Spatio-temporal pattern formation in predator-prey systems with fitness taxis
Heilmann, I. T., Thygesen, U. H. & Sørensen, M. P. 1 May 2018 In : Ecological Complexity. 34, p. 44-57
Publication: Research - peer-review › Journal article – Annual report year: 2018

A General Microscopic Traffic Model Yielding Dissipative Shocks
Publication: Research - peer-review › Article in proceedings – Annual report year: 2018

Cellular effects and delivery propensity of penetratin is influenced by conjugation to parathyroid hormone fragment 1-34 in synergy with pH
Kristensen, M., Nielsen, L. H., Zor, K., Boisen, A., Christensen, M. V., Berthelsen, J. & Mørck Nielsen, H. 2018 In : Bioconjugate Chemistry. 29, 2, p. 371-381
Publication: Research - peer-review › Journal article – Annual report year: 2018

Drug loaded biodegradable polymer microneedles fabricated by hot embossing
Publication: Research - peer-review › Journal article – Annual report year: 2018

Efficiency enhancement of InGaN amber MQWs using nanopillar structures
Publication: Research - peer-review › Journal article – Annual report year: 2018

Gold Nanoparticles Sliding on Recyclable Nanohoodoo-Engineered for Surface-Enhanced Raman Spectroscopy
Publication: Research - peer-review › Journal article – Annual report year: 2018

Injection molded lab-on-a-disc platform for screening of genetically modified E. coli using liquid-liquid extraction and surface enhanced Raman scattering
Publication: Research - peer-review › Journal article – Annual report year: 2018

Laser ablation and injection moulding as techniques for producing micro channels compatible with Small Angle X-Ray Scattering
Publication: Research - peer-review › Journal article – Annual report year: 2018

Micropatterned Carbon-on-Quartz Electrode Chips for Photocurrent Generation from Thyliakid Membranes
Publication: Research - peer-review › Journal article – Annual report year: 2018
Tailoring stress in pyrolytic carbon for fabrication of nanomechanical string resonators
Publication: Research - peer-review › Journal article – Annual report year: 2018

Temperature Modulated Nanomechanical Thermal Analysis
Publication: Research - peer-review › Journal article – Annual report year: 2018

Using microcantilever sensors to measure poly(lactic-co-glycolic acid) plasticization by moisture uptake
Publication: Research - peer-review › Journal article – Annual report year: 2018

Mucin dispersions as a model for the oromucosal mucus layer in in vitro and ex vivo buccal permeability studies of small molecules
Publication: Research - peer-review › Journal article – Annual report year: 2017

A METHOD FOR PREPARING A SUBSTRATE BY APPLYING A SAMPLE TO BE ANALYSED
Durucan, O., Schmidt, M. S., Rindzevicius, T. & Boisen, A. 9 Nov 2017
Publication: Research › Patent – Annual report year: 2017

Micro-fabrication of three dimensional pyrolysed carbon microelectrodes
Hemanth, S., Keller, S. S., Caviglia, C. & Amato, L. 30 Mar 2017
Publication: Research › Patent – Annual report year: 2017

A nanofiltration technique for analyte extraction from complex matrix and surface enhanced Raman spectroscopy based sensing
Durucan, O., Rindzevicius, T., Schmidt, M. S., Ilchenko, O. & Boisen, A. 2017
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017

A pseudo-Voigt component model for high-resolution recovery of constituent spectra in Raman spectroscopy
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Blu-Ray-based micromechanical characterization platform for biopolymer degradation assessment
Publication: Research - peer-review › Journal article – Annual report year: 2016

Chemical Engineering in the "BIO" world
Publication: Research - peer-review › Journal article – Annual report year: 2017

Detection of p-coumaric acid from cell supernatant using surface enhanced Raman scattering
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2017
Detection of Surface-Linked Polychlorinated Biphenyls using Surface-Enhanced Raman Scattering Spectroscopy
Publication: Research - peer-review › Journal article – Annual report year: 2017

