1. Record Nr. UNINA9910299401903321

Autore	Gupta Ravi P
Titolo	Remote sensing geology / / by Ravi P. Gupta
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer, , [2018] ©2018
ISBN	9783662558768 3-662-55876-9
Edizione	[Third edition]
Descrizione fisica	1 online resource (XXIII, 428 p. 451 illus., 52 illus. in color.)
Disciplina	550.28
Soggetti	Imatges - Processament - Tècniques digitals Anàlisi espectral Teledetecció Remote sensing Optical data processing Spectroscopy Microscopy Remote Sensing/Photogrammetry Image Processing and Computer Vision Spectroscopy and Microscopy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction.- Physical Principles.- Spectra of Minerals and Rocks. - Photography.- Multispectral Imaging Techniques -- Important Spaceborne Missions and Multispectral Sensors.- Geometric Aspects of Photographs and Images -- Digital Elevation Model.- Image Quality and Principles of Interpretation.- Atmospheric Corrections. - Interpretation of Solar Reflection Data.-Interpretation of Thermal-IR Data.- Digital Image Processing of Multispectral Data.- Imaging Spectroscopy.- Microwave Sensors.- Interpretation of SAR Imagery. - SAR Interferometry.- Integrating Remote Sensing Data with Other Geodata (GIS Approach) -- Geological Applications.
Sommario/riassunto	Over the past decade, advances in sensor technology, processing algorithms, and computational capacity have taken remote sensing to a

level where observations can be transformed into quantitative measurements, and the technology can be used in near real-time for mapping, monitoring and decision-making. For the third edition, this widely acclaimed book has been fully revised, enlarged and updated. It covers remote sensing in a wide range of optical, thermal, and microwave wavelengths and their host of geologic applications featuring sample applications from around the globe. In addition, it presents state-of-the-art content on emerging themes such as atmospheric interactions, spectroscopy, spectral indices, prospectivity modelling, and multi-sensor geodata integration. The subject matter is presented at a basic level, offering students an excellent introductory text on remote sensing. Further, the main part of the book will also be of great value to active researchers. Excerpt from the review of Remote Sensing Geology (2nd ed., 2003): International Journal of Applied Earth Observation and Geoinformation, 5 (2004) 239–240 “....Graduate students, research workers and professional earth scientists will use this book to their advantage and with pleasure; it is well-written, to the point and with an emphasis on understanding the principles underlying this wide spectre of technology in its application to the earth sciences. Remote sensing is a fascinating subject; so is geology. The author has fully succeeded in providing a fascinating book that combines them in a handy volume.” Jan J. Nossin .