Fernando Moreno-Herrero

List of Publications by Year
in descending order

77 papers	3,616 citations	159585 30 h-index	138484 58 g-index
89 all docs	89 docs citations	89 times ranked	3973 citing authors

#	Article	IF	Citations
1	Human HELB is a processive motor protein that catalyzes RPA clearance from single-stranded DNA. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2112376119.	7.1	16
2	Long DNA constructs to study helicases and nucleic acid translocases using optical tweezers. Methods in Enzymology, 2022, , .	1.0	1
3	A molecular view of DNA flexibility. Quarterly Reviews of Biophysics, 2021, 54, e8.	5.7	35
4	CTP promotes efficient ParB-dependent DNA condensation by facilitating one-dimensional diffusion from parS. ELife, 2021, 10, .	6.0	32
5	Bulk and single-molecule analysis of a bacterial DNA2-like helicaseâ€"nuclease reveals a single-stranded DNA looping motor. Nucleic Acids Research, 2020, 48, 7991-8005.	14.5	5
6	Functional characterization of the different oligomeric forms of human surfactant protein SP-D. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2020, 1868, 140436.	2.3	10
7	Double-stranded RNA bending by AU-tract sequences. Nucleic Acids Research, 2020, 48, 12917-12928.	14.5	12
8	Characterizing microfluidic approaches for a fast and efficient reagent exchange in single-molecule studies. Scientific Reports, 2020, 10, 18069.	3.3	3
9	Purified Smc5/6 Complex Exhibits DNA Substrate Recognition and Compaction. Molecular Cell, 2020, 80, 1039-1054.e6.	9.7	51
10	Structure and activity of human surfactant protein D from different natural sources. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2020, 319, L148-L158.	2.9	8
11	Understanding the paradoxical mechanical response of in-phase A-tracts at different force regimes. Nucleic Acids Research, 2020, 48, 5024-5036.	14.5	27
12	Dynamics of DNA nicking and unwinding by the RepCâ€"PcrA complex. Nucleic Acids Research, 2020, 48, 2013-2025.	14.5	5
13	ParB dynamics and the critical role of the CTD in DNA condensation unveiled by combined force-fluorescence measurements. ELife, 2019, 8, .	6.0	22
14	DNA Crookedness Regulates DNA Mechanical Properties at Short Length Scales. Physical Review Letters, 2019, 122, 048102.	7.8	44
15	Bacillus subtilis MutS Modulates RecA-Mediated DNA Strand Exchange Between Divergent DNA Sequences. Frontiers in Microbiology, 2019, 10, 237.	3.5	24
16	Sequence-dependent mechanical properties of double-stranded RNA. Nanoscale, 2019, 11, 21471-21478.	5.6	17
17	CtIP forms a tetrameric dumbbell-shaped particle which bridges complex DNA end structures for double-strand break repair. ELife, 2019, 8, .	6.0	23
18	Characterization of the activity of the different oligomeric forms of pulmonary human surfactant protein SP-D. , 2019, , .		0

