



*Society for
Imaging Science and Technology*

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IS&T/WILEY SERIES BOOKS ON COLOR

Color Gamut Mapping

Jan Morovic, published by John Wiley & Sons, Inc. 2008 (list price \$130) 304 pp., ISSN: 978-0-470-03032-5, 2 lbs.

Gamut mapping algorithms, implemented by color management systems, are an integral part of the color reproduction process. By adjusting the colors with appropriate algorithms, gamut mapping enables original colors to 'fit' inside differently shaped color gamuts and authentically transfers images across a range of media. This book illustrates the range of possible gamut mapping strategies for cross-media color reproduction, evaluates the performance of various options and advises on designing new, improved solutions. *Color Gamut Mapping* is a comprehensive resource for practicing color and imaging engineers, scientists and researchers working in the development of imaging devices, software and solutions. It is also a valuable reference for students of color and imaging science, as well as photographers, graphic designers and artists.

Member \$100/Non-Member \$110

Color Constancy

Marc Ebner, published by John Wiley & Sons, Inc. 2007 (list price \$150), 416 pp., ISBN: 978-0-47005829-9, 2.5 lbs

Color constancy is the ability of a human observer to recognize the color of objects irrespective of the light used to illuminate them. Because a digital camera uses a sensor to measure reflected light, the measured color at each pixel varies according to the color of the illuminant. The resulting colors, therefore, may not be the same as the colors perceived by the observer. Obtaining color constant descriptors from image pixels is not only important for digital photography, but also valuable for computer vision, color-based automatic object recognition, and color image processing in general. This book provides a comprehensive introduction to the field of color constancy, describing all the major color constancy algorithms, as well as presenting cutting edge research in the area of color image processing.

Member: \$115 / Non-member: \$125

The Reproduction of Colour, 6th Edition

R.W.G. Hunt, published by John Wiley & Sons, Inc. 2004 (list price \$160), 792 pp., ISBN 0-470-02425-9, 5 lbs.

Completely revised and updated, this standard is widely used as a basis for lectures. The 6th Edition includes information on the latest digital and printing technologies, as well as new chapters on digital printing and imaging discussing and is illustrated with many new photographs and diagrams. Expanded coverage of the evaluation of color appearance, including a detailed treatment of color appearance models and the color inconstancy index, and color reproduction on HDTV and digital cinema systems. Divided into six parts, the book presents the foundations of color imaging and color reproduction before going on to discuss how these basic principles can be applied to photography, television, printing, and digital imaging. The final section deals with the evaluation of color appearance. *The Reproduction of Colour* presents a tried-and-tested balance of theory and practical application, and provides detailed coverage of the physics of light and the chemistry of colorants.

Member: \$120 / Non-Member: \$135

Colorimetry: Fundamentals and Applications

Noburu Ohta and Alan Robertson, published by John Wiley & Sons, Inc. 2006 (list price \$130), 352 pp., ISBN: 0-470-09472-9, 3 lbs.

Colorimetry, the science of quantitatively describing color, is essential for color reproduction technology because it creates standards by which to measure color, using mathematical techniques and software to ensure fidelity across media, allow accurate color mixing, and to develop color optimization. This book is a comprehensive and thorough introduction to colorimetry, taking the reader from basic concepts through a variety of industrial applications. Principles such as color specification, the CIE system, and color vision and appearance models are set out in clear, easy-to-follow terminology.

Member: \$100 / Non-Member: \$110

Color Appearance Models, 2nd Edition

Mark D. Fairchild, published by John Wiley & Sons, Inc. 2004 (list price \$150), 385 pp., ISBN 0-470-01216-1, 3 lbs.

The eagerly anticipated 2nd edition of this popular book has been fully revised and updated including recent developments in the CIE model (CIECAM02) and chromatic adaptations transforms. It provides an overview of the fundamentals of color measurement and the phenomena that necessitate the development of color appearance models. The book is a valuable reference for advanced students in technology programs and for color engineers, color scientists, and imaging professionals working on engineering color systems. *Color Appearance Models* features a combination of the fundamental issues and current solutions in the field; detailed discussions of the most widely used models to date; an accompanying website listing related developments, publications, and calculations.

Member: \$ 115 / Non-Member: \$125

Digital Color Management: Encoding Solutions, 2nd Edition

Edward J. Giorgianni, and Thomas E. Madden published by John Wiley & Sons, Inc. 2008 (list price \$140), 432 pp., ISBN: 978-0-470-51244-9, 3 lbs.

This popular book explains the capabilities and limitations of existing color management systems and provides comprehensive practical solutions for communicating color within and among imaging systems, from the simplest to the most complex. Beginning with the fundamentals of color and human color perception, the book progresses to in-depth analyses of the nature of color images, digital color encoding, color management systems and digital color interchange.

Member: \$110 / Non-Member: \$120

Note: All books in this box but *The Reproduction of Color* are ON SALE for \$90. See back cover.

SPECIAL OFFER—BOOK + DVD

The Hunt Course: Basic Color Science and Imaging DVD

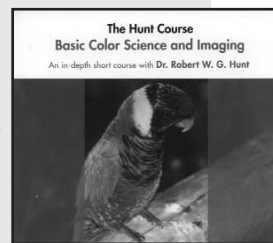
Published by IS&T 2008, ISBN: 978-0-89208-268-1, 1 lbs.

