

1. Record Nr.	UNINA9910815623903321
Autore	Rowan-Robinson Michael
Titolo	Night vision : exploring the infrared universe / / Michael Rowan-Robinson [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2013
ISBN	1-139-61070-8 1-107-23618-5 1-139-17601-3 1-139-62558-6 1-139-61628-5 1-139-61256-5 1-139-62186-6
Descrizione fisica	1 online resource (x, 251 pages) : digital, PDF file(s)
Classificazione	SCI004000
Disciplina	522/.683
Soggetti	Infrared astronomy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Machine generated contents note: Preface; 1. Introduction; 2. William Herschel opens up the invisible universe; 3. 1800-1950: slow progress - the moon, planets, bright stars, and the discovery of interstellar dust; 4. Dying stars shrouded in dust and stars being born: the emergence of infrared astronomy in the 60s and 70s; 5. Birth of far infrared and submillimetre astronomy: clouds of dust and molecules in our Galaxy; 6. The cosmic microwave background, echo of the Big Bang; 7. The Infrared Astronomical Satellite and the opening up of extragalactic infrared astronomy: starbursts and active galactic nuclei; 8. The Cosmic Background Explorer and the ripples, the Wilkinson Microwave Anisotropy Explorer, and dark energy; 9. Giant ground-based infrared and submillimetre telescopes; 10. The Infrared Space Observatory and the Spitzer Space Telescope: the star-formation history of the universe and infrared galaxy populations; 11. Our dusty Solar System, debris disks and the search for exoplanets; 12. The future: pioneering space missions and giant ground-based telescopes; Notes; Credits for illustrations; Further reading; Bibliography; Glossary; Index of names;

Drawing on exciting discoveries of the last forty years, *Night Vision* explores how infrared astronomy, an essential tool for modern astrophysics and cosmology, helps astronomers reveal our Universe's most fascinating phenomena - from the birth of stars in dense clouds of gas to black holes and distant colliding galaxies and the traffic of interstellar dust from the formation of our Solar System. While surveying the progress in infrared observation, astronomer Michael Rowan-Robinson introduces readers to the pioneering scientists and engineers who painstakingly developed infrared astronomy over the past two hundred years. Accessible and well illustrated, this comprehensive volume is written for the interested science reader, amateur astronomer or university student, while researchers in astronomy and the history of science will find Rowan-Robinson's detailed notes and references a valuable resource.