CURRICULUM VITAE
Laura Finzi

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EDUCATION

1990 Ph.D. in Chemistry, University of New Mexico, Albuquerque, NM. (Advisor: Carlos Bustamante)

1987 Master's in Chemistry, University of New Mexico, Albuquerque, NM.

1984 Laurea in Industrial Chemistry, University of Bologna, Bologna, Italy.

1979 Diploma from Liceo Classico "M. Minghetti" (High School diploma), Bologna, Italy.

PROFESSIONAL ACTIVITY

September 2012 - present: Full Professor, Physics Department, Emory University.

July 2005-August 2012: Associate Professor, Physics Department, Emory University.

June 1999-June 2005: Tenured Researcher and Group Leader, Biology Dept, University of Milano, Italy.

1993-May 1999: Researcher (tenured in '96), Biology Dept, University of Milan, Italy.

1992-1993: Post Doctoral Fellow**,** Biochemistry Dept., Brandeis University (Mentor: Jeff Gelles).

1990-1991: Post Doctoral Fellow**,** Chem. Dept., University of New Mexico **(October-December 1990),** Institute of Molecular Biology, University of Oregon **(January-December 1991)** (Carlos Bustamante group).

HONORS and AWARDS

2018: Recognized for "Excellent Teaching" by Phi Beta Kappa Mentee. Ceremony held on 4/10 in Cannon Chapel.

2018: Invited speaker, 52nd Biophysical Society Meeting, San Francisco, February 18.

2016 - present: Affiliated Faculty in the Emory Chemistry Department

2015 - present: Faculty member of the Emory GDBBS – Biochemistry, Cell and Developmental Biology (BCDB) program.

2016: Editor Special Issue "Supercoiling in DNA-protein interactions" of *Biophysical Reviews*, Springer.

2014 - 2015: co-Chair and, then, Chair of the "Nanoscale Biophysics" Subgroup of the Biophysical Society.

2014: Invited speaker, 58th Biophysical Society Meeting, San Francisco, February 18.

2013: elected to Emory's MilliPub Club (for >1000 citations on Science 258, 1122 (1992).

2013: Co-organizer of the Atlanta Area Molecular and Cellular Biophysics Symposium.

2012 - 2018: Standing Member of the NIH Molecular Structure and Function – C (MSFC) Study Section

2012 - 2014: Member of the Biophysical Society Program Committee.

2012: Moderator (in representation of the *Biophysical Journal*) of the Cell Press podcast "Single Molecule Biology" presented by Steve Block, National Lecturer at the 2012 Biophysical Society Meeting.

2011-2013: Member of the Biophysical Society Executive Board.

2010: Member of the Biophysical Society Nomination Committee.

2007 - 2011: Emory Computational and Life Sciences Core Faculty.

7/1/08 - 6/30/14: Editorial Board Member, Biophysical Journal (two terms).

2008 - 2011: Elected member of the Biophysical Society Council.

2008 - 2011: Member of the Biophysical Society Special Programs Committee.

2000 - 2004: Invited referee for EEC Framework Programmes grant applications

2005 - present: NSF and HFSPO reviewer.

1990: Dow-Smith award.

1988 - 89: American Association of University Women for the academic year.

1988: UNM Chemistry Dept. award.

SCIENTIFIC SOCIETY MEMBERSHIPS

Biophysical Society.

FELLOWSHIPS and GRANTS

Federal and extra-mural grants:

NIH R01: "Supercoiling in genome topology and transcription", (1R01GM084070-10-13) $ 1,789,710.00, 2018 -2022.

Biophysical Society –minigrant in support of a networking meeting, $ 500, 2017.

NIH - NIGMS Program of Administrative Supplements for Equipment (Admin Supp) - [PA15-089] - 3R01GM084070-07S1, $120,000, 2016.

NIH R01: "How elongating RNAP navigates protein-mediated DNA looping and wrapping", (1R01GM084070-06-09) $1,250,500, 2014 -2018.

