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Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front matter -- Foreword -- List of abbreviations -- Contents -- 1 Introduction -- 2 Materials -- 3 Photonics -- 4 Fluidics and fluid control systems -- 5 Biology -- 6 Sensors for Optofluidic systems -- 7 Optofluidic system technology -- 8 Outlook -- 9 Glossary of Optofluidics terms and definitions -- 10 Chemical resistance properties of materials -- International standards and regulations -- Bibliography -- Index
Sommario/riassunto	At the cross-roads of biology, microfluidics and photonics the field of optofluidics allows for quick and compact solutions for medical and biochemical sensing and manipulation. This book is concerned with the ingredients for a polymer-based platform which is able to culture and pattern life cells for a sufficient period of time, enables the integration of photonic devices, and provides means to integrate electronic readout. Thus - in its cross-discipline approach - it touches on aspects of photonics, nanofabrication, and biological methods alike.