The complete two-day, twelve-hour Hunt short course “Basic Color Science and Imaging” as taught at the annual Color Imaging Conferences (CIC) on DVD.

Includes two bonus interviews conducted with Dr. Hunt by Dr. Mark Fairchild and Dr. James King.

Member: \$ 79 / Non-Member: \$99

*purchased with *The Reproduction of Color* \$49*



Colorimetry: Understanding the CIE System

János Schanda, published by John Wiley & Sons, Inc. 2007 (list price \$130), 459 pp., ISBN: 0-470-04904-9, 2 lbs.

A comprehensive compilation of the updates and recommendations of the CIE over the past 75 years, this book addresses all aspects of CIE colorimetry, including basic principles, colorimetric measurements and calculations, color difference and appearance evaluation, color management, and visual fundamentals. It covers the historical background, recent developments, and future perspectives of colorimetric measurement and helps readers to understand fundamentals and properly use current standards. Presented in tutorial format, this book serves as single-source, hands-on reference for color and vision scientists, and industrial color, lighting, and optical engineers.

Member: \$110 / Non-Member: \$120

Measuring Colour, 3rd Edition

R.W.G. Hunt, published by Fountain Press, 1998 (list price \$90), 344 pp., ISBN: 0-86343-387-1, 2 lbs.

Intended to provide the reader with the basic facts needed to measure color, this is a book about principles, rather than a guide to instruments. Its aim is to restate the basic principles of colorimetry together with the latest international recommendations on their applications.

Member: \$70 / Non-Member: \$80

Color Imaging: Fundamentals and Applications

Erik Reinhard, Erum Arif Khan, Ahmet Oguz Akyüz, and Garrett Johnson; published by AK Peters, 2008 (list price \$125), 1074 pp., ISBN: 978-1568813448, 4.5 lbs.

This book provides readers with an understanding of what color is, where it comes from, and how it can be used correctly in many different applications. The authors address the physics of light and its interaction with matter at the atomic level, so that the origins of color can be appreciated. The intimate relationship between energy levels, orbital states, and electromagnetic waves helps to explain why diamonds shimmer, rubies are red, and the feathers of the Blue Jay are blue. Then, color theory is explained from its origin to the current state of the art, including image capture and display as well as the practical use of color in disciplines such as computer graphics, computer vision, photography, and film.

Member: \$95 / Non-Member: \$105

Digital Color Imaging Handbook

Gaurav Sharma, published by CRC Press, 2003 (list price \$176), 797 pp., ISBN: 0-8493-0900-X, 3 lbs.

Digital technology enables unparalleled functionality and flexibility in the capture, processing, exchange, and output of color images, but harnessing its potential requires knowledge of color science, systems, processing algorithms, and device characteristics. One can acquire the requisite background with an armload of physics, chemistry, engineering, computer science, and mathematics books and journals—or one can find it here. Each chapter, written by world-class experts, is largely self-contained, although cross references between chapters reflect important interrelations. Supplemental materials available.

Member: \$145 / Non-Member: \$155

Color Desktop Printer Technology

Noboru Ohta (Co-editor), Mitchell Rosen (Editor), published by CRC Press, 2005, (list price \$186), 296 pp., ISBN / ISSN: 082475364X, 1.5 lbs.

Printing traces its roots back centuries and the invention of moveable type changed the world. However, until the advent of the computer, printing remained a costly and

time-consuming operation. From the first humble dot matrix to modern inkjet, laser, and dye sublimation printers, desktop printing has brought low-cost, high quality printing into the home and office. This book provides an overview of the current state of the technology and emerging applications.

Member: \$150 / Non-Member: \$160

Billmeyer and Saltzman's Principles of Color Technology, Third Edition

Roy S. Berns, published by John Wiley & Sons, Inc., 2000 (list price \$170), 247 pp., ISBN: 0-471-19459-X, 3 lbs.

This edition combines the clarity and ease of use of earlier editions with two decades of advancement in the theory and technology of color. It offers detailed coverage of color, colorants, the coloring of materials, reproducing the color of materials through imaging, computer-generated color, digital image capture, desktop color printing, and color management.

Member: \$135 / Non-Member: \$145

Wyszecki & Stiles Color Science: Concepts and Methods, Quantitative Data and Formulae, 2nd Edition

Gunter Wyszecki & W. S. Stiles, published by John Wiley & Sons, 2001 (list price \$106), 950 pp., ISBN: 0-471-39918-3, 4 lbs.

This classic covers physical data; the eye; colorimetry; photometry; visual equivalence and visual matching; uniform color scales; visual thresholds; and theories and models of color vision.

Member: \$90 / Non-Member: \$100

A Field Guide to Digital Color

Maureen C. Stone, published by A K Peters, Ltd., 2003 (list price \$59), 230 pp., ISBN: 1-56881-161-6, 1.5 lbs.

Color is a part of many different fields, from vision and perception to art and design. Digital color, in which color is encoded and manipulated as digital values, spans many fields, including image reproduction, computer graphics, and multi-media design. Each field has its own reference books, technical publications, and conferences, making it

easy to focus on one field without being aware of relevant work in others. This book is designed to provide a high-level summary of each field, with pointers to in-depth resources.

Member: \$50 / Non-Member: \$55

Physics and Chemistry of Color: The Fifteen Causes of Color, 2nd Edition

Kurt Nassau, published by John Wiley & Sons, 2001 (list price \$175), 481 pp., ISBN: 978-0-471-39106-7, 2 lbs.

