Felix Rico

List of Publications by Year in Descending Order

52 papers	2,425 citations	25 h-index	49 g-index
68 ext. papers	2,849 ext. citations	5.5 avg, IF	5.05 L-index

#	Paper	IF	Citations
52	Monitoring of in-vitro ultrasonic stimulation of cells by numerical modeling.. *Ultrasonics*, **2022**, 124, 106714	3.9	
51	Determination of calibration parameters of cantilevers of arbitrary shape by finite element analysis. *Review of Scientific Instruments*, **2021**, 92, 045001	1.7	2
50	integrin expression increases elasticity in human melanoma cells. *Biochemical and Biophysical Research Communications*, **2020**, 525, 836-840	3.4	4
49	Biological physics by high-speed atomic force microscopy. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2020**, 378, 20190604	3	10
48	A microfluidic method generating monodispersed microparticles with controllable sizes and mechanical properties. *Chemical Engineering Science*, **2020**, 211, 115322	4.4	4
47	One-Step Calibration of AFM in Liquid. *Frontiers in Physics*, **2020**, 8,	3.9	7
46	Genome editing retraces the evolution of toxin resistance in the monarch butterfly. *Nature*, **2019**, 574, 409-412	50.4	52
45	Heterogeneous and rate-dependent streptavidin-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	11.5	55
44	High-speed force spectroscopy: microsecond force measurements using ultrashort cantilevers. *Biophysical Reviews*, **2019**, 11, 689-699	3.7	18
43	Single-Molecule Force Spectroscopy: Experiments, Analysis, and Simulations. *Methods in Molecular Biology*, **2019**, 1886, 163-189	1.4	12
42	Helix Unwinding as Force Buffer in Spectrins. *ACS Nano*, **2018**, 12, 2719-2727	16.7	26
41	History, rare, and multiple events of mechanical unfolding of repeat proteins. *Journal of Chemical Physics*, **2018**, 148, 123335	3.9	11
40	High-Speed Force Spectroscopy for Single Protein Unfolding. *Methods in Molecular Biology*, **2018**, 1814, 243-264	1.4	8
39	Monitoring Unfolding of Titin I27 Single and Bi Domain with High-Pressure NMR Spectroscopy. *Biophysical Journal*, **2018**, 115, 341-352	2.9	3
38	High-frequency microrheology reveals cytoskeleton dynamics in living cells. *Nature Physics*, **2017**, 13, 771-775	16.2	118
37	Standardized Nanomechanical Atomic Force Microscopy Procedure (SNAP) for Measuring Soft and Biological Samples. *Scientific Reports*, **2017**, 7, 5117	4.9	123
36	Mutation in the Core Structure of Desmin Intermediate Filaments Affects Myoblast Elasticity. *Biophysical Journal*, **2017**, 113, 627-636	2.9	5

