knots and co-translational folding. Journal of Chemical Physics, 2015, 143, 045101.	1.2	25
9	Statistical radii associated with amino acids to determine the contact map: fixing the structure of a type I cohesin domain in theClostridium thermocellumcellulosome. Physical Biology, 2015, 12, 046002.	0.8	22
10	The volume of cavities in proteins and virus capsids. Proteins: Structure, Function and Bioinformatics, 2016, 84, 1275-1286.	1.5	22
11	Topological transformations in proteins: effects of heating and proximity of an interface. Scientific Reports, 2017, 7, 39851.	1.6	15
12	Structural entanglements in protein complexes. Journal of Chemical Physics, 2017, 146, 225102.	1.2	14
13	Theoretical tests of the mechanical protection strategy in protein nanomechanics. Proteins: Structure, Function and Bioinformatics, 2014, 82, 717-726.	1.5	13
14	Conformational Biases of Î±-Synuclein and Formation of Transient Knots. Journal of Physical Chemistry B, 2020, 124, 11-19.	1.2	12
15	Properties of Cavities in Biological Structuresâ€”A Survey of the Protein Data Bank. Frontiers in Molecular Biosciences, 2020, 7, 591381.	1.6	11
16	Networks of interbasin traffic in intrinsically disordered proteins. Physical Review Research, 2020, 2, .	1.3	7
17	Non-local effects of point mutations on the stability of a protein module. Journal of Chemical Physics, 2017, 147, 105101.	1.2	6
18	Transient knots in intrinsically disordered proteins and neurodegeneration. Progress in Molecular Biology and Translational Science, 2020, 174, 79-103.	0.9	5

#	Article	IF	Citations
19	Knotted Proteins under Tension. Israel Journal of Chemistry, 2014, 54, 1241-1249.	1.0	3
20	Nascent Folding of Proteins Across the Three Domains of Life. Frontiers in Molecular Biosciences, 2021, 8, 692230.	1.6	3
21	Contact-Based Analysis of Aggregation of Intrinsically Disordered Proteins. Methods in Molecular Biology, 2022, 2340, 105-120.	0.4	1