This edition covers light and color; color involving vibrations, simple excitations, field effects, molecular orbitals, band theory, and geometrical and physical optics, and color-related topics.

Member: \$135 / Non-Member: \$145

Computational Colour Science

Stephen Westland and Caterina Ripamonti; published by John Wiley and Sons, Inc. 2004 (list price \$120), 220 pp., ISBN: 0-470-84562-7, 1.5 lbs.

Presenting a practical, problem-based approach to color physics, this title describes the key issues encountered in modern color engineering, including efficient representation of color information, fourier analysis of reflectance spectra and advanced colorimetric computation. Emphasis is placed on the practical applications rather than the techniques themselves, with material structured around key topics, such as colour calibration of visual displays, computer recipe prediction and models for colour-appearance prediction.

Member: \$100 / Non-Member: \$110

CONFERENCE PROCEEDINGS

Color in Graphics, Imaging, and Vision (CGIV)

Color science, vision, image filtering, image classification, image rendering, device technology, media, and fuzzy logic are all topics covered. The papers presented at the International Symposium on Multispectral Colour Science, for the respective year are also included.

CGIV 2008: Fourth European Conference

2008, Universitat Politècnica de Catalunya (UPC), Spain, abstract book with CD of complete technical papers, 40 pp., ISBN: 978-0-89208-262-6, 1 lbs.

Member: \$115 / Non-Member: \$135

CGIV 2006: Third European Conference

2006, University of Leeds, United Kingdom, abstract book with CD of complete technical papers, 25 pp., ISBN: 0-89208-262-3, 1 lb.

CGIV 2004: Second European Conference

2004, Aachen, Germany, 566 pp. ISBN: 0-89208-250-X, 4 lbs

Member / Non-Member: \$50

Color Imaging Conference (CIC)

Co-sponsored by IS&T and SID, CIC is the premier technical gathering for scientists, technologists, and engineers working in the areas of color science, systems, and their application to color imaging. Participants represent and present papers on disciplines ranging from psychophysics, optical physics, image processing,

color science, color engineering, graphic arts, and systems engineering to hardware and software development.

17th Color Imaging Conference Proceedings and CD

2009, Albuquerque, New Mexico, 306 pp., ISBN: 978-0-89208-288-9, 2 lbs.; full-color hardcopy + CD

16th Color Imaging Conference Proceedings and CD

2008, Portland, Oregon, 371 pp., ISBN: 978-0-89208-281-0, 2 lbs.; full-color hardcopy + CD

15th Color Imaging Conference Proceedings and CD

2007, Albuquerque, New Mexico, 342 pp., ISBN: 978-89208-275-9, 2.5 lbs.; full-color hardcopy + CD

Member: \$95 / Non-Member: \$115

14th Color Imaging Conference CD + abstract book

2006, Scottsdale, Arizona, 22 pp., ISBN: 0-89208-267-4, 1 lbs.

14th Color Imaging Conference (hardcopy only)

2006, Scottsdale, Arizona, 22 pp., ISBN: 0-89208-267-4, 1 lbs.

Member: \$70 / Non-Member: \$90

13th Color Imaging Conference (hardcopy only)

2005, Scottsdale, Arizona, 343 pp., ISBN: 0-89208-259-3, 2 lbs.

12th Color Imaging Conference (hardcopy only)

2004, Scottsdale, Arizona, 358 pp., ISBN: 0-89208-254-2, 2.5 lbs.

11th Color Imaging Conference (hardcopy only)

2003, Scottsdale, Arizona, 372pp., ISBN: 0-89208-248-8, 2.5 lbs.

Member / Non-Member: \$50

9th International Symposium on Multispectral Colour Science

2007, Taipei, Taiwan, 233 pp. ISBN: 978-0-89208-272-8, 1.5 lbs.

Proceedings of the annual International Symposium, held May 30-June 1, 2007. Topics include Acquisition and reproduction, spectral reconstruction, spectral colour science, and spectral interaction.

Member: \$70 / Non-Member: \$90

Holographic Imaging

Stephen A. Benton and Michael Bove, Jr., published by John Wiley & Sons, Inc. 2008 (List Price \$106) 261 pp. ISBN: 978-0-470-06806-X, 2 lbs

This covers the fundamental physical and optical principles of using diffraction to record and reconstruct images, human perception, and the history of holographic imaging with an approachable explanation of both basic and advanced holographic concepts. This authoritative work focuses on practical holography, including methods for white light illumination, full color holography, and holographic recording of natural scenes. The book promotes a hands-on approach to making holograms and an understanding of why and how they work.

Member: \$85 / Non-Member: \$90

ON SALE: \$80 (see back cover)

Stereoscopic Cinema and the Origins of 3-D Film 1838-1952

Ray Zone, published by University Press of Kentucky 2007 (list price \$42) 220 pp., ISBN / ISSN: 978-0-8131-2461-2, 2 lbs.

This book is an exhaustive study of the evolution of 3-D technology and subsequent filmmaking achievements, as well as the public response to and cultural impact of 3-D movies. Zone takes the reader on a voyage of discovery into the rich history of a field that predates photography and that continues to influence television and computer animation today.

Member \$35 / Non-Member \$40

Creative 3-D Display and Interaction Interfaces A Trans-Disciplinary Approach

Barry G. Blundell and Adam J. Schwarz, published by John Wiley & Sons, Inc. 2006 (list price: \$113) 371 pp., ISBN: 978-0-471-48271-0, 2 lbs.

