Record Nr. UNINA9910347047303321 Autore Steidle Nicole E **Titolo** Micro- and Nanostructured Microfluidic Devices for Localized Protein Immobilization and Other Biomedical Applications Pubbl/distr/stampa KIT Scientific Publishing, 2014 1000044095 **ISBN** Descrizione fisica 1 electronic resource (IX, 138 p. p.) Collana Schriften des Instituts für Mikrostrukturtechnik am Karlsruher Institut für Technologie / Hrsg.: Institut für Mikrostrukturtechnik Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto A new immobilization method for the localized adsorption of proteins on thermoplastic surfaces is introduced. Artificial three-phase interfaces were realized by surface structuring to control the wetting behavior which lead to a preferred adsorption in these modified areas. Additionally, different fabrication methods were analyzed to determine mass fabrication capabilities. These fabrication methods also allowed the production of fully structured microchannels to tune the fluids behavior within.