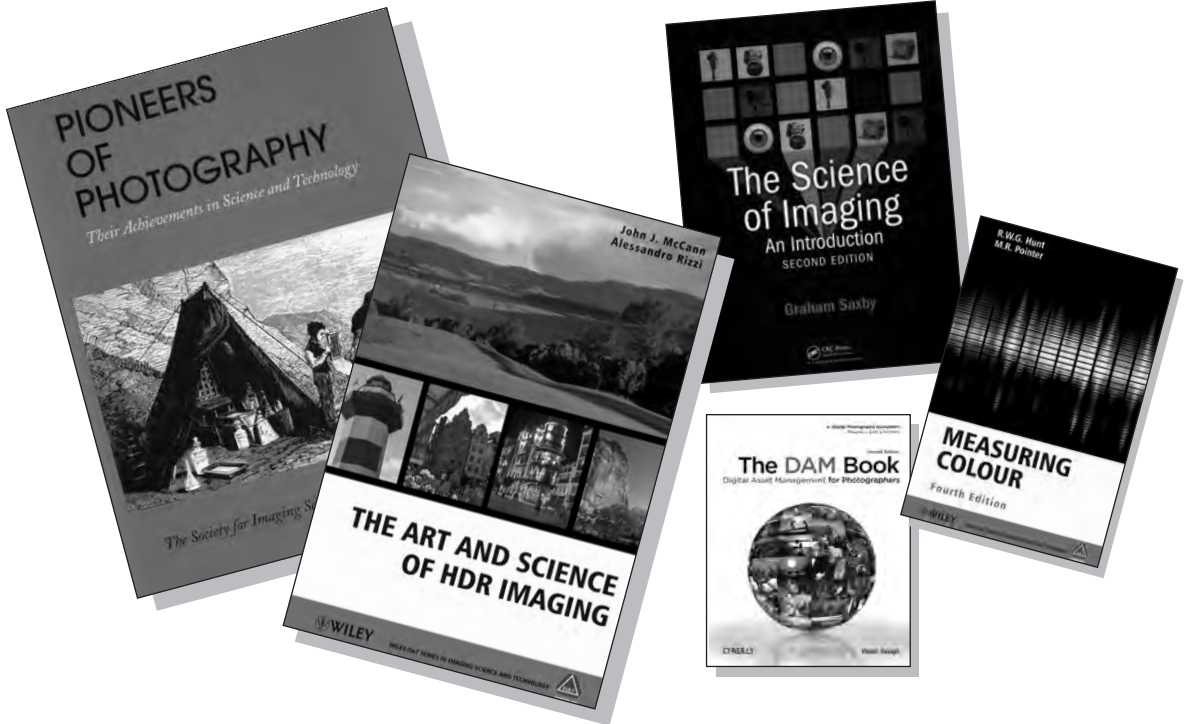


Society for Imaging Science and Technology



your source for imaging information

Publications Catalog Fall/Winter 2011-2012

Prices updated November 2011



IS&T/WILEY SERIES BOOKS ON COLOR*

Color Management Understanding & Using ICC Profiles

Phil Green, editor, published by John Wiley and Sons, Inc. 2010 (list price \$130), 314 pp., ISBN: 978-0-470-05825-1, 1.5 lbs.

A comprehensive guide to the implementation of the ICC (International Color Consortium) profile specification—widely used for maintaining color fidelity across multi-media imaging devices and software—this book draws together many of the White Papers produced by the ICC. In summary, it

- provides an overview of color management in applications and the role of ICC profiles in a color reproduction process
- presents user guidelines on color measurement procedures and discusses measurement issues for media such as optically-brightened papers and inkjet prints.
- offers comprehensive guidance on the latest version of the specification and the application of the perceptual rendering intent with its reference gamut.
- examines the construction and benefits of different types of ICC profiles, and sets out compliance test considerations, implementation notes and evaluation of profile quality.

Written for color and imaging scientists developing, implementing and using color management systems within a range of imaging devices and software, students will also find the book of use.

