
More than 1450 citations (July 2010).

Review papers and book chapters listed separately.

2010


2009


43. Peter Jönsson, Jason P. Beech, Jonas O. Tegenfeldt, and Fredrik Höök, “Shear-Driven Motion of Supported Lipid Bilayers in Microfluidic Channels”, Journal of the American Chemical Society, 131 (14), 5294-5297 (2009) [DOI: 10.1021/ja809987b]


2008


2007


2006


2005


2004


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2002


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1997


1995


1994


1993


Invited review papers

2. Fredrik Persson and Jonas O. Tegenfeldt "DNA in nanochannels - directly visualizing genomic information"; invited review paper, part of the themed issue: From microfluidic applications to nanofluidic phenomena, Chemical Society Reviews, 39, 985 - 999 (2010) DOI:10.1039/B912918A

Book Chapters


Manuscripts in preparation

1. Tobias Ambjömsson, Bo Söderberg, Jonas O. Tegenfeldt, "Melting maps in heteropolymer DNA", manuscript

2. Fredrik Persson, Fredrik Westerlund, Jonas O. Tegenfeldt, “Ionic effects on DNA extension in nanofunnels”, manuscript


Patents

Issued


Pending


2. Jonas Tegenfeldt and Jason Beech, “Adjustable Separation and Concentration Device”, Swedish patent application #050 1900-5 filed August 29th, 2005. (13 out of 14 claims have passed the review process.)


Invited presentations

2010

upcoming: Jonas Tegenfeldt, “Studies of DNA confined in nanochannels”, Summerschool Biosensing with channels organized by Loïc Avray et al. at Université d’Évry, Berder Island – Brittany, France, 21-27 August 2010


Jonas Tegenfeldt, "DNA analysis in nanostructured devices", Nordic Workshop on Statistical Physics: Biological, Complex and Non-equilibrium Systems, NORDITA, Stockholm, Sweden, 17-19 March 2010

18 invited talks 2002-2009

2009

Jonas Tegenfeldt, "Nanostructured devices for DNA analysis", ESF-EMBO Symposium "Biological Surfaces and Interfaces", Sant Feliu de Guixols (Costa Brava), Spain, on 27 June -- 2 July 2009


Jonas Tegenfeldt, "Tools for biology - nanoscale injection needles and the bumper array", Workshop at the 1st Conference on Advances in Microfluidics and Nanofluidics, held Jan 05-07 2009 at the campus of the Hong Kong University of Science and Technology at Clearwater Bay, Kowloon, SAR Hong Kong. Workshop title: Below the Micron Scale: Problems in Nanofluidics in Biology
2008


Jonas Tegenfeldt, “Transport phenomena in Micro- and Nanofluidics”; six lectures to be given at a summer school organized at CISM (Centre International des Sciences Mécaniques), Udine, Italy, September 1-5, 2008

2007

Jonas Tegenfeldt, “Microfluidics for medical applications”, invited presentation at Medicintekniskt seminarium organized by Xano Industri in Malmö, Sweden, September 4th 2007

Jonas Tegenfeldt, “Nanofluidics for DNA analysis”, invited keynote at the Fifth International Conference in Nanochannels, Microchannels and Minichannels in Puebla, Mexico during June 18-20, 2007 [http://www.asmeconferences.org/ICNMM07/]

2006

Jonas Tegenfeldt, “Nanofluidics for DNA analysis” and “Micro/nanofluidics for bioseparation”; two lectures given at the summer school PANAMA organized within NaPa (IP within FP6), Toulouse, France, July 3-14, 2006


Jonas Tegenfeldt, “Mikro- och nanoteknologi för biomedicinska tillämpningar” at Analysens Dag, a yearly internal meeting for Astra Zeneca in Lund, April 5, 2006

2005

Jonas Tegenfeldt, “Nanofluidics in bioanalysis” at the yearly meeting of the Center for Bioseparation at Järavallen, Sweden, May 16-17, 2005

Jonas Tegenfeldt, “Particle and DNA Separation” and “DNA Analysis in nanofluidic Channels”; two lectures given at the summer school PANAMA organized within NaPa (IP within FP6), Toulouse, France, July 4-15, 2005

2004


2002


Conference contributions

The presenting coauthor is underlined. Date is given as yymmdd. For the last two years, I indicate what conferences have had a system with referee to select accepted contributions (referee). Any invited conference presentations are listed above.

