

1. Record Nr.	UNINA9910829035203321
Titolo	Image modeling of the human eye / / Rajendra Acharya U, Eddie Y.K. Ng, Jasjit S. Suri, editors
Pubbl/distr/stampa	Norwood, Mass., : Artech House, c2008
ISBN	1-59693-209-0
Edizione	[1st ed.]
Descrizione fisica	1 online resource (377 pages)
Collana	Bioinformatics & biomedical imaging
Altri autori (Persone)	Acharya URajendra NgY. K. Eddie SuriJasjit S
Disciplina	617.7/15
Soggetti	Eye - Diseases - Diagnosis Eye - Data processing Eye - Anatomy Diagnostic imaging
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	The human eye -- Introduction to imaging optics -- Eye imaging systems -- Automatic identification of anterior segment eye abnormalities in optical images -- Identification of different stages of diabetic retinopathy using retinal optical images -- Computer-based detection of diabetes maculopathy stages using higher-order spectra -- Algorithms for detecting glaucomatous structural changes in the optic nerve head -- Fractal measures for fungal keratitis diagnosis using a white-light confocal microscope -- Vessel detection experiments using a Gaussian matched filter -- Detection of retinal blood vessels using Gabor filters -- Finite element simulation of the eye structure with bioheat analysis: two- and three-dimensional ocular surface temperature profiles -- Variations of the corneal surface temperature with contact lens wear -- An axisymmetric boundary element model for bioheat transfer in the human eye -- Simulation of aqueous humor circulation inside the human eye -- Clinical implications for thermography in the eye world: a short history of clinical ocular thermography --Temperature measurement of the anterior eye during hydrogel contact lens wear -- Variations of ocular

surface temperature with different age groups.

Sommario/riassunto

"This resource offers details on state-of-the-art 2D and 3D eye imaging and modeling techniques that are paving the way to breakthrough clinical applications in eye health."--Jacket.