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Nota di contenuto	Cover; Half-title; Series-title; Title; Copyright; Dedication; Contents; List of inserts; Preface; 1 Overview and overture; 2 Relativistic strings; 3 A closer look at the world-sheet; 4 Strings on circles and T-duality; 5 Background fields and world-volume actions; 6 D-brane tension and boundary states; 7 Supersymmetric strings; 8 Supersymmetric strings and T-duality; 9 World-volume curvature couplings; 10 The geometry of D-branes; 11 Multiple D-branes and bound states; 12 Strong coupling and string duality; 13 D-branes and geometry I; 14 K3 orientifolds and compactification 15 D-branes and geometry II 16 Towards M- and F-theory; 17 D-branes and black holes; 18 D-branes, gravity and gauge theory; 19 The holographic renormalisation group; 20 Taking stock; References; Index
Sommario/riassunto	D-branes represent a key theoretical tool in the understanding of strongly coupled superstring theory and M-theory. They have led to

many striking discoveries, including the precise microphysics underlying the thermodynamic behaviour of certain black holes, and remarkable holographic dualities between large- N gauge theories and gravity. This book provides a self-contained introduction to the technology of D-branes, presenting the recent developments and ideas in a pedagogical manner. It is suitable for use as a textbook in graduate courses on modern string theory and theoretical particle physics, and will also be an indispensable reference for seasoned practitioners. The introductory material is developed by first starting with the main features of string theory needed to get rapidly to grips with D-branes, uncovering further aspects while actually working with D-branes. Many advanced applications are covered, with discussions of open problems which could form the basis for other avenues of research.
