1. Record Nr. UNINA9910131416503321 Autore Jiang Hongrui Titolo Microlenses MDPI - Multidisciplinary Digital Publishing Institute, 2015 Pubbl/distr/stampa **ISBN** 3-03842-051-4 Descrizione fisica 1 electronic resource (160 p.) Disciplina 532.05 Microfluidics Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto The study and application of microscale lenses and lens arrays enjoys a long history. Advances in microfabrication technologies in the past few decades have enabled the design and fabrication of microlenses and microlens arrays through many different approaches. In recent years, there has been notably a host of exciting developments in the microlenses and microlens arrays, including tunable-focus ones, those

long history. Advances in microfabrication technologies in the past few decades have enabled the design and fabrication of microlenses and microlens arrays through many different approaches. In recent years, there has been notably a host of exciting developments in the microlenses and microlens arrays, including tunable-focus ones, those fabricated on non-planar substrates and surfaces, and microlens arrays mimicking natural compound eyes, to name just a few. The developments in microlenses and microlens arrays have found profound applications in many engineering and biomedical fields, including but not limited to optical coherence tomography (OCT), endoscopy, photolithography, 3-dimensional imaging, optical communications, and lab on chips. This Special Issue aims to highlight the state of the art in the development of microlenses and microlens arrays; examples being fabrication technologies and optical characterizations. It also focuses on their applications when implemented in microoptical systems.