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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface -- Overview -- Search and discovery.-Environments and rates of Supernovae -- Spectra -- Light curves -- Circumstellar interaction -- Supernovae remnants -- Evolution to catastrophe -- Core collapse -- Pair-instability Supernovae A Models -- Supernova 1987A -- Type IIP Supernovae -- Type IIL Supernovae -- Type IIn Supernovae -- Type IIb Supernovae -- Type Ib Supernovae -- Type Ic Supernovae -- Superluminous Supernovae -- Degenerate carbon burning -- Observational properties -- Progenitors -- Explosion models -- Related explosions -- Consequences of Supernovae -- Applications of Supernovae to the areas of astrophysics and physics -- Summary and prospects.
Sommario/riassunto	Targeting advanced students of astronomy and physics, as well as astronomers and physicists contemplating research on supernovae or related fields, David Branch and J. Craig Wheeler offer a modern account of the nature, causes and consequences of supernovae, as well as of issues that remain to be resolved. Owing especially to (1) the appearance of supernova 1987A in the nearby Large Magellanic Cloud,

(2) the spectacularly successful use of supernovae as distance indicators for cosmology, (3) the association of some supernovae with the enigmatic cosmic gamma-ray bursts, and (4) the discovery of a class of superluminous supernovae, the pace of supernova research has been increasing sharply. This monograph serves as a broad survey of modern supernova research and a guide to the current literature. The book's emphasis is on the explosive phases of supernovae. Part 1 is devoted to a survey of the kinds of observations that inform us about supernovae, some basic interpretations of such data, and an overview of the evolution of stars that brings them to an explosive endpoint. Part 2 goes into more detail on core-collapse and superluminous events: which kinds of stars produce them, and how do they do it? Part 3 is concerned with the stellar progenitors and explosion mechanisms of thermonuclear (Type Ia) supernovae. Part 4 is about consequences of supernovae and some applications to astrophysics and cosmology. References are provided in sufficient number to help the reader enter the literature.