NIH R01: "Elucidating the Biophysical Mechanisms of Notch Activation", P.I. Khalid Salaita, co-P.I. LF, 2012-2014.

NIH R01: "The λ bacteriophage regulatory loop", (1R01GM084070-01-05) $1,317,500, 2009-2014.

NIH R01: "Genetic Regulation in Drosophila: Dosage Compensation" P.I. John Lucchesi, co-P.I. LF, 2009-2012.

Emory Intramural grants:

ICIS Travel Award, 2009 (cancelled since ICIS was closed that year)

University Research Council (URC) –2006

Grants from international agencies:

Australian Research Council (ARC): "The rational design and construction of new genetic circuits for applications in synthetic biology", P.I. Keith Shearwin, co-P.I. LF, (DP110100824), 2011-2013.

Human Frontier Science Programme Organization (HFSPO) 2002-2005, extended to 2006

European Science Foundation (ESF) short-term fellowship to conduct Single Particle Tracking measurements in the photosynthetic membranes at the Hungarian National Academy of Sciences in Szeged, Hungary from August to September 1999.

Italian grants:

Member/Co-applicant of the National Center of Excellence "Interdisciplinary Center for Nanostructured Materials and Interfaces" (CIMAINA) of the University of Milano (2004-5).

FIRB 2002 from the Italian Ministry of Research (MIUR)

MIUR cofin 2002 ("Research projects of national interest")

MIUR cofin 2000 ("Research projects of national interest")

FIRST from the Biology Dept. ("Explorative actions")

FIRST from the Biology Dept. for the years 2000, 2001, 2002.

PEER REVIEW ACTIVITIES

Regular reviewer for peer-reviewed, scientific journals such as Physical Review Letters, PRE, PNAS, Journal of Molecular Biology, Biophysical Journal, NAR, European Biophysics J, Cytometry A, Nature Publishing Group (npg) Journals, eLife, etc.

Reviewer for NSF and HFSPO.

Member of the "*Ad hoc*" on-site review panel of the NIH P40 Center in Albany NY (ZRG1 GGG-T (40) P study section)

Standing member of the NIH Molecular Structure and Function C (MSFC) study session, Oct 2012 – June 2018.

"*Ad hoc*" reviewer for the NIH MSFC study section prior to Fall 2012.

External reviewer for promotion at various domestic and foreign Universities.

External reviewer for the Dutch governent (FOM), the Belgian Research Council and the Swiss National Science Foundation.

Referee for EEC Framework Programme 5 (FP5) and FP6 grant applications (2000-2004).

COMMITTEES AND SERVICE

Emory Physics Department:

Montag Award committee member, 2015 – present

Biophysics Major, Chair, Spring 2015 - present

Search Committee, Chair, 2010-2011, 2011-2012, 2017 - 2018

Strategic Committee, 2016 – present

Montag Award Committee member, 2015 - present

Colloquium Committee, 2011-2012, 2016 - present

Director of Graduate Studies, 2008-2011

Jackson Fellowship for undergraduate research in Physics, selection committee, 2006 - 2010.

Emory College:

Co-chairs the Faculty Science Council, 2017 – present.

Co-founded Women in Science at Emory (WiSE), 2017.

Faculty interviewer during Emory Scholar Finalists' Week, March, 2017.

Faculty Life Course Committee, Member, Fall 2016 – present.

Hosted Nobel Laureate, Prof. W.E. Moerner for a Hightower Lecture, April 2015.

Emory Diversity Graduate Fellowship Committee, 2014-2015.

Emory Tenure and Promotion Committee (elected by Emory faculty), Fall 2013 – 2016.

Emory College Curriculum Committee (elected by Emory faculty), Fall 2012 – 2015.

Emory Space Committee, Member, 2014-2016.

Emory Tibetan Science Initiative (ETSI), taught introductory physics to Tibetan monks in the monastery of Drepung, India, June, 2014.

Clare Booth Luce Fellowship (CBL) committee member, 2012-2013.

