

# Jorge Alegre-Cebollada

## List of Publications by Year in descending order

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Version: 2024-02-01

57  
papers

2,650  
citations

236612

25  
h-index

197535

49  
g-index

63  
all docs

63  
docs citations

63  
times ranked

3201  
citing authors

#	ARTICLE	IF	CITATIONS
1	The mechanics of the heart: zooming in on hypertrophic cardiomyopathy and cMyBP $\alpha$ . FEBS Letters, 2022, 596, 703-746.	1.3	12
2	Basal oxidation of conserved cysteines modulates cardiac titin stiffness and dynamics. Redox Biology, 2022, 52, 102306.	3.9	7
3	Nicotinamide for the treatment of heart failure with preserved ejection fraction. Science Translational Medicine, 2021, 13, .	5.8	109
4	Crystallographic Structures of Titin Immunoglobulin-Like I21 Domains Involved in Dilated Cardiomyopathy. Biophysical Journal, 2021, 120, 252a.	0.2	0
5	Correspondence on $\alpha$ Computational prediction of protein subdomain stability in MYBPC3 enables clinical risk stratification in hypertrophic cardiomyopathy and enhances variant interpretation $\beta$ by Thompson et al.. Genetics in Medicine, 2021, 23, 2009-2010.	1.1	3
6	Protein Hydrogels: The Swiss Army Knife for Enhanced Mechanical and Bioactive Properties of Biomaterials. Nanomaterials, 2021, 11, 1656.	1.9	27
7	Nanomechanical Phenotypes in Cardiac Myosin-Binding Protein C Mutants That Cause Hypertrophic Cardiomyopathy. ACS Nano, 2021, 15, 10203-10216.	7.3	16
8	Protein haploinsufficiency drivers identify MYBPC3 variants that cause hypertrophic cardiomyopathy. Journal of Biological Chemistry, 2021, 297, 100854.	1.6	23
9	Protein nanomechanics in biological context. Biophysical Reviews, 2021, 13, 435-454.	1.5	21
10	A Network of Macrophages Supports Mitochondrial Homeostasis in the Heart. Cell, 2020, 183, 94-109.e23.	13.5	360
11	Protein Thermodynamic Destabilization in the Assessment of Pathogenicity of a Variant of Uncertain Significance in Cardiac Myosin Binding Protein C. Journal of Cardiovascular Translational Research, 2020, 13, 867-877.	1.1	18
12	Independent Tuning of Viscous and Elastic Properties of Protein Biomaterials. Biophysical Journal, 2020, 118, 163a-164a.	0.2	0
13	A HaloTag-TEV genetic cassette for mechanical phenotyping of proteins from tissues. Nature Communications, 2020, 11, 2060.	5.8	42
14	Concurrent atomic force spectroscopy. Communications Physics, 2019, 2, .	2.0	16
15	Specific Cleavage of the Titin Springs In Situ Uncovers the Role of Titin-Based Force in Sarcomere Structure and Muscle Contraction. Biophysical Journal, 2019, 116, 402a.	0.2	0
16	An Abl-FBP17 mechanosensing system couples local plasma membrane curvature and stress fiber remodeling during mechanoadaptation. Nature Communications, 2019, 10, 5828.	5.8	50
17	Redox regulation of protein nanomechanics in health and disease: Lessons from titin. Redox Biology, 2019, 21, 101074.	3.9	13
18	Disulfide isomerization reactions in titin immunoglobulin $\alpha$ domains enable a mode of protein elasticity. Nature Communications, 2018, 9, 185.	5.8	70

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19	Nanomechanical Phenotypes in Hypertrophic Cardiomyopathy caused by Missense Mutations in Cardiac Myosin-Binding Protein C. <i>Biophysical Journal</i> , 2017, 112, 164a-165a.	0.2	0
20	Mechanochemical evolution of the giant muscle protein titin as inferred from resurrected proteins. <i>Nature Structural and Molecular Biology</i> , 2017, 24, 652-657.	3.6	30
21	Synergistic Action of Actinoporin Isoforms from the Same Sea Anemone Species Assembled into Functionally Active Heteropores. <i>Journal of Biological Chemistry</i> , 2016, 291, 14109-14119.	1.6	21
22	CnaA domains in bacterial pili are efficient dissipaters of large mechanical shocks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 2490-2495.	3.3	60
23	A Novel Strategy for Utilizing Voice Coil Servoactuators in Tensile Tests of Low Volume Protein Hydrogels. <i>Macromolecular Materials and Engineering</i> , 2015, 300, 369-376.	1.7	11
24	Identifying Sequential Substrate Binding at the Single-Molecule Level by Enzyme Mechanical Stabilization. <i>ACS Nano</i> , 2015, 9, 3996-4005.	7.3	16
25	Altered Thiol Chemistry in Human Amyotrophic Lateral Sclerosis-linked Mutants of Superoxide Dismutase 1. <i>Journal of Biological Chemistry</i> , 2014, 289, 26722-26732.	1.6	14
26	S-Glutathionylation of Cryptic Cysteines Enhances Titin Elasticity by Blocking Protein Folding. <i>Cell</i> , 2014, 156, 1235-1246.	13.5	170
27	Surviving a Bumpy Ride in the Oropharynx: Bacterial Pili as Nano-Seatbelts that Dissipate Mechanical Energy. <i>Biophysical Journal</i> , 2014, 106, 578a.	0.2	0
28	Halotag Tethers to Study Titin Folding at the Single Molecule Level. <i>Biophysical Journal</i> , 2014, 106, 391a.	0.2	1
29	Nanomechanics of HaloTag Tethers. <i>Journal of the American Chemical Society</i> , 2013, 135, 12762-12771.	6.6	108
30	Three-dimensional structure of the actinoporin sticholysin I. Influence of long-distance effects on protein function. <i>Archives of Biochemistry and Biophysics</i> , 2013, 532, 39-45.	1.4	47
31	Force dependency of biochemical reactions measured by single-molecule force-clamp spectroscopy. <i>Nature Protocols</i> , 2013, 8, 1261-1276.	5.5	101
32	Conformational Plasticity of the Essential Membrane-associated Mannosyltransferase PimA from Mycobacteria. <i>Journal of Biological Chemistry</i> , 2013, 288, 29797-29808.	1.6	24
33	Spontaneous Dimerization of Titin Protein Z1Z2 Domains Induces Strong Nanomechanical Anchoring. <i>Journal of Biological Chemistry</i> , 2012, 287, 20240-20247.	1.6	11
34	Protein Folding Drives Disulfide Formation. <i>Cell</i> , 2012, 151, 794-806.	13.5	158
35	Towards a General Platform to Study Single-Bond Chemistry Under Force. <i>Biophysical Journal</i> , 2012, 102, 11a-12a.	0.2	0
36	Enzyme Catalysis at the Single-Molecule Level. , 2012, , 149-168.		0

