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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	The Classical Bosonic String -- The Quantized Bosonic String -- Introduction to Conformal Field Theory -- Parametrization Ghosts and BRST Quantization -- String Perturbation Theory and One-Loop Amplitudes -- The Classical Fermionic String -- The Quantized Fermionic String -- Superstrings -- Toroidal Compactifications – 10-Dimensional Heterotic String -- Conformal Field Theory II: Lattices and Kac-Moody Algebras -- Conformal Field Theory III: Superconformal Field Theory -- Covariant Vertex Operators, BRST and Covariant Lattices -- String Compactifications -- CFTs for Type II and Heterotic String Vacua -- String Scattering Amplitudes and Low Energy Effective Field Theory -- Compactifications of the Type II Superstring With D-branes and Fluxes -- String Dualities and M-theory.

Sommario/riassunto

The purpose of this book is to thoroughly prepare the reader for research in string theory. It is intended as a textbook in the sense that, starting from the basics, the material is presented in a pedagogical and self-contained fashion. The emphasis is on the world-sheet perspective of closed strings and of open strings ending on D-branes, where two-dimensional conformal field theory is the main tool. Compactifications of string theory, with and without fluxes, and string dualities are also discussed from the space-time point of view, i. e. in geometric language. End-of-chapter references have been added to guide the reader intending to pursue further studies or to start research in the topics covered by this book.