1. Record Nr. UNINA9910457188003321

Titolo	Adaptive motion compensation in radiotherapy / / edited by Martin J. Murphy
Pubbl/distr/stampa	Boca Raton, Fla. : , : CRC Press, , 2012
ISBN	0-429-19348-3 1-280-12176-9 9786613525628 1-4398-2194-1
Descrizione fisica	1 online resource (163 p.)
Collana	Imaging in medical diagnosis and therapy
Altri autori (Persone)	MurphyMartin J
Disciplina	615.8/42
Soggetti	Image-guided radiation therapy Radiotherapy - Data processing Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	A Taylor & Francis book.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; Contents; Series Preface; Preface; About the Editor; List of Contributors; Introduction; 1. Real-Time Tumor Localization; 2. Theoretical Aspects of Target Detection and Tracking; 3. Respiratory Gating; 4. The CyberKnife® Image-Guided Radiosurgery System; 5. Fundamentals of Tracking with a Linac Multileaf Collimator; 6. Couch-Based Target Alignment; 7. Robotic LINAC Tracking Based on Correlation and Prediction; 8. Treatment Planning for Motion Adaptation in Radiation Therapy; 9. Treatment Planning for Motion Management via DMLC Tracking 10. Real-Time Motion Adaptation in Tomotherapy® Using a Binary MLC11. Combination of a LINAC with 1.5 T MRI for Real-Time Image Guided Radiotherapy; 12. The ViewRayTM System; 13. Fault Detection in Image-Based Tracking
Sommario/riassunto	Preface External-beam radiotherapy has long been vexed by the simple fact that patients can (and do) move during the delivery of radiation. The most elegant and forward-looking solution to this reality is to actively adapt the radiation delivery process to the patient's natural movements. Recent advances in imaging and beam delivery

	technologies have now made this solution a practical reality. The purpose of this book is to present to researchers and clinical practitioners in radiation therapy an overview of the current and prospective state of the art in motion-adaptive radiation therapy. It presents technical reviews of each of the contributing elements of a motion-adaptive system (including target detection and tracking, beam adaptation, and patient realignment), discusses treatment planning issues that arise when the patient and internal target are mobile, describes several integrated motion-adaptive systems that are in clinical use or at advanced stages of development, and concludes with a review of the system control functions that must be an essential part of any therapy device that operates in a near-autonomous manner with limited human interaction. From these chapters, the reader will hopefully gain not only an understanding of the technical aspects and capabilities of motion adaptation but also practical clinical insights into planning and carrying out various types of motion-adaptive radiotherapy treatment--Provided by publisher.

2.

Record Nr.	UNISA996655155103316
Autore	Guillemin Amedee <1826-1893>
Titolo	Cosmografia
Pubbl/distr/stampa	Salt Lake City, UT : , : Project Gutenberg
Descrizione fisica	1 online resource : multiple file formats
Lingua di pubblicazione	Spagnolo
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Reading ease score: 47.0 (College-level). Difficult to read. Release date is 2007-03-29
Sommario/riassunto	"Cosmografia" by Amedee Guillemin is a scientific publication written in the late 19th century. The work examines the nature, structure, and movements of celestial bodies, including the Earth, Moon, and stars,

providing insights into the foundational principles of cosmography. It serves both as an educational resource on astronomical phenomena and a study of how these celestial aspects interact with our understanding of the world. The opening of the book introduces cosmography as the study of various celestial bodies and their movements. It describes the diurnal movement of the heavens, noting the apparent motions of the sun, moon, and stars as observed from Earth. The text highlights the significance of perceiving the Earth as a celestial body in motion, detailing aspects such as the fixed positions of stars, the concept of planets, and the nature of day and night. The author emphasizes that our understanding of these movements leads to the recognition of the Earth's spherical nature and its place within the universe, setting a foundation for the topics that will be further explored throughout the publication. (This is an automatically generated summary.)