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

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 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

NEWEST TITLES in the IS&T/WILEY SERIES

Measuring Colour, 4th Edition

Robert W. G. Hunt & M. R. Pointer, published by John Wiley & Sons, Inc. 2011 (list price: \$110), 496 pages; ISBN 978-1-119-97537-3, 3 lbs.

Building upon the success of earlier editions, the book has been updated throughout, with new chapters on color rendering by light sources; colorimetry with digital cameras; factors affecting the appearance of colored objects, and details of new CIE color appearance models. This edition includes extensive practical advice on measurement procedures and the latest CIE recommendations. IT also covers the basic principles of color measurement; describes and explains how color is affected by lighting type, nature of the objects illuminated, and the properties—as well as the physiology and psychology, as relevant—of the observer. The book has many examples and a series of Appendices containing the numerical data needed for many colorimetric calculations.

SPECIAL PRICE until January 31, 2012:

Member / Non-Member: \$90 (includes shipping)

after January 31, 2012

Member: \$90 / Non-Member: \$95 (shipping not included)

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

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 per-

The Art and Science of HDR Imaging

John J. McCann & Alessandro Rizzi, published by John Wiley & Sons, Inc. 2011 (list price: \$135), 384 pages; ISBN 978-0-470-66622-7, 2.5 lbs.

This books presents a unique scientific HDR approach derived from artists' understanding of painting, emphasizing spatial information in electronic imaging. Human visual appearance and reproduction rendition of the HDR world requires spatial-image processing to overcome the veiling glare limits of optical imaging, in eyes and in cameras. Illustrated in full colour, the book uses techniques to study the HDR properties of entire scenes, and measures the range of light of scenes and the range that cameras capture. It also describes the limits of HDR scenes, camera images, and appearance; examines HDR algorithms used today; explains the advantages of algorithms that replicate human vision; offers a unique review of Retinex image processing algorithms; describes the considerable overlap of HDR and Color Constancy; and provides extensive data to test algorithms and models of vision on an accompanying website.

SPECIAL PRICE until January 31, 2012:

Member / Non-Member: \$99 (includes shipping)

after January 31, 2012

Member: \$100 / Non-Member: \$110 (shipping not included)

ceived 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: \$110 / Non-member: \$120

*** NOTE: MOST BOOKS IN THE IS&T/WILEY SERIES ARE ON SALE FOR \$90. See back page. IS&T/Wiley books continue on page 4.**

SPECIAL OFFER—BOOK + DVD

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
with DVD Member: \$169 / Non-Member: \$184

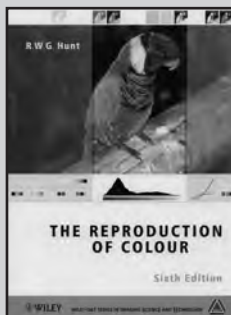
The Hunt Course: Basic Color Science and Imaging DVD

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

Colorimetry: Understanding the CIE System

János Schanda, published by John Wiley & Sons, Inc. 2007 (list price \$148), 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

Digital Color Imaging Handbook

Gaurav Sharma, published by CRC Press, 2003 (list price \$190), 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: \$160 / Non-Member: \$170

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.

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: \$45 / Non-Member: \$50

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

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 \$113), 950 pp., ISBN: 0-471-39918-3, 4 lbs.

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

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

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

Roy S. Berns, published by John Wiley & Sons, Inc., 2000 (list price \$188), 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: \$145 / Non-Member: \$155

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

Kurt Nassau, published by John Wiley & Sons, 2001 (list price \$184), 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

CONFERENCE PROCEEDINGS

Color in Graphics, Imaging, and Vision (CGIV)

Color science, vision, image filtering, image classification, image rendering, device technology, media, multispectral color science, and fuzzy logic are some of the topics covered.

CGIV 2010 abstract book with CD of complete technical papers, 2010, University of Eastern Finland, Finland, 34 pp., ISBN: 978-0-89208-291-9, 1 lb.

Member: \$160 / Non-Member: \$170

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

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

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

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

SPECIAL PRICE: \$50

Color and 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.