A single source for key information on 3-D display and interaction. This authoritative book provides a groundbreaking, trans-disciplinary approach to the creation of computer interface technologies that more naturally matches the complex needs of human sensory and motor systems. The conventional interface, though useful in the past, has started to inhibit human creativity in key areas such as creative 3-D design, medical diagnostics, and the visualization of complex structures. With the aim of effectively advancing the human-computer interaction experience, this book takes a refreshing approach by bringing together a range of important disciplines within a common framework.

Member \$90 / Non-Member \$100

2-D and 3-D Image Registration: for Medical, Remote Sensing, and Industrial Applications

A. Ardeshir Goshtasby, published by John Wiley & Sons, Inc. 2005, (list price \$101) 280 pp., ISBN 0-471-64954-6, 2.5 lbs.

To master the fundamentals of image registration, there is no more comprehensive source than 2-D and 3-D Image Registration. In addition to delving into the relevant theories of image registration, the author presents their underlying algorithms. You'll also discover cutting-edge techniques to use in remote sensing, industrial, and medical applications. Examples of image registration are presented throughout, and the companion Web site contains all the images used in the book and provides links to software and algorithms discussed in the text, allowing you to reproduce the results in the text and develop images for your own research needs. 2-D and 3-D Image Registration serves as an excellent textbook for classes in image registration as well as an invaluable working resource.

Member: \$80 / Non-Member: \$90

IS&T RECENT PROGRESS SERIES: Color and Printing

A comprehensive compilation of technical information from conference proceedings and journals.

Recent Progress in Color Management and Communications

Robert Buckley, editor, 1998, 270 pp. ISBN: 0-89208-210-0, 2 lbs.

Recent Progress in Color Science

Karen Braun and Reiner Eschbach, editors, 1997, 434 pp., ISBN: 0-89208-202-X, 3 lbs.

Recent Progress in Digital Halftoning II

Reiner Eschbach, editor, 1999, ISBN: 0-89208-214-3, 3 lbs.

Recent Progress in Ink Jet Technologies II - CD ONLY

Eric Hanson, editor, 1999, 614 pp., ISBN: 0-89208-220-8

Recent Progress in Toner Technologies

George Marshall, editor, 1997, 456 pp., ISBN: 0-89208-203-8, 3 lbs.

SPECIAL PRICE

Members/ Non-Member: \$25

Handbook of Imaging Materials: 2nd Edition

Arthur S. Diamond and David S. Weiss, published by Marcel Dekker, 2002 (list price \$210), 676 pp., ISBN: 0-8247-8903-2, 2 lbs.

This revised and expanded reference book presents the most recent developments in the materials, properties, and performance characteristics of photographic, electrophotographic, electrostatic, diazo, and ink jet imaging processes, and provides current techniques and modern applications for ink jet, thermal, and toner-related imaging systems

Member: \$175 / Non-Member: \$185

Print Unchained—Fifty Years of Digital Printing, 1950-2000 and Beyond: A Saga of Invention and Enterprise

Edward Webster, published by DRA of Vermont, Inc., 2000 (list price \$125), 272 pp., ISBN: 0-9702617-0-5, 4 lbs.

A must for industry insiders and newcomers alike. Browse case vignettes that illuminate how the strategic decisions of

selected companies fit or failed to fit changing technology and market realities. A global overview of the technologies, a glossary, and a bibliography make this volume an industry handbook, as well as a comprehensive history.

Member: \$100 / Non-Member: \$115

Handbook of Print Media (includes CD-Rom)

Helmut Kipphan, published by Springer, 2001 (list price \$159), 1207 pp., ISBN: 3-540-67326-1, 6.5 lbs.

A comprehensive guide to both the traditional and new digital technologies involved in all phases of print media production, this book presents the technologies and production systems that are state of the art and represent a multitude of products from well-known manufacturers worldwide. *Handbook of Print Media* is the ideal companion for technically and commercially oriented specialists and management in the graphic arts industry.

Member: \$120 / Non-Member: \$130

CONFERENCE PROCEEDINGS

Digital Fabrication Conference Proceedings

Digital and non-impact printing technologies are enabling new fabrication methods, materials, and applications. It is now possible to pattern and print—digitally fabricate—two- and three-dimensional structures at physical scales ranging from nanometers to meters, including electronic circuits, MEMs and NEMs structures, architectural components, and even biologically-engineered structures. These methods are finding applications in all areas of prototyping, fabrication, and commercial applications—from the laboratory bench to the manufacturing floor. This conference covers these topics.

Beginning in 2007, the Digital Fabrication Proceedings were published with the NIP Proceedings (see next page).

Digital Fabrication 2006 (hardcopy only)

2006, Denver, Colorado, 216 pp., ISBN: 0-89208-264-X, 1.5 lbs.

Note: For Digital Fabrication 2006 CD + abstract book, see next page under NIP.

Digital Fabrication 2005 (hardcopy only)

2005, Baltimore, Maryland, 256 pp., ISBN: 0-89208-258-5, 1.5 lbs.

Member: \$70 / Non-Member: \$90

NON-IMPACT AND DIGITAL PRINTING

CONFERENCE PROCEEDINGS

NIP: International Conference on Digital Printing Technologies

The premier technical meetings on digital and non-impact printing technologies.

