

has demonstrated greater efficacy and less toxicity. Clinical vignettes with images now accompany all site-specific chapters. The chapter on prostate brachytherapy has been expanded to include other indications in the genitourinary system, and there are two entirely new chapters—one chronicling the history of brachytherapy and the other detailing the emergence of skin brachytherapy. Dr. Devlin, a leading world authority on brachytherapy, has assembled other leaders in the field from world-renowned radiation oncology programs to enrich this comprehensive text. From new data on medical outcomes to the costs and benefits of running a brachytherapy practice, *Brachytherapy, Second Edition* is the first and last word on what still is considered the most conformal radiotherapy technique in the field. In the new edition: Over 300 images accompany the chapter text and clinical vignettes Essential tables and spreadsheets enhance the chapter on running a brachytherapy practice Ten years of technological advancements are assimilated and reviewed in each site-specific chapter Includes access to the fully-searchable downloadable ebook From the Foreword: "As education is essential to advance awareness of and proficiency in the full spectrum of brachytherapy applications, the appearance of the second edition of this highly regarded text is both a timely and most welcome event. The distinguished list of contributors to this work reads like a veritable "Who's Who" of international brachytherapy expertise making this an indispensable resource for students and practitioners of this complex and challenging modality. A particularly welcome feature is the clinical vignettes at the close of every chapter that bring seemingly remote concepts to life in real world practical applications. With the second edition of *Brachytherapy: Applications and Techniques*, Dr. Devlin and colleagues give us a text that instills a profound appreciation for the critical

value of this essential modality. This book makes it clear that brachytherapy not only works, it is an irreplaceable component of contemporary cancer care. --David Wazer, MD, FACRO, FACR, FASTRO, Professor and Chairman, Departments of Radiation Oncology, Alpert Medical School of Brown University, Providence, RI

Revised edition of: Advanced high dynamic range imaging / Francesco Banterle ... [et. al.]. 2011.

Public water systems deliver high-quality water to the public. They also present a vast array of problems, from pollution monitoring and control to the fundamentals of hydraulics and pipe fitting.

Mastering the Nikon D610 by Darrell Young provides a wealth of experience-based information and insights for owners of the new D610 camera. Darrell is determined to help the user navigate past the confusion that often comes with complex and powerful professional camera equipment. This book explores the features and capabilities of the camera in a way that far surpasses the user's manual. It guides readers through the camera features with step-by-step setting adjustments; color illustrations; and detailed how, when, and why explanations for each option. Every button, dial, switch, and menu configuration setting is explored in a user-friendly manner, with suggestions for setup according to various shooting styles. Darrell's friendly and informative writing style allows readers to easily follow directions while feeling as if a friend dropped in to share his knowledge. The learning experience for new D610 users goes beyond just the camera itself and covers basic photography technique.

" This is a highly practical resource about the specific technical aspects of delivering radiation treatment. Pocket-sized and well organized for ease of use, the book is designed to lead radiation oncology trainees and

residents step by step through the basics of radiotherapy planning and delivery for all major malignancies. This new, evidence-based edition retains the valued, practical features of the first edition while incorporating recent advances in the field. Chapters are the result of a joint collaboration between residents and staff radiation oncologists in the Department of Radiation Oncology at the Cleveland Clinic. Sections are organized by body site or system whichever is best suited to consistency in presenting planning principles. Also included are such specialized topics as palliative therapy and pediatrics. More than 200 images help to clarify the steps of radiotherapy planning and delivery. Written by and for residents on the "front lines" of their training, it is also a valuable resource for training other professionals in the field such as technologists, nurses, dosimetrists, and others as well as a quick reference for practicing physicians.

