Record Nr. UNINA9910502686303321 Autore Seryi Andrei Titolo Unifying physics of accelerators, lasers and plasma / / Andrei Seryi Pubbl/distr/stampa Taylor & Francis, 2016 Boca Raton:,: CRC Press,, [2016] ©2016 **ISBN** 0-429-07596-0 1-4822-4059-9 Edizione [1st ed.] Descrizione fisica 1 online resource (284 p.) Disciplina 539.7/3 Soggetti Particle accelerators Lasers Plasma (Ionized gases) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references. Nota di contenuto Front Cover; Dedication; Contents In Brief; Contents; List Of Figures; List Of Tables; Foreword; Preface; Author; Chapter 1 Basics Of Accelerators And Of the Art Of Inventiveness; Chapter 2 Transverse Dynamics: Chapter 3 Synchrotron Radiation: Chapter 4 Synergies Between Accelerators, Lasers And Plasma; Chapter 5 Conventional Acceleration; Chapter 6 Plasma Acceleration; Chapter 7 Light Sources; Chapter 8 Free Electron Lasers; Chapter 9 Proton And Ion Laser Plasma Acceleration; Chapter 10 Advanced Beam Manipulation, Cooling, Damping And Stability Chapter 11 Inventions And Innovations In ScienceFinal Words: Bibliography: Back Cover Sommario/riassunto Unifying Physics of Accelerators, Lasers and Plasma introduces the physics of accelerators, lasers and plasma in tandem with the industrial methodology of inventiveness, a technique that teaches that similar problems and solutions appear again and again in seemingly dissimilar

disciplines. This unique approach builds bridges and enhances connections between the three aforementioned areas of physics that are essential for developing the next generation of accelerators. Boasting more than 200 illustrations, this highly visual text:Employs

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