Record Nr. UNINA9910451304703321 Accelerator physics, technology, and applications [[electronic resource] **Titolo** 1: selected lectures of OCPA International Accelerator School 2002. Singapore / / editors, Alexander Wu Chao, Herbert O. Moser, Zhentang Pubbl/distr/stampa River Edge, N.J., : World Scientific, c2004 **ISBN** 1-281-89883-X 9786611898830 981-270-280-6 Descrizione fisica 1 online resource (639 p.) Altri autori (Persone) ChaoAlex MoserHerbert O ZhaoZhentang Disciplina 539.73 Soggetti Particle accelerators Beam dynamics Synchrotron radiation Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia 3rd International Accelerator School held under the auspices of the Note generali Overseas Chinese Physics Association (OCPA). Includes bibliographical references. Nota di bibliografia Nota di contenuto Preface; CONTENTS; Particle Accelerators: An Introduction Zhang Chuang; A Guided Survey of Synchrotron Radiation Sources H. O. Moser: Transverse Beam Dynamics: Linear Optics Q. Qin: Transverse Beam Dynamics: Closed Orbit Correction and Injection Chin-Cheng Kuo; Transverse Beam Dynamics: Dynamic Aperture Q. Qin; Longitudinal Beam Dynamics - Energy Oscillation In An Electron Storage

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Sommario/riassunto

Originally invented for generating the first artificial nuclear reactions, particle accelerators have undergone, during the past 80 years, a fascinating development that is an impressive example of the inventiveness and perseverance of scientists and engineers. Since the early 1980's, accelerator science and technology has been booming. Today, accelerators are the prime tool for high energy physics to probe the structure of matter to an unknown depth. They are also, as synchrotron radiation sources, the most versatile tool for characterizing materials and processes and for producing micro- and