Pre-major Advising Connections at Emory (P.A.C.E.), 2009-present.

Member of the Marshall Nomination committee (Fall 2009).

Chair of the URC Math and Science subcommittee (2006 – Spring 2009).

Member of the search committee for the Computational and Life Sciences (CLS) strategic initiative, 2007 – Spring 2009.

Freshman Advising and Mentoring at Emory (F.A.M.E.) advisor (Fall '06 and '07).

External member of the search committee for the Chemistry Dept., 2007-08.

Member of the committee for the selection of the applications to the INSPIRE program (2007).

Outside Emory

2017: Organizer of the Southeastern Single-Molecule Biophysics Networking Meeting, April 6-9.

2015-present: Mentor for the NIH-SCORE Program.

Chaired and Co-Chaired several scientific sessions at different domestic and international meetings and conferences.

ACTIVE COLLABORATIONS

Dr. David Dunlap, Department of Physics, Emory University.

Dr. Harold Kim, Department of Physics, GATech.

Dr. Fenfei Leng, Florida International University

Dr. Sankar Adhya, NIH NCI

Dr. Sachin Goyal, School of Engineering, University of California at Merced.

Dr. Krishnananda Chattopadhyay, Indian Institute of Chemical Biology, Calcutta, India.

Dr. Francesco Mantegazza, Universita' degli Studi Bicocca, Milano, Italy

TEACHING and TRAINING

At Emory University:

"Biological Physics" (PHYS 434; undergraduate), Fall 2017
"Biological Physics" (PHYS 534; graduate), Fall 2017
"Freshman Seminar: from Energy to information and life" (PHYS 190), Spring and Fall 2016
"Foundations in BCDB-I" (BCDB 501), Fall 2015 – present (these are 1-2 weeks modules).
"Thermal Physics" (PHYS 421), Fall 2012
"Introductory Physics" (PHYS 142), Springs 2009 – 2012, 2014
"Single-molecule biophysics" (PHYS 380, now Phys 556), Spring 2006, 08, 13, 15 - 18
"Biomacromolecules" (PHYS 380, now PHYS 552), Fall 2006 - 09, 11 and 15.
"How things work" (PHYS 121), Fall 2010
"Freshman Seminar: Physics and Physiology" (PHYS 190), Spring 2007

Mentor of undergraduate students in the following Emory programs: Summer Undergraduate Research at Emory (SURE), Scholarly Inquiry and Research at Emory (SIRE), Interdisciplinary Scence Program for Integrating Research into Education (INSPIRE).

Mentor of undergraduate Honor students (Paul Liebesny, 2008-09; Chandler Fountain, 2011-12; Hamin Jeon, 2012-2013; Crissy Hendrickson and Geethika Malla, current). For the full list of undergraduate advisees, please see my personal webpage.

Mentor of graduate students in the Problems and Research to Integrate Science and Mathematics (PRISM) program.

Mentor of a HHMI/STEP curriculum development fellow (2012 - 2013).

Sponsored and helped drafting several intra- and extramural applications by graduate students and postdoctoral fellows.

At the University of Milano:

1993-2005: laboratory course on enzymology and electron transport to 3rd year undergraduate students, classes on microscopy to graduates and postgraduates.

INVITED SEMINARS and LECTURES

University of Illinois at Chicago, Physics Department seminar series, April 18th, 2018.

Florida International University, Physics Department seminar series, March 30th, 2018.

62nd Biophysical Society Meeting, symposium on "DNA supercoiling", San Francisco, February 17-21, 2018.

Fifth Global Biotechnology Congress 2017, Session lecture, Boston, July 10 - 13, 2017, declined.

North Dakota State University, Physics Department seminar series, Spring 2017.

