Felix Rico

List of Publications by Year
in descending order

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64 papers	3,156 citations	218592 26 h-index	168321 53 g-index
68 all docs	68 docs citations	68 times ranked	4834 citing authors

#	Article	IF	Citations
1	Monitoring of in-vitro ultrasonic stimulation of cells by numerical modeling. Ultrasonics, 2022, 124, 106714.	2.1	1
2	Dynamics and Binding Strength of the Spike Protein of Sars-Cov-2 Probed by High-Speed Atomic Force Microscopy. Biophysical Journal, 2021, 120, 3a.	0.2	2
3	Determination of calibration parameters of cantilevers of arbitrary shape by finite element analysis. Review of Scientific Instruments, 2021, 92, 045001.	0.6	7
4	A microfluidic method generating monodispersed microparticles with controllable sizes and mechanical properties. Chemical Engineering Science, 2020, 211, 115322.	1.9	8
5	One-Step Calibration of AFM in Liquid. Frontiers in Physics, 2020, 8, .	1.0	14
6	Î±vÎ²3 integrin expression increases elasticity in human melanoma cells. Biochemical and Biophysical Research Communications, 2020, 525, 836-840.	1.0	10
7	Mechanics of Adhesion Molecules Probed by Molecular Dynamics and High-Speed Force Spectroscopy. Biophysical Journal, 2020, 118, 37a.	0.2	0
8	Biological physics by high-speed atomic force microscopy. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190604.	1.6	21
9	High-speed force spectroscopy: microsecond force measurements using ultrashort cantilevers. Biophysical Reviews, 2019, 11, 689-699.	1.5	28
10	Genome editing retraces the evolution of toxin resistance in the monarch butterfly. Nature, 2019, 574, 409-412.	13.7	120
11	Heterogeneous and rate-dependent streptavidinâ€“biotin unbinding revealed by high-speed force spectroscopy and atomistic simulations. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6594-6601.	3.3	95
12	Fifteen years of Servitude et Grandeur to the application of a biophysical technique in medicine: The tale of AFMBioMed. Journal of Molecular Recognition, 2019, 32, e2773.	1.1	4
13	Single-Molecule Force Spectroscopy: Experiments, Analysis, and Simulations. Methods in Molecular Biology, 2019, 1886, 163-189.	0.4	19
14	A Simple and Fast Drift Correction Method for High-throughput Microscopy. Biophysical Journal, 2018, 114, 385a.	0.2	0
15	Î±-Helix Unwinding as Force Buffer in Spectrins. ACS Nano, 2018, 12, 2719-2727.	7.3	37
16	History, rare, and multiple events of mechanical unfolding of repeat proteins. Journal of Chemical Physics, 2018, 148, 123335.	1.2	15
17	High-Speed Force Spectroscopy of Lipid Bilayer Rupture. Biophysical Journal, 2018, 114, 100a.	0.2	0
18	High-Speed Force Spectroscopy for Single Protein Unfolding. Methods in Molecular Biology, 2018, 1814, 243-264.	0.4	10

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19	Monitoring Unfolding of Titin I27 Single and Bi Domain with High-Pressure NMR Spectroscopy. Biophysical Journal, 2018, 115, 341-352.	0.2	6
20	High-frequency microrheology reveals cytoskeleton dynamics in living cells. Nature Physics, 2017, 13, 771-775.	6.5	183
21	Standardized Nanomechanical Atomic Force Microscopy Procedure (SNAP) for Measuring Soft and Biological Samples. Scientific Reports, 2017, 7, 5117.	1.6	195
22	Mutation in the Core Structure of Desmin Intermediate Filaments Affects Myoblast Elasticity. Biophysical Journal, 2017, 113, 627-636.	0.2	11
23	High Frequency Microrheology of Living Cells. Biophysical Journal, 2016, 110, 132a.	0.2	2
24	Glasslike Membrane Protein Diffusion in a Crowded Membrane. ACS Nano, 2016, 10, 2584-2590.	7.3	43
25	Bringing Force Probe Molecular Dynamics Simulations Closer to Experiments. Biophysical Journal, 2015, 108, 166a.	0.2	0
26	High-Speed Force Spectroscopy Unbinds Streptavidin-Biotin at the Velocity of Molecular Dynamics Simulations. Biophysical Journal, 2015, 108, 356a.	0.2	1
27	Atomic Force Microscopy Mechanical Mapping of Micropatterned Cells Shows Adhesion Geometry-Dependent Mechanical Response on Local and Global Scales. ACS Nano, 2015, 9, 5846-5856.	7.3	59
28	Highâ€speed atomic force microscopy: Imaging and force spectroscopy. FEBS Letters, 2014, 588, 3631-3638.	1.3	58
29	High-Speed Atomic Force Microscopy: Integration with Optical Microscopy and High-Speed Force Spectroscopy. Biophysical Journal, 2014, 106, 797a.	0.2	0
30	Cannabinoid-induced actomyosin contractility shapes neuronal morphology and growth. ELife, 2014, 3, e03159.	2.8	75
31	A hybrid high-speed atomic forceâ€"optical microscope for visualizing single membrane proteins on eukaryotic cells. Nature Communications, 2013, 4, 2155.	5.8	64
32	High-Speed AFM Force Spectroscopy Unfolds Titin at the Speed of Molecular Dynamics Simulations. Biophysical Journal, 2013, 104, 381a.	0.2	1
33	High-Speed Force Spectroscopy Unfolds Titin at the Velocity of Molecular Dynamics Simulations. Science, 2013, 342, 741-743.	6.0	216
34	Mechanics of proteins with a focus on atomic force microscopy. Journal of Nanobiotechnology, 2013, 11, S3.	4.2	23
35	The mechanics of membrane proteins is a signature of biological function. Soft Matter, 2013, 9, 7866.	1.2	7
36	High-Speed Atomic Force Microscopy of Protein-Protein Interactions. Biophysical Journal, 2013, 104, 386a.	0.2	0

