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Nota di contenuto	Contents; 1 Synchrotron radiation and electromagnetic waves; 2 Electromagnetic radiation is produced by electrons; 3 Electromagnetic radiation-observed and imagined; 4 Radiation from moving electrons; 5 Synchrotron radiation from dipole magnets; 6 The spectral distribution of synchrotron radiation; 7 Photon spectral distribution integrated over vertical angles; 8 Introduction to electron storage rings; 9 Synchrotron radiation from electron storage rings; 10 Behaviour of the electron beam in a synchrotron radiation storage ring. The concept of phase space 11 Behaviour of the electron beam in a synchrotron radiation storage ring. Betatron oscillations 12 Behaviour of the electron beam in a synchrotron radiation storage ring. Energy oscillations; 13 Insertion devices-wigglers; 14 Insertion devices-undulators; 15 Recent developments and future prospects; Appendix 1. Vector algebra; Index
Sommario/riassunto	Synchrotron radiation is the most important new source of electromagnetic radiation and has drastically transformed the study of

the properties of materials. This book presents the properties of synchrotron radiation in a clear and self-contained way and explains the advanced techniques which are required for its production. - ;This book introduces in a thorough and self-contained way the production of electromagnetic radiation by high energy electron storage rings. This radiation, which is called synchrotron radiation, has become a research tool of wide application. Physicists, chemists, biologi
