

Alejandro Valbuena

List of Publications by Year in descending order

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Version: 2024-02-01

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papers

547
citations

623734

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713466

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g-index

29
all docs

29
docs citations

29
times ranked

781
citing authors

#	ARTICLE	IF	CITATIONS
1	On the remarkable mechanostability of scaffoldins and the mechanical clamp motif. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 13791-13796.	7.1	116
2	Common Features at the Start of the Neurodegeneration Cascade. PLoS Biology, 2012, 10, e1001335.	5.6	60
3	Nanomechanics of the Cadherin Ectodomain. Journal of Biological Chemistry, 2011, 286, 9405-9418.	3.4	45
4	Imaging and Quantitation of a Succession of Transient Intermediates Reveal the Reversible Self-Assembly Pathway of a Simple Icosahedral Virus Capsid. Journal of the American Chemical Society, 2016, 138, 15385-15396.	13.7	38
5	Visualization of Single Molecules Building a Viral Capsid Protein Lattice through Stochastic Pathways. ACS Nano, 2020, 14, 8724-8734.	14.6	33
6	Mechanical Properties of β -Catenin Revealed by Single-Molecule Experiments. Biophysical Journal, 2012, 103, 1744-1752.	0.5	28
7	Structural Analysis of a Temperature-Induced Transition in a Viral Capsid Probed by HDX-MS. Biophysical Journal, 2017, 112, 1157-1165.	0.5	28
8	Conformational rearrangements in the transmembrane domain of CNGA1 channels revealed by single-molecule force spectroscopy. Nature Communications, 2015, 6, 7093.	12.8	24
9	Amino Acid Side Chains Buried along Intersubunit Interfaces in a Viral Capsid Preserve Low Mechanical Stiffness Associated with Virus Infectivity. ACS Nano, 2017, 11, 2194-2208.	14.6	23
10	Structural basis for biologically relevant mechanical stiffening of a virus capsid by cavity-creating or spacefilling mutations. Scientific Reports, 2017, 7, 4101.	3.3	23
11	Quasi-simultaneous imaging/pulling analysis of single polyprotein molecules by atomic force microscopy. Review of Scientific Instruments, 2007, 78, 113707.	1.3	22
12	Quantification and modification of the equilibrium dynamics and mechanics of a viral capsid lattice self-assembled as a protein nanocoating. Nanoscale, 2015, 7, 14953-14964.	5.6	21
13	Kinetics of Surface-Driven Self-Assembly and Fatigue-Induced Disassembly of a Virus-Based Nanocoating. Biophysical Journal, 2017, 112, 663-673.	0.5	17
14	Mechanical stiffening of human rhinovirus by cavity-filling antiviral drugs. Nanoscale, 2018, 10, 1440-1452.	5.6	16
15	Nanomechanics of tip-link cadherins. Scientific Reports, 2019, 9, 13306.	3.3	14
16	Structural determinants of mechanical resistance against breakage of a virus-based protein nanoparticle at a resolution of single amino acids. Nanoscale, 2019, 11, 9369-9383.	5.6	9
17	Thermostability of the Foot-and-Mouth Disease Virus Capsid Is Modulated by Lethal and Viability-Restoring Compensatory Amino Acid Substitutions. Journal of Virology, 2019, 93, .	3.4	9
18	Unequivocal Single-Molecule Force Spectroscopy of Intrinsically Disordered Proteins. Methods in Molecular Biology, 2012, 896, 71-87.	0.9	7

#	ARTICLE	IF	CITATIONS
19	Antiviral compounds modulate elasticity, strength and material fatigue of a virus capsid framework. <i>Biophysical Journal</i> , 2022, 121, 919-931.	0.5	7
20	A Genetically Engineered, Chain Mail-Like Nanostructured Protein Material with Increased Fatigue Resistance and Enhanced Self-Healing. <i>Small</i> , 2022, , 2105456.	10.0	4
21	Long-Range Cooperative Disassembly and Aging During Adenovirus Uncoating. <i>Physical Review X</i> , 2021, 11, .	8.9	3
22	The Nanomechanics of Neurotoxic Proteins Reveals Common Features at the Start of the Neurodegeneration Cascade. <i>Biophysical Journal</i> , 2012, 102, 633a.	0.5	0
23	Understanding CNG Channels Gating Process by MD Simulations. <i>Biophysical Journal</i> , 2012, 102, 129a-130a.	0.5	0
24	Characterization of Cyclic Nucleotide Gated Channels using Atomic Force Microscope. <i>Biophysical Journal</i> , 2012, 102, 131a.	0.5	0
25	Single Molecule Force Spectroscopy of CNGA1 Channels In Situ. <i>Biophysical Journal</i> , 2013, 104, 167a.	0.5	0
26	Role of Myosin II in Motility and in Force Generation of DRG Growth Cones. <i>Biophysical Journal</i> , 2013, 104, 477a.	0.5	0
27	Single Molecule Force Spectroscopy of CNGA1 Channels "In Situ" Reveals Major Conformational Changes upon Gating. <i>Biophysical Journal</i> , 2014, 106, 392a.	0.5	0