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37	Structural and Mechanical Heterogeneity of the Erythrocyte Membrane Reveals Hallmarks of Membrane Stability. ACS Nano, 2013, 7, 1054-1063.	7.3	66
38	Cellular capsules as a tool for multicellular spheroid production and for investigating the mechanics of tumor progression in vitro. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14843-14848.	3.3	367
39	Elongated Membrane Tethers, Individually Anchored by High Affinity Î±4Î²1/VCAM-1 Complexes, Are the Quantal Units of Monocyte Arrests. PLoS ONE, 2013, 8, e64187.	1.1	22
40	Nanomechanical Characterization of the Stiffness of Eye Lens Cells: A Pilot Study. , 2012, 53, 2151.		16
41	Direct Observation of Junctional Microdomain Assembly. Biophysical Journal, 2012, 102, 297a.	0.2	0
42	Direct Measurement of the Mechanical Properties of Lipid Phases in Supported Bilayers. Biophysical Journal, 2012, 102, L01-L03.	0.2	174
43	Binding Kinetics of Inter-Connexon Interaction. Biophysical Journal, 2011, 100, 564a.	0.2	0
44	Mechanical Mapping of Single Membrane Proteins at Submolecular Resolution. Nano Letters, 2011, 11, 3983-3986.	4.5	122
45	Two-Dimensional Kinetics of Inter-Connexin Interactions from Single-Molecule Force Spectroscopy. Journal of Molecular Biology, 2011, 412, 72-79.	2.0	11
46	High-speed atomic force microscopy: Structure and dynamics of single proteins. Current Opinion in Chemical Biology, 2011, 15, 704-709.	2.8	29
47	Biological AFM: where we come from â€“ where we are â€“ where we may go. Journal of Molecular Recognition, 2011, 24, 406-413.	1.1	90
48	Force-Clamp Measurements of Receptorâ€“Ligand Interactions. Methods in Molecular Biology, 2011, 736, 331-353.	0.4	4
49	Probing Cellular Adhesion at the Single-Molecule Level. , 2011, , 225-261.		4
50	Structural and Mechanical Mechanisms of Ocular Tissues Probed by AFM. Nanoscience and Technology, 2010, , 363-393.	1.5	1
51	Temperature Modulation of Integrin-Mediated Cell Adhesion. Biophysical Journal, 2010, 99, 1387-1396.	0.2	61
52	Experimental Evidence for Membrane-Mediated Protein-Protein Interaction. Biophysical Journal, 2010, 99, L47-L49.	0.2	71
53	Atomic Force Microscopy Studies of the Mechanical Properties of Living Cells. , 2010, , 533-553.		1
54	Pulling force generated by interacting SNAREs facilitates membrane hemifusion. Integrative Biology (United Kingdom), 2009, 1, 301.	0.6	18

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55	Atomic Force Microscopy of Proteinâ€"Protein Interactions. , 2009, , 555-570.		10
56	Atomic Force Microscopy Studies of the Mechanical Properties of Living Cells. , 2008, , 89-109.		4
57	Cell dynamic adhesion and elastic properties probed with cylindrical atomic force microscopy cantilever tips. Journal of Molecular Recognition, 2007, 20, 459-466.	1.1	40
58	Energy landscape roughness of the streptavidinâ€"biotin interaction. Journal of Molecular Recognition, 2007, 20, 495-501.	1.1	83
59	Thrombin and histamine induce stiffening of alveolar epithelial cells. Journal of Applied Physiology, 2005, 98, 1567-1574.	1.2	59
60	Nanomechanics of lung epithelial cells. International Journal of Nanotechnology, 2005, 2, 180.	0.1	7
61	Vibration Enhances Interleukin-8 Release in a Cell Model of Snoring-Induced Airway Inflammation. Sleep, 2005, 28, 1312-1316.	0.6	79
62	Probing mechanical properties of living cells by atomic force microscopy with blunted pyramidal cantilever tips. Physical Review E, 2005, 72, 021914.	0.8	316
63	Stability of Microfabricated High Aspect Ratio Structures in Poly(dimethylsiloxane). Langmuir, 2005, 21, 5542-5548.	1.6	132
64	Oscillatory magnetic tweezers based on ferromagnetic beads and simple coaxial coils. Review of Scientific Instruments, 2003, 74, 4012-4020.	0.6	28