1. Record Nr. UNINA9910483893103321 Autore Feng Chuanliang Titolo Microfabrication of stimuli-responsive polymers / / Chuanliang Feng, Xiaoqiu Dou, Yibin Xu Pubbl/distr/stampa Singapore:,: Springer,, [2021] ©2021 **ISBN** 981-336-869-1 Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (XIV, 183 p. 124 illus., 55 illus. in color.) Disciplina 530.4175 Soggetti Nanotechnology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Reactive Platforms for Controllable Fabrication of Functional (Bio) interfaces -- Surface Reactions and Fabrication of Bioreactive Platforms -- Confinement Effects on the Reactivity in Ultrathin Polymer Films --Reactive Thin Polymer Films as Platforms for the Immobilization of Biomolecules -- Tailored Biointerfaces via Derivatization of Polystyrene-b-Poly(tert-butyl acrylate) Thin Films -- Fabrication of Robust Biomolecular Patterns by Reactive Microcontact Printing on NHS Ester Containing Polymer Films -- Reactive CP on Ultrathin Block Copolymer Films -- Nanofabrication on Reactive Block Copolymer Film Platforms -- Outlook. This book introduces readers to interfacial reactions in confinement on Sommario/riassunto stimuli-responsive homopolymer and diblock copolymer films. It also includes investigations concerning the immobilization of (bio)molecules and the fabrication of biomolecular patterns by reactive microcontact printing on these reactive polymer films. In turn, the book takes advantage of the microphase separation of diblock copolymer films to study the fabrication of nanopatterns, which could contribute to the future development of a model system that allows us to areaselectively deposit and address (bio)molecules. Given its scope, the book broadens readers' perspective on the microfabrication of stimuli-

responsive polymers.