35	Glasslike Membrane Protein Diffusion in a Crowded Membrane. *ACS Nano*, **2016**, 10, 2584-90	16.7	33
34	High Frequency Microrheology of Living Cells. *Biophysical Journal*, **2016**, 110, 132a	2.9	2
33	Atomic Force Microscopy Mechanical Mapping of Micropatterned Cells Shows Adhesion Geometry-Dependent Mechanical Response on Local and Global Scales. *ACS Nano*, **2015**, 9, 5846-56	16.7	43
32	High-speed atomic force microscopy: imaging and force spectroscopy. *FEBS Letters*, **2014**, 588, 3631-8	3.8	49
31	Cannabinoid-induced actomyosin contractility shapes neuronal morphology and growth. *ELife*, **2014**, 3, e03159	8.9	49
30	A hybrid high-speed atomic force-optical microscope for visualizing single membrane proteins on eukaryotic cells. *Nature Communications*, **2013**, 4, 2155	17.4	53
29	High-speed force spectroscopy unfolds titin at the velocity of molecular dynamics simulations. *Science*, **2013**, 342, 741-3	33.3	184
28	Mechanics of proteins with a focus on atomic force microscopy. *Journal of Nanobiotechnology*, **2013**, 11 Suppl 1, S3	9.4	17
27	The mechanics of membrane proteins is a signature of biological function. *Soft Matter*, **2013**, 9, 7866	3.6	6
26	Structural and mechanical heterogeneity of the erythrocyte membrane reveals hallmarks of membrane stability. *ACS Nano*, **2013**, 7, 1054-63	16.7	57
25	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, 14843-8	11.5	271
24	Elongated membrane tethers, individually anchored by high affinity 41/VCAM-1 complexes, are the quantal units of monocyte arrests. *PLoS ONE*, **2013**, 8, e64187	3.7	18
23	Direct measurement of the mechanical properties of lipid phases in supported bilayers. *Biophysical Journal*, **2012**, 102, L01-3	2.9	147
22	Nanomechanical characterization of the stiffness of eye lens cells: a pilot study **2012**, 53, 2151-6		14
21	Mechanical mapping of single membrane proteins at submolecular resolution. *Nano Letters*, **2011**, 11, 3983-6	11.5	114
20	Two-dimensional kinetics of inter-connexin interactions from single-molecule force spectroscopy. *Journal of Molecular Biology*, **2011**, 412, 72-9	6.5	10
19	High-speed atomic force microscopy: Structure and dynamics of single proteins. *Current Opinion in Chemical Biology*, **2011**, 15, 704-9	9.7	28
18	Biological AFM: where we come from--where we are--where we may go. *Journal of Molecular Recognition*, **2011**, 24, 406-13	2.6	77

17	Probing Cellular Adhesion at the Single-Molecule Level **2011**, 225-261		4
16	Force-clamp measurements of receptor-ligand interactions. *Methods in Molecular Biology*, **2011**, 736, 331-53	1.4	3
15	Structural and Mechanical Mechanisms of Ocular Tissues Probed by AFM. *Nanoscience and Technology*, **2010**, 363-393	0.6	0
14	Temperature modulation of integrin-mediated cell adhesion. *Biophysical Journal*, **2010**, 99, 1387-96	2.9	48
13	Experimental evidence for membrane-mediated protein-protein interaction. *Biophysical Journal*, **2010**, 99, L47-9	2.9	65
12	Atomic Force Microscopy Studies of the Mechanical Properties of Living Cells **2010**, 533-553		1
11	Pulling force generated by interacting SNAREs facilitates membrane hemifusion. *Integrative Biology (United Kingdom)*, **2009**, 1, 301-10	3.7	17
10	Atomic Force Microscopy of Protein□rotein Interactions **2009**, 555		10
9	Atomic Force Microscopy Studies of the Mechanical Properties of Living Cells **2008**, 89-109		1
8	Cell dynamic adhesion and elastic properties probed with cylindrical atomic force microscopy cantilever tips. *Journal of Molecular Recognition*, **2007**, 20, 459-66	2.6	35
7	Energy landscape roughness of the streptavidin-biotin interaction. *Journal of Molecular Recognition* , **2007**, 20, 495-501	2.6	76
6	Probing mechanical properties of living cells by atomic force microscopy with blunted pyramidal cantilever tips. *Physical Review E*, **2005**, 72, 021914	2.4	250
5	Stability of microfabricated high aspect ratio structures in poly(dimethylsiloxane). *Langmuir*, **2005**, 21, 5542-8	4	122
4	Thrombin and histamine induce stiffening of alveolar epithelial cells. *Journal of Applied Physiology*, **2005**, 98, 1567-74	3.7	54
3	Nanomechanics of lung epithelial cells. *International Journal of Nanotechnology*, **2005**, 2, 180	1.5	6
2	Vibration enhances interleukin-8 release in a cell model of snoring-induced airway inflammation. *Sleep*, **2005**, 28, 1312-6	1.1	73
1	Oscillatory magnetic tweezers based on ferromagnetic beads and simple coaxial coils. *Review of Scientific Instruments*, **2003**, 74, 4012-4020	1.7	24