

1. Record Nr.	UNINA9910458492103321
Titolo	Microscope image processing [[electronic resource] /] / [edited by] Qiang Wu, Fatima A. Merchant, Kenneth R. Castleman
Pubbl/distr/stampa	Amsterdam ; ; Boston, : Elsevier/Academic Press, c2008
ISBN	1-281-27935-8 9786611279356 0-08-055854-2
Edizione	[1st edition]
Descrizione fisica	1 online resource (585 p.)
Altri autori (Persone)	WuQiang <1958-> MerchantFatima Aziz <1967-> CastlemanKenneth R
Disciplina	502.82
Soggetti	Microscopy Microscopes 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	Front Cover; Microscope Image Processing; Copyright Page; Contents; Foreword; Reference; Preface; Acknowledgments; Chapter 1: Introduction; 1.1 The Microscope and Image Processing; 1.2 Scope of This Book; 1.3 Our Approach; 1.3.1 The Four Types of Images; 1.3.1.1 Optical Image; 1.3.1.2 Continuous Image; 1.3.1.3 Digital Image; 1.3.1.4 Displayed Image; 1.3.2 The Result; 1.3.2.1 Analytic Functions; 1.3.3 The Sampling Theorem; 1.4 The Challenge; 1.5 Nomenclature; 1.6 Summary of Important Points; References; Chapter 2: Fundamentals of Microscopy; 2.1 Origins of the Microscope; 2.2 Optical Imaging 2.2.1 Image Formation by a Lens 2.2.1.1 Imaging a Point Source; 2.2.1.2 Focal Length; 2.2.1.3 Numerical Aperture; 2.2.1.4 Lens Shape; 2.3 Diffraction-Limited Optical Systems; 2.3.1 Linear System Analysis; 2.4 Incoherent Illumination; 2.4.1 The Point Spread Function; 2.4.2 The Optical Transfer Function; 2.5 Coherent Illumination; 2.5.1 The Coherent Point Spread Function; 2.5.2 The Coherent Optical Transfer Function; 2.6 Resolution; 2.6.1 Abbe Distance; 2.6.2 Rayleigh Distance; 2.6.3 Size Calculations; 2.7 Aberration; 2.8 Calibration; 2.8.1 Spatial

Calibration; 2.8.2 Photometric Calibration
2.9 Summary of Important Points
References; Chapter 3: Image Digitization; 3.1 Introduction; 3.2 Resolution; 3.3 Sampling; 3.3.1 Interpolation; 3.3.2 Aliasing; 3.4 Noise; 3.5 Shading; 3.6 Photometry; 3.7 Geometric Distortion; 3.8 Complete System Design; 3.8.1 Cumulative Resolution; 3.8.2 Design Rules of Thumb; 3.8.2.1 Pixel Spacing; 3.8.2.2 Resolution; 3.8.2.3 Noise; 3.8.2.4 Photometry; 3.8.2.5 Distortion; 3.9 Summary of Important Points; References; Chapter 4: Image Display; 4.1 Introduction; 4.2 Display Characteristics; 4.2.1 Displayed Image Size; 4.2.2 Aspect Ratio
4.2.3 Photometric Resolution
4.2.4 Grayscale Linearity; 4.2.5 Low-Frequency Response; 4.2.5.1 Pixel Polarity; 4.2.5.2 Pixel Interaction; 4.2.6 High-Frequency Response; 4.2.7 The Spot-Spacing Compromise; 4.2.8 Noise Considerations; 4.3 Volatile Displays; 4.4 Sampling for Display Purposes; 4.4.1 Oversampling; 4.4.2 Resampling; 4.5 Display Calibration; 4.6 Summary of Important Points; References; Chapter 5: Geometric Transformations; 5.1 Introduction; 5.2 Implementation; 5.3 Gray-Level Interpolation; 5.3.1 Nearest-Neighbor Interpolation; 5.3.2 Bilinear Interpolation; 5.3.3 Bicubic Interpolation
5.3.4 Higher-Order Interpolation
5.4 Spatial Transformation; 5.4.1 Control-Grid Mapping; 5.5 Applications; 5.5.1 Distortion Removal; 5.5.2 Image Registration; 5.5.3 Stitching; 5.6 Summary of Important Points; References; Chapter 6: Image Enhancement; 6.1 Introduction; 6.2 Spatial Domain Methods; 6.2.1 Contrast Stretching; 6.2.2 Clipping and Thresholding; 6.2.3 Image Subtraction and Averaging; 6.2.4 Histogram Equalization; 6.2.5 Histogram Specification; 6.2.6 Spatial Filtering; 6.2.7 Directional and Steerable Filtering; 6.2.8 Median Filtering; 6.3 Fourier Transform Methods
6.3.1 Wiener Filtering and Wiener Deconvolution

Sommario/riassunto

Digital image processing, an integral part of microscopy, is increasingly important to the fields of medicine and scientific research. This book provides a unique one-stop reference on the theory, technique, and applications of this technology. Written by leading experts in the field, this book presents a unique practical perspective of state-of-the-art microscope image processing and the development of specialized algorithms. It contains in-depth analysis of methods coupled with the results of specific real-world experiments. Microscope Image Processing covers image digitization and di

2. Record Nr.	UNINA9910966725903321
Titolo	Tobacco control policy : strategies, successes, and setbacks / / edited by Joy de Beyer and Linda Waverley Brigden
Pubbl/distr/stampa	Washington, D.C., : World Bank, : Research for International Tobacco Control, c2003
ISBN	1-280-08683-1 9786610086832
Edizione	[1st ed.]
Descrizione fisica	xviii, 189 pages : illustrations ; ; 23 cm
Altri autori (Persone)	De BeyerJoy BrigdenLinda Waverley <1946->
Disciplina	362.29/66
Soggetti	Tobacco use - Government policy Tobacco use - Prevention - Government policy Tobacco use - Prevention - Evaluation Smoking - Government policy Smoking - Prevention - Government policy Smoking - Prevention - Evaluation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Overview / Joy de Beyer and Linda Waverley Brigden -- Building momentum for tobacco control : the case of Bangladesh / Debra Efroymson and Saifuddin Ahmed -- Government leadership in tobacco control : Brazil's experience / Luisa M. da Costa e Silva Goldfarb -- Legislation and applied economics in the pursuit of public health : Canada / David Swanson and Ken Kyle -- Democracy and health : tobacco control in Poland / Witold Zatonski -- Political change in South Africa : new tobacco control and public health policies / Mia Malan and Rosemary Leaver -- Tailoring tobacco control efforts to the country : the example of Thailand / Prakit Vateesatokit.
Sommario/riassunto	There are over 1.2 billion tobacco users in the world, most in developing countries. Once a problem primarily in high-income countries, disease and death from tobacco use has increasingly become a burden for developing countries as well. The tobacco epidemic is one of the leading causes of preventable death and disability. However,

mitigating the devastating health damage caused by tobacco use is made especially difficult by nicotine's powerfully addictive properties, low prices of tobacco products, and the constant, often subtle reinforcement of social norms and encouragement to smoke through billions of dollars of advertising each year. This work contains the stories of six countries - Brazil, Bangladesh, Canada, Poland, South Africa, and Thailand. These countries, selected to provide global representation, are in different stages of the tobacco epidemic and the strength and history of their tobacco control policies vary considerably. This work relates the strategies, success stories and setbacks in developing tobacco control policies in order to assist people grappling with similar issues in other countries.