Georgetown University, D.C., 9/22/2016

Scientific Symposium in honor of Carlos Bustmante 65th b-day, UC Berkeley, 5/21/2016

North Carolina State University, Physics Department colloquium series, 10/05/2015

Aarhus University, Physics Department, Distinguished iNANO Lecture, Aarhus, Denmark, 8/14/2015

NHLBI, Biochemistry and Biophysics Center Guest Speaker Seminar Series, 5/27/2015

Emory University, Chemistry Department, Distinguished Visiting Researchers Seminar Series, 5/4/2015

59th Biophysical Society Annual Meeting, platform "DNA Replication & Transcription", Baltimore, MD. February 11, 2015.

"Single Molecule Biophysics (SMB)" Winter Conference, Center for Physics, Aspen, Jan 4-9, 2015.

Cornell University, Biophysics seminar Series, March 12, 2014.

58th Biophysical Society Meeting, symposium on "Biophysics of Epigenetic Switches", February 18, 2014.

Auburn University, Physics Department, January 17, 2014.

UT at San Antonio, Physics Department, October 25, 2013.

Emory University, Atlanta Area Cell and Molecular Biophysics Symposium, Atlanta, September, 2013.

Atlanta Science Tavern (http://www.meetup.com/AtlantaScienceTavern/), March 23, 2013.

"Single Molecule Biophysics (SMB)" Winter Conference, Center for Physics, Aspen, Jan 5 - 11, 2013.

Mechanobiology workshop, Singapore, November 7-10, 2012.

6th Mechanobiology Conference, 'Mechanobiology of Chromatin and Transcription', Singapore, November 12-14, 2012.

Emory Emeritus College (http://www.emory.edu/emeritus/), September 10, 2012;

Italian Institute of Technology, Genova, Italy, July 3, 2012;

University of Texas at Austin, Department of Physics, 6/14/2011;

University of Alabama at Birmingham, Department of Biochemistry and Molecular Genetics, 1/28/2011;

AAPT National Winter Meeting, Jacksonville, FL, January 8-12, 2011 (Could not go);

"Statistical physics and topology of polymers with ramifications to structure and function of DNA and proteins", Yukawa Institute for Theoretical Physics, Kyoto University, Kyoto, Japan, 8/2-6/2010. This was a satellite meeting of the XXIV International Conference on Statistical Physics, Cairns, Queensland, Australia, 19-23 July, 2010. (Did not accept invitation).

Small Systems Biology Meeting, May 6-8, 2010, Dragor, Denmark;

South East Workshop on Soft Materials, GATech, Atlanta, May 13, 2010

University of Puerto Rico at Río Piedras, Department of Chemistry, San Juan, PR, 5/17/2010. Supported by the NIH-RISE Program (Research Initiative for Scientific Enhancement),

American Physics Society March Meeting, A10: Focus Session: Single Molecule Biophysics and Chemical Physics Contributed talk. Portland, Oregon, March 15–19, 2010 (Did not go due to teaching conflict);

7th European Biophysical Societies Association (EBSA) Meeting, Genoa, Italy, July 11-15th, 2009.

"From DNA-inspired physics to physics-inspired biology", Intl. Center for Theoretical Physics, Trieste-Miramare, Italy, June 1-5th, 2009.

109th General Meeting of the American Society for Microbiology, Philadelphia, PA, May 17-21, 2009.

"DNA loop formation, nucleosome positioning, and transcriptional regulation", APS March Meeting Symposium, Division of Biological Physics, Pittsburg, 3/16-20, 2009

Georgia Institute of Technology, Chemistry Department Seminar Series, February 24th, 2009

University of Maryland, Biophysics Symposium on "Single Molecules", November 17th, 2008.

Emory School of Medicine, Biochemistry Department Seminar series, October 16th, 2008.

Fall meeting of the Southeast Section of APS-Physics, Biophysics session. November 8-10, 2008, Nashville, TN (declined).

