Table 34: CRC Series on Medical Physics and Biomedical Engineering

The CRC Series on Medical Physics and Biomedical Engineering (CRC Press, Taylor and Francis) has been created in 1985 in association with IOMP and IFMBE. Several voluntarily contributing Editors of the Series have been involved in the soliciting, assessment and moving to publication of textbooks for the profession.

Below are the CRC Series Editors and titles of the textbooks published (on average it takes 2-5 years from the assessment and accepting of the book proposal to the publishing).

The CRC Series Editors in the period 1997-2009 were: R F Mould (UK), C G Orton (USA), J A E Spaan (The Netherlands) and John G. Webster (USA)

The CRC Series Editors in the period 2009-2021 were: Kwan-Hoong Ng (Malaysia), Russell Ritenour (USA), Slavik Tabakov (UK) and John G. Webster (who retired in 2017).

In 2017 the Editors created a new CRC sub-Series (Focus Series) to deal with quick publications of new methods. Its Editors are Tae Suk Suh (S.Korea) and Magdalena Stoeva (Bulgaria).

From 2021 the CRC Series is based on new CRC IOMP agreement with new editorial structure.

TEXTBOOKS published in the CRC Series:

-Fundamentals of Radiation Dosimetry, Second Edition, 1985, J.R Greening

-Prevention of Pressure Sores: Engineering and Clinical Aspects, 1991, J.G Webster

-The Physics of Three Dimensional Radiation Therapy: Conformal Radiotherapy, Radiosurgery and Treatment Planning, 1993, S. Webb

- Rehabilitation Engineering Applied to Mobility and Manipulation, 1995, Rory A Cooper

-The Physics of Conformal Radiotherapy: Advances in Technology, 1997, S. Webb

-Linear Accelerators for Radiation Therapy, Second Edition, 1997, David Greene, P.C Williams

-Design of Pulse Oximeters, 1997, Editor: John G. Webster

-Medical Physics and Biomedical Engineering, 1998, B.H Brown, R.H Smallwood, D.C. Barber, P.V Lawford, D.R Hose

-Ultrasound in Medicine, 1998, Editors: Francis A. Duck, A.C Baker, H.C Starritt

-Achieving Quality in Brachytherapy, 1999, B.R. Thomadsen

-Intensity-Modulated Radiation Therapy, 2001, S. Webb

-Minimally Invasive Medical Technology, 2001, John Webster

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-Therapeutic Applications of Monte Carlo Calculations in Nuclear Medicine, 2002, Editors: H. Zaidi, G Sgouros

-The Physical Measurement of Bone, 2003, Editors: C.M. Langton, C.F. Njeh

- Contemporary IMRT: Developing Physics and Clinical Implementation, 2004, S. Webb

-Electrical Impedance Tomography: Methods, History and Applications, 2004, Editor: David S. Holder

-The Physics of Modern Brachytherapy for Oncology, 2006, Dimos Baltas, Loukas Sakelliou, Nikolaos Zamboglou

-An Introduction to Rehabilitation Engineering, 2006, Editors: Rory A Cooper, Hisaichi Ohnabe, Douglas A. Hobson

- Biomolecular Action of Ionizing Radiation, 2007, Shirley Lehnert

-A Practical Approach to Medical Image Processing, 2007, Elizabeth Berry

-An Introduction to Radiation Protection in Medicine, 2008, Editors: Jamie V. Trapp, Tomas Kron

-Intelligent and Adaptive Systems in Medicine, 2008, Editors: Olivier C. L. Haas, Keith J. Burnham

-Fundamentals of MRI: An Interactive Learning Approach, 2008, Elizabeth Berry, Andrew J. Bulpitt

-Handbook of Optical Sensing of Glucose in Biological Fluids and Tissues, 2008, Editor: Valery V. Tuchin

-Handbook of Anatomical Models for Radiation Dosimetry, 2009, Editors: Xie George Xu, Keith F. Eckerman

