1. Record Nr. UNINA9910265942303321

Titolo	Handbook of Supernovae [[electronic resource] /] / edited by Athem W. Alsabti, Paul Murdin
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-21846-8
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (850 illus., 680 illus. in color. eReference.)
Collana	Springer reference
Disciplina	523.84465
Soggetti	Astronomy Astrophysics Nuclear chemistry Astronomy, Astrophysics and Cosmology Nuclear Chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Review of Supernovae and Supernovae Remnants -- Historical Supernovae -- Types of Supernovae -- Supernovae and Stellar Evolution -- Light Curves and Spectra of Supernovae -- Explosion Mechanisms of Supernovae -- Stellar Remnants: Pulsars and Neutron Stars -- Stellar Remnants: Black Holes -- Nucleosynthesis in Supernovae -- Evolution of Supernovae and the Interstellar Medium -- Cosmology from Supernovae -- Supernovae, Galaxies, our Solar System and Life on Earth -- Neutrinos, Gravitational Waves and Cosmic Rays.
Sommario/riassunto	This reference work gathers all of the latest research in the supernova field areas to create a definitive source book on supernovae, their remnants and related topics. It includes each distinct subdiscipline, including stellar types, progenitors, stellar evolution, nucleosynthesis of elements, supernova types, neutron stars and pulsars, black holes, swept up interstellar matter, cosmic rays, neutrinos from supernovae, supernova observations in different wavelengths, interstellar molecules and dust. While there is a great deal of primary and specialist literature on supernovae, with a great many scientific groups around the world focusing on the phenomenon and related subdisciplines, nothing else

presents an overall survey. This handbook closes that gap at last. As a comprehensive and balanced collection that presents the current state of knowledge in the broad field of supernovae, this is to be used as a basis for further work and study by graduate students, astronomers and astrophysicists working in close/related disciplines, and established groups. Editorial Board EDITORS-IN-CHIEF Athem W. Alsabti University College London Observatory, University College London, London, UK Sections: Supernovae and Supernova Remnants Supernovae and the Environment of the Solar System Paul Murdin Institute of Astronomy, University of Cambridge, Cambridge, UK Section: Supernovae and Supernova Remnants SECTION EDITORS David Arnett Steward Observatory,University of Arizona, Tucson, AZ, USA Section: Nucleosynthesis in Supernovae Phil Charles University of Southampton, School of Physics and Astronomy, Southampton, UK Section: Stellar Remnants - Neutron Stars and Black Holes Robert A. Fesen Department of Physics and Astronomy, Dartmouth College, Hanover, NH, USA Section: Evolution of Supernovae and the Interstellar Medium David A. Green Cavendish Laboratory, University of Cambridge, Cambridge, UK Section: Historical Supernovae Mario Hamuy Astronomy Department, University of Chile, Santiago, Chile; Millennium Institute of Astrophysics, Santiago, Chile Section: Cosmology from Supernovae Peter Hoeflich Department of Physics, Florida State University, Tallahassee, FL, USA Section: Explosion Mechanisms of Supernovae Ken’ichi Nomoto Kavli Institute for the Physics and Mathematics of the Universe (WPI), The University of Tokyo, Kashiwa, Chiba, Japan Section: Supernovae and Stellar Evolution Stephen Smart Astrophysics Research Centre, Queen's University, Belfast; Northern Ireland, UK Section: Light Curves and Spectra of Supernovae Mark Sullivan School of Physics and Astronomy, University of Southampton, Highfield, Southampton, UK Section: Types of Supernovae Friedrich-Karl Thielemann Department of Physics, University of Basel, Basel, Switzerland Sections: Neutrinos, Gravitational Waves and Cosmic Rays Nucleosynthesis in Supernovae Chengmin M. Zhang National Astronomical Observatories, Chinese Academy of Sciences, Beijing, China; Key Laboratory of Radio Astronomy, CAS, Beijing, China; School of Physical Science, University of Chinese Academy of Sciences, Beijing, China Section: Stellar Remnants - Neutron Stars and Black Holes.