“Mathematics of DNA Structure, Function, and Interactions”, part of the 2007 program focused on Molecular and Cellular Biology at the Institute for Mathematics and its Applications (IMA). September 15-21, 2007. The University of Minnesota, Minneapolis. On-line talk available at: http://www.ima.umn.edu/2007-2008/W9.16-21.07/abstracts.html#Finzi-Laura

Workshop "Mechanics of Life: from Biomolecules to Molecular Machines". June 11-13, 2007, University of Michigan, Ann Arbor. On-line talk available at: http://www.umich.edu/~mctp/SciPrgPgs/events/2007/mechlife/sci.pro.fin.html

Drexel University, Physics Department, Colloquium series, 3/1/07

“Single Molecule Biophysics (SMB)” Winter Conference, Center for Physics, Aspen, Feb 4-10, 2007.

Contributing speaker at the Gordon conference on “Single-molecule Approaches to Biology”, Colby-Sawyer College, New London, NH, 18-23 June, 2006

"New Physical Approaches to Molecular and Cellular Machines" workshop at the Kavli Institute for Theoretical Physics, May 29-June 4, 2006. On-line talk available at: http://online.kitp.ucsb.edu/online/biomachine06/

"Phages, Experiments and Modeling", workshop organized by the Center for Models of Life, Niels Bohr Institute, Dracor, Denmark, May 4-6, 2006

HFSP Fifth Awardees Annual Meeting, Natcher Conference Center, NIH, Bethesda, MD, June 5-8 2005

Workshop on Biopolymers: Thermodynamics, Kinetics and Mechanics of DNA, RNA and Proteins”, The Abdus Salam International Center for Theoretical Physics, Trieste, Italy, May 30-June 3, 2005

“DNA, Mathematics and Mechanics”, Lecce, Italy, May 26-28, 2005

INFM School on “Single Molecule Biophysics”, Villa Gualino, Torino, 6-12/9/2004.

“Topological modifications of DNA in transcriptional regulation”, Waksman Institute, Rutgers University, NJ, USA, 21/1/2004

“Topological Modifications of DNA: a regulatory mechanism of gene expression”, Physics Department, Emory University, GA, USA, 9/2/2004.

Invited lecturer in the session dedicated to "Nanovideoimaging".in the course entitled "Imaging techniques in animal and human research : can Space help Biology", European University of Studies, Toulouse, France 15-19/9/2003.

13th Conversation in Albany, SUNY, Albany NY, USA, 17-21 June, 2003.

“DNA topological modifications in transcriptional regulation: a study at the single molecule level” University of Lausanne, Switzerland, 24/3/2003.

“DNA topological modifications in the control of transcription” University of Twente, NL, 12-13/12/2002.

Invited lecturer in the National School of Biophysics, Genova 1-7/12/ 2002.

“Rivelazione dinamica di nanostrutture biologiche con tecniche di singola molecola” LXXXVIII Congresso Nazionale Società Italiana di Fisica (SIF), Alghero 26/9-1/10, 2002.

“Studi Biologici a livello di singola molecola”, Dipartimento di Biochimica, Università Statale degli Studi di Milano, 18/4/2002.

“Modificazioni topologiche del DNA durante la trascrizione: studio su singole molecole”, Simposio “Osservando il genoma in azione”, Istituto Lombardo, Accademia di Scienze e Lettere, Milano, 4/4/2002.

“Control of gene expression: study of the architectural interactions between transcriptional factors and DNA”, CNI, NIH, Bethesda, MD, USA, 28/2/2001.

“Control of gene expression: study of the architectural interactions between transcriptional factors and DNA”, Howard Hughes Medical Institute, Center for Single Molecule Biophysics, School of Medicine and Biomedical Sciences, State University of New York at Buffalo, NY, USA, 26/2/2001.

"DNA nanomanipulation and visualisation at the single molecule level", Laboratoire de Microbiologie et Génétique Moléculaire (UPR 9007, CNRS), Toulouse, France, 1/12/2000.

"Insights from single molecule studies of transcriptional, photosynthetic and motor proteins", Natl. Cancer Institute, NIH, Bethesda, MD, 7/4/2000.

"Insights from single molecule studies of transcriptional, photosynthetic and motor proteins", Department of Biochemistry and Molecular Biology, SUNY Health Science Center, Syracuse 5/4/2000.

