Record Nr. UNINA9911019937403321 Hyperspectral data exploitation: theory and applications / / edited by **Titolo** Chein-I Chang Pubbl/distr/stampa Hoboken, N.J., : Wiley-Interscience, c2007 **ISBN** 9786610822430 9781280822438 1280822430 9780470124628 0470124628 9780470124611 047012461X Descrizione fisica 1 online resource (442 p.) Altri autori (Persone) ChangChein-I Disciplina 526.9/82 Soggetti Remote sensing Multispectral imaging Image processing - Digital techniques Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. HYPERSPECTRAL DATA EXPLOITATION; CONTENTS; PREFACE; Nota di contenuto CONTRIBUTORS; 1. OVERVIEW; I TUTORIALS; 2. HYPERSPECTRAL IMAGING SYSTEMS: 3. INFORMATION-PROCESSED MATCHED FILTERS FOR HYPERSPECTRAL TARGET DETECTION AND CLASSIFICATION: II THEORY; 4. AN OPTICAL REAL-TIME ADAPTIVE SPECTRAL IDENTIFICATION SYSTEM (ORASIS); 5. STOCHASTIC MIXTURE MODELING; 6. UNMIXING HYPERSPECTRAL DATA: INDEPENDENT AND DEPENDENT COMPONENT ANALYSIS; 7. MAXIMUM VOLUME TRANSFORM FOR ENDMEMBER SPECTRA DETERMINATION; 8. HYPERSPECTRAL DATA REPRESENTATION; 9. OPTIMAL BAND SELECTION AND UTILITY **EVALUATION FOR SPECTRAL SYSTEMS** 10. FEATURE REDUCTION FOR CLASSIFICATION PURPOSE11. SEMISUPERVISED SUPPORT VECTOR MACHINES FOR CLASSIFICATION OF HYPERSPECTRAL REMOTE SENSING IMAGES; III APPLICATIONS; 12.

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Authored by a panel of experts in the field, this book focuses on hyperspectral image analysis, systems, and applications. With discussion of application-based projects and case studies, this professional reference will bring you up-to-date on this pervasive technology, wether you are working in the military and defense fields, or in remote sensing technology, geoscience, or agriculture.