

Full List of Publications.

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Peer-reviewed Papers

- 31) M.E. Fuentes-Perez et al. **Biophysical Journal** (2012) Accepted
Using DNA as a fiducial marker to study SMC complex interactions with the Atomic Force Microscope
- 30) Yeeles JTP et al. **Molecular Cell** 42, 806-816, (2011)
Recombination hotspots and single-stranded DNA binding proteins couple DNA translocation to DNA unwinding by the AddAB helicase-nuclease
- 29) C. Carrasco and F. Moreno-Herrero, **Encyclopedia of Life Sciences** (15 April, 2011)
Magnetic Tweezers
- 28) S. Hormeno et al. **Biophysical Journal** 100(8), 1996-2005 (2011).
Mechanical Properties of High G•C-content DNA with A-type base-stacking
- 27) S. Hormeno et al. **Biophysical Journal** 100(8), 2006-2015 (2011).
Condensation prevails over B-A transition in the structure of DNA at low humidity
- 26) T. van der Heijden et al. **Nano Letters** 7(4), 1112 (2007).
AFM tip-induced dissociation of RecA-dsDNA filaments
- 25) T. van der Heijden et al. **Nano Letters** 6(12), 3000-3002 (2006).
Comment on "Direct and real-time visualization of the disassembly of a single RecA-DNA-ATPgS complex using AFM imagin in fluid"
- 24) P.A. Wiggins et al. **Nature Nanotechnology** 1, 137-141 (2006).
High flexibility of DNA on short length scales probed by atomic force microscopy
- 23) F. Moreno-Herrero et al. **Nucleic Acids Research** 34(10), 3057-3066 (2006).
*Structural analysis of hyperperiodic DNA from *Caenorhabditis elegans**
- 22) F. Moreno-Herrero et al. **Nucleic Acids Research** 33(18), 5945-5953 (2005).
Atomic force microscopy shows that vaccinia topoisomerase IB generates filaments on DNA in a cooperative fashion
- 21) F. Moreno-Herrero et al. **Nature** 437 (7057), 440-443 (2005).
Mesoscale conformational changes in the DNA-repair complex Rad50/Mre11/Nbs1 upon DNA binding
- 20) F. Moreno-Herrero et al. **Biophysical Journal** 88(1), 381A-381A Part 2 Suppl. S. (2005).

The interaction between Vaccinia topoisomerase IB and DNA studied with the atomic force microscope

- 19) J.A. Abels et al. **Biophysical Journal** 88(1), 570A Part 2 Suppl. S. (2005).
Single-molecule measurements of the persistence length of double-stranded RNA
- 18) J.A. Abels et al. **Biophysical Journal** 88(4), 2737-2744 (2005).
Single molecule measurements of the persistence length of double-stranded RNA
- 17) M. Diaz-Hernandez et al. **Journal of Neuroscience** 24(42), 9361-9371 (2004).
The stable component of Huntington's disease inclusions consist of amyloid-like huntingtin filaments that can be purified and that are susceptible to revert in vivo
- 16) F. Moreno-Herrero et al. **European Polymer Journal** 40(5), 927-932 (2004).
Jumping mode atomic force microscopy obtains reproducible images of Alzheimer paired helical filaments in liquids
- 15) F. Moreno-Herrero et al. **Physical Review E** 69, 031915 (2004).
Jumping Mode Scanning Force Microscopy: a tool for precise force control and high-resolution imaging in liquids
- 14) F. Moreno-Herrero et al. **Biophysical Journal** 86, 517-525 (2004).
Characterization by atomic force microscopy of Alzheimer paired helical filaments under physiological conditions
- 13) F. Moreno-Herrero et al. **Ultramicroscopy** 96, 167-174 (2003).
DNA height in Scanning Force Microscopy
- 12) F. Moreno-Herrero et al. **Applied Surface Science** 210, 22-26, (2003).
Jumping Mode Scanning Force Microscopy: a suitable technique for imaging DNA in liquids
- 11) F. Moreno-Herrero et al. **Nanotechnology** 14 (2), 128-133, (2003).
Topographic characterization and electrostatic response of M-DNA studied by Atomic Force Microscopy
- 10) F. Moreno-Herrero et al. **Applied Physics Letters** 81, 2620 (2002).
Scanning Force Microscopy Jumping and Tapping modes in liquids
- 9) C.Gómez-Navarro*, F. Moreno-Herrero* et al. **Proceedings of the National Academy of Sciences USA** 99 (13), 8484-8487 (2002).
Contactless experiments on individual DNA molecules show no evidence for molecular wire behavior
*Shared first authorship
- 8) C.Gómez-Navarro et al. **Nanotechnology** 13, 1-4 (2002).
Scanning force microscopy three-dimensional modes applied to the study of the dielectric response of adsorbed DNA molecules
- 7) T.de la Cera et al. **Journal of Molecular Biology** 319, 703-714 (2002).

Mediator factor Med8p interacts with the hexokinase 2: Implication in the glucose signalling pathway of Saccharomyces cerevisiae

6) C.Gómez-Navarro et al. **Phantoms Newsletters** 4, 4-6 (2002).
DNA, the miracle molecule

5) F. Moreno-Herrero et al. **Journal of Alzheimer's Disease** 3, 443-451 (2001).
Characterization by atomic force microscopy of tau polymers assembled in Alzheimer's disease

4) F. Moreno-Herrero et al. **Biochemical and Biophysical Research Communications** 280, 151-157 (2001).
Imaging and mapping protein-binding sites on DNA regulatory regions with atomic force microscopy

3) P.J.de Pablo et al. **Physical Review. Letters** 85 (23), 4992-4995 (2000).
Absence of dc-conductivity in lambda DNA

2) F. Moreno-Herrero et al. **Surface Science** 453, 152-158 (2000).
The role of shear forces in scanning force microscopy: a comparison between jumping mode and tapping mode

1) F. Moreno-Herrero et al. **FEBS Letters** 459, 427-432 (1999).
Analysis by atomic force microscopy of Med8 binding to cis-acting regulatory elements of the SUC2 and HXK2 genes of Saccharomyces cerevisiae