2010 (8 presentations)


100824-27 G. Ohlsson, S. Tabaei, M. Brändén, J. O. Tegenfeldt and F. Höök, "Detecting water transport through lipid membranes on a millisecond level using microfluidics and fluorescent dyes", Third International NanoBio Conference 2010, Zürich, Switzerland (poster)


100219-24 Fredrik Westerlund, Fredrik Persson, Anders Kristensen and Jonas O. Tegenfeldt, "Fluorescence enhancement from single molecules confined in SiO2 nanochannels", The 54th annual meeting of the Biophysical Society, San Francisco, CA (accepted as poster, referee)

100219-24 Fredrik Persson, Fredrik Westerlund, Anders Kristensen and Jonas O. Tegenfeldt, "Local conformation of confined DNA studied using emission polarization anisotropy", The 54th annual meeting of the Biophysical Society, San Francisco, CA (accepted as poster, referee)

100219-24 Gregory J. Gemmen, Walter W. Reisner, Jonas Tegenfeldt, Heiner Linke, "Ethanol induced shortening of DNA in nanochannels", The 54th annual meeting of the Biophysical Society, San Francisco, CA (accepted as poster, referee)

100219-24 Tobias Ambjörnsson, Bo Söderberg, Jonas O. Tegenfeldt, "Simplified theory for DNA melting maps", The 54th annual meeting of the Biophysical Society, San Francisco, CA (accepted as poster, referee)
71 conference contributions 1994-2009

2009 (5 presentations)


091101-05 Jason P. Beech and Jonas O. Tegenfeldt, "Gravitationally driven deterministic lateral displacement devices", µTAS, Jeju, Korea (accepted as poster, referee)

091101-05 Jason P. Beech and Jonas O. Tegenfeldt, "Shape-based particle sorting - a new paradigm in microfluidics", µTAS, Jeju, Korea (accepted as poster, referee)

091101-05 Jason P. Beech and Jonas O. Tegenfeldt, "Capillary driven separation on patterned surfaces", µTAS, Jeju, Korea (accepted as poster, referee)

2008 (6 presentations)


081012-16 Jason P. Beech, Peter Jönsson, J. O. Tegenfeldt, “Tipping the balance with dielectrophoretic forces – an electric deterministic lateral displacement device”, µTAS, SanDiego, CA, US, pp. 95-7 (accepted as poster, referee)


081012-16 Fredrik Persson, Fredrik Westerlund, J. O. Tegenfeldt, Anders Kristensen, “Polarization anisotropy of DNA in nanochannels”, µTAS, SanDiego, CA, US, pp. 668-70 (accepted as oral, referee)

2007 (6 presentations)


A total of 54 conference presentations during 1994-2006.

2006 (7 presentations)


061105-09 Jason P. Beech, and Jonas O. Tegenfeldt, “Stretching the limits of separation”, µTAS, Tokyo, Japan, pp. 1034-6 (accepted as oral, referee)

061105-09 Asger Vig Larsen, Jason Beech, Veysel Özkapici, Brian Bilenberg, Anders Kristensen, and Jonas O. Tegenfeldt, “Pushing the limits of deterministic lateral displacement devices”, µTAS, Tokyo, Japan, pp. 930-2 (accepted as poster, referee)

061105-09 Søren Jacobsen, Jason Beech, Mikkel Schøler, Anders Kristensen, and Jonas O. Tegenfeldt, “Single-step NIL of micro and nanochannels combined with optical waveguides for characterization of DNA molecules”, µTAS, Tokyo, Japan, pp. 696-8 (accepted as poster, referee)

060730-0804 Jason P. Beech, and Jonas O. Tegenfeldt, “Stretching the limits of separation”, ICN+T2006, Basel, Switzerland (accepted as poster, referee)

060508-11 Jonas Tegenfeldt, “Stretching the limits of separation”, 3rd Nordic Network Meeting on Statistical Physics, Soft Matter, and Biological Physics at Nordita, Copenhagen,
Tegenfeldt

Publications July 7, 2010

12 (16)

Denmark (invited oral)


2005 (5 presentations)


050602-03 Michael Hansen, Brian Bilenberg, Claus Jeppesen, Daniel Nilsson, Veysel Özkapici, Jonas O. Tegenfeldt, and A. Kristensen, “Polymer Based Lab-on-a-Chip Microsystems Fabricated by Thermal Nanoimprint Lithography in a Cyclic-Olefin-Copolymer”, Danish Physical Society Annual Meeting Thursday June 2nd.- Friday June 3rd, 2005 at Hotel Nyborg Strand (referee)


050418-20 Jonas O. Tegenfeldt, “Nanofluidics for DNA analysis”, First International Nanofluidics Workshop, Boekelo, Netherlands (oral, referee)

2004 (6 presentations)

040129 Jonas Tegenfeldt, “Nanofluidics for biomolecular analysis”, ProNano event: Nanoscience and Biomedicine, Malmö, Sweden (invited)

040527-28 Jonas Tegenfeldt, “Nanofluidics for biological applications”, Danish Physics Society Annual Meeting, Nyborg, Denmark (invited)


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2003 (8 presentations)


030303-07 Walter Reisner, Jonas Tegenfeldt, Joseph Peach, Robert Austin, Paul Chaikin “Nanosphere Arrays for DNA Fractionation using Pulse-Field Electrophoresis”, APS March Meeting, Austin, TX