Key Features of Handbook of Treatment Planning in Radiation Oncology, Second Edition:

- Provides a consistent, step-by-step approach to effective radiotherapy planning and delivery
- Presents content in consistent, concise, bulleted format for easy review
- Includes over 200 color images
- Explains specific technical aspects of delivering radiation treatment
- Addresses such specialized topics as palliative therapy and pediatrics

New to the Second Edition: Stereotactic body radiation therapy (SBRT) for prostate and GI tumors
Intraoperative therapy for GI tumors
Volumetric modulated arc therapy (VMAT) for brain tumors
New coverage of MRI based planning in simulation "

With the encroachment of the Internet into nearly all

aspects of work and life, it seems as though information is everywhere. However, there is information and then there is correct, appropriate, and timely information. While we might love being able to turn to Wikipedia® for encyclopedia-like information or search Google® for the thousands of links on a topic, engineers need the best information, information that is evaluated, up-to-date, and complete. Accurate, vetted information is necessary when building new skyscrapers or developing new prosthetics for returning military veterans. While the award-winning first edition of *Using the Engineering Literature* used a roadmap analogy, we now need a three-dimensional analysis reflecting the complex and dynamic nature of research in the information age. *Using the Engineering Literature, Second Edition* provides a guide to the wide range of resources available in all fields of engineering. This second edition has been thoroughly revised and features new sections on nanotechnology as well as green engineering. The information age has greatly impacted the way engineers find information. Engineers have an effect, directly and indirectly, on almost all aspects of our lives, and it is vital that they find the right information at the right time to create better products and processes. Comprehensive and up to date, with expert chapter authors, this book fills a gap in the literature, providing critical information in a user-friendly format.

From Plato to the New Testament, banquets held an important place in creating community, sharing values, and connecting with the divine.

Practical HDRI, 2nd Edition, by pro photographer Jack

Howard, leads you into the the new frontier of High Dynamic Range Imaging, a multi-shot technique to digitally capture, store, and edit the full luminosity range of a scene in ways not possible in a single captured image. Fully updated for 2010, the 2nd Edition covers the HDR process from image capture through post-processing for web and print. Practical HDR1, 2nd Edition is richly illustrated with step-by-step tutorials for creating professional results using the leading HDR software titles, including the latest versions of Adobe Photoshop, Photomatix Pro, FDRTools, Dynamic Photo HDR, and HDR PhotoStudio. Howard instructs from experience as a photographer and a writer, with an emphasis on making the HDR process work for you. Topics include: Step-by-step tutorialsBasic and advanced workflows and workaroundsWeb and print optimizationFile management, keywordingAdvice on cameras, gear and software HDR imaging can be challenging and frustrating for the uninitiated, as it involves both field and computer expertise. However, Jack Howard explains this complex subject matter in a practical way that will not intimidate the beginner, nor bore the experienced photographer. The emphasis is on the creative process and how to make it work for you-rather than the science behind it. This handbook informs the reader about how much progress we, the human race, have made in enhancing the quality of life on this planet. Many skeptics focus on how the quality of life has deteriorated over the course of human history, particularly given World War II and its aftermath. This handbook provides a positive perspective on the history of well-being. Quality of life, as

documented by scientists worldwide, has significantly improved. Nevertheless, one sees more improvements in well-being in some regions of the world than in others. Why? This handbook documents the progress of well-being in the various world regions as well as the differences in those regions. The broad questions that the handbook addresses include: What does well-being mean? How do different philosophical and religious traditions interpret the concept of well-being within their own context? Has well-being remained the same over different historical epochs and for different regions and subregions of the world? In which areas of human development have we been most successful in advancing individual and collective well-being? In which sectors has the attainment of well-being proven most difficult? How does well-being differ within and between different populations groups that, for a variety of socially created reasons, have been the most disadvantaged (e.g., children, the aged, women, the poor, racial, ethnic, and sexual minorities)?

