Esben Thormann - Research outputs - DTU Orbit (28/10/2018)

An engineered cell-imprinted substrate directs osteogenic differentiation in stem cells
Research output: Research - peer-review › Journal article – Annual report year: 2018

Fuel-independent and membrane-less self-charging biosupercapacitor
Research output: Research - peer-review › Journal article – Annual report year: 2018

Salt-Induced Control of the Grafting Density in Poly(ethylene glycol) Brush Layers by a Grafting-to Approach
Ortiz, R., Olsen, S. & Thormann, E. 2018 In : Langmuir. 34, 15, p. 4455-4464
Research output: Research - peer-review › Journal article – Annual report year: 2018

Surface forces between highly charged cationic polyelectrolytes adsorbed to silica: How control of pH and the adsorbed amount determines the net surface charge
Research output: Research - peer-review › Journal article – Annual report year: 2018

Electrical Double-Layer and Ion Bridging Forces between Symmetric and Asymmetric Charged Surfaces in the Presence of Mono- and Divalent Ions
Research output: Research - peer-review › Journal article – Annual report year: 2017

Hofmeister Effect on PNIPAM in Bulk and at an Interface: Surface Partitioning of Weakly Hydrated Anions
Moghaddam, S. Z. & Thormann, E. 2017 In : Langmuir. 33, 19, p. 4806-4815
Research output: Research - peer-review › Journal article – Annual report year: 2017

Specific Ion Effects in Thermo-Responsive Polymer Solutions
Research output: Research › Ph.D. thesis – Annual report year: 2017

Surface forces between rough and topographically structured interfaces
Research output: Research - peer-review › Journal article – Annual report year: 2016

Thermo-responsive diblock and triblock cationic copolymers at the silica/aqueous interface: A QCM-D and AFM study
Research output: Research - peer-review › Journal article – Annual report year: 2017

Binding of human serum albumin to liposomes studied by fluorescence correlation spectroscopy
Kristensen, K., Urquhart, A., Thormann, E. & Andresen, T. L. 2016
Research output: Research - peer-review › Poster – Annual report year: 2016

Binding of human serum albumin to PEGylated liposomes: insights into binding numbers and dynamics by fluorescence correlation spectroscopy
Research output: Research - peer-review › Journal article – Annual report year: 2016

Effect of Aluminum Substrate Surface Modification on Wettability and Freezing Delay of Water Droplet at Subzero Temperatures
Research output: Research - peer-review › Journal article – Annual report year: 2016
Hydrophobic pore array surfaces: Wetting and interaction forces in water/ethanol mixtures
Research output: Research - peer-review › Journal article – Annual report year: 2013

Hydrophobic Surfaces: Topography Effects on Wetting by Supercooled Water and Freezing Delay
Research output: Research - peer-review › Journal article – Annual report year: 2013

Low friction and high load bearing capacity layers formed by cationic-block-non-ionic bottle-brush copolymers in aqueous media
Research output: Research - peer-review › Journal article – Annual report year: 2013

Negative friction coefficients
Research output: Research › Comment/debate – Annual report year: 2013

Note: Determination of torsional spring constant of atomic force microscopy cantilevers: Combining normal spring constant and classical beam theory
Álvarez-Asencio, R., Thormann, E. & Rutland, M. W. 2013 In : Review of Scientific Instruments. 84, 9, 096102
Research output: Research - peer-review › Journal article – Annual report year: 2013

Quartz Crystal Microbalance with Dissipation (QCM-D) studies of the viscoelastic response from a continuously growing grafted polyelectrolyte layer
Dunér, G., Thormann, E. & Dedinaite, A. 2013 In : Journal of Colloid and Interface Science. 408, 1, p. 229-234
Research output: Research - peer-review › Journal article – Annual report year: 2014

Sustained frictional instabilities on nanodomed surfaces: Stick-slip amplitude coefficient
Research output: Research - peer-review › Journal article – Annual report year: 2014

Tribological Properties Mapping: Local Variation in Friction Coefficient and Adhesion
Research output: Research - peer-review › Journal article – Annual report year: 2013

Adsorption and protein-induced metal release from chromium metal and stainless steel
Research output: Research - peer-review › Journal article – Annual report year: 2012

Aggregation of Modified Celluloses in Aqueous Solution: Transition from Methylcellulose to Hydroxypropylmethylcellulose Solution Properties Induced by a Low-Molecular-Weight Oxyethylene Additive
Research output: Research - peer-review › Journal article – Annual report year: 2012

Attractive double-layer forces and charge regulation upon interaction between electrografted amine layers and silica
Research output: Research - peer-review › Journal article – Annual report year: 2012
Effect of Surface Depressions on Wetting and Interactions between Hydrophobic Pore Array Surfaces
Research output: Research - peer-review › Journal article – Annual report year: 2012

Electrostatically Anchored Branched Brush Layers
Research output: Research - peer-review › Journal article – Annual report year: 2012

Embedded proteins and sacrificial bonds provide the strong adhesive properties of gastroliths
Research output: Research - peer-review › Journal article – Annual report year: 2012

Hyaluronan and phospholipids in boundary lubrication
Research output: Research - peer-review › Journal article – Annual report year: 2012

Influence of Surface Topography on the Interactions between Nanostructured Hydrophobic Surfaces
Research output: Research - peer-review › Journal article – Annual report year: 2012

Nanomechanical mapping of a high curvature polymer brush grafted from a rigid nanoparticle
Research output: Research - peer-review › Journal article – Annual report year: 2012