19th Color and Imaging Conference Proceedings and CD

2011, San Jose, California, 382 pp., ISBN: 978-0-89208-297-1, 2.5 lbs.; full-color hardcopy + CD

18th Color and Imaging Conference Proceedings and CD

2010, San Antonio, Texas, 394 pp., ISBN: 978-0-89208-294-0, 3.5 lbs.; full-color hardcopy + CD

Member: \$160 / Non-Member: \$175

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

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

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

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.

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.

SPECIAL PRICE: \$50

Other years available; visit www.imaging.org or call IS&T

9th International Symposium on Multispectral Colour Science

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

Topics include acquisition and reproduction, spectral reconstruction, spectral colour science, and spectral interaction.

SPECIAL PRICE: \$50

Join IS&T and purchase books at the

MEMBERSHIP PRICE!

In addition you'll get a subscription to either JIST or JEI (see page 14), and receive the bi-monthly IS&T Reporter newsletter as well as discount rates for conference/tutorial registration(s) and the products found in this catalog.

Membership Rates

US: \$95/ Non-US address: \$105

Full-time student: \$25

Holographic Imaging

Stephen A. Benton and Michael Bove, Jr., published by John Wiley & Sons, Inc. 2008 (list price \$112) 261 pp. ISBN: 978-0-470-06806-X, 2 lbs

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. It promotes a hands-on approach to making holograms and an understanding of why and how they work.

SPECIAL PRICE: \$80

Enhanced Visualization Making Space for 3-D Images

Barry G. Blundell, published by John Wiley & Sons 2007 (list price: \$125); ISBN: 978-0-471-78629-0, 2 lbs.

Building on a previous work (*Creative 3-D Display and Interaction Interfaces*)—but still may be read as a stand-alone volume—this book offers a trans-disciplinary approach, making the content accessible to audiences from both the sciences and humanities. The book is also highly-relevant to computer users who would like to learn more about new approaches to computer interaction, to those wishing to develop new forms of creative digital media, and to those within industry who are involved in the advancement of computers and computer related products.

Member: \$90 / Non-Member: \$95

The Science of Imaging: An Introduction, 2nd Edition

Graham Saxby: published by CRC Press, 2010 (list price: \$70), 352 pp., ISBN 9781439812860, 2.5 lbs.

Expanded to keep pace with the digital revolution, this edition of this highly-popular and critically-acclaimed work provides a comprehensive exploration of imaging science. Covering the fundamental laws of physics, as well as the cutting-edge techniques defining current and future directions in the field, this new edition includes a chapter on

astronomical imaging, major revisions in the areas of digital imaging and modern technology, and updated references with links to online resources. This book starts with the fundamentals of light and basic cameras, then move through television and holography to advanced scientific and medical imaging. Essential formulas are highlighted, complex mathematics are kept to a minimum, and there are copious illustration covering optics, imaging systems, materials, and image interpretation and creation in a manner that makes it easy to understand.

Member: \$60 / Non-Member: \$65

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 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: \$75 / Non-Member: \$85

Digital Image Processing: PIKS INSIDE, 4th Ed.

William K. Pratt, published by John Wiley & Sons, 2007 (list price \$177), 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

IS&T/WILEY SERIES

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)

Fourier Methods in Imaging

Roger L. Easton, Jr., published by John Wiley and Sons, Inc. 2010 (list price \$165), 954 pp., ISBN: 978-0-470-68983-7, 4 lbs.

This book introduces the mathematical tools for modeling linear imaging systems to predict the action of the system or for solving for the input. The chapters are grouped into five sections, the first introduces the imaging “tasks” (direct, inverse, and system analysis), the basic concepts of linear algebra for vectors and functions, including complex-valued vectors, and inner products of vectors and functions. The second section defines “special” functions, mathematical operations, and transformations that are useful for describing imaging systems. Among these are the Fourier transforms of 1-D and 2-D function, and the Hankel and Radon transforms. The third and fourth sections examine the discrete Fourier transform and the description of imaging systems as linear “filters,” including the inverse, matched, Wiener and Wiener-Helstrom filters. The final section examines applications of linear system models to optical imaging systems, including holography.