NIP25 and Digital Fabrication 2009 (hardcopy only)

2009, Louisville, Kentucky, 868 pp, ISBN: 0-89208-287-2, 4.5 lbs.

NIP25 and Digital Fabrication 2009 CD + abstract book

2009, Louisville, Kentucky, 68 pp, ISBN: 0-89208-286-5, 1 lb.

NIP24 and Digital Fabrication 2008 (hardcopy only)

2008, Pittsburgh, Penn., 972 pp., ISBN: 978-0-89208-279-7, 5 lbs.

NIP24 and Digital Fabrication 2008 CD + abstract book

2008, Pittsburgh, Penn., 77 pp., ISBN: 978-0-89208-278-0, 1 lb.

Member: \$135 / Non-Member: \$165

NIP23 and Digital Fabrication 2007 (hardcopy only)

2007, Anchorage Alaska, 1016 pp., ISBN: 0-89208-297-6, 6 lbs.

NIP23 and Digital Fabrication 2007 CD + abstract book

2007, Anchorage, Alaska, 72 pp., ISBN: 0-89208-298-4, 1 lbs.

Member: \$135 / Non-Member: \$165

NIP23 and Digital Fabrication 2007 (hardcopy + CD)

2007, Anchorage Alaska, 1016 pp., ISBN: 0-89208-297-6, 6 lbs.

Member: \$200 / Non-Member: \$230

NIP22 and Digital Fabrication 2006 CD + abstract book

2006, Denver, Colorado, 72 pp., ISBN: 0-89208-265-8, 1 lbs.

Member: \$135 / Non-Member: \$165

NIP22: International Conf. on Digital Printing Technologies

2006, Denver, Colorado 646 pp., ISBN: 0-89208-253-1, 3 lbs.

NIP21: International Conf. on Digital Printing Technologies

2005, Baltimore, Maryland, 694 pp., ISBN: 0-89208-257-7, 3 lbs.

hardcopy volumes

Member: \$100 / Non-Member: \$125

International Conference on Digital Production Printing (DPP) and Industrial Applications

This European printing conference covers developments in digital printing, including the printing environment; hybrid printing solutions; production printing Workflow management; business integration and e-commerce; variable data printing; packaging; novel substrates; emerging applications; and digital photofinishing with NIP technologies.

DPP 2005

Amsterdam, The Netherlands, 206 pp. ISBN: 0-89208-256-9, 2 lbs.

DPP 2003

Barcelona, Spain, 224 pp. ISBN: 0-89208-246-1, 2 lbs.

DPP 2001

Antwerp, Belgium, 400 pp. ISBN: 0-89208-233-X, 3 lbs.

SPECIAL PRICE — Member / Non-Member: \$15

ARCHIVING

CONFERENCE PROCEEDINGS

Archiving Conference

Bringing together a diverse group of scientists and end-users from academia, industry, museums, libraries, government institutions, and not-for-profit organizations, this conference addresses issues related to the preservation and archiving of images and data, focusing on formats and metadata; imaging science and archiving infrastructure; and media and storage.

Archiving 2009

2009, Arlington, VA, ISBN: 978-0-89208-284-1 238 pp., 1.5 lbs

Member: \$85 / Non-Member: \$105

Archiving 2008

2008, Bern, Switzerland 306 pp., ISBN: 978-0-89208-277-3, 2 lbs.

Member: \$75 / Non-Member: \$95

Archiving 2007

2007, Arlington, VA, 180 pp., ISBN: 978-0-89208-270-4, 1.5 lbs.

Archiving 2006

2006, Ottawa, Canada, 254 pp., ISBN: 0-89208-261-5, 1.5 lbs.

Archiving 2005

2005, Washington, DC, 268 pp., ISBN: 0-89208-255-0, 2 lbs.

Archiving 2004

2004, San Antonio, TX, 289 pp., ISBN: 0-89208-251-8, 2 lbs.

Member: \$70 / Non-Member: \$90

IS&T/WILEY SERIES

Panoramic Imaging: Sensor-Line Cameras and Laser Range-Finders

Fay Huang, Reinhard Klette, and Karsten Scheibe; published by John Wiley & Sons, Inc. 2008 (list price \$150), 284 pp., ISBN: 978-0-470-06065-0, 1.5 lbs.

Panoramic imaging has applications in digital photography, robotics, film productions for panoramic screens, architecture, environmental studies, remote sensing and GIS technology. This book describes two modern technologies for capturing high-accuracy panoramic images and range data, namely the use of sensor-line cameras and laser range-finders. It provides mathematically accurate descriptions of the geometry of these sensing technologies and the necessary information required to apply them to 3D scene visualization or 3D representation.

Member: \$115 / Non-Member: \$125

ON SALE: \$90 (see back cover)

The Science of Imaging: An Introduction

Graham Saxby; published by IOP Publishing Ltd., 2001 (list price: \$60), 260 pp., ISBN 075030734X, 2 lbs.

A genuine introduction to the subject, *The Science of Imaging* is written in a style that keeps the mathematics to a minimum and copiously littered with examples. It takes the reader on a grand tour of imaging. Starting with the fundamentals of light and basic cameras, the authors journey through television and holography to advanced scientific and medical imaging. Topics such as digital recording of images and the photographic process and film development are dealt with in an informative and entertaining manner.

