Record Nr. UNINA9910455961803321 Autore Nguyen Nam-Trung <1970-> Titolo Fundamentals and applications of microfluidics [[electronic resource] /] / Nam-Trung Nguyen, Steven T. Wereley Boston, MA,: Artech House, c2002 Pubbl/distr/stampa **ISBN** 1-58053-805-3 Descrizione fisica 1 online resource (482 p.) Collana MEMS--Microelectromechanical systems series Altri autori (Persone) WereleySteven T Disciplina 620.1/06 Soggetti Fluidic devices Micromechanics Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Preliminaries; Contents; Preface; Acknowledgments; Chapter 1 Introduction: Chapter 2 Fluid Mechanics Theory: Chapter 3 Fabrication Techniques for Microfluidics; Chapter 4 Experimental Flow Characterization; Chapter 5 Microfluidics for External Flow Control; Chapter 6 Microfluidics for Internal Flow Control Microvalves; Chapter 7 Microfluidics for Internal Flow Control Micropumps; Chapter 8 Microfluidics for Internal Flow Control Microflow Sensors; Chapter 9 Microfluidics for Life Sciences and Chemistry: Appendix A List of Symbols; Appendix B Resources for Microfluidics Research Appendix C Abbreviations of Different PlasticsAppendix D Linear Elastic Deflection Models: About the Authors: Index Sommario/riassunto Look to this authoritative, new resource for a comprehensive introduction to the emerging field of microfluidics. The book shows you how to take advantage of the performance benefits of microfluidics and serves as your instant reference for state-of-the-art technology and applications in this cutting-edge area. It offers you practical guidance in choosing the best fabrication and enabling technology for a specific microfluidic application, and shows you how to design a

microfluidic device.