Fabrication and characterization of Au dimer antennas on glass pillars with enhanced plasmonic response
Publication: Research - peer-review › Journal article – Annual report year: 2017

Fabrication of completely free-standing pyrolytic carbon string resonator
Publication: Research - peer-review › Poster – Annual report year: 2017

Fabrication of completely free-standing pyrolytic carbon string resonators
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017

From concept to in vivo testing: Microcontainers for oral drug delivery
Publication: Research - peer-review › Journal article – Annual report year: 2017

Hand-Held Femtogram Detection of Hazardous Picric Acid with 2 Hydrophobic Ag Nanopillar SERS Substrates and Mechanism of 3 Elasto-Capillarity
Publication: Research - peer-review › Journal article – Annual report year: 2017

High-Throughput Fabrication of Nanocone Substrates through Polymer Injection Moulding For SERS Analysis in Microfluidic Systems
Viehrig, M., Matteucci, M., Thilsted, A. H., Schmidt, M. S. & Boisen, A. 2017
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Lab-on-a-disc platform for screening of genetically modified E. coli cells via cell-free electrochemical detection of p-Coumaric acid
Publication: Research - peer-review › Journal article – Annual report year: 2017

Large-scale, Lithography-free Production of Transparent Nanostructured Surface for Dual-functional Electrochemical and SERS Sensing
Publication: Research - peer-review › Journal article – Annual report year: 2017

Loading of Drug-Polymer Matrices in Microreservoirs for Oral Drug Delivery
Petersen, R. S., Keller, S. S. & Boisen, A. 2017 In : Macromolecular Materials & Engineering. 302, 3, 6 p., 1600366
Publication: Research - peer-review › Journal article – Annual report year: 2016

Microcontainers as an oral delivery system for spray dried cubosomes containing ovalbumin
Publication: Research - peer-review › Journal article – Annual report year: 2016
MICROCONTAINERS FOR INTESTINAL DRUG DELIVERY: in vivo and ex vivo study
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Modelling the thermal properties of large diameter fibre ropes
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Nanomechanical Infrared Spectroscopy with Vibrating Filters for Pharmaceutical Analysis
Publication: Research - peer-review › Journal article – Annual report year: 2017

Nanopillar Filters for Surface-Enhanced Raman Spectroscopy
Durucan, O., Rindzevicius, T., Schmidt, M. S., Matteucci, M. & Boisen, A. 2017 In : ACS Sensors. 2, 10, p. 1400-1404
Publication: Research - peer-review › Journal article – Annual report year: 2017

New Evidence for the Mechanism of Action of a Type-2 Diabetes Drug Using a Magnetic Bead-Based Automated Biosensing Platform
Publication: Research - peer-review › Journal article – Annual report year: 2017

Numerical Optimization in Microfluidics
Publication: Research - peer-review › Book chapter – Annual report year: 2017

Optimizing silver-capped silicon nanopillars to simultaneously realize macroscopic, practical-level SERS signal reproducibility and high enhancement at low costs
Publication: Research - peer-review › Journal article – Annual report year: 2017

Position and mode dependent optical detection back-action in cantilever beam resonators
Publication: Research - peer-review › Journal article – Annual report year: 2017

Powder embossing method for selective loading of polymeric microcontainers with drug formulation
Publication: Research - peer-review › Journal article – Annual report year: 2017

Quantification of a bacterial secondary metabolite by SERS combined with SLM extraction for bioprocess monitoring
Publication: Research - peer-review › Journal article – Annual report year: 2017

Quantitative Detection of Trace Level Cloxacillin in Food Samples Using Magnetic Molecularly Imprinted Polymer Extraction and Surface-Enhanced Raman Spectroscopy Nanopillars
Publication: Research - peer-review › Journal article – Annual report year: 2017

SERS detection of the biomarker hydrogen cyanide from Pseudomonas aeruginosa cultures isolated from cystic fibrosis patients
Microcontainers as an oral drug delivery system
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Nanomechanical IR spectroscopy for fast analysis of liquid-dispersed engineered nanomaterials
Publication: Research - peer-review › Journal article – Annual report year: 2016

