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| Descrizione fisica | 1 online resource (166 p.) |
| Collana | Diagnostic Imaging, , 2731-4685 |
| Disciplina | 616.99481 |
| Soggetti | Nervous system - Radiography Oncology Neurology Neuroradiology |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references at the end of each chapters. |
| Nota di contenuto | Introduction -- Part I: Technologies & Methods -- DWI, PWI, MR Spectroscopy -- Part II: Limits of conventional MR imaging -- Part III: Differential diagnosis of solid intracerebral brain tumors -- Part IV: Differential diagnosis of necrotic brain tumors -- Part V: Monitoring brain tumor therapy -- Subject Index. |
| Sommario/riassunto | This book describes the basics, the challenges and the limitations of state of the art brain tumor imaging and examines in detail its impact on diagnosis and treatment monitoring. It is intended for radiologists, neurologists, neurosurgeons, oncologists and other scientists in the biomedical field with an interest in neuro-oncology. The book opens with an introduction to the clinically relevant physical principles of brain imaging. Since MR methodology plays a crucial role in brain imaging, the fundamental aspects of MR spectroscopy, MR perfusion and diffusion-weighted MR methods are described, focusing on the specific demands of brain tumor imaging. The potential and limits of conventional MR imaging and new imaging methodology are carefully addressed. In the main part of the book, the most important imaging criteria for the differential diagnosis of solid and necrotic brain tumors are delineated and illustrated in examples. Specific issues relevant to all MR modalities used for this purpose are thoroughly discussed. A |

closing section is devoted to the use of MR methods for the monitoring of brain tumor therapy.
