1. Record Nr. UNINA9910367760003321 Autore Kaynak Akif Titolo Stimuli-Responsive Polymer Systems-Recent Manufacturing Techniques and Applications / Akif Kaynak, Ali Zolfagharian MDPI - Multidisciplinary Digital Publishing Institute, 2019 Pubbl/distr/stampa Basel, Switzerland:,: MDPI,, 2019 **ISBN** 9783039214846 3039214845 Descrizione fisica 1 electronic resource (92 p.) Soggetti History of engineering and technology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Stimuli-responsive polymer systems can be defined as functional materials that show physical or chemical property changes in response to external stimuli such as temperature, radiation, chemical agents, pH, mechanical stress, and electric and magnetic fields. Recent developments in manufacturing techniques have facilitated the production of a wide range of stimuli-responsive polymer systems. such as micro- and nanoscale structures, with potential applications in soft sensors and actuators, smart textiles, soft robots, and artificial muscles. This book brings together the recent progress in manufacturing techniques, with particular emphasis on 3D and 4D printing and applications of stimuli-responsive polymer systems in

biomedicine and soft robotics.