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

ON SALE: \$120—includes shipping, see back page

Fundamentals of Digital Imaging

H. J. Trussell and M. M. Vrhel, published by Cambridge University Press 2009 (list price: \$125); 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: \$110 / Non-Member: \$115

Handbook of Image Quality

Brian W. Keelan, Marcel Decker, Inc., 2002 (list price: \$268), 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: \$220 / Non-Member: \$230

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.

SPECIAL PRICE: \$70 (see back cover)

Diffraction, Fourier Optics, and Imaging

Okan K. Erosy, published by John Wiley & Sons Inc., 2006, (list price \$139), 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.

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

Digital Video and HDTV Algorithms and Interfaces

Charles Poynton, published by Morgan Kaufman, 2002 (list price \$85), 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: \$65 / Non-Member: \$70

High Dynamic Range Imaging: Acquisition, Display, and Image-Based Lighting, 2nd Edition

Eric Reinhard, Greg Ward, Sumanta Pattanaik, Paul Debevec, Wolfgang Heidrich, and Karol Myszkowski; published by Morgan Kaufmann Publishers, 2010 (list price \$90), 672 pp., ISBN: 978-0-12-374914-7, 4 lbs.

This book is the first to describe HDRI technology in its entirety. It covers a wide-range of topics, from capture devices to tone reproduction and image-based lighting. The techniques described enable you to produce images that have a dynamic range much closer to that found in the real world, leading to an unparalleled visual experience. As both an introduc-

tion to the field and an authoritative technical reference, it is essential to anyone working with images, whether in computer graphics, film, video, photography, or lighting design.

Member: \$77 / Non-Member: \$83

Multi-Camera Networks

Hamid Aghajan and Andrea Cavallaro, published by Academic Press 2009, (list price \$130), 624 pp., ISBN 978-0-12-374633-7, 3.5 lbs.

A definitive reference, this book provides clear guidance on the conceptual and implementation issues involved in the design and operation of multi-camera networks, as well as presents the state-of-the-art in hardware, algorithms, and system development. Broad in scope, it covers smart camera architectures, embedded processing, sensor fusion and middleware, calibration and topology, network-based detection and tracking, and applications in distributed and collaborative methods in camera networks.

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

Image Sensors and Signal Processing for Digital Still Cameras

Junichi Nakamura, published by CRC Press, 2005 (list price \$190), 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; discusses quality-related standards; and features a look to the future.

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

IMAGE PROCESSING / PHOTOGRAPHY

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 crucial to developing new camera-driven applications and commercial products in digital photography and covered in this book.

Member and Non-Member: \$90

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

Imaging Processes and Materials Neblette's Eighth Edition

John Sturge, Vivian Walworth, and Allan Shepp, editors, published by Van Nostrand Reinhold, 1989 (list price: \$250), 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.

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

CONFERENCE PROCEEDINGS

International Congress on Imaging Science (ICIS)

Held every four years, this conference brings together world leaders from the field.

ICIS'10 Beijing, China, 884 pp., ISBN: 978-0-89208-289-6, 7 lbs.

Member / Non-Member: \$220

ICIS'06 Rochester, New York, 702 pp., ISBN: 0-89208-260-7, 4 lbs.

ICIS'02, Tokyo, Japan, published by ISJ & STSPJ, 718 pp., 5 lbs.

SPECIAL PRICE \$40

Care and Identification of 19th-Century Photographic Prints

James M. Reilly, published by the Image Permanence Institute, 116 pp., ISBN: 978-0879853655, 3 lbs.

A fully illustrated book which is a comprehensive reference on all aspects of the care and identification of 19th-century photographic prints. Excellent for anyone who is a serious collector or has an interest in preserving old pictures.

SPECIAL PRICE \$60

The Digital Print

Martin C. Jürgens, published by Getty Conservation Institute, 2009 (list price \$60), 310 pp., ISBN: 978-0-89236-960-7, 3 lbs.