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19	Force determination in lateral magnetic tweezers combined with TIRF microscopy. Nanoscale, 2018, 10, 4579-4590.	5.6	27
20	Supramolecular Assembly of Human Pulmonary Surfactant Protein SP-D. Journal of Molecular Biology, 2018, 430, 1495-1509.	4.2	26
21	Stickâ€“Slip Motion of ssDNA over Graphene. Journal of Physical Chemistry B, 2018, 122, 840-846.	2.6	9
22	The TubRâ€“centromere complex adopts a double-ring segrosome structure in Type III partition systems. Nucleic Acids Research, 2018, 46, 5704-5716.	14.5	9
23	High-Resolution Atomic Force Microscopy Imaging of Nucleic Acids. Methods in Molecular Biology, 2018, 1814, 3-17.	0.9	2
24	Understanding the mechanical response of double-stranded DNA and RNA under constant stretching forces using all-atom molecular dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7049-7054.	7.1	71
25	TubZ filament assembly dynamics requires the flexible C-terminal tail. Scientific Reports, 2017, 7, 43342.	3.3	3
26	The structural basis for dynamic DNA binding and bridging interactions which condense the bacterial centromere. ELife, 2017, 6, .	6.0	64
27	Force and twist dependence of RepC nicking activity on torsionally-constrained DNA molecules. Nucleic Acids Research, 2016, 44, 8885-8896.	14.5	20
28	Recognition and Condensation of the Bacterial Centromere by ParB. Biophysical Journal, 2016, 110, 562a.	0.5	0
29	Chi hotspots trigger a conformational change in the helicase-like domain of AddAB to activate homologous recombination. Nucleic Acids Research, 2016, 44, 2727-2741.	14.5	6
30	High resolution atomic force microscopy of double-stranded RNA. Nanoscale, 2016, 8, 11818-11826.	5.6	42
31	Specific and non-specific interactions of ParB with DNA: implications for chromosome segregation. Nucleic Acids Research, 2015, 43, 719-731.	14.5	68
32	Amyloidogenesis of Bacterial Prionoid RepA-WH1 Recapitulates Dimer to Monomer Transitions of RepA in DNA Replication Initiation. Structure, 2015, 23, 183-189.	3.3	26
33	Probing DNA Helicase Kinetics with Temperatureâ€Controlled Magnetic Tweezers. Small, 2015, 11, 1273-1284.	10.0	21
34	Sequence-specific interactions of Rep proteins with ssDNA in the AT-rich region of the plasmid replication origin. Nucleic Acids Research, 2014, 42, 7807-7818.	14.5	23
35	Single molecule approaches to monitor the recognition and resection of double-stranded DNA breaks during homologous recombination. DNA Repair, 2014, 20, 119-129.	2.8	11
36	Condensation of DNA Mediated by the Bacterial Centromere Binding Protein Spo0J/ParB. Biophysical Journal, 2014, 106, 429a.	0.5	0

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37	Probing the Kinetics of a Model Helicase-Nuclease with a Temperature-Controlled Magnetic Tweezers. Biophysical Journal, 2014, 106, 393a-394a.	0.5	0
38	AFM volumetric methods for the characterization of proteins and nucleic acids. Methods, 2013, 60, 113-121.	3.8	47
39	DNA Scanning Mechanism of a Translocating Motor Protein. Biophysical Journal, 2013, 104, 540a-541a.	0.5	0
40	A Landauâ€"Squire Nanojet. Nano Letters, 2013, 13, 5141-5146.	9.1	40
41	Mechanical Identities of RNA and DNA Double Helices Unveiled at the Single-Molecule Level. Journal of the American Chemical Society, 2013, 135, 122-131.	13.7	139
42	On the mechanism of recombination hotspot scanning during double-stranded DNA break resection. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E2562-71.	7.1	34
43	Electrostatic Binding and Hydrophobic Collapse of Peptideâ€"Nucleic Acid Aggregates Quantified Using Force Spectroscopy. ACS Nano, 2013, 7, 5102-5113.	14.6	26
44	Multiplexed ionic current sensing with glass nanopores. Lab on A Chip, 2013, 13, 1859.	6.0	63
45	DNA Origami Nanopores for Controlling DNA Translocation. ACS Nano, 2013, 7, 6024-6030.	14.6	118
46	Modulation of the Translocation Properties of a Model Helicase by DNA Damage and Sequence Content within the Track. Biophysical Journal, 2012, 102, 611a.	0.5	0
47	Using DNA as a Fiducial Marker To Study SMC Complex Interactions with the Atomic Force Microscope. Biophysical Journal, 2012, 102, 839-848.	0.5	37
48	Condensation Prevails over B-A Transition in the Structure of DNA at Low Humidity. Biophysical Journal, 2011, 100, 2006-2015.	0.5	33
49	Mechanical Properties of High-Gâ‹…C Content DNA with A-Type Base-Stacking. Biophysical Journal, 2011, 100, 1996-2005.	0.5	20
50	Recombination Hotspots and SSB Proteins Couple Translocation and Unwinding Activities of the AddAb Helicase-Nuclease. Biophysical Journal, 2011, 100, 239a.	0.5	0
51	Recombination Hotspots and Single-Stranded DNA Binding Proteins Couple DNA Translocation to DNA Unwinding by the AddAB Helicase-Nuclease. Molecular Cell, 2011, 42, 806-816.	9.7	36
52	Atomic Force Microscopy Shows that Chi Sequences and SSB Proteins Prevent DNA Reannealing Behind the Translocating AddAB Helicase-Nuclease. Biophysical Journal, 2010, 98, 65a.	0.5	0
53	Activation of a Helicase Motor Upon Encounter With a Specific Sequence in the DNA Track. Biophysical Journal, 2010, 98, 66a.	0.5	0
54	AFM Tip-Induced Dissociation of RecA-dsDNA Filaments. Nano Letters, 2007, 7, 1112-1112.	9.1	0

