

## Photoresponsive Polymer Brushes

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Four polymer brush coatings containing photoresponsive arylazopyrazole (AAP)-based methacrylate monomers are reported. The glass substrates were functionalized using microcontact printing ( $\mu\text{CP}$ ) and surface-initiated atom transfer radical polymerisation (SI-ATRP). These polymer thin films were characterised by atomic force microscopy (AFM) and resulted in a height of 15 to 25 nm depending on the monomer composition. UV/*vis* and NMR spectroscopy confirmed the incorporation of the AAP-based monomers in the polymer brushes. Utilizing the photoisomerisation of the AAP, various characteristics of the surfaces can be tuned, specifically the wetting behaviour of the substrates can be reversibly switched, which was investigated via contact angle measurements.

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**Sitzung Einordnung:** Poster Session