While the medical literature abounds with information on gynecological cancer, this book winnows that volume of data into one manageable reference. In a practical and easy-to-use layout, the Handbook of Gynecologic Oncology, Second Edition provides a comprehensive and concise guide to the diagnosis and management of gynecologic cancer, including breast and colon cancers. Edited and written by the faculty of the gynecologic oncology programs of MD Anderson Cancer Center and Memorial Sloan-Kettering Cancer Center, this second edition reviews and updates various chapters. It includes

a discussion of the new developments in management and a new chapter on germ cell and sex cord-stromal tumors. The text is aimed at fellows and residents in gynecologic oncology, radiation oncology and medical oncology as well as residents in obstetrics and gynecologic surgery and medicine. It will also be a handy guide for medical students and practicing physicians. Practical Radiotherapy introduces the reader to the physics and equipment that is central to radiotherapy practice. This Second Edition has been extensively revised and is fully up to date with key developments in equipment and practice, namely:

stereotactic radiosurgery, CT SIM and SIM CT, portal imaging, MLC and HDR brachytherapy. Practical Radiotherapy is written by an experienced team of practitioners and teachers who present a difficult and dry subject in a reader-friendly manner, covering all of the required core information.

A Timely Exploration of Multiuser Detection in Wireless Networks During the past decade, the design and development of current and emerging wireless systems have motivated many important advances in multiuser detection. This book fills an important need by providing a comprehensive overview of crucial recent developments that have occurred in this active research area. Each chapter is contributed by noted experts and is meant to serve as a self-contained treatment of the topic. Coverage includes: Linear and decision feedback methods Iterative multiuser detection and decoding Multiuser detection in the presence of channel impairments Performance analysis with random

signatures and channels Joint detection methods for MIMO channels Interference avoidance methods at the transmitter Transmitter precoding methods for the MIMO downlink This book is an ideal entry point for exploring ongoing research in multiuser detection and for learning about the field's existing unsolved problems and issues. It is a valuable resource for researchers, engineers, and graduate students who are involved in the area of digital communications.

Crime Scene Photography, Second Edition, offers an introduction to the basic concepts of forensic picture-taking. The forensic photographer, or more specifically the crime scene photographer, must know how to create an acceptable image that is capable of withstanding challenges in court. The photographic theory and principles have to be well grounded in the physics of optics, the how-to recommendations have to work, and the end result must be admissible in court. Based on the author's years of experience in the field at both the Arlington County and Baltimore County Police Departments, this book blends the practical functions of crime scene processing with theories of photography to guide the student in acquiring the skills, knowledge, and ability to render reliable evidence. This text has been carefully constructed for ease of use and effectiveness in training and was class-tested by the author at George Washington University. Beginning August 2008, this book will be required reading by the IAI Crime Scene Certification Board for all levels of certification (through August 2011). Over 600 full color photographs Two new chapters on 'The History of Forensic Photography,' and

'Digital Image Processing of Evidentiary Photography' An essential reference for crime scene photography, including topics such as Composition, the Inverse Square Law, Court Cases affecting photography, Digital Image Processing, and Photogrammetry Required reading by the Crime Scene Certification Board of the International Association for Identification (IAI) for all levels of certification

The 2010 Haiti and Chili earthquakes, the 2010 BP oil spill in the Gulf of Mexico, and the 2011 Fukushima earthquake and tsunami in Japan are but a few examples of recent catastrophic events that continue to reveal how social structure and roles produce extensive human suffering and differential impacts on individuals and communities. These events bring social vulnerability to the forefront in considering how disasters unfold, clearly revealing that disasters are not created from the physical event alone. Equally important, people—even those considered vulnerable—respond in innovative and resilient ways that unveil the strength of human ingenuity and spirit. It is not a foregone conclusion that a hazard event, even a large one, will result in catastrophic loss. This updated second edition of *Social Vulnerability to Disasters* focuses on the social construction of disasters, demonstrating how the characteristics of an event are not the only reason that tragedies unfurl. By carefully examining and documenting social vulnerabilities throughout the disaster management cycle, the book remains essential to emergency management professionals, the independent volunteer sector, homeland security, and related social science fields,