"DNA Elasticity and Enzyme-Mediated Looping Studied by Single Molecule Microscopy", DIBIT (Dipartimento di

Biotecnologie), HSR (Ospedale San Raffaele), Science Park, 19/5/1999.

"DNA Elasticity and Enzyme-Mediated Looping Studied by Single Molecule Microscopy", Department of Chemistry, New Mexico University, 25/3/1999.

"DNA Elasticity and Enzyme-Mediated Looping Studied by Single Molecule Microscopy", Department of Zoology and Genetics, Iowa State University, 22/3/1999.

PUBLICATIONS (Links to the most significant publications are available on the Finzi Lab web site)

1. Suparna Sarkar, Sachin Goyal, Ning Gao, John Mack, Benito Thompson, David Dunlap, Krishnananda Chattopadhyay, Laura Finzi, "Specifically bound Lambda repressor dimers promote adjacent non-specific binding", PLOS One, 13(4): e0194930, 2018.
2. Yan Yan, Laura Finzi and David Dunlap, "Large topological domains secured by long-range protein-protein interactions", *NAR*, 2018, *doi: 10.1093/nar/gky153*.
3. Yan Yan, Fenfei Leng, Laura Finzi and David Dunlap, "Supercoiling drives protein-mediated looping of DNA under slight tension", *NAR*, 2018, doi: 10.1093/nar/gky021.
4. Zsuzsanna Voros, Yan Yan, David D. Dunlap and Laura Finzi, "Protein-mediated DNA looping enhances roadblocks", *Protein Science*, 26(7):1427-1438 (2017).
5. Suleyman Ucuncuoglu, Krysta Engel, David D.Dunlap, David Schneider, Laura Finzi, "Direct characterization of transcription elongation by RNA polymerase I", *PLoS One*, 2016 Jul 25;11(7):e0159527. doi: 10.1371/journal.pone.0159527.
6. Monica Fernandez, Qing Shao, Chandler Fountain, Laura Finzi, David D. Dunlap, "E. coli gyrase fails to negatively supercoil diaminopurine-substituted DNA", *JMB*, 427, 2305-2318, 2015.
7. Yue Ding, Carlo Manzo, Geraldine Fulcrand, David Dunlap, Fenfei Leng and Laura Finzi, "DNA Supercoiling: a Regulatory Signal for the Lambda Repressor", *PNAS*, **111**(43), 15402-15407, 2014.
8. Sandip Kumar, Carlo Manzo, Chiara Zurla, Suleyman Ucuncuoglu, Laura Finzi and David Dunlap, "Enhanced Tether Particle Motion Analysis Reveals Viscous Effects", *Biophysical J*., **106**(2), 399-409, 2014.
9. Ning Gao, Laura Finzi and David D. Dunlap, "Purification of Bacteriophage Lambda Repressor", *Protein Expression and Purification*, **91**, 30-36, 2013.
10. Marta Adelina Mendesa, Rosalinda Fiorella Guerra, Markus Christian Berns, Laura Finzi, Martin M. Kater and Lucia Colombo, "MADS-domain Transcription Factor Complex Induced Short-Range DNA Loop Formation is Essential for Target Gene Expression in Arabidopsis", *Plant Cell*, **25**, 2560-2572, 2013.
11. Haowei Wang, Ian Dodd, Keith Shearwin, David Dunlap and Laura Finzi, "Single molecule analysis of DNA wrapping and looping by a circular 14-mer of the 186 bacteriophage CI repressor", *Nucleic Acids Research*, **41**, 5746-5756, 2013.
12. Carlo Manzo, Chiara Zurla, David Dunlap and Laura Finzi, "The effect of non-specific binding of lambda repressor on DNA looping dynamics", Biophys. J., 103, 1753-1761, 2012.
13. Sachin Goyal, Chandler Fountain, David D. Dunlap, Fereydoon Family, Laura Finzi, "Stretching DNA to quantify non-specific binding", *PRE*, **86**, 011905, 2012.
14. Qing Shao, Sachin Goyal, Laura Finzi and David Dunlap, "Physiological levels of salt and polyamines favor writhe and limit twist in DNA", *Macromolecules*,**45**, 3188−3196, 2012.
15. Dale E.A. Lewis, Phuoc Le, Chiara Zurla, Laura Finzi, and Sankar Adhya, "Multi-level Auto-regulation of CI Protein in a λ lysogen", *PNAS*, **108** (36):14807-14812, 2011.
16. C. Zurla, C. Manzo, D.D. Dunlap, D.E.A. Lewis, S. Adhya, L. Finzi, "Direct demonstration and quantification of long-range DNA looping by the λ bacteriophage repressor.", *NAR*, **37**, 2789-2795, 2009.
17. G. Lia, S. Semsey, D. E. Lewis, S. Adhya, D. Bensimon, D.D. Dunlap, L. Finzi, "The antiparallel loops in Gal DNA", *NAR*, **36**, 4204-4210, 2008.
18. F. Guerra, L. Imperadori, D. Dunlap, R. Mantovani, L. Finzi "DNA compaction by the Nuclear Factor-Y", *Biophys. J*., **93** (1): 176-182, 2007.
19. C. Zurla, T. Samuely, G. Bertoni, F. Valle, G. Dietler, L. Finzi, D. Dunlap "Integration Host Factor alters LacI-induced DNA looping", *Biophysical Chemistry*, **128**, 245-252, 2007.