Nanomechanical Pyrolytic Carbon Resonators: Novel Fabrication Method and Characterization of Mechanical Properties
Publication: Research - peer-review › Journal article – Annual report year: 2016

Nonlinear optomechanical measurement of mechanical motion
Publication: Research - peer-review › Journal article – Annual report year: 2016

Orientation of Pterin-6-Carboxylic Acid on Gold Capped Silicon Nanopillars Platforms: Surface Enhanced Raman Spectroscopy and Density Functional Theory Studies
Publication: Research - peer-review › Journal article – Annual report year: 2016

Polymeric microcontainers improve oral bioavailability of furosemide
Publication: Research - peer-review › Journal article – Annual report year: 2016

Supercritical impregnation of polymer matrices spatially confined in microcontainers for oral drug delivery: Effect of temperature, pressure and time
Publication: Research - peer-review › Journal article – Annual report year: 2016

Surface-enhanced Raman spectroscopic study of DNA and 6-mercapto-1-hexanol interactions using large area mapping
Publication: Research - peer-review › Journal article – Annual report year: 2016

Synthesis and characterization of UV photocrosslinkable hydrogels with poly(N-vinyl-2-pyrrolidone): Determination of the network mesh size distribution
Publication: Research - peer-review › Journal article – Annual report year: 2016

Thermal properties of Fiber ropes
Bossolini, E., Nielsen, O. W., Oland, E., Sørensen, M. P. & Veje, C. 2016
Publication: Research - peer-review › Paper – Annual report year: 2017

Triple co-culture cell model as an in vitro model for oral particulate vaccine systems
Publication: Research - peer-review › Poster – Annual report year: 2016
Integrating Electrochemical Detection with Centrifugal Microfluidics for Real-Time and Fully Automated Sample Testing
In : RSC Advances. 5, p. 17187–17193
Publication: Research - peer-review › Journal article – Annual report year: 2015

Integration of agglutination assay for protein detection in microfluidic disc using Blu-ray optical pickup unit and optical fluid scanning
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Mathematical model for biomolecular quantification using large-area surface-enhanced Raman spectroscopy mapping
Publication: Research - peer-review › Journal article – Annual report year: 2015

Mathematical model for biomolecular quantification using surface-enhanced Raman spectroscopy based signal intensity distributions
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Microcantilever sensors for fast analysis of enzymatic degradation of poly (D, L-lactide)
Publication: Research - peer-review › Journal article – Annual report year: 2015

Microcontainers as an oral drug delivery system
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Micromechanical Fast Quasi-Static Detection of α and β Relaxations with Nanograms of Polymer
Publication: Research - peer-review › Journal article – Annual report year: 2015

Parallelized system for biopolymer degradation studies through automated microresonator measurement in liquid flow
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

pH-triggered drug release from biodegradable microwells for oral drug delivery
Publication: Research - peer-review › Journal article – Annual report year: 2015

Plasmon resonances of Ag capped Si nanopillars fabricated using mask-less lithography.
Wu, K., Rindzevicius, T., Schmidt, M. S., Mogensen, K. B., Xiao, S. & Boisen, A. 2015 In : Optics Express. 23, 10, p. 12965-12978
Publication: Research - peer-review › Journal article – Annual report year: 2015

Silver-capped silicon nanopillar platforms for adsorption studies of folic acid using surface enhanced Raman spectroscopy and density functional theory
Simulating cyclic voltammetry under advection for electrochemical cantilevers

Stabilisation of amorphous furosemide increases the oral drug bioavailability in rats

The copper binding properties of metformin - QCM-D, XPS and nanobead agglomeration
Quan, X., Uddin, R., Heiskanen, A., Parmvi, M., Nilson, K., Donolato, M., Hansen, M. F., Rena, G. & Boisen, A. 2015 In : Chemical Communications. 51, 97, p. 17313-17316

Towards quantitative SERS detection of hydrogen cyanide at ppb level for human breath analysis