including public policy, sociology, geography, political science, urban and regional planning, and public health. The new edition is fully updated, more international in scope, and incorporates significant recent disaster events. It also includes new case studies to illustrate important concepts. By understanding the nuances of social vulnerability and how these vulnerabilities compound one another, we can take steps to reduce the danger to at-risk populations and strengthen community resilience overall. Features and Highlights from the Second Edition: Contains contributions from leading scholars, professionals, and academics, who draw on their areas of expertise to examine vulnerable populations Incorporates disaster case studies to illustrate concepts, relevant and seminal literature, and the most recent data available In addition to highlighting the U.S. context, integrates a global approach and includes numerous international case studies Highlights recent policy changes and current disaster management approaches Infuses the concept of community resilience and building capacity throughout the text Includes new chapters that incorporate additional perspectives on social vulnerability Instructor's guide, PowerPoint® slides, and test bank available with qualifying course adoption

This handbook provides an in-depth exploration of the entire journey of postgraduate research in the social and behavioural sciences, from enrolment to its culmination in the form of a thesis, dissertation or portfolio, and beyond. It is written in an accessible and example-rich style, offering practical and concrete advice in virtually all

areas. It also includes references to additional resources and websites, and each chapter features key recommendations for improving the postgraduate research experience. The book addresses not only research-related aspects (e.g. supervisors; selecting your guiding assumptions; contextualising, framing and configuring research; reviewing literature; sampling; writing proposals; ethics and academic integrity; selecting a data gathering strategy; surviving your thesis/dissertation/portfolio examination; and publishing), but also questions concerning how to integrate, manage, and balance the research journey in the context of the postgraduate student's broader life-world (e.g. skill development and supervisor relations; effective time and project management; a healthy work–life balance; maintaining motivation; and dealing with criticism). The book adopts an explicitly pluralist perspective on postgraduate research, moving beyond mixed methods thinking, and offers concrete examples from postgraduate students' real-world experiences.

Perfect for radiation oncologists, medical physicists, and residents in both fields, *Practical Radiation Oncology Physics* provides a concise and practical summary of the current practice standards in therapeutic medical physics. A companion to the fourth edition of *Clinical Radiation Oncology*, by Drs. Leonard Gunderson and Joel Tepper, this indispensable guide helps you ensure a current, state-of-the-art clinical practice. Covers key topics such as relative and in-vivo dosimetry, imaging and clinical imaging, stereotactic body radiation therapy, and brachytherapy. Describes technical aspects a.

Cancer is a widespread type of diseases that each year affects millions of people. It is mainly treated by chemotherapy, surgery or radiation therapy, or a combination of them. One modality of radiation therapy is high dose-rate brachytherapy, used in treatment of for example prostate cancer and gynecologic cancer. Brachytherapy is an invasive treatment in which catheters (hollow needles) or applicators are used to place the highly active radiation source close to or within a tumour. The treatment planning problem, which can be modelled as a mathematical optimization problem, is the topic of this thesis. The treatment planning includes decisions on how many catheters to use and where to place them as well as the dwell times for the radiation source. There are multiple aims with the treatment and these are primarily to give the tumour a radiation dose that is sufficiently high and to give the surrounding healthy tissue and organs (organs at risk) a dose that is sufficiently low. Because these aims are in conflict, modelling the treatment planning gives optimization problems which essentially are multiobjective. To evaluate treatment plans, a concept called dosimetric indices is commonly used and they constitute an essential part of the clinical treatment guidelines. For the tumour, the portion of the volume that receives at least a specified dose is of interest while for an organ at risk it is rather the portion of the volume that receives at most a specified dose. The dosimetric indices are derived from the dose-volume histogram, which for each dose level shows the corresponding dosimetric index. Dose-volume histograms are commonly used to visualise the three-