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37	Direct observation of disulfide isomerization in a single protein. <i>Nature Chemistry</i> , 2011, 3, 882-887.	6.6	121
38	Protease Power Strokes Force Proteins to Unfold. <i>Cell</i> , 2011, 145, 339-340.	13.5	6
39	The behavior of sea anemone actinoporins at the water-membrane interface. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2011, 1808, 2275-2288.	1.4	76
40	Intrinsic local disorder and a network of charge-charge interactions are key to actinoporin membrane disruption and cytotoxicity. <i>FEBS Journal</i> , 2011, 278, 2080-2089.	2.2	21
41	Single-molecule paleoenzymology probes the chemistry of resurrected enzymes. <i>Nature Structural and Molecular Biology</i> , 2011, 18, 592-596.	3.6	182
42	<sup>1</sup> H, <sup>13</sup> C, and <sup>15</sup> N NMR assignments of StnII-Y111N, a highly impaired mutant of the sea anemone actinoporin Sticholysin II. <i>Biomolecular NMR Assignments</i> , 2010, 4, 69-72.	0.4	14
43	Specific interactions of sticholysin I with model membranes: An NMR study. <i>Proteins: Structure, Function and Bioinformatics</i> , 2010, 78, 1959-1970.	1.5	36
44	Single-molecule Force Spectroscopy Approach to Enzyme Catalysis. <i>Journal of Biological Chemistry</i> , 2010, 285, 18961-18966.	1.6	67
45	Isopeptide Bonds Block the Mechanical Extension of Pili in Pathogenic <i>Streptococcus pyogenes</i> . <i>Journal of Biological Chemistry</i> , 2010, 285, 11235-11242.	1.6	94
46	<sup>1</sup> H, <sup>13</sup> C, and <sup>15</sup> N NMR assignments of the actinoporin Sticholysin I. <i>Biomolecular NMR Assignments</i> , 2009, 3, 5-7.	0.4	24
47	<sup>1</sup> H, <sup>13</sup> C, and <sup>15</sup> N NMR assignments of StnII-R29Q, a defective lipid binding mutant of the sea anemone actinoporin Sticholysin II. <i>Biomolecular NMR Assignments</i> , 2009, 3, 239-241.	0.4	7
48	Solvent Bridging Determines The Molecular Architecture Of The Unfolding Transition State Of A Protein. <i>Biophysical Journal</i> , 2009, 96, 72a-73a.	0.2	0
49	Calorimetric Scrutiny of Lipid Binding by Sticholysin II Toxin Mutants. <i>Journal of Molecular Biology</i> , 2008, 382, 920-930.	2.0	51
50	<i>Lactococcus lactis</i> as a vehicle for the heterologous expression of fungal ribotoxin variants with reduced IgE-binding affinity. <i>Journal of Biotechnology</i> , 2008, 134, 1-8.	1.9	5
51	The Therapeutic Potential of Fungal Ribotoxins. <i>Current Pharmaceutical Biotechnology</i> , 2008, 9, 153-160.	0.9	28
52	Sea Anemone Actinoporins: The Transition from a Folded Soluble State to a Functionally Active Membrane-Bound Oligomeric Pore. <i>Current Protein and Peptide Science</i> , 2007, 8, 558-572.	0.7	63
53	Silent mutations at the 5'-end of the cDNA of actinoporins from the sea anemone <i>Stichodactyla helianthus</i> allow their heterologous overproduction in <i>Escherichia coli</i> . <i>Journal of Biotechnology</i> , 2007, 127, 211-221.	1.9	35
54	Infrared Spectroscopy Study on the Conformational Changes Leading to Pore Formation of the Toxin Sticholysin II. <i>Biophysical Journal</i> , 2007, 93, 3191-3201.	0.2	39

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55	Fungal ribotoxins: molecular dissection of a family of natural killers. FEMS Microbiology Reviews, 2007, 31, 212-237.	3.9	126
56	Detergent-resistant membranes are platforms for actinoporin pore-forming activity on intact cells. FEBS Journal, 2006, 273, 863-871.	2.2	49
57	Phenotypic selection and characterization of randomly produced non-haemolytic mutants of the toxic sea anemone protein sticholysin II. FEBS Letters, 2004, 575, 14-18.	1.3	34