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Titolo	PET/MRI in Oncology : Current Clinical Applications // edited by Andrei Iagaru, Thomas Hope, Patrick Veit-Haibach
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ISBN	3-319-68517-1
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (IX, 433 p. 95 illus., 71 illus. in color.)
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Soggetti	Nuclear medicine Oncology Nuclear Medicine
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Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- PET technology designs for PET/MRI -- MR hardware for PET/MR -- MR pulse sequences for PET/MR -- MR contrast agents -- PET/MRI: attenuation correction -- PET/MRI: motion correction -- PET/MRI: reliability/reproducibility of SUV measurements -- PET/MRI: Safety considerations -- Functional/Heterogeneity MR techniques in Oncology -- Workflow and protocols considerations -- Whole body applications -- Neuro: Brain Oncology -- Neuro: Head and Neck Oncology -- Lung nodules and lung cancer -- Breast cancer -- Liver -- Tom -- Neuroendocrine tumors -- Oesophageal, Gastric, and Pancreatic Cancer -- Rectal cancer -- Gynecologic applications -- Prostate cancer -- Melanoma and multiple myeloma -- MSK oncology -- Lymphoma -- Pediatric oncology -- Future directions.
Sommario/riassunto	In this book, experts from premier institutions across the world with extensive experience in the field clearly and succinctly describe the current and anticipated uses of PET/MRI in oncology. The book also includes detailed presentations of the MRI and PET technologies as they apply to the combined PET/MRI scanners. The applications of PET/MRI in a wide range of oncological settings are well documented, highlighting characteristic findings, advantages of this dual-modality technique, and pitfalls. Whole-body PET/MRI applications and pediatric oncology are discussed separately. In addition, information is provided

on PET technology designs and MR hardware for PET/MRI, MR pulse sequences and contrast agents, attenuation and motion correction, the reliability of standardized uptake value measurements, and safety considerations. The balanced presentation of clinical topics and technical aspects will ensure that the book is of wide appeal. It will serve as a reference for specialists in nuclear medicine and radiology and oncologists and will also be of interest for residents in these fields and technologists.
