376c Reactive Surface Micropatterning by Wet Stamping

Christopher J. Campbell, Stoyan K. Smoukov, Kyle J.M. Bishop, and Bartosz A. Grzybowski Hydrogel stamps are used to reactively micropattern various types of substrates. The method, called reactive wet stamping (r-WETS), is general in nature and allows for the patterning of chemicals that react with a solid surface to render it either hydrophobic or hydrophilic, or the deposition of silane or thiol monolayers with either hydrophobic or hydrophilic moieties. Applications of this method will be described, including deposition of metallic microstructures, preparation of supports for electrostatic self-assembly, and multistep reactive patterning.