dimensional dose distribution. The research focus of this thesis is mathematical modelling of the treatment planning and properties of optimization models explicitly including dosimetric indices, which the clinical treatment guidelines are based on. Modelling dosimetric indices explicitly yields mixed integer programs which are computationally demanding to solve. The computing time of the treatment planning is of clinical relevance as the planning is typically conducted while the patient is under anaesthesia. Research topics in this thesis include both studying properties of models, extending and improving models, and developing new optimization models to be able to take more aspects into account in the treatment planning. There are several advantages of using mathematical optimization for treatment planning in comparison to manual planning. First, the treatment planning phase can be shortened compared to the time consuming manual planning. Secondly, also the quality of treatment plans can be improved by using optimization models and algorithms, for example by considering more of the clinically relevant aspects. Finally, with the use of optimization algorithms the requirements of experience and skill level for the planners are lower. This thesis summary contains a literature review over optimization models for treatment planning, including the catheter placement problem. How optimization models consider the multiobjective nature of the treatment planning problem is also discussed.

In the last decade, new displays have been developed at an ever-increasing pace: bulky cathode ray tubes have been replaced by flat panels and mobile phones, tablets,

and navigation systems have proliferated. Seeing this explosion raises tantalizing questions about the future evolution of visual displays: Will printed displays be sold by the square yard and glued to the wall? Will disposable displays, powered by printed batteries and with built-in storage chips, talk to us from cereal boxes? Will we begin wearing display glasses that simulate any kind or number of virtual displays we would ever need? Will chip implants directly interface to our brains, eliminating the need for any displays at all? These and other questions are explored in *Displays: Fundamentals & Applications*, which describes existing and emerging display technology. The book begins by presenting the basics of wave optics, geometric optics, light modulation, visual perception, and display measures, along with the principles of holography. It then describes the technology and techniques behind projection displays, projector-camera systems, stereoscopic and autostereoscopic displays, computer-generated holography, and near-eye displays. In addition, the authors discuss how real-time computer graphics and computer vision enable the visualization of graphical 2D and 3D content. The text is complemented by more than 400 rich illustrations, which give readers a clear understanding of existing and emerging display technology.

Photoshop CS6 is truly amazing, but it can also be overwhelming if you're just getting started. This book makes learning Photoshop a breeze by explaining things in a friendly, conversational style—without technical jargon. After a thorough introduction to the program, you'll delve deep into Photoshop's secrets with expert

tips and practical advice you can use every day. The important stuff you need to know: Learn your way around. Get a guided tour of Photoshop's beautiful new workspace. Unlock the magic. Discover the most practical ways to use layers, channels, masks, paths, and other tools. Fine-tune your images. Learn techniques for cropping, retouching, and combining photos. Play with color. Drain, change, and add color; and create gorgeous black-and-whites and duotones. Be artistic. Create original illustrations and paintings, use text and filters effectively, and edit video clips. Share your work. Produce great-looking images for print and the Web. Work smarter and faster. Automate common chores and install plug-ins for complex tasks.

Instant access to the latest geotechnical engineering data Fully updated to include the 2012 International Building Code (IBC), *Geotechnical Engineer's Portable Handbook, Second Edition*, features a wealth of on-the-job geotechnical and construction related information in a convenient, quick-reference format. This practical resource is filled with essential data, formulas, and guidelines you can access right away. Detailed tables, charts, graphs, and illustrations are included throughout the book for ease of use in the field. Coverage includes:

- Field exploration
- Laboratory testing
- Soil and rock classification
- Phase relationships
- Effective stress and stress distribution
- Shear strength
- Permeability and seepage
- Settlement analyses
- Bearing capacity analyses
- Pavement and pipeline design
- Expansive soil
- Slope stability
- Geotechnical earthquake engineering
- Erosion analyses
- Retaining walls
- Deterioration
- Foundations

Grading and other site improvement methods
Groundwater and percolation tests Excavation,
underpinning, and field lead tests Geosynthetics
Instrumentation International Building Code regulations
for soils International Building Code regulations for
foundations

Providing comprehensive coverage of the biology of
gynecologic cancer, the therapeutic modalities available,
and the diagnosis and treatment of site-specific
malignancies, this edition has 30 percent new
contributing authors and new material. A companion
Web site offers a fully searchable text.