Wafer-Scale Leaning Silver Nanopillars for Molecular Detection at Ultra-Low Concentrations

Projects:

Biological Sample Preparation for Electron Microscopy
Mateiu, R. V., Schneider, C., von Halling Laier, C., Ullah, S., Andersen, A. J. & García Moreno, P. J.
16/11/2015 → 20/11/2015

Activities:

3D printed system for testing intestinal drug transport
Jepsen, M. L. (Other), Nielsen, L. H. (Other), Almdal, K. (Other), Boisen, A. (Other), Dufva, M. (Other)
21 Mar 2018
Activity: Talks and presentations › Conference presentations

Loading of poorly soluble drugs by supercritical CO2 impregnation into microcontainers for oral drug delivery
Mazzoni, C. (Other), Antalaki, A. (Other), Jacobsen, R. D. (Other), Mortensen, J. (Other), Tentor, F. (Other), Slipets, R. (Other), Ilchenko, O. (Other), Keller, S. S. (Other), Nielsen, L. H. (Other), Boisen, A. (Other)
19 Mar 2018 → 22 Mar 2018
Activity: Talks and presentations › Conference presentations

An automated flow-injection enzyme-linked immunosorbent assay for the detection of Zearalenone
Jongjit Jantra (Other), Zor, K. (Other), Martin Hedström (Other), Bo Mattiasson (Other)
7 Feb 2018 → 9 Feb 2018
Activity: Talks and presentations › Conference presentations

3D printed system for based on hydrogels for drug transport
Jepsen, M. L. (Other), Nielsen, L. H. (Other), Almdal, K. (Other), Boisen, A. (Other), Dufva, M. (Other)
29 Jan 2018
Activity: Talks and presentations › Conference presentations
Loading of poorly soluble drugs by supercritical CO2 impregnation into microcontainers for oral drug delivery
Mazzoni, C. (Speaker), Antalaki, A. (Other), Jacobsen, R. D. (Other), Mortensen, J. (Other), Tentor, F. (Other), Slipets, R. (Other), Ilchenko, O. (Other), Keller, S. S. (Other), Nielsen, L. H. (Other), Boisen, A. (Other)
29 Jan 2018 – 31 Jan 2018
Activity: Talks and presentations › Conference presentations

Microcontainers for oral vaccine delivery
Nielsen, L. H. (Guest lecturer)
29 Jan 2018 → 31 Jan 2018
Activity: Talks and presentations › Conference presentations

Polarization noise study in all-normal dispersion fiber supercontinuum generation
Bravo Gonzalo, I. (Speaker), Engelsholm, R. D. (Other), Mieritz, A. F. (Other), Sørensen, M. P. (Other), Bang, O. (Other)
29 Jan 2018
Activity: Talks and presentations › Conference presentations

26th International Meshing Roundtable
Jensen, K. E. (Organizer)
21 Sep 2017
Activity: Attending an event › Participating in or organising a conference

A nanofiltration technique for analyte extraction from complex matrix and surface enhanced Raman spectroscopy based sensing
Durucan, O. (Guest lecturer), Rindzevicius, T. (Other), Schmidt, M. S. (Other), Ilchenko, O. (Other), Boisen, A. (Other)
20 Sep 2017
Activity: Talks and presentations › Conference presentations

Photothermal probing of metallic nanoparticles on nanomechanical string resonators to study plasmonic heating effects
Padmanabhan Rangacharya, V. (Speaker)
20 Sep 2017
Activity: Talks and presentations › Conference presentations

Microcontainers for oral vaccine delivery
Nielsen, L. H. (Guest lecturer)
18 Sep 2017 → 22 Sep 2017
Activity: Talks and presentations › Conference presentations

Electrospraying Chitosan Particles for Oral Vaccine Delivery
Nielsen, L. H. (Guest lecturer)
16 Jul 2017 → 19 Jul 2017
Activity: Talks and presentations › Conference presentations

Microcontainers as an Oral Drug Delivery System
Nielsen, L. H. (Guest lecturer)
16 Jul 2017 → 19 Jul 2017
Activity: Talks and presentations › Conference presentations