This invaluable resource demystifies the complex, rapidly-changing, and sometimes confusing world of digital print technologies. It describes the major digital printing processes used by photographers and artists over the past 40 years, explaining and illustrating materials and their deterioration, methods of identification, and options for acquiring and preserving digital prints. A removable poster provides a ready reference for identifying specific processes and materials. Conservators, curators, archivists, registrars, photographers, artists, and printing studios will find this comprehensive, one-of-a-kind volume very useful.

Member/Non-Member: \$60

The Manual of Photography

Elizabeth Allen and Sophie Triantaphillidou, published by Focal Press, 2011 (list price \$69.95) 584 pp.s, ISBN: 978-0-240-52037-7, 3.5 lbs.

The tenth edition is indispensable for anyone serious about photography. Professional photographers, lab technicians, researchers and students will gain insight into the underlying

ing scientific principles of photography and digital imaging. This comprehensive guide takes you from capture to output in both digital and film media, with sections on lens use, darkroom techniques, digital cameras and scanners, image editing techniques and processes, workflow, digital file formats and image archiving. First published in 1890, this iconic text has aided thousands of photographers in developing their own techniques and understanding of the medium. Now in full colour, the book retains its clear, reader-friendly style and is filled with images and illustrations demonstrating the key principles, allowing readers to fully understand the science behind the creation of great images.

Member: \$55 / Non-Member \$60

The DAM Book: Digital Asset Management for Photographers

Peter Krogh, published by O'Reilly, 2009 (list price \$49.99) 496 pp., ISBN: 978-0-596-52357-2, 2.5 lbs.

This bestselling guide presents a solid plan for managing your digital images efficiently and effectively. Anyone who shoots, scans, or stores digital photographs is practicing some form of digital asset management (DAM), but few people do it in a way that makes sense. In the new edition of this book, photographer and DAM expert Peter Krogh offers new tools and techniques that have emerged in recent years.

Member: \$37 / Non-Member: \$43

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 proceedings of the First International Congress: Pioneers of Photographic Science Technology, which was designed to look 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.

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

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.)

Reference book where 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 \$50

Edwin H. Land's Essays

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

This collection of Edwin H. Land's 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.

SPECIAL PRICE: \$45

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.

SPECIAL PRICE: \$15

DIGITAL PRINTING

Handbook of Imaging Materials: 2nd Edition

Arthur S. Diamond and David S. Weiss, published by Marcel Dekker, 2002 (list price \$220), 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: \$195 / Non-Member: \$205

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 \$175), 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

CONFERENCE PROCEEDINGS

NIP: International Conference on Digital Printing Technologies AND Digital Fabrication*

NIP is the premier technical meetings on digital and non-impact printing technologies. Digital Fabrication covers topics from two- and three-dimensional structures at physical scales ranging from nanometers to meters, to electronic circuits, MEMs and NEMs structures, architectural components, and even biologically-engineered structures.

NIP27 and Digital Fabrication 2011 (hardcopy + CD)

2011, Minneapolis, Minnesota, ISBN: 978-0-89208-296-4, 864 pp., 4.5 lbs.

NIP26 and Digital Fabrication 2010 (hardcopy + CD)

2010, Austin, TX, ISBN: 978-0-89208-293-3, 788 pp., 4 lbs.

NIP25 and Digital Fabrication 2009 (hardcopy + CD)

2010, Austin, TX, ISBN: 978-0-89208-293-3, 788 pp., 4 lbs.

Member: \$210 / Non-Member: \$225

NIP27 and Digital Fabrication 2011 (hardcopy only)

2011, Minneapolis, Minnesota, ISBN: 978-0-89208-296-4, 864 pp., 4.5 lbs.

NIP27 and Digital Fabrication 2011 CD + abstract book

2011, Minneapolis, Minnesota, ISBN: 978-0-89208-295-7, 74 pp., 1 lb.

NIP26 and Digital Fabrication 2010 (hardcopy only)

2010, Austin, TX, ISBN: 978-0-89208-293-3, 788 pp., 4 lbs.

NIP26 and Digital Fabrication 2010 CD + abstract book

2010, Austin, TX, ISBN: 978-0-89208-292-6, 74 pp., 1 lb.

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.

