

List of publications

Diffusion of Polystyrene Chains and Fluorescent Dye Molecules in Semidilute and Concentrated Polymer Solutions. Christopher A. Grabowski and Ashis Mukhopadhyay. *Macromolecules* **41**, 6191 (2008).

Comparing the Activation Energy of Diffusion in Bulk and Ultrathin Fluid Films. C. Grabowski and A. Mukhopadhyay. *J. Chem. Phys.* **127**, 171101 (2007).

Contraction and Re-swelling of a Polymer Chain near the Critical Point of a Binary Liquid Mixture. C. Grabowski and A. Mukhopadhyay. *Phys. Rev. Lett.* **98**, 207801 (2007).

Combined Atomic Force Microscopy and Fluorescence Correlation Spectroscopy Studies of Interfacial Fluids. S. Patil, G. Matei, C. Grabowski, P. M. Hoffmann, and A. Mukhopadhyay. *Langmuir* **23**, 4988-4992 (2007).

Disassembly of layer-by-layer films of plasmid DNA and reducible TAT polypeptide. J. Blacklock, H. Handa, D. S. Manickam, G. Z. Mao, A. Mukhopadhyay and D. Oupicky, *Biomaterials* **28**, 117 (2007).

Interfacial Forces and Spectroscopy of Confined Fluids. Y. Zhu, A. Mukhopadhyay and S. Granick, *Nanotechnology Handbook*, August 2006 (2nd ed., Springer Verlag, editor: Bharat Bhusan)

How Confined Lubricants Diffuse During shear. A. Mukhopadhyay, S. C. Bae, J. Zhao, and S. Granick, *Phys. Rev. Lett.* **93**, 236105 (2004).

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Contrasting Friction and Diffusion in Molecularly-Thin Films. A. Mukhopadhyay, J. Zhao, S. Bae and S. Granick, *Phys. Rev. Lett.* **89**, 136103 (2002).

Dipole Orientational Order at the Critical Interface. A. Mukhopadhyay and B. M. Law, *Phys. Rev. E* **63** (1), 011507 (2001).

Casimir Force in a Critical Film formed from an Electrolytic Solution. A. Mukhopadhyay and B. M. Law, *Phys. Rev. E* **63** (4), 041605 (2001).

Micro- and Nanorheology. Ashis Mukhopadhyay and Steve Granick, *Current Opinion in Colloid and Interface Science*, **6**, 423 (2001). (Invited review).

Casimir Effect in Critical Films of Binary Liquid Mixtures. A. Mukhopadhyay and B. M. Law, Phys. Rev. E **62** (4), 5201 (2000).

Evidence for Dipole Surface Orientational Order at Critical interfaces. A. Mukhopadhyay and Bruce M. Law, Phys. Rev E (Rapid Com.) **61**, R1036 (2000).

Critical Casimir Effect in Binary Liquid Wetting Films. Ashis Mukhopadhyay and Bruce M. Law, Phys. Rev. Lett. **83**, 772 (1999).

Book Chapters

Interfacial Forces and Spectroscopy of Confined Fluids. Y. Zhu, A. Mukhopadhyay and S. Granick, will appear in *Nanotechnology Handbook*, May 06 (2nd ed., Springer Verlag, editor: Bharat Bhusan) .