Line Hagner Nielsen - DTU Orbit (01/12/2018)

Nielsen, Line Hagner

lihan@nanotech.dtu.dk

Department of Applied Mathematics and Computer Science

Department of Micro- and Nanotechnology - Researcher

Nanoprobes

Center for Intelligent Drug Delivery and Sensing Using Microcontainers and Nanomechanics

Research outputs:

**Preparation and Characterization of an Oral Vaccine Formulation Using Electrosprayed Chitosan Microparticles**
(Accepted/In press) In : AAPS PharmSciTech. 8 p.
Research output: Research - peer-review › Journal article – 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
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Development of electrosprayed mucoadhesive chitosan microparticles**
Moreno, J. A. S., Mendes, A. C., Stephansen, K., Engwer, C., Goycoolea, F. M., Boisen, A., Nielsen, L. H. & Chronakis, I. S. 2018 In : Carbohydrate Polymers. 190, p. 240-247
Research output: Research - peer-review › Journal article – Annual report year: 2018

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

**Effects of water-absorption and thermal drift on a polymeric photonic crystal slab sensor**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Microfabricated devices for oral drug delivery**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Spray dried cubosomes with ovalbumin and Quil-A as a nanoparticulate dry powder vaccine formulation**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Animal models for evaluation of oral delivery of biopharmaceuticals**
Research output: Research - peer-review › Journal article – Annual report year: 2017

**Ciprofloxacin-loaded sodium alginate/poly (lactic-co-glycolic acid) electrospun fibrous mats for wound healing**
Research output: Research - peer-review › Journal article – Annual report year: 2017
Polymeric microcontainers improve oral bioavailability of a poorly soluble drug
Research output: Research - peer-review › Journal article – Annual report year: 2015

Spray drying of cubosomes for oral vaccine delivery
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Stabilisation of amorphous furosemide increases the oral drug bioavailability in rats
Research output: Research - peer-review › Journal article – Annual report year: 2015

Biorelevant dissolution behavior of amorphous furosemide forms as determined by UV imaging and Raman spectroscopy.
Research output: Research - peer-review › Poster – Annual report year: 2014

Drug Formulations for Microcontainers
Nielsen, L. H. 2014 Copenhagen: University of Copenhagen.
Research output: Research › Ph.D. thesis – Annual report year: 2014

In vitro characterization of microcontainers as an oral drug delivery system.
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2014

In vitro characterization of microcontainers as an oral drug delivery system.
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Microcontainers, an innovative oral drug delivery system for poorly soluble drugs
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Microcontainers as an oral drug delivery system.
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Microcontainers as an oral drug delivery system.
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Microcontainers as an oral drug delivery system for small molecules and proteins
Research output: Research - peer-review › Poster – Annual report year: 2014

Microcontainers for Unidirectional Release in the Upper Intestine
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Microfabricated containers for oral drug delivery
Refining stability and dissolution rate of amorphous drug formulations
Research output: Research - peer-review › Journal article – Annual report year: 2014

A slow cooling rate of indomethacin melt spatially confined in microcontainers increases the physical stability of the amorphous drug without influencing its biorelevant dissolution behaviour
Research output: Research - peer-review › Journal article – Annual report year: 2013

Biodegradable microcontainers as an oral drug delivery system for poorly soluble drugs
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Biorelevant characterisation of amorphous furosemide salt indicates conversion to a furosemide hydrate during dissolution
Research output: Research - peer-review › Journal article – Annual report year: 2013

Preparation of an amorphous sodium furosemide salt improves solubility and dissolution rate and leads to a faster Tmax after oral dosing to rats
Research output: Research - peer-review › Journal article – Annual report year: 2013

Amorphous furosemide salt exhibits higher dissolution rate and stability compared to amorphous furosemide acid
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012
Amorphous furosemide salt exhibits higher dissolution rate and stability compared to amorphous furosemide acid
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Amorphous furosemide salt exhibits higher solubility and dissolution rate compared to amorphous furosemide acid
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Dissolution characteristics of amorphous furosemide salt
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Dissolution Rate of Spray Dried Amorphous Salts of Furosemide and HPMC in Biorelevant Dissolution Media Obtained by µ-diss Profiler
Research output: Research - peer-review › Paper – Annual report year: 2012

Higher apparent solubility and faster dissolution rate of amorphous furosemide salt leads to faster Tmax after oral dosing in rats compared to amorphous and crystalline furosemide acid
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Improved in vitro properties of furosemide through utilisation of the amorphous sodium salt
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Investigations by Raman Microscopy if Spatial Confinement of Amorphous Indomethacin Can Lead to Increased Stability
Research output: Research - peer-review › Paper – Annual report year: 2012

Physical stability and dissolution of spatially confined amorphous indomethacin: The effect of different heating and cooling rates
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Preparation of amorphous furosemide salt formulations by spray drying
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Spatial confinement can lead to increased stability of amorphous indomethacin
Research output: Research - peer-review › Journal article – Annual report year: 2012

Stability of amorphous drug formulations in microcontainers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Various heating and cooling conditions influence the release of amorphous indomethacin from microcontainers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Spatial confinement of amorphous indomethacin increases stability
Spatial confinement of amorphous indomethacin increases stability
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Stability, liposome interaction, and in vivo pharmacology of ghrelin in liposomal suspensions
Research output: Research - peer-review › Journal article – Annual report year: 2010

Projects:

3D printing of micro-container for oral delivery of probiotics
Chang, T., Boisen, A., Hwu, E. T., Nielsen, L. H. & Chang, T.
Samfinansieret - Andet
01/09/2018 → 31/08/2021
Project: PhD

Evaluating microcontainers for oral delivery of probiotics
Christfort, J. F., Boisen, A., Nielsen, L. H., Zor, K. & Christfort, J. F.
Samfinansieret - Andet
01/09/2018 → 31/08/2021
Project: PhD

Microcontainers for Oral Delivery of Probiotics
Kamguyan, K., Boisen, A., Nielsen, L. H. & Zor, K.
Fonde
15/06/2018 → 14/06/2021
Project: PhD

Microcontainers for oral drug delivery
Hansen, S. E., Boisen, A. & Nielsen, L. H.
Samfinansieret - Andet
01/02/2018 → 31/01/2021
Project: PhD

Drug transport in in vitro intestine models
Jepsen, M. L., Dufva, M., Boisen, A. & Nielsen, L. H.
Grundforskningsfonden
15/12/2016 → 14/12/2019
Project: PhD

Loading of microcontainers for oral drug delivery
Mazzoni, C., Boisen, A. & Nielsen, L. H.
Samfinansieret - Andet
15/01/2016 → 14/01/2019
Project: PhD

Microcontainers for oral vaccine delivery
von Halling Laier, C., Boisen, A., Nielsen, L. H., Rades, T., Larsen, N. B., Christensen, D., Lavelle, E., Christensen, D. & Lavelle, E.
Samfinansieret - Andet
01/09/2015 → 07/11/2018
Project: PhD
Microcontainers for Oral Vaccine Delivery
Nielsen, L. H.
01/07/2014 → 30/06/2017
Project: Research

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

**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

**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