

Publications

- S. Rathgeber, J. Perlich, F. Kühnlenz, S. Türk, H. Hoppe, and R. Gehrke; *Polymer* (accepted): "Correlation between polymer architecture, mesoscale structure and photovoltaic performance in side-chain-modified poly(*p*-arylene-ethynylene)-*alt*-poly(*p*-arylene-vinylene):PCBM bulk-heterojunction solar cells".
- M. Zabska, K. Jaskiewicz, A. Kiersnowski, K. Szustakiewicz, S. Rathgeber, and J. Piglowski; *Rad. Phys. Chem.* (online), doi:10.1016/j.radphyschem.2011.02.019: "Spontaneous exfoliation and self-assembly phenomena in polyvinylpyrrolidone/synthetic layered silicate nanocomposites".
- D.A.M. Egbe, G. Adam, A. Pivrikas, S. Rathgeber, A.M. Ramil, E. Birckner, V. Cimrova, H. Hoppe and N.S. Sariciftci; *J. Mater. Chem.* **20**, 9726 (2010): "Improvement in carrier mobility and photovoltaic performance through random distribution of segments of linear and branched side chains".
- H.-P. Hsu, W. Paul, S. Rathgeber, K. Binder; *Macromolecules* **43**, 1592 (2010): "Characteristic Length Scales and Radial Monomer Density Profiles of Molecular Bottle-Brushes: Simulation and Experiment".
- D.A.M. Egbe, S. Türk, S. Rathgeber, F. Kühnlenz, R. Jadhav, A. Wild, E. Birckner, G. Adam, A. Pivrikas, V. Cimrova, G. Knör, N.S. Sariciftci, and H. Hoppe; *Macromolecules* **43**, 1261 (2010): "Anthracene Based Conjugated Polymers: Correlation between $\pi\pi$ -Stacking Ability, Charge Carrier Mobility, and Photovoltaic Performance".
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- S. Rathgeber, K. Matyjaszewski, H.I. Lee, E. Di Cola; *Macromolecules* **40**, 7680 (2007): "Rheo-oscillations of a Bottlebrush Polymer Solution Due to Shear-induced Phase Transitions between a Shear Molten State and a Line Hexatic Phase".
- S. Rathgeber, M. Monkenbusch, J.L. Hedrick, M. Trollsås, A.P. Gast; *J. Chem. Phys.* **125**, Art. No. 204908 (2006): "Star-Like Dendrimers in Solution: Structural Properties and Internal Dynamics".
- S. Kronholz, S. Rathgeber, S. Karthäuser, H. Kohlstedt, S. Clemens, T. Schneller; in *Adv. Funct. Mater.* **16**, 2346 (2006): "Self-Assembly of Diblock-Copolymer Micelles for Template Based Preparation of PbTiO₃ Nano-Grains".
- S. Rathgeber, T. Pakula, A. Wilk, K. Matyjaszewski, H.I. Lee, K.L. Beers; *Polymer*. **47**, 7318 (2006): "Bottle-Brush Macromolecules in Solution: Comparison between Results Obtained from Scattering Experiments and Computer Simulations".

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