-Handbook of Photonics for Biomedical Science, 2010, Editor: Valery V. Tuchin

-Nuclear Medicine Physics, 2010, Editors: Joao Jose De Lima

-Physics for Diagnostic Radiology, Third Edition, 2011, Philip Palin Dendy, Brian Heaton

-Practical Biomedical Signal Analysis Using MATLAB® , 2011, Katarzyn J. Blinowska, Jaroslaw Zygierewicz

-Stem Cell Labeling for Delivery and Tracking Using Noninvasive Imaging, 2011, Editors: Dara L. Kraitchman, Joseph C. Wu

-Physiology, Biophysics, and Biomedical Engineering, 2012, Editor: Andrew W Wood

-Correction Techniques in Emission Tomography, 2012, Editors: Mohammad Dawood, Xiaoyi Jiang, Klaus Schäfers

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-Webb's Physics of Medical Imaging, Second Edition, 2012, Editor: M A Flower

-Vibrational Spectroscopy for Tissue Analysis, 2012, Ihtesham ur Rehman, Zanyar Movasaghi, Shazza Rehman

-Monte Carlo Calculations in Nuclear Medicine, Second Edition: Applications in Diagnostic Imaging, 2012, Editors: Michael Ljungberg, Sven-Erik Strand, Michael A. King

-Quantifying Morphology and Physiology of the Human Body Using MRI, 2013, Editor: L. Tugan Muftuler

-Targeted Muscle Reinnervation: A Neural Interface for Artificial Limbs, 2013, Editors: Todd A. Kuiken, Aimee E. Schultz Feuser, Ann K. Barlow

-Medical Equipment Management, 2013, Keith Willson, Keith Ison, Slavik Tabakov

-Diagnostic Endoscopy, 2013, Editor: Haishan Zeng

-The Physiological Measurement Handbook, 2014, Editor: John G. Webster

-Radiosensitizers and Radiochemotherapy in the Treatment of Cancer, 2014, Shirley Lehnert

-Statistical Computing in Nuclear Imaging, 2014, Arkadiusz Sitek

-Graphics Processing Unit-Based High Performance Computing in Radiation Therapy, 2015, Editors: Xun Jia, Steve B. Jiang

-Radiation Protection in Medical Imaging and Radiation Oncology, 2015, Editors: Richard J. Vetter, Magdalena S. Stoeva

-The Practice of Internal Dosimetry in Nuclear Medicine, 2016, Michael G. Stabin

-Fundamental Mathematics and Physics of Medical Imaging, 2016, Jack Lancaster, Bruce Hasegawa

-Gamma Cameras for Interventional and Intraoperative Imaging, 2016, Editors: Alan C. Perkins, John E. Lees

-Environmental Radioactivity and Emergency Preparedness, 2016, Mats Isaksson, Christopher L. Raaf

-Emerging Technologies in Brachytherapy, 2017, Editors: William Y. Song, Kari Tanderup, Bradley Pieters

-A Brief Survey of Quantitative EEG, 2017, Kaushik Majumdar

-Advanced MR Neuroimaging: From Theory to Clinical Practice, 2017, Ioannis Tsougos

-Handbook of X-ray Imaging: Physics and Technology, 2018, Editor: Paolo Russo

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-Quantitative MRI of the Brain: Principles of Physical Measurement, Second edition, 2018, Editor: Mara Cercignani, Nicholas G. Dowell, Paul S. Tofts

- A Guide to Outcome Modelling In Radiotherapy and Oncology: Listening to the Data, 2018, Editor: Issam El Naqa

- Problems and Solutions in Medical Physics: Diagnostic Imaging Physics, 2018, Kwan Hoong Ng, Jeannie Hsiu Ding Wong, Geoffrey D. Clarke