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55	Comment on â€œDirect and Real-Time Visualization of the Disassembly of a Single RecA-DNA-ATPÎ³S Complex Using AFM Imaging in Fluidâ€: Nano Letters, 2006, 6, 3000-3002.	9.1	9
56	High flexibility of DNA on short length scales probed by atomic force microscopy. Nature Nanotechnology, 2006, 1, 137-141.	31.5	345
57	Structural analysis of hyperperiodic DNA from Caenorhabditis elegans. Nucleic Acids Research, 2006, 34, 3057-3066.	14.5	37
58	Mesoscale conformational changes in the DNA-repair complex Rad50/Mre11/Nbs1 upon binding DNA. Nature, 2005, 437, 440-443.	27.8	243
59	Atomic force microscopy shows that vaccinia topoisomerase IB generates filaments on DNA in a cooperative fashion. Nucleic Acids Research, 2005, 33, 5945-5953.	14.5	23
60	Single-Molecule Measurements of the Persistence Length of Double-Stranded RNA. Biophysical Journal, 2005, 88, 2737-2744.	0.5	241
61	Biochemical, Ultrastructural, and Reversibility Studies on Huntingtin Filaments Isolated from Mouse and Human Brain. Journal of Neuroscience, 2004, 24, 9361-9371.	3.6	52
62	Jumping mode atomic force microscopy obtains reproducible images of Alzheimer paired helical filaments in liquids. European Polymer Journal, 2004, 40, 927-932.	5.4	6
63	Atomic force microscopy contact, tapping, and jumping modes for imaging biological samples in liquids. Physical Review E, 2004, 69, 031915.	2.1	100
64	Characterization by Atomic Force Microscopy of Alzheimer Paired Helical Filaments under Physiological Conditions. Biophysical Journal, 2004, 86, 517-525.	0.5	50
65	Jumping mode scanning force microscopy: a suitable technique for imaging DNA in liquids. Applied Surface Science, 2003, 210, 22-26.	6.1	12
66	DNA height in scanning force microscopy. Ultramicroscopy, 2003, 96, 167-174.	1.9	130
67	Topographic characterization and electrostatic response ofM-DNA studied by atomic force microscopy. Nanotechnology, 2003, 14, 128-133.	2.6	39
68	Contactless experiments on individual DNA molecules show no evidence for molecular wire behavior. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 8484-8487.	7.1	128
69	Scanning force microscopy three-dimensional modes applied to the study of the dielectric response of adsorbed DNA molecules. Nanotechnology, 2002, 13, 314-317.	2.6	42
70	Mediator Factor Med8p Interacts with the Hexokinase 2: Implication in the Glucose Signalling Pathway of Saccharomyces cerevisiae. Journal of Molecular Biology, 2002, 319, 703-714.	4.2	38
71	Scanning force microscopy jumping and tapping modes in liquids. Applied Physics Letters, 2002, 81, 2620-2622.	3.3	40
72	Imaging and Mapping Protein-Binding Sites on DNA Regulatory Regions with Atomic Force Microscopy. Biochemical and Biophysical Research Communications, 2001, 280, 151-157.	2.1	31

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73	Characterization by atomic force microscopy and cryoelectron microscopy of tau polymers assembled in Alzheimer's disease1. Journal of Alzheimer's Disease, 2001, 3, 443-451.	2.6	14
74	The role of shear forces in scanning force microscopy: a comparison between the jumping mode and tapping mode. Surface Science, 2000, 453, 152-158.	1.9	42
75	Absence of dc-Conductivity inÎ»-DNA. Physical Review Letters, 2000, 85, 4992-4995.	7.8	602
76	Analysis by atomic force microscopy of Med8 binding to cis -acting regulatory elements of the SUC2 and HXK2 genes of Saccharomyces cerevisiae. FEBS Letters, 1999, 459, 427-432.	2.8	30
77	AFM: Basic Concepts. , 0, , 1-34.		3