20. John F. Beausang, Chiara Zurla, Carlo Manzo, David Dunlap, Laura Finzi, Philip C. Nelson "DNA Looping Kinetics Analysed Using Diffusive Hidden Markov Method Model", *Biophys. J.-Biophys. Lett.*, **92** (8), L64-L66, 2007.

21. J. F. Beausang, C. Zurla, L. Sullivan, L. Finzi, P. C. Nelson "Elementary simulation of tethered Brownian motion", *Am. J. Phys*. **75**, 520, 2007. Also featured in the *Virtual Journal of Biological Physics Research*, issue of May 15, 2007.

22. P. Nelson, C. Zurla, D. Brogioli, John F. Beausang, L. Finzi, D. Dunlap "Tethered Particle Motion as a Diagnostic of DNA Tether Length", *The Journal of Physical Chemistry B*, **110** (34): 17260-17267, 2006.

23. Zurla, A Franzini, G. Galli, D.D. Dunlap, D.E.A. Lewis, S. Adhya and L. Finzi "Novel tethered particle motion analysis of CI protein-mediated DNA looping in the regulation of bacteriophage lambda" *Journal of Physics:Condensed Matter*, **18**, S225-S234, 2006.

24. Podestà, M. Indrieri, D. Brogioli, J. S. Manning, P. Milani, R. Guerra, L.Finzi, D. Dunlap "Positively charged surfaces increase the flexibility of DNA", *Biophys J*., **89**, 2558-2563, 2005.

25. E. Consoli, R. Croce, D. Dunlap and L. Finzi "Diffusion of phosphorylated and non-phosphorylated Light Harvesting Complex II in the thylakoid membranes", *EMBO reports*, Aug;**6**(8):782-6 (2005).

26. G. Garab, P. Galaida, I. Pomozi, L. Finzi, T. Praznovszky, P. Ormos, H. Van Amerongen "Alignment of biological microparticles by polarized laser beam", *Eur. Biophys. J*., **34**(4):335-43 (2005).

27. M. Kooiker, C. Airoldi, A. Losa, P.S. Manzotti, L. Finzi, M. M. Kater and L. Colombo "Basic pentacysteine1 a GA-Binding Protein that Induces Conformational Changes in the Regulatory Region of the Homeotic Arabidopsis Gene SEEDSTICK", *The Plant Cell*, **17**, 722-729 (2005).