"This book is about one of the major unresolved issues
in the field of color science, the efforts that have been
made toward its resolution, and the techniques that can
be used to address current technological problems"--
This book provides practical guidance on the use of
brachytherapy. Each chapter gives the reader a solid
background in the physics and dosimetry of the
technique, followed by practical information on its use in
common disease sites.

The thoroughly updated fifth edition of this landmark
work has been extensively revised to better represent
the rapidly changing field of radiation oncology and to
provide an understanding of the many aspects of
radiation oncology. This edition places greater emphasis
on use of radiation treatment in palliative and supportive
care as well as therapy.

Bronchoscopy and Central Airway Disorders provides
the guidance you need to plan and implement the most
effective bronchoscopy procedure for every patient.

Through specifically-designed case scenarios with correlating review questions and videos, this practical respiratory medicine reference leads you through the decision-making process and execution of these sometimes complex procedures, as well as the optimal long-term management of your patients. Master various bronchoscopic approaches and techniques necessary to treat a variety of malignancies that may occur in the trachea or lungs. Consider the rationale and weigh the consequences of each approach. Case resolutions at the end of each chapter --with commentary and alternative approaches from 36 key experts in interventional bronchoscopy -- illustrate the decision-making process from patient evaluation through long-term management. Reinforce learning by correlating key concepts and practice through study questions related to each clinical scenario. See exactly how to proceed with high-quality videos online that capture crucial teaching moments and provide a walkthrough of sometimes complex procedures including the placement of airway stents via bronchoscopy for a variety of diseases and complications, such as airway collapse due to COPD. Systematically think through diagnostic and interventional (therapeutic) bronchoscopic procedures using Dr. Colt's unique "Four Box" approach: Initial Evaluation; Procedural Techniques and Results; Procedural Strategies; and Long-term Management Plan. Access the full text online at www.expertconsult.com, along with image and video libraries, review questions, and more!

We live in an age of global capitalism and terror. In a

climate of consumption and fear the unknown Other is regarded as a threat to our safety, a client to assist, or a competitor to be overcome in the struggle for scarce resources. And yet, the Christian Scriptures explicitly summon us to welcome strangers, to care for the widow and the orphan, and to build relationships with those distant from us. But how, in this world of hostility and commodification, do we practice hospitality? In *The Gift of the Other*, Andrew Shepherd engages deeply with the influential thought of French thinkers Emmanuel Levinas and Jacques Derrida, and argues that a true vision of hospitality is ultimately found not in postmodern philosophies but in the Christian narrative. The book offers a compelling Trinitarian account of the God of hospitality--a God of communion who "makes room" for otherness, who overcomes the hostility of the world through Jesus' life, death, and resurrection, and who through the work of the Spirit is forming a new community: the Church--a people of welcome.

HDR is both a technical solution to the limitations of digital camera sensors, and a creative tool that can give any image much more impact - but it is not without its pitfalls, and it's essential to understand these if you want to take full advantage of this innovative technique. The second edition of David Nightingale's successful *Practical HDR* is completely updated with the latest techniques and technologies in HDR. *Practical HDR* provides you with an abundance of step-by-step examples that will quickly make you an expert on the theory and practice of shooting and processing HDR images, allowing you to get the best possible results

every time. As well as practical advice on shooting and processing, the book also contains a global showcase of inspirational HDR images - you will quickly find that HDR offers unparalleled opportunities for indulging your creative instincts, from photo-realistic to hyper-realism.

Practical HdrA Complete Guide to Creating High Dynamic Range Images with Your Digital SLRlex Press
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