1. Record Nr. UNINA9910437767903321

Autore	Richards John A
Titolo	Remote Sensing Digital Image Analysis : An Introduction / / by John A. Richards
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2013
ISBN	3-642-30062-6 978-3-642-30062-2
Edizione	[5th ed. 2013.]
Descrizione fisica	1 online resource (502 p.)
Disciplina	621.3678
Soggetti	Signal processing Image processing Speech processing systems Geotechnical engineering Remote sensing Optical data processing Environmental toxicology Signal, Image and Speech Processing Geotechnical Engineering & Applied Earth Sciences Remote Sensing/Photogrammetry Image Processing and Computer Vision Ecotoxicology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Sources and characteristics of remote sensing image data -- correcting and registering images -- interpreting images -- radiometric enhancement of images -- geometric processing and enhancement: image domain techniques -- spectral domain image transforms -- spatial domain image transforms -- supervised classification techniques -- clustering and unsupervised classification -- Feature Reduction -- Image Classification in Practice -- Multisource Image Analysis.
Sommario/riassunto	Remote Sensing Digital Image Analysis provides the non-specialist with

a treatment of the quantitative analysis of satellite and aircraft derived remotely sensed data. Since the first edition of the book there have been significant developments in the algorithms used for the processing and analysis of remote sensing imagery; nevertheless many of the fundamentals have substantially remained the same. This new edition presents material that has retained value since those early days, along with new techniques that can be incorporated into an operational framework for the analysis of remote sensing data. The book is designed as a teaching text for the senior undergraduate and postgraduate student, and as a fundamental treatment for those engaged in research using digital image processing in remote sensing. The presentation level is for the mathematical non-specialist. Since the very great number of operational users of remote sensing come from the earth sciences communities, the text is pitched at a level commensurate with their background. Each chapter covers a different aspect of the analysis of digital remotely sensed data, without an excessively detailed mathematical treatment of computer based algorithms, but in a manner conductive to an understanding of their capabilities and limitations. Problems conclude each chapter.