1st Summer School on Complex Fluid-Flows in Microfluidics
Jensen, K. E. (Speaker)
14 Jul 2017
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

Structural aspects of hydrates – insight into phase transformations using nanomechanical sensors
Peter Ouma Okeyo (Guest lecturer), Larsen, P. E. (Guest lecturer), Ilchenko, O. (Guest lecturer), Rindzevicius, T. (Guest lecturer), Roman Slipets (Guest lecturer), Boisen, A. (Guest lecturer), Thomas Rades (Guest lecturer), Jukka Rantanen (Guest lecturer)
Integration of Nanopillar SERS Substrates in a Microfluidic Platform for Analyte Separation and Quantitative Sensing
Durucan, O. (Guest lecturer), Morelli, L. (Guest lecturer), Wu, K. (Guest lecturer), Viehrig, M. (Guest lecturer), Ilchenko, O. (Guest lecturer), Zor, K. (Guest lecturer), Matteucci, M. (Guest lecturer), Alstrøm, T. S. (Guest lecturer), Rindzevicius, T. (Guest lecturer), Schmidt, M. S. (Guest lecturer), Boisen, A. (Guest lecturer)
11 Jun 2017 → 17 Jun 2017
Activity: Talks and presentations › Conference presentations

SERS combiner for high-speed and high-sensitive quantitative analysis
Ilchenko, O. (Guest lecturer), Rindzevicius, T. (Guest lecturer), Durucan, O. (Guest lecturer), Schmidt, M. S. (Guest lecturer), Roman Slipets (Other), Morelli, L. (Guest lecturer), Boisen, A. (Guest lecturer)
11 Jun 2017 → 17 Jun 2017
Activity: Talks and presentations › Conference presentations

SERS combiner for high-speed and high-sensitive quantitative analysis
Ilchenko, O. (Guest lecturer), Rindzevicius, T. (Guest lecturer), Schmidt, M. S. (Guest lecturer), Roman Slipets (Guest lecturer), Durucan, O. (Guest lecturer), Morelli, L. (Guest lecturer), Boisen, A. (Guest lecturer)
11 Jun 2017 → 17 Jun 2017
Activity: Talks and presentations › Conference presentations

Solving 2D/3D Heat Conduction Problems by Combining Topology Optimization and Anisotropic Mesh Adaptation
Jensen, K. E. (Guest lecturer)
8 Jun 2017
Activity: Talks and presentations › Conference presentations

Non-Invasive Delivery of Macromolecules Conference
Mazzoni, C. (Guest lecturer)
23 Feb 2017
Activity: Talks and presentations › Conference presentations

Effects on cells on differentiation.
Dufva, M. (Lecturer)
11 Nov 2016
Activity: Talks and presentations › Conference presentations

11th Central European Symposium on Pharmaceutical Technology
Tenor, F. (Speaker)
23 Sep 2016 → 24 Sep 2016
Activity: Talks and presentations › Conference presentations

Central European Symposium on Pharmaceutical Technology
Mazzoni, C. (Speaker)
23 Sep 2016
Activity: Talks and presentations › Conference presentations

Modelling and experiments in drug delivery systems
Jensen, K. E. (Speaker)
20 Jun 2016 → 22 Jun 2016
Activity: Talks and presentations › Conference presentations

Biosensors 2016
Sanger, K. (Participant)
25 May 2016 → 27 May 2016
Activity: Attending an event › Participating in or organising a conference
11th Workshop on Biosensors and Bioanalytical Microtechniques in Environmental, Food and Clinical Analysis
Sanger, K. (Participant)
26 Sep 2015 → 30 Sep 2015
Activity: Attending an event › Participating in or organising a conference

41st International conference on Micro and Nano Engineering
Sanger, K. (Participant)
21 Sep 2015 → 24 Sep 2015
Activity: Attending an event › Participating in or organising a conference

22nd Nordic Rheology Conference
Jensen, K. E. (Participant)
12 Jun 2013
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.