030303-07 Lotien Richard Huang, Pascal Silberzan, Jonas Tegenfeldt, Edward Cox, James Sturm, Robert Austin, “The Role of Fluid Flow Angle in Ratchet Fractionation”, APS March Meeting, Austin, TX


030303-07 Jonas O. Tegenfeldt, Han Cao, Christelle Prinz, Zhaoning Yu, Robert H. Austin, Edward C. Cox, Stephen Y. Chou, James C. Sturm, “DNA analysis in nanochannels”, APS March Meeting, Austin, TX

030303-07 Yan Mei Wang, Robert H. Austin, Jonas O. Tegenfeldt, Edward C. Cox, Han Cao, Stephen Y. Chou, “Study of stretched fusion transcription protein bind to DNA”, APS March Meeting, Austin, TX

031112-13 Jonas Tegenfeldt, “Nanofluidics for biomolecular analysis”, Älvsjö, Stockholm, Sweden (invited)


2002 (6 presentations)

020318-22 Jonas O. Tegenfeldt, Han Cao, Robert H. Austin, Edward C. Cox, Shirley M. Tilghman, “Nanofluidics and Single Molecule Detection for DNA Analysis”, APS March Meeting, Indianapolis, IN

020318-22 Han Cao, Jonas O. Tegenfeldt, Wanli Li, Zhaoning Yu, Robert H. Austin, Stephen Chou, “Nanoimprinted channels for single DNA analysis”, APS March Meeting, Indianapolis, IN

020318-22 Christelle Prinz, Jonas O. Tegenfeldt, Robert H. Austin, “Cell Lysis and DNA Extraction in Microfabricated Devices”, APS March Meeting, Indianapolis, IN

020318-22 Lotien Richard Huang, Jonas O. Tegenfeldt, Jessica Kraeft, Edward C. Cox, James
C. Sturm, Robert H. Austin, “Rapid Continuous Fractionation of Genomic DNA”, APS March Meeting, Indianapolis, IN

020624-28 M. Beck, R. Bunk, J. O. Tegenfeldt, T. G. I. Ling, and L. Montelius, “Fabrication and characterization of a molecular layer for micro- and nanofabricated electrochemical electrodes”, The 7th International Conference on Nanometer-Scale Science and Technology (nano-7) and the 21st European Conference on Surface Science (ecoss-21), Malmö (Sweden)

020811-15 C. H. Wei, W. S. Fann, J. Tegenfeldt, R. Austin, “Large 3-dimensional field distribution from nanometer single slit studied by NSOM”, NFO-7, The 7th International Conference on Near-Field Optics and Related Techniques, Rochester, NY

2001 (3 presentations)

010312-16 Christelle Prinz, Jonas Tegenfeldt, Robert Austin, “Extraction and Elongation of Genomic DNA from a Single Cell”, APS March Meeting, Seattle, WA

010311 J.O. Tegenfeldt, “Single Molecule Imaging in Condensed Matter and Biology” tutorial given at the APS March Meeting, Seattle, WA


2000 (5 presentations)


000320-24 C. F. Chou, J. O. Tegenfeldt, O. Bakajin, S. S. Chan, E. C. Cox, R. H. Austin, “DNA Trapping by Electrodeless Dielectrophoresis”, APS March Meeting, Minneapolis, MN


1999 (5 presentations)

Field Electrophoresis, Program in Mathematics and Molecular Biology Conference, Santa Fe (poster)


990320-26 Jonas Tegenfeldt, Robert H. Austin, Eugene Chan, “A simplified approach to near-field excitation of labeled DNA”, APS Centennial Meeting, Atlanta, GA

1998 (1 presentation)


1996 (5 presentations)

960908-12 P. Hallberg, J. Tegenfeldt, B. Heidari, and L. Montelius, "AFM-tip induced Selective Metal Etching", Fourth International Conference on nanometer-scale Science and Technology NANO IV, Beijing


961014-18 J. O. Tegenfeldt, P. Hallberg, B. Heidari, and L. Montelius, "Selective metal patterning and etching using an AFM-tip", 43rd National symposium of AVS, Philadelphia

961031-1103 "Novel all-silicon sensor structure with integrated poly-Si electrodes", L. Montelius, T. G. I. Ling, J. O. Tegenfeldt, IEEE Engineering in Medicine and Biology, 18th Annual International Conference, Amsterdam, The Netherlands


1995 (1 presentation)

1994 (2 presentations)

940425-26  J. O. Tegenfeldt, and L. Montelius, "Lateral Forces in Studies of Biomolecules", Microprobe symposium, Vadstena, Sweden

941024-28  L. Montelius, J. O. Tegenfeldt, and T. Ling, "Fabrication and Characterization of a Nanosensor for Admittance Spectroscopy of Biomolecules", Nano III, Denver, Colorado, USA