28. A. Podestà, L. Imperadori, W. Colnaghi, L. Finzi, P. Milani and D. D. Dunlap "Atomic Force Microscopy studies of DNA deposited on poly-L-ornithine coated mica", ***Journal of Microscopy 215, 236-240(2004)***

29. G. Lia, D. Bensimon, V. Croquette, J-F. Allemand, D. Dunlap, DAE. Lewis, S. Adhya, L. Finzi, "Supercoiling and denaturation in GalR/HU-mediated DNA looping as seen by single-molecule microscopy", *PNAS*, **100**, 11373-377, 2003

30. L. Finzi "Single-molecule supercoiling and denaturation in GalR/HU-mediated DNA looping", *J. Biomol. Struct. and Dyn., **20**, 913-914, 2003.*

31. M Capitanio, G. Romano, R. Ballerini, D. Dunlap, L. Finzi, M. Giuntini and F.S. Pavone, " Calibration of an Optical Tweezer with DIC Signals", *Reviews of Scientific Instruments,***73**, 1687-1696, 2002.

32. L. Finzi, Peter Galajda, and Gyozo Garab, "Labeling phosphorylated LHCII with microspheres for tracking studies and force measurements" *J. Photochem. Photobiol,B:Biology, **65**, 1-4, 2001*.

33. L. Sacconi, G. Romano, R. Ballerini, M. Capitanio, M. De Pas, D. Dunlap, M. Giuntini, L. Finzi, and F.S. Pavone."A 3D micro-TOP magneto-optical trap for micro-objects manipulation", *Optics Letters*, **26**, 1359-61, 2001.

34. L. Finzi, G. Zucchelli, F. M. Garlaschi, and R. C. Jennings, "Thermal Sensitivity of the Red Absorption Tail of Photosystem II Reaction Center Complex", *Biochemistry*, **38** (33), 10627-10631 (1999).

35. L. Finzi, G. Elli, G. Zucchelli, F. M. Garlaschi, R. C. Jennings, "Long Wavelength Absorption Transitions in the D1/D2/cytb559 Complex as Revealed by Selective Pigment Photobleaching and Circular Dichroism Measurenments", *BBA*, **1366**, 256-264 (1998).

36. R. C. Jennings, G. Zucchelli, R. Croce, L. Valkunas, L. Finzi, and F. M. Garlaschi, "Model Studies on the Excited State Equilibrium Perturbation due to Reaction Center Trapping in Photosystem I", *Photosynthesis Research*, **52**, 245 (1997).

37. R. C. Jennings, F. M. Garlaschi, L. Finzi and G. Zucchelli, "Slow Exciton Trapping in Photosystem II. A Possible Physiological Role", *Photosynthesis Research* **47**, 167-173 (1996)

38. J. Gelles, H. Yin, L. Finzi, O. K. Wang, R. Landick, "Single molecule kinetic studies on DNA transcription and transcriptional regulation", *Biophysical Journal* **68**(4 supplement S):S73, 1995 April

39. R. Cattaneo, G. Zucchelli, F. M. Garlaschi, L. Finzi, and R. C. Jenninngs, "A Thermal Broadening Analysis of Absorption Spectra of the D1/d2/cytochrome b-559 Complex in Terms of Gaussian Decomposition Sub-bands", *Biochemistry* **34**, 15267(1995)

40. L. Finzi and J. Gelles, "Measurement of Lac Repressor-mediated loop formation and Breakdown in Single

DNA Molecules", *Science* **267**, 378-380(1995).

41. R. C. Jennings, F. M. Garlaschi, L. Finzi, and G. Zucchelli, "Spectral heterogeneity and energy transfer in higher plant Photosystem II", *Lietuvos Fizikos Zurnalas*, **34**(4), 293(1994).
42. S. Smith, L. Finzi and C. Bustamante, "Direct Mechanical Measurements of the Elasticity of single DNA molecules Using Magnetic Beads", Science 258, 1122(1992).
43. L. Finzi, P. Sebring, S. Smith, and C. Bustamante, "Optical Methods for Ultrasensitive Detection and Analysis: Techniques and Applications", *S.P.I.E*, **1435**, 178-187(1992).
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