- Radiotherapy and Clinical Radiobiology of Head and Neck Cancer, 2018, Loredana G. Marcu, Iuliana Toma-Dasu, Alexandru Dasu, Claes Mercke

-Advances in Particle Therapy: A Multidisciplinary Approach, 2018, Editors: Manjit Dosanjh, Jacques Bernier

- Advanced and Emerging Technologies in Radiation Oncology Physics, 2018, Editors: Siyong Kim, John W. Wong

- Clinical Radiotherapy Physics with MATLAB: A Problem-Solving Approach, 2018, Pavel Dvorak

- Mixed and Augmented Reality in Medicine, 2018, Editors: Terry M. Peters, Cristian A. Linte, Ziv Yaniv, Jacqueline Williams

- Proton Therapy Physics, Second Edition, 2018, Editor: Harald Paganetti

-Ethics for Radiation Protection in Medicine, 2018, Jim Malone, Friedo Zölzer, Gaston Meskens, Christina Skourou

- Introduction to Megavoltage X-Ray Dose Computation Algorithms, 2019, Editor: Jerry Battista

- Problems and Solutions in Medical Physics: Nuclear Medicine Physics, 2019, Kwan Hoong Ng, Chai Hong Yeong, Alan Christopher Perkins

- The Physics of CT Dosimetry: CTDI and Beyond, 2019, Robert L. Dixon

- Advanced Radiation Protection Dosimetry, 2019, Editors: Shaheen Dewji, Nolan E. Hertel

- On-Treatment Verification Imaging: A Study Guide for IGRT, 2019, Mike Kirby, Kerrie-Anne Calder

-Modelling Radiotherapy Side Effects: Practical Applications for Planning Optimisation, 2019, Tiziana Rancati, Claudio Fiorino

-Ultrasound in Medicine, 2019, Francis A. Duck, A.C Baker, H.C Starritt

-Intelligent and Adaptive Systems in Medicine, 2019, Olivier C. L. Haas, Keith J. Burnham

-Achieving Quality in Brachytherapy, 2019, B.R. Thomadsen

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-The Physical Measurement of Bone, 2020, C.M. Langton, C.F. Njeh

-Minimally Invasive Medical Technology (II Ed.),, 2020, John G. Webster

- e-Learning in Medical Physics and Engineering: Building Educational Modules with Moodle, 2020, Vassilka Tabakova

-Contemporary IMRT: Developing Physics and Clinical Implementation (II Ed.), 2020, S Webb

-A Practical Approach to Medical Image Processing (II Ed.), 2020, Elizabeth Berry

-Auto-Segmentation for Radiation Oncology: State of the Art, 2021, Jinzhong Yang, Gregory C. Sharp, Mark J. Gooding

-Clinical Nuclear Medicine Physics with MATLAB®: A Problem-Solving Approach, 2021, Maria Lyra Georgosopoulou

-Practical Biomedical Signal Analysis Using MATLAB® (II Ed.), 2021, Katarzyna J. Blinowska, Jarosław Żygierewicz

-Electrical Impedance Tomography: Methods, History and Applications (II Ed.), 2021, Andy Adler, David Holder

-Introduction to Medical Physics, 2022, Ed: Stephen Keevil, Renato Padovani, Slavik Tabakov, Tony Greener, Cornelius Lewis

-Handbook of Nuclear Medicine and Molecular Imaging for Physicists: Instrumentation and Imaging Procedures, Volume I, 2022, Michael Ljungberg

-Handbook of Nuclear Medicine and Molecular Imaging for Physicists: Modelling, Dosimetry and Radiation Protection, Volume II, 2022, Michael Ljungberg

-Handbook of Nuclear Medicine and Molecular Imaging for Physicists: Radiopharmaceuticals and Clinical Applications, Volume III, Michael Ljungberg

-Calculating X-ray Tube Spectra: Analytical and Monte Carlo Approaches, 2022, Gavin Poludniowski, Artur Omar, Pedro Andreo