

1. Record Nr.	UNINA9910144748403321
Autore	Talman Richard
Titolo	Accelerator x-ray sources // Richard Talman
Pubbl/distr/stampa	Weinheim, [Germany] : , : Wiley-VCH Verlag GmbH & Co. KGaA, , 2006 ©2006
ISBN	1-280-85462-6 9786610854622 3-527-61030-8 3-527-61029-4
Descrizione fisica	1 online resource (496 p.)
Disciplina	539.73 621.361
Soggetti	X-rays Electron accelerators Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Accelerator X-Ray Sources; Contents; Preface; 1 Beams of Electrons or Photons; 1.1 Preview; 1.2 Coordinate Definitions; 1.3 One-dimensional Transverse Propagation Equations; 1.4 Transfer Matrices for Simple Elements; 1.4.1 Drift Space; 1.4.2 Thin Lens; 1.4.3 Thick Lens; 1.4.4 Erect Quadrupole Lens; 1.5 Elliptical (in Phase Space) Beams; 1.6 Beam Envelope E(s); 1.7 Gaussian Beams: their Variances and Covariances; 1.8 Pseudoharmonic Trajectory Description; 1.9 Transfer Matrix Parametrization; 1.10 Reconciliation of Beam and Lattice Parameters; 1.10.1 Beam Evolution Through a Drift Section 1.10.2 Beam Evolution Through a Thin LensReferences; 2 Beams Treated as Waves; 2.1 Preview; 2.2 Scalar Wave Equation; 2.3 The Short Wavelength, Geometric Optics Limit; 2.3.1 Determination of Rays from Wavefronts; 2.3.2 The Ray Equation in Geometric Optics; 2.3.3 Obtaining Phase Information from Intensity Measurement; 2.4 Wave Description of Gaussian Beams; 2.4.1 Gaussian Beam in a Focusing Medium; 2.4.2 Spatial Dependence of a Wave Near a Free Space Focus;

2.4.3 The ABCD Law; 2.4.4 Optics Using Mirrors; 2.4.5 Wave Particle Duality for Electrons; 2.5 Synchrotron Radiation: Waves or Particles? 2.6 X-ray Holography and Phase Contrast and Lens-free ImagingReferences; 3 Synchrotron Radiation From Accelerator Magnets; 3.1 Capsule History of Synchrotron Light Sources; 3.2 Generalities; 3.3 Potentials and Fields; 3.4 Relations Between Observation Time and Retarded Time; 3.5 Evaluation of Electric and Magnetic Fields; 3.5.1 Radial Field Approximation; 3.6 Total Power Radiated and its Angular Distribution; 3.7 Spectral Power Density of the Radiation; 3.7.1 Estimate of Frequency Spectrum from Pulse Duration; 3.7.2 Radial Approximation; 3.7.3 Accurate Formula for Spectral Power Density 3.8 Radiation from Multiple Charges3.9 The Terminology of "Intensity" Measures; 3.10 Photon Beam Features "Inherited from" the Electron Beam; 3.11 Intensity Estimates for Bending Magnet beams; References; 4 Simple Storage Rings; 4.1 Preview; 4.2 The Uniform Field Ring; 4.3 Horizontal Stability; 4.4 Vertical Stability; 4.5 Simultaneous Horizontal and Vertical Stability; 4.6 Dispersion; 4.7 Momentum Compaction; 4.8 Chromaticity; 4.9 Strong Focusing; 5 The Influence of Synchrotron Radiation on a Storage Ring; 5.1 Preview; 5.2 Statistical Properties of Synchrotron Radiation 5.2.1 Total Energy Radiated5.2.2 The Distribution of Photon Energies; "Regularized Treatment"; 5.2.3 Randomness of the Radiation; 5.3 The Damping Rate Sum Rule: Robinson's Theorem; 5.3.1 Vertical Damping; 5.3.2 Longitudinal Damping; 5.3.3 Horizontal Damping and Partition Numbers; 5.4 Equilibrium between Damping and Fluctuation.; 5.5 Horizontal Equilibrium and Beam Width; 5.6 Longitudinal Bunch Distributions; 5.6.1 Energy Spread; 5.6.2 Bunch Length; 5.7 "Thermodynamics" of Wiggler-dominated Storage Rings; 5.7.1 Emittance of Pure Wiggler Lattice; 5.7.2 Thermodynamic Analogy; References 6 Elementary Theory Of Linacs

Sommario/riassunto

This first book to cover in-depth the generation of x-rays in particle accelerators focuses on electron beams produced by means of the novel Energy Recovery Linac (ERL) technology. The resulting highly brilliant x-rays are at the centre of this monograph, which continues where other books on the market stop. Written primarily for general, high energy and radiation physicists, the systematic treatment adopted by the work makes it equally suitable as an advanced textbook for young researchers.

2. Record Nr.	UNINA9910170984603321
Titolo	Communities in cyberspace // edited by Marc A. Smith and Peter Kollock
Pubbl/distr/stampa	London ; ; New York, : Routledge, 1999
ISBN	1-134-65411-1 1-134-65412-X 0-203-26313-8 1-280-11051-1 0-203-19495-0
Descrizione fisica	ix, 323 p. : ill
Altri autori (Persone)	SmithMarc A. <1965-> KollockPeter
Disciplina	303.48/33
Soggetti	Computer networks - Social aspects Internet - Social aspects Interpersonal relations Social problems Social control Technology and civilization
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	part Part one Introduction -- chapter 1 Communities in cyberspace -- part Part two Identity -- chapter 2 Identity and deception in the virtual community / Judith S. Donath -- chapter 3 Reading race online -- chapter 4 Writing in the body -- part Part three Social order and control -- chapter 5 Hierarchy and power -- chapter 6 Problems of conflict management in virtual communities / Anna DuVal Smith -- part Part four Community structure and dynamics -- chapter 7 Virtual communities as communities -- chapter 8 Invisible crowds in cyberspace -- chapter 9 The economies of online cooperation -- part Part five Collective action -- chapter 10 The promise and the peril of social action in cyberspace -- chapter 11 Electronic homesteading on the rural frontier -- chapter 12 Cyberspace and disadvantaged

communities.

Sommario/riassunto

This wide-ranging introductory text looks at the virtual community of cyberspace and analyses its relationship to real communities lived out in today's societies. Issues such as race, gender, power, economics and ethics in cyberspace are grouped under four main sections and discussed by leading experts: * identity * social order and control * community structure and dynamics * collective action. This topical new book displays how the idea of community is being challenged and rewritten by the increasing power and range of cyberspace. As new societies and relationships are formed in this virtual landscape, we now have to consider the potential consequences this may have on our own community and societies. Clearly and concisely written with a wide range of international examples, this edited volume is an essential introduction to the sociology of the internet. It will appeal to students and professionals, and to those concerned about the changing relationships between information technology and a society which is fast becoming divided between those on-line and those not.