Member: \$50 / Non-Member: \$55

ON SALE: \$45 (see back cover)

The Essential Guide to Image Processing

Al Bovik, published by Academic Press (Elsevier) 2009 (list price \$90), 853 pp., ISBN 978-0-12-374457-9, 4.5 lbs.

This comprehensive and state-of-the-art approach to image processing gives engineers and students a thorough introduction, and includes full coverage of key applications: image

The JPEG 2000 Suite

Peter Schelkens (editor), Athanassios Skodras (co-editor), Touradj Ebrahimi (co-editor); published by John Wiley & Sons, Inc. 2009 (list price \$160), 544 pp., ISBN/ISSN: 978-0-470-72147-6, 2.5 lbs.

The JPEG 2000 Suite provides a comprehensive overview of the baseline JPEG 2000 standard and its extensions. The first part of the book sets out the core coding system, additions to the standard and reference software. The second part discusses the successful deployment of JPEG 2000 in application domains such as video surveillance, digital cinema, digital television, medical imaging, defence imaging, security, geographic imaging and remote sensing, digital culture imaging and 3D graphics. The book also presents implementation strategies accompanied by existing software and hardware solutions.

Member: \$120 / Non-Member: \$135

ON SALE: \$90 (see back cover)

watermarking, fingerprint recognition, face recognition and iris recognition, and medical imaging. To help learn the concepts and techniques, the book contains a CD-ROM of 70 highly interactive visual demonstrations. Key algorithms and their implementation details are included, along with the latest developments in the standards.

Member: \$77 / Non-Member: \$84

Digital Image Processing: PIKS INSIDE, 4th Ed.

William K. Pratt, published by John Wiley & Sons, 2007 (list price \$144), 735 pp., ISBN: 978-0-471-76777-0, 3 lbs.; includes CD-ROM

The Fourth Edition of Digital Image Processing provides a complete introduction to the field and includes new information that updates the state of the art. The text offers coverage of new topics and includes interactive computer display imaging examples and computer programming exercises that illustrate the theoretical content of the book. These exercises can be implemented using the Programmer's Imaging Kernel System (PIKS) application program interface included on the accompanying CD.

Member: \$120 / Non-Member: \$130

IMAGE PROCESSING AND IMAGING SYSTEMS

Fundamentals of Digital Imaging

H. J. Trussell and M. M. Vrhel, published by Cambridge University Press 2009 (list price: \$117); ISBN: 978-0-521-86853-2, 3.5 lbs.

This book presents an introduction to the fundamentals of digital imaging, with an emphasis on the basic operations of image capture and display of monochrome and color images. The authors balance the mathematical description of real problems with practical examples. With a color-plate section and real-world applications, this book is suitable for graduate students taking courses in digital imaging in electrical engineering and computer science departments. It will also be a useful reference for practitioners in industry.

Member: \$105 / Non-Member: \$110

Digital Video and HDTV Algorithms and Interfaces

Charles Poynton, published by Morgan Kaufman, 2002 (list price \$81), 736 pp., ISBN: 1-55860-792-7, 4 lbs.

Rapidly evolving computer and communications technologies have achieved data transmission rates and data storage capacities high enough for digital video. But video involves much more than just pushing bits! Achieving the best possible image quality, accurate color, and smooth motion requires understanding many aspects of image acquisition, coding, processing, and display that are outside the usual realm of computer graphics. Video system designers are also facing new demands to interface with film and computer system that require techniques outside conventional video engineering.

Member: \$62 / Non-Member: \$67

High Dynamic Range Imaging: Acquisition, Display, and Image-Based Lighting

Eric Reinhard, Greg Ward, Sumanta Pattanaik and Paul Debevec, published by Morgan Kaufmann Publishers, 2005 (list price \$85), 502 pp., ISBN: 0-12-585263-0, 3 lbs.

“High Dynamic Range Imaging is a landmark in the history of imaging science. In the 1930s . . . Mannes and Godowsky invented what become known as Kodachrome and the world of color photography was forever changed. We are not on the cusp of a change of similar magnitude and the catalyst is not color, nor even digital—it is HDR.” This is

the first book to describe this exciting new field that is transforming the media and entertainment industries. Written by the foremost researchers in HDRI, it will explain and define this new technology for anyone who works with images, whether it is for computer graphics, film, video, photography, or lighting design.

Member: \$65 / Non-Member: \$70

Image Sensors and Signal Processing for Digital Still Cameras

Junichi Nakamura, published by CRC Press, 2005 (list price \$176), 352 pp., ISBN: 0849335450, 2 lbs.

This book provides comprehensive coverage of the image acquisition and image processing technologies for DCSs; explains both CCD and CMOS image sensors in detail, from operating principles to specific sensors; details evaluation methods for image sensors and image processing; presents the algorithms used by the software and hardware in a DSC and discussed quality-related standards; features a look to the future, written by Eric Fossum, the pioneer of CMOS active pixel image sensor technology, that explores a linear extrapolation of current technologies, a new paradigm for image sensors, and future DSC concepts and includes a 20-page full-color insert.

Member: \$145 / Non-Member: \$155

Psychometric Scaling: A Toolkit for Imaging Systems Development

Peter G. Engledrum, published by Imcotek Press, 2000 (list price: \$95), 201 pp., ISBN: 0-9678706-0-7, 2.5 lbs.

