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Nota di contenuto	Ionizing Radiation and Radiation Protection -- Interaction of Ionizing Radiation with Matter -- Radiation Environment in Nuclear Fuel Cycle Facilities -- Radiation Environment in Medical Facilities -- Occupational and Patient Doses in Medical Facilities -- Radiation Environment in Industrial and Research Facilities -- Radiation Environment in Particle Accelerator Facilities -- Detectors and Reader Systems for External Dose Monitoring -- Monitoring of External Gamma and Beta Exposures -- Monitoring of External Neutron Exposures -- Space Radiation Dosimetry -- Retrospective Dosimetry -- Biological Retrospective Dosimetry -- Introduction to Internal Dosimetry -- Biokientics of Radionuclides.
Sommario/riassunto	The handbook aims to provide a comprehensive resource for understanding ionizing radiation dosimetry, catering to experts, policymakers, and interested readers. The content of the handbook is focused on two two main aspects of dose measurements: external dosimetry and internal dosimetry. The section on external dosimetry covers fundamental principles and discusses monitoring techniques

across various environments, such as nuclear, industrial, research, and medical facilities. It also covers advanced topics like Bayesian inference and retrospective dosimetry. The internal dosimetry section explores radionuclide biokinetics, simulation techniques, dose evaluation, and monitoring methods. Specific scenarios, such as radon inhalation and off-normal conditions, are addressed, highlighting the importance of precision and intervention. The handbook serves as a comprehensive resource for students, academicians, scientists, engineers, and policymakers interested in seeking an in-depth knowledge of radiation dose measurements and its multi-faceted aspects in protecting human health and the environment.