

1. Record Nr.	UNINA9910437981903321
Titolo	Biomedical optical imaging technologies : design and applications // Rongguang Liang, editor
Pubbl/distr/stampa	New York, : Springer, 2013
ISBN	3-642-28391-8 9786613939395 1-283-62694-2
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (390 p.)
Collana	Biological and medical physics, biomedical engineering
Altri autori (Persone)	LiangRongguang
Disciplina	616.07 616.0754
Soggetti	Imaging systems in medicine
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"With 153 figures."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Fluorescence imaging -- Reflectance confocal imaging -- Micro-endoscope -- Polarization imaging -- Hyperspectral imaging -- OCT imaging -- Mutlimodal optical imaging -- Spectroscopic system.
Sommario/riassunto	This book provides an introduction to design of biomedical optical imaging technologies and their applications. The main topics include: fluorescence imaging, confocal imaging, micro-endoscope, polarization imaging, hyperspectral imaging, OCT imaging, multimodal imaging and spectroscopic systems. Each chapter is written by the world leaders of the respective fields, and will cover: principles and limitations of optical imaging technology, system design and practical implementation for one or two specific applications, including design guidelines, system configuration, optical design, component requirements and selection, system optimization and design examples, recent advances and applications in biomedical researches and clinical imaging. This book serves as a reference for students and researchers in optics and biomedical engineering.