Record Nr. UNINA9910438120203321 Planets, Stars and Stellar Systems [[electronic resource]]: Volume 1: **Titolo** Telescopes and Instrumentation / / edited by Ian S. McLean Pubbl/distr/stampa Dordrecht:,: Springer Netherlands:,: Imprint: Springer,, 2013 **ISBN** 94-007-5621-6 Edizione [1st ed. 2013.] 1 online resource (111 illus. in color. eReference.) Descrizione fisica Collana Springer reference Disciplina 520 Soggetti Observations, Astronomical Astronomy—Observations Space sciences Astronomy, Observations and Techniques

Space Sciences (including Extraterrestrial Physics, Space Exploration

and Astronautics)

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Bibliographic Level Mode of Issuance: Monograph

Nota di bibliografia Includes bibliographical references and indexes.

Sommario/riassunto

This is volume 1 of Planets, Stars and Stellar Systems, a six-volume compendium of modern astronomical research, covering subjects of key interest to the main fields of contemporary astronomy. This volume on "Telescopes and Instrumentation" edited by Ian S. McLean presents, after a general Introduction to Telescopes, accessible review chapters on Robotic and Survey Telescopes, Segmented Mirror Telescopes. Honeycomb Mirrors for Large Telescopes, Active Thin-Mirror Telescopes, Optical and Infrared Interferometers, Submillimeter Telescopes, Radio Telescopes, Space Telescopes in the Ultraviolet, Optical, and Infrared (UV/O/IR), CMB Telescopes and Optical Systems. Very- High-Energy Gamma-Ray Telescopes, Instrumentation and Detectors, Silicon-Based Image Sensors, Long-Wavelength Infrared Detectors, and Astronomical Spectrographs. All chapters of the handbook were written by practicing professionals. They include sufficient background material and references to the current literature to allow readers to learn enough about a specialty within astronomy, astrophysics and cosmology to get started on their own practical

research projects. In the spirit of the series Stars and Stellar Systems published by Chicago University Press in the 1960s and 1970s, each chapter of Planets, Stars and Stellar Systems can stand on its own as a fundamental review of its respective sub-discipline, and each volume can be used as a textbook or recommended reference work for advanced undergraduate or postgraduate courses. Advanced students and professional astronomers in their roles as both lecturers and researchers will welcome Planets, Stars and Stellar Systems as a comprehensive and pedagogical reference work on astronomy, astrophysics and cosmology.