

Teaching portfolio

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Research outputs

Interaction patterns for staggered assembly of fibrils from semiflexible chains

Jongeling, A., Svaneborg, C. & de Vries, R., Nov 2020, In: *Symmetry*. 12, 11, 17 p., 1926.

Computational Study of Cross-Link and Entanglement Contributions to the Elastic Properties of Model PDMS Networks

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Characteristic Time and Length Scales in Melts of Kremer-Grest Bead-Spring Polymers with Wormlike Bending Stiffness

Svaneborg, C. & Everaers, R., 5. Mar 2020, In: *Macromolecules*. 53, 6, p. 1917-1941

Effects of Graphite and Plasticizers on the Structure of Highly Entangled Polyisoprene Melts

Giunta, G., Svaneborg, C., Ali Karimi-Varzaneh, H. & Carbone, P., 2020, In: *ACS Applied Polymer Materials*. 2, 2, p. 317-325

Kremer-Grest Models for Commodity Polymer Melts: Linking Theory, Experiment, and Simulation at the Kuhn Scale

Everaers, R., Karimi-Varzaneh, H. A., Fleck, F., Hojdis, N. & Svaneborg, C., 2020, In: *Macromolecules*. 53, 6, p. 1901-1916

Dynamics of dense hard sphere colloidal systems: A numerical analysis

Sibani, P. & Svaneborg, C., 17. Apr 2019, In: *Physical Review E*. 99, 4, 8 p., 042607.

Generating minimal living systems from non-living materials and increasing their evolutionary abilities

Rasmussen, S., Constantinescu, A. & Svaneborg, C., 2016, In: *Royal Society of London. Philosophical Transactions B. Biological Sciences*. 371, 1701

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A Formalism for Scattering of Complex Composite Structures: I Applications to Branched Structures of Asymmetric Sub-Units

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A Formalism for Scattering of Complex Composite Structures: 2 Distributed Reference Points

Svaneborg, C. & Pedersen, J. S., 2012, In: *Journal of Chemical Physics*. 136, p. 154907

LAMMPS Framework for Dynamic Bonding and an Application Modeling DNA
Svaneborg, C., 2012, In: Computer Physics Communications. 183, p. 1793-1802

Stress Relaxation in Entangled Polymer Melts

Hou, J-X., Svaneborg, C., Everaers, R. & Grest, G. S., 2010, In: Physical Review Letters. 105, p. 068301 4 p.

Microphase separation in cross-linked polymer blends

Klopper, A., Svaneborg, C. & Everaers, R., 1. Jan 2009, In: The European Physical Journal E: Soft Matter and Biological Physics. 28, 1, p. 89-96 7 p.

Connectivity and entanglement stress contributions in strained polymer networks

Svaneborg, C., Everaers, R., Grest, G. S. & Curro, J. G., 1. Jan 2008, In: Macromolecules. 41, 13, p. 4920-4928 8 p.

Molecular dynamics simulations of polymer networks undergoing sequential cross-linking and scission reactions

Rottach, D. R., Curro, J. G., Budzien, J., Grest, G. S., Svaneborg, C. & Everaers, R., 1. Jan 2007, In: Macromolecules. 40, 1, p. 131-139 8 p.

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Monte Carlo simulations and analysis of scattering from neutral and polyelectrolyte polymer and polymer-like systems

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Rheology and Microscopic Topology of Entangled Polymeric Liquids

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Strain-Dependent Localization, Microscopic Deformations, and Macroscopic Normal Tensions in Model Polymer Networks

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A small-angle neutron and X-ray contrast variation scattering study of the structure of block copolymer micelles: Corona shape and excluded volume interactions

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Block copolymer micelle coronas as quasi-two-dimensional dilute or semidilute polymer solutions

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