

1. Record Nr.	UNINA9910433228803321
Autore	Otto Thomas
Titolo	Safety for Particle Accelerators // by Thomas Otto
Pubbl/distr/stampa	Springer Nature, 2021 Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-57031-2
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XI, 148 p. 59 illus., 42 illus. in color.)
Collana	Particle Acceleration and Detection, , 1611-1052
Disciplina	539.73
Soggetti	Particle acceleration Physical measurements Measurement Quality control Reliability Industrial safety Low temperature physics Low temperatures Particle Acceleration and Detection, Beam Physics Measurement Science and Instrumentation Quality Control, Reliability, Safety and Risk Low Temperature Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Introduction to Occupational Safety -- Chapter 2. Risks and Hazards of Particle Accelerator Technologies -- Chapter 3. Beam Hazards and Ionising Radiation -- Chapter 4. Industrial Safety at Particle Accelerators -- Chapter 5. Safety Organisation at Particle Accelerators.
Sommario/riassunto	The use of non-standard technologies such as superconductivity, cryogenics and radiofrequency pose challenges for the safe operation of accelerator facilities that cannot be addressed using only best practice from occupational safety in conventional industry. This book introduces readers to different occupational safety issues at accelerator

facilities and is directed to managers, scientists, technical personnel and students working at current or future accelerator facilities. While the focus is on occupational safety – how to protect the people working at these facilities – the book also touches on “machine safety” – how to prevent accelerators from doing structural damage to themselves. This open access book offers a first introduction to safety at accelerator facilities. Presenting an overview of the safety-related aspects of the specific technologies employed in particle accelerators, it highlights the potential hazards at such facilities and current prevention and protection measures. It closes with a review of safety management and organization at accelerator facilities. .
