

1. Record Nr.	UNINA9910317832803321
Autore	Ishaq Ahmad
Titolo	Accelerator Physics : Radiation Safety and Applications / / edited by Ishaq Ahmad and Malek Maaza
Pubbl/distr/stampa	IntechOpen, 2018 Rijeka, Croatia : , : IntechOpen, , 2018
ISBN	953-51-4043-4 953-51-3836-7
Descrizione fisica	1 online resource (208 pages) : illustrations some color
Disciplina	539.73
Soggetti	Physics Particle acceleration Radiation - Safety measures
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Sommario/riassunto	Scientists are continuously improving the accelerator and light source technologies to observe the secret of matter as well as the origin of nature which create new opportunities for accelerator physics research. This book provides a glance view on phase space dynamics of electron beam, motion of relativistic electrons in three-dimensional ideal undulator magnetic field, numerical simulation of electron multi-beam linear accelerator EVT, nuclear safety design of high energy accelerator facilities, and radiation safety aspects of operation of electron linear accelerators. The determination of the structure of biomolecules is presently among the best examples of the application of synchrotron radiation. This book also covers synchrotron-based X-ray diffraction study of mammalian connective tissues and related disease. Furthermore, an overview of the versatile applications of ion beam and synchrotron radiation techniques in hair elemental profiling in biomedical studies is also incorporated in this book.