Written for scientists, engineers, and product managers who need to measure observer responses to images, the framework of the book is the Image Quality Circle that links image quality judgments with the visual perceptions of observers. An array of “psychometric-mind measuring” methods to address many applications encountered are included, as well as a CD-ROM with MathCad worksheets that enable the reader to generate psychometric scale values from their own data using the methods described. It provides sufficient theory, but its emphasis is on practical applications.

Member: \$80 / Non-Member: \$90

Single-Sensor Imaging

Rastislav Lukas, Editor, published by CRC Press, 2009, (list price \$100), ISBN: 978-1-4200-5452-1, 3 lbs.

Advances in technologies for digital color imaging, multidimensional signal processing, and visual scene analysis have been crucial to developing new camera-driven applications and commercial products in digital photography. This book embraces this extraordinary progress, comprehensively covering state-of-the-art systems, processing techniques, and emerging applications

Members: \$85 / Non-members: \$90

Diffraction, Fourier Optics, and Imaging

Okan K. Erosy, published by John Wiley & Sons Inc., 2006, (list price \$125), 413 pp, ISBN: 978-0-471-23816-4, 2 lbs.

Current theories of diffraction, imaging, and related topics based on Fourier analysis and synthesis techniques that are essential for understanding, analyzing, and synthesizing modern imaging, optical communications and networking, and micro/nano systems are detailed in this book. Covered applications include tomography; magnetic resonance imaging; synthetic aperture radar (SAR) and interferometric SAR; optical communications and networking devices; computer-generated analog holograms; and wireless systems using EM waves.

Members \$105 / Non-Members \$115

Polarized Light in Liquid Crystals and Polymers

Toralf Scharf; published by John Wiley & Sons Inc., 2007 (list price \$113) 400 pp., ISBN: 0-471-7-4064-0, 2lbs

This book addresses the linear optics of birefringent materials, such as liquid crystals and polymers, and surveys light propagation in such media with special attention to applications. It is unique in treating light propagation in micro- and nanostructured birefringent optical elements, such as lenses and gratings composed of birefringent materials, as well as the spatial varying anisotropic structures often found in miniaturized liquid crystal devices.

Members \$90 / Non-Members \$100

Close Range Photogrammetry: Principles, Methods and Applications

Thomas Luhmann, Stuart Robson, Stephen Kyle, and Ian Harley, published by John Wiley & Sons Inc., 2007, (list price \$140) 528 pp, ISBN: 978-0-470-10633-4, 2 lbs.

This English translation of a book originally published (2003) in German undertaken with the cooperation of the original author describes the fundamentals of photogrammetry, the equipment used in both hardware and software, analytical methods and various real-world applications .

Members \$115 / Non-Members \$125

Imaging Processes and Materials Neblette's Eighth Edition

John Sturge, Vivian Walworth, and Allan Shepp, editors, published by Van Nostrand Reinhold, 1989 (list price: \$225), 711 pp., ISBN: 0-442-28042-6, 5.5 lbs.

An overview of traditional and contemporary imaging, with information on the evaluation and utilization of images, extensive references to imaging literature, and detailed accounts of the principal methods of forming images, including electronic imaging, electrophotography, instant photography, polymer imaging, low amplification imaging systems, and thermally processed silver systems are included.

SPECIAL PRICE

was: Member: \$180 / Non-Member: \$200

NOW: Members: \$120 / Non-members: \$130

Handbook of Image Quality

Brian W. Keelan, Marcel Decker, Inc., 2002 (list price: \$250), 516 pp., ISBN: 0-8247-0770-2, 2 lbs.

This reference explains how to mathematically quantify and predict the pictorial quality distribution produced by a proposed imaging system under actual customer usage.

Member: \$200 / Non-Member: \$215

PHOTOGRAPHY, PHOTOFINISHING, AND FULFILLMENT

IS&T's Handbook of Photographic Science and Engineering, 2nd Edition

Charles Noel Proudfoot, editor, 1997, 768 pp., ISBN: 0-89208-198-8, 4 lbs. (1st edition edited by Woodlief Thomas, Jr.)

This is a reference book, not a textbook or an encyclopedia. As such readers can go to it for details of knowledge previously learned—numerical constants, formulas, definitions, and data—but not regularly used or customarily memorized. This version of includes more than 500 figures, 200 tables, and 1,250 references contributed from imaging science professionals and institutions throughout the world. Available in print or CD.

SPECIAL PRICE — Member / Non-Member: \$50

Selected Readings in Photoprocessing and The Environment

Austin Cooley, Editor, 1995, 446 pp., ISBN: 0-89208-183-X, 3lbs.

IS&T and CPAC, Inc. jointly designed this publication for professionals working on environmental problems associated with photographic processing compiling papers from eight relevant journals.

Member: \$35 / Non-Member: \$45

NOW: Member/Non-Member: \$15

Pioneers of Photography: Their Achievements in Science and Technology

Eugene Ostroff, editor, 1986, reprinted 2009, 285 pp., ISBN 0-89208-131-7, 3 lbs.

This unique collection of 26 authoritative essays by leading photographic historians, scientists, and inventors tracks the evolution of the medium through its landmark inventions and key technological developments of the past century and a half. The essays were selected from the proceedings of the three-day First International Congress: Pioneers of Photographic Science Technology, which was designed to provide a means for looking at the history of photography with fresh eyes and examining important forces that shaped the field and led to its present level of achievement and importance to the world. The papers cover more than a century of work in a broad range of topics, making this an invaluable historical reference.

