

# Pedro J De Pablo

## List of Publications by Year in descending order

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Version: 2024-02-01

40  
papers

1,371  
citations

304743

22  
h-index

345221

36  
g-index

41  
all docs

41  
docs citations

41  
times ranked

1170  
citing authors

#	ARTICLE	IF	CITATIONS
1	Seeing and touching adenovirus: complementary approaches for understanding assembly and disassembly of a complex virion. <i>Current Opinion in Virology</i> , 2022, 52, 112-122.	5.4	11
2	Fluctuating nonlinear spring theory: Strength, deformability, and toughness of biological nanoparticles from theoretical reconstruction of force-deformation spectra. <i>Acta Biomaterialia</i> , 2021, 122, 263-277.	8.3	5
3	Acidification induces condensation of the adenovirus core. <i>Acta Biomaterialia</i> , 2021, 135, 534-542.	8.3	7
4	Cryo-electron Microscopy Structure, Assembly, and Mechanics Show Morphogenesis and Evolution of Human Picobirnavirus. <i>Journal of Virology</i> , 2020, 94, .	3.4	11
5	Dynamic competition for hexon binding between core protein VII and lytic protein VI promotes adenovirus maturation and entry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 13699-13707.	7.1	26
6	Virucidal Action Mechanism of Alcohol and Divalent Cations Against Human Adenovirus. <i>Frontiers in Molecular Biosciences</i> , 2020, 7, 570914.	3.5	6
7	Adenovirus major core protein condenses DNA in clusters and bundles, modulating genome release and capsid internal pressure. <i>Nucleic Acids Research</i> , 2019, 47, 9231-9242.	14.5	31
8	The application of atomic force microscopy for viruses and protein shells: Imaging and spectroscopy. <i>Advances in Virus Research</i> , 2019, 105, 161-187.	2.1	17
9	Structural and Mechanical Characterization of Viruses with AFM. <i>Methods in Molecular Biology</i> , 2019, 1886, 259-278.	0.9	5
10	Direct visualization of single virus restoration after damage in real time. <i>Journal of Biological Physics</i> , 2018, 44, 225-235.	1.5	10
11	Exploring the role of genome and structural ions in preventing viral capsid collapse during dehydration. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 104001.	1.8	5
12	Changes in the stability and biomechanics of P22 bacteriophage capsid during maturation. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2018, 1862, 1492-1504.	2.4	14
13	Atomic Force Microscopy of Protein Shells: Virus Capsids and Beyond. <i>Methods in Molecular Biology</i> , 2018, 1665, 281-296.	0.9	1
14	Atomic force microscopy of virus shells. <i>Seminars in Cell and Developmental Biology</i> , 2018, 73, 199-208.	5.0	41
15	Biophysical properties of single rotavirus particles account for the functions of protein shells in a multilayered virus. <i>ELife</i> , 2018, 7, .	6.0	38
16	Atomic force microscopy of virus shells. <i>Biochemical Society Transactions</i> , 2017, 45, 499-511.	3.4	25
17	Structural Analysis of a Temperature-Induced Transition in a Viral Capsid Probed by HDX-MS. <i>Biophysical Journal</i> , 2017, 112, 1157-1165.	0.5	28
18	Cargoâ€œshell and cargoâ€œcargo couplings govern the mechanics of artificially loaded virus-derived cages. <i>Nanoscale</i> , 2016, 8, 9328-9336.	5.6	60

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19	Tuning Viral Capsid Nanoparticle Stability with Symmetrical Morphogenesis. ACS Nano, 2016, 10, 8465-8473.	14.6	34
20	Decrease in pH destabilizes individual vault nanocages by weakening the inter-protein lateral interaction. Scientific Reports, 2016, 6, 34143.	3.3	17
21	A protein with simultaneous capsid scaffolding and dsRNA-binding activities enhances the birnavirus capsid mechanical stability. Scientific Reports, 2015, 5, 13486.	3.3	25
22	Calcium Ions Modulate the Mechanics of Tomato Bushy Stunt Virus. Biophysical Journal, 2015, 109, 390-397.	0.5	25
23	Fluorescence Tracking of Genome Release during Mechanical Unpacking of Single Viruses. ACS Nano, 2015, 9, 10571-10579.	14.6	67
24	Mechanics of Viral Chromatin Reveals the Pressurization of Human Adenovirus. ACS Nano, 2015, 9, 10826-10833.	14.6	83
25	Imaging Biological Samples with Atomic Force Microscopy. Cold Spring Harbor Protocols, 2014, 2014, pdb.top080473.	0.3	8
26	The interplay between mechanics and stability of viral cages. Nanoscale, 2014, 6, 2702-2709.	5.6	51
27	Mechanical Stability and Reversible Fracture of Vault Particles. Biophysical Journal, 2014, 106, 687-695.	0.5	36
28	Biophysical Methods to Monitor Structural Aspects of the Adenovirus Infectious Cycle. Methods in Molecular Biology, 2014, 1089, 1-24.	0.9	1
29	Mechanical Properties of Viruses. Sub-Cellular Biochemistry, 2013, 68, 519-551.	2.4	21
30	Atomic Force Microscopy of Viruses. Sub-Cellular Biochemistry, 2013, 68, 247-271.	2.4	14
31	Mechanical elasticity as a physical signature of conformational dynamics in a virus particle. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12028-12033.	7.1	64
32	The Role of Capsid Maturation on Adenovirus Priming for Sequential Uncoating. Journal of Biological Chemistry, 2012, 287, 31582-31595.	3.4	82
33	Mechanical Disassembly of Single Virus Particles Reveals Kinetic Intermediates Predicted by Theory. Biophysical Journal, 2012, 102, 2615-2624.	0.5	43
34	Resolving Structure and Mechanical Properties at the Nanoscale of Viruses with Frequency Modulation Atomic Force Microscopy. PLoS ONE, 2012, 7, e30204.	2.5	30
35	Direct Measurement of Phage phi29 Stiffness Provides Evidence of Internal Pressure. Small, 2012, 8, 2366-2370.	10.0	71
36	Kinesin Walks the Line: Single Motors Observed by Atomic Force Microscopy. Biophysical Journal, 2011, 100, 2450-2456.	0.5	36

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37	Introduction to Atomic Force Microscopy. <i>Methods in Molecular Biology</i> , 2011, 783, 197-212.	0.9	8
38	Manipulation of the mechanical properties of a virus by protein engineering. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 4150-4155.	7.1	103
39	Elastic Response, Buckling, and Instability of Microtubules under Radial Indentation. <i>Biophysical Journal</i> , 2006, 91, 1521-1531.	0.5	163
40	Resolving the molecular structure of microtubules under physiological conditions with scanning force microscopy. <i>European Biophysics Journal</i> , 2004, 33, 462-467.	2.2	47