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Descrizione fisica	1 online resource (XXVII, 667 p. 303 illus., 289 illus. in color.)
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Nota di contenuto	1. History of Radiation Biology -- 2.Basic Concepts of Radiation Biology -- 3. Molecular Radiation Biology -- 4. Mechanistic, Modelling and Dosimetric Radiation Biology -- 5. Clinical Radiobiology for Radiation Oncology -- 6. Radiobiology of Combining Radiotherapy with other Cancer Treatment Modalities -- 7. Individual Radiation Sensitivity and Biomarkers -- 8. Radiobiology of Accidental, Public and Occupational Exposures -- 9. Environmental Radiobiology -- 10. Space Radiobiology -- 11.Radioprotectors, Radiomitigators and Radiosensitizers -- 12. Ethical, Legal, Social and Epistemological Considerations of Radiation Exposure.
Sommario/riassunto	This open access textbook focuses on the various aspects of radiobiology. The goal of radiobiological research is to better understand the effects of radiation exposure at the cellular and molecular levels in order to determine the impact on health. This book offers a unique perspective, by covering not only radiation biology but

also radiation physics, radiation oncology, radiotherapy, radiochemistry, radiopharmacy, nuclear medicine, space radiation biology & physics, environmental and human radiation protection, nuclear emergency planning, molecular biology and bioinformatics, as well as the ethical, legal and social considerations related to radiobiology. This range of disciplines contributes to making radiobiology a broad and rather complex topic. This textbook is intended to provide a solid foundation to those interested in the basics and practice of radiobiological science. It is a learning resource, meeting the needs of students, scientists and medical staff with an interestin this rapidly evolving discipline, as well as a teaching tool, with accompanying teaching material to help educators.