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

NIP22 and Digital Fabrication 2006 CD + abstract book

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

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.

SPECIAL PRICE: \$75

Beginning in 2007, the Digital Fabrication and NIP Proceedings were published as one volume.

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.

SPECIAL PRICE: \$50

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 2011

2011, Salt Lake City, UT, ISBN: 978-0-89208-294-0, 240 pp., 1.5 lbs.

Archiving 2010

2010, Den Haag, the Netherlands, ISBN: 978-0-89208-290-2, 212 pp., 1.5 lbs.

Member: \$125 / Non-Member: \$135

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

International Symposium on Technologies for Digital Photo Fulfillment

This conference addresses all aspects associated with generating consumer and professional photos—from capture to photographic image processing, sharing, archiving, and other 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

IS&T 2012 MEETINGS

- | | |
|-------------------|------------------------------------------------------------------------------------------------|
| Jan. 8-9 | Technologies in Digital Photo Fulfillment
Collocated with CES and PMA, Las Vegas, NV |
| Jan. 22-26 | IS&T/SPIE 24th Electronic Imaging Symposium
San Jose, CA |
| May 6-9 | Color in Graphics, Imaging, and Vision (CGIV)
Amsterdam, the Netherlands |
| June 12-15 | Archiving 2012
Copenhagen, Denmark |
| Sept. 9-13 | Digital Fabrication 2011 and NIP28
Quebec City, Quebec, Canada |
| Nov. 12-17 | CIC20: Color and Imaging Conference
Los Angeles, CA |

JOURNALS / RECENT PROGRESS

Journal of Imaging Science and Technology (JIST)

ISSN: 1062-3701

JIST is dedicated to the advancement of imaging science and related field knowledge. An intensive peer-review process insures the highest quality content covering a broad range of research, development, and applications. IS&T is proud to report that In a price comparison of optics periodicals, JIST consistently ranks as one of the most cost-effective publications, providing more information while costing less than other journals in the field.

JIST Library/Institution Rates

domestic and overseas online only: \$385

online corporate multisite license: \$1,165

hardcopy only: Domestic: \$295 / Overseas: \$325

online and hardcopy: Domestic: \$560 / Overseas: \$595

additional hardcopy add-on: Domestic \$165/ Overseas: \$200

Journal of Electronic Imaging (JEI)

ISSN: 1017-9909

Co-published quarterly by IS&T and SPIE, JEI was created in response to the need for a journal dedicated to technical problems, issues, and progress in the field of electronic imaging. Its scope covers the following research areas as they focus on applied or apply directly to electronic imaging: image acquisition, data storage, and data communication; display of image data; hard copy output; image visualization and processing; and applications.

JEI Library/Institution Rates:

domestic and overseas online only: \$395

online corporate multisite license: \$1185

online and hardcopy: Domestic: \$510 / Overseas: \$550

additional for hardcopy: Domestic: \$115 / Overseas: \$155

IS&T RECENT PROGRESS SERIES: Color and Printing

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

Recent Progress in Color Mgmt. and Communications

(Robert Buckley, ed., 1998, 270 pp. ISBN: 0-89208-210-0, 2 lbs.)

Recent Progress in Color Science (Karen Braun and Reiner Eschbach, eds., 1997, 434 pp., ISBN: 0-89208-202-X, 3 lbs.)

Recent Progress in Digital Halftoning II (Reiner Eschbach, ed., 1999, ISBN: 0-89208-214-3, 3 lbs.)

Recent Progress in Ink Jet Technologies II - CD ONLY

(Eric Hanson, ed., 1999, 614 pp., ISBN: 0-89208-220-8)

Recent Progress in Toner Technologies (George Marshall, ed., 1997, 456 pp., ISBN: 0-89208-203-8, 3 lbs.)

SPECIAL PRICE: \$25

PAPERS AVAILABLE ONLINE

IS&T maintains an online library of more than 16,000 papers from conference proceedings, journals, and recent progress books published by the Society since 1997. These papers are available for FREE for members or purchase by others, and for immediate download as PDFs at www.imaging.org.