On understanding of the Hofmeister effect: How addition of salt alters the stability of temperature responsive polymers in aqueous solutions
Thormann, E. 2012 In : R S C Advances. 2, 22, p. 8297-8305
Research output: Research - peer-review › Journal article – Annual report year: 2012

Structural and Nanomechanical Properties of Paperboard Coatings Studied by Peak Force Tapping Atomic Force Microscopy
Sababi, M., Kettle, J., Rautkoski, H., Claesson, P. M. & Thormann, E. 2012 In : A C S Applied Materials and Interfaces. 4, 10, p. 5534-5541
Research output: Research - peer-review › Journal article – Annual report year: 2012

Temperature-Dependent Competition between Adsorption and Aggregation of a Cellulose Ether - Simultaneous Use of Optical and Acoustical Techniques for Investigating Surface Properties
Research output: Research - peer-review › Journal article – Annual report year: 2012

Amontonian frictional behaviour of nanostructured surfaces
Research output: Research - peer-review › Journal article – Annual report year: 2011

Amontonian Friction Induced by Flexible Surface Features on Microstructured Silicon
Thormann, E., Yun, S. H., Claesson, P. M. & Linroos, J. 2011 In : A C S Applied Materials and Interfaces. 3, 9, p. 3432-3439
Research output: Research - peer-review › Journal article – Annual report year: 2011
Interfacial properties and applications of polymer-grafted nanoparticles
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Layer-by-Layer Assemblies of Chitosan and Heparin: Effect of Solution Ionic Strength and pH
Research output: Research - peer-review › Journal article – Annual report year: 2011

Robust Hydrophobic Surfaces Displaying Different Surface Roughness Scales While Maintaining the Same Wettability
Research output: Research - peer-review › Journal article – Annual report year: 2011

Temperature-dependent adsorption of cellulose ethers on silica and hydrophobized silica immersed in aqueous polymer solution
Research output: Research - peer-review › Journal article – Annual report year: 2011

Temperature responsive surface layers of modified celluloses
Research output: Research - peer-review › Journal article – Annual report year: 2011

Toward Homogeneous Nanostructured Polyaniline/Resin Blends
Research output: Research - peer-review › Journal article – Annual report year: 2011

Confinement of linear polymers, surfactants, and particles between interfaces
Research output: Research - peer-review › Journal article – Annual report year: 2010

Effect of local curvature on the interaction between hydrophobic surfaces
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Friction in aqueous media tuned by temperature-responsive polymer layers
Research output: Research - peer-review › Journal article – Annual report year: 2010

Letter to the Editor: Friction between Surfaces - Polyacrylic Acid Brush and Silica - Mediated by Calcium Ions
Research output: Research - peer-review › Comment/debate – Annual report year: 2010

Probing material properties of polymeric surface layers with tapping mode AFM: Which cantilever spring constant, tapping amplitude and amplitude set point gives good image contrast and minimal surface damage?
Thomann, E., Pettersson, T., Kettle, J. & Claesson, P. M. 2010 In : Ultramicroscopy. 110, 4, p. 313-319
Research output: Research - peer-review › Journal article – Annual report year: 2010

Protein interactions with bottle-brush polymer layers: Effect of side chain and charge density ratio probed by QCM-D and AFM
Tuning structural forces between silica surfaces by temperature-induced micellization of responsive block copolymers
Thormann, E., Claesson, P. M. & Mouritsen, O. G. 2010 In : Physical Chemistry Chemical Physics. 12, 36, p. 10730-10735
Research output: Research - peer-review › Journal article – Annual report year: 2010

Force Pulling of Single Cellulose Chains at the Crystalline Cellulose−Liquid Interface: A Molecular Dynamics Study
Research output: Research › Journal article – Annual report year: 2009

How to measure forces with atomic force microscopy without significant influence from nonlinear optical lever sensitivity
Thormann, E., Pettersson, T. & Claesson, P. M. 2009 In : Review of Scientific Instruments. 80, 9, 11 p., 093701
Research output: Research - peer-review › Journal article – Annual report year: 2009

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Research output: Communication › Journal article – Annual report year: 2008

Force trace hysteresis and temperature dependence of bridging nanobubble induced forces between hydrophobic surfaces
Research output: Research - peer-review › Journal article – Annual report year: 2008

Interactions between a Polystyrene Particle and Hydrophilic and Hydrophobic Surfaces in Aqueous Solutions
Research output: Research › Journal article – Annual report year: 2008

Dynamic Strength of the Interaction between Lung Surfactant Protein D (SP-D) and Saccharide Ligands
Research output: Research - peer-review › Journal article – Annual report year: 2007

Ligand-receptor interactions and membrane structure investigated by AFM and time-resolved fluorescence microscopy
Thormann, E., Simonsen, A. C., Nielsen, L. K. & Mouritsen, O. G. 2007 In : Journal of Molecular Recognition. 20, 6, p. 554-560
Research output: Research - peer-review › Journal article – Annual report year: 2007

Dynamic force spectroscopy on soft molecular systems: Improved analysis of unbinding spectra with varying linker compliance
Research output: Research - peer-review › Journal article – Annual report year: 2006

Experimental studies of the dynamic mechanical response of a single polymer chain
Thormann, E., Evans, D. R. & Craig, V. S. J. 2006 In : Macromolecules. 39, 18, p. 6180-6185
Research output: Research - peer-review › Journal article – Annual report year: 2006