Member: \$60 / Non-Member: \$70

Edwin H. Land's Essays

Mary McCann, Editor, 1989, 3 Volumes, 590 pp., ISBN: 0-89208-170-8, 6 lbs.

Edwin H. Land is known worldwide for his work in photography, but of equal importance are his writings on polarizers, color vision, business, and education. This collection of his papers is amazing for its scope, insight, and influence. A unique compilation of 76 essays, the two book, three volume set includes articles that appeared in 35 books or journals and 16 heretofore unpublished essays and lectures, as well as Land's testimony before the Senate Military Affairs Committee at the Joint Hearings on Science Bills in 1945. Of great interest to many, Volume I has the only published listing of all of 540 of Land's patents, 406 in Land's name alone.

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Nov. 8 – 12	CIC18: Eighteenth Color Imaging Conference San Antonio, TX

International Symposium on Technologies for Digital Photo Fulfillment

This conference addresses all aspects associated with generating consumer and professional photos—from capture devices such as camera phones, digital still cameras, and conventional color negative film to photographic image processing, sharing, archiving, and various modes and methods of output.

2009 International Symposium on Technologies for Digital Fulfillment CD + abstract book

2009, Las Vegas, Nevada; 9 pp. ISBN / ISSN: 0-89208-283-4, 1 lb.

2007 International Symposium on Technologies for Digital Fulfillment CD + abstract book

2007, Las Vegas, Nevada; 9 pp. ISBN / ISSN: 0-89208-269-0, 1 lb.

Member: \$70 / Non-Member: \$90

International Symposium on Silver Halide Technology

Held every four years, this meeting is a key international forum for primarily discussing the basic science and technology of silver halide photography.

2004 International Symposium on Silver Halide Imaging: At the Forefront of Silver Halide Imaging

2004, Ventura, CA, 220 pp.. ISBN: 0-89208-252-6, 3 lbs.

2000 International Symposium on Silver Halide Imaging: Recent Advances and Future Opportunities in Silver Halide Imaging

2000, St. Adele, Canada, 293 pp. ISBN: 0-89208-229-1, 3 lbs.

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Digital Photography (PICS) Proceedings

This conference focuses on image quality, psychophysics, multispectral imaging, and digital image processing as well as digital photography.

PICS 2003

Rochester, NY, 576 pp., ISBN: 0-89208-245-3, 3 lbs.

PICS 2001

2001, Montreal, Canada, 428 pp., ISBN: 0-89208-232-1, 3 lbs.

SPECIAL PRICE — Member and Non-Member: \$10

International Symposium on Photofinishing

This topic of this conference is the evolution of digital and hybrid imaging into the traditional photofinishing industry. It provides a forum for presentation of the latest technologies that affect how imaging services are provided to consumers and professional customers. Topics cover both imaging system components as well as systems integration issues

13th Int'l. Symposium on Photofinishing Technology

2004, Las Vegas, NV, 112 pp. ISBN: 0-89208-249-6, 1 lbs.

12th Int'l. Symposium on Photofinishing Technology

2002, Orlando, FL, 109 pp. ISBN: 0-89208-237-2, 1 lbs.

11th Int'l. Symposium on Photofinishing Technology

2000, Las Vegas, NV, 98 pp. ISBN: 0-89208-226-7, 1 lbs.

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International Congress on Imaging Science (ICIS)

Run under the auspices of the International Committee on Imaging Science and held every four years, this conference brings together world leaders from the field.

ICIS'06

2006, Rochester, New York, 702 pp., ISBN: 0-89208-260-7, 4 lbs.

ICIS'02, Tokyo

2002, Tokyo, Japan, published by ISJ & STSPJ, 718 pp., 5 lbs.

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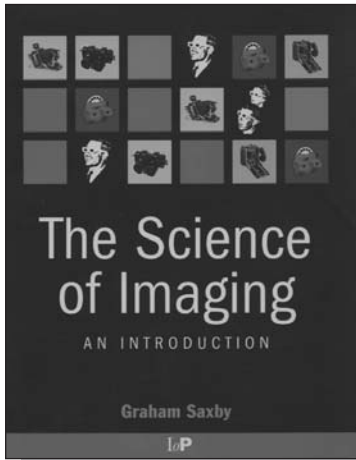
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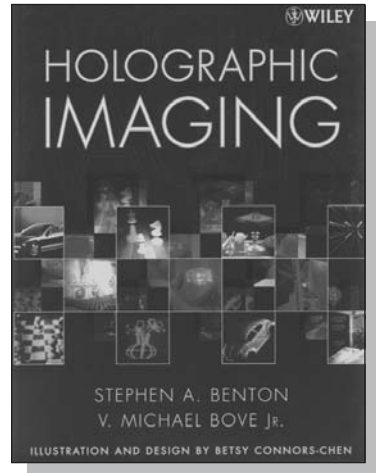
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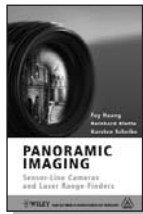
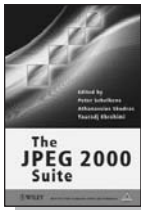
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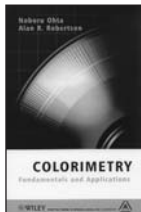
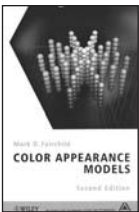
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