Shipping Rates

IS&T is not in the shipping business, but we do need to cover costs, which can be high. Please calculate shipping/handling for your order based on the "ship to" address and total weight. Weights for individual books are found after the ISBN number in the listings.

	United States*	All Other Countries
	via UPS	
1 lb.	\$17.00	\$12.00
2 lb.	\$18.00	\$18.00
3 lb.	\$19.00	\$24.00
4 lb.	\$20.00	\$30.00
5 lb.	\$21.00	\$36.00
each +		
add'l lb	\$1.00/lb	\$6.00/lb

*Call for rates to Alaska and Hawaii



IS&T Publication Order Form

Prof. Dr. Mr. Ms. Other _____

Name _____ Telephone _____

Company _____ Fax _____

Street Address or PO Box _____

City/State/Zip or Postal Code _____

Country _____ Email _____

Books/Proceedings/CDs (provide book title and cost on lines provided)

Title: _____	\$ _____
Title: _____	\$ _____
Title: _____	\$ _____
Title: _____	\$ _____
Title: _____	\$ _____
Title: _____	\$ _____
Title: _____	\$ _____
Title: _____	\$ _____
Title: _____	\$ _____

(if applicable, refer to shipping/handling chart for current rates)

subtotal \$ _____
 shipping \$ _____
Grand Total \$ _____

Payment Method: Cash Check (Check # _____)

AMEX MC VISA Discover

Card#: _____ Exp. Date: _____

Name as it appears on card: _____

Authorization Signature: _____

Fax form to 703/642-9094 or mail to

IS&T ▲ 7003 Kilworth Lane ▲ Springfield, VA 22151

Need more information? Contact info@imaging.org; www.imaging.org; 703/642-9090

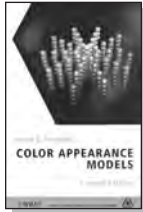
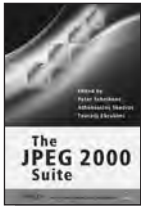


imaging.org

your source for imaging technology books

Special Offers

CHOOSE ANY ONE OF THESE IS&T/WILEY SERIES TITLES FOR \$90



The JPEG 2000 Suite
Schelkens, Skodras, and Ebrahimi (eds.),
see description page 8 — *list price \$160*

Color Constancy
Marc Ebner, see description page 3 — *list price \$150*

Color Gamut Mapping
Jan Morovic, see description page 2 — *list price \$130*

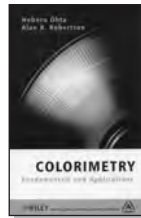


Digital Color Management: Encoding Solutions
Giorgianni and Madden, see description page 2 — *list price \$140*

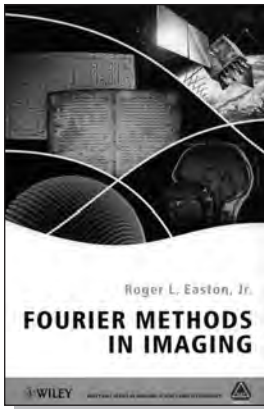
Colorimetry: Fundamentals and Applications
Ohta and Robertson, see description page 2 — *list price \$130*

Color Appearance Models, 2nd Edition
Mark D. Fairchild, see description page 2 — *list price \$150*

**Color Management:
Understanding and Using ICC Profiles**
Phil Green, ed., see description page 2 — *list price \$130*

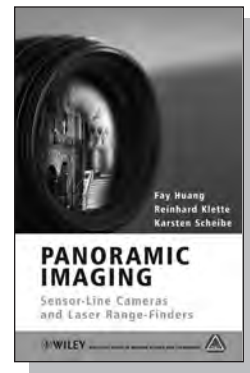


ADDITIONAL SPECIAL PRICE OFFERS



Fourier Methods in Imaging
\$120,
includes shipping anywhere in the world
see book details, page 8

**Panoramic Imaging:
Sensor-Line Cameras and
Laser Range Finders**
\$70
see book details, page 8



*To get these prices you must call or fax your order to imaging.org.
Offer guaranteed through April 1, 2012.*