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Nota di contenuto	Remote Sensing Digital Image Processing Technology I -- Overview of Remote Sensing Digital Image Processing -- System Support Conditions of Remote Sensing Digital Image Processing and Analysis -- Mathematical Basis for the Overall Processing and Analysis of Remote Sensing Digital Images -- The Physical Foundation and Global Analysis of Remote Sensing Digital Images -- Remote Sensing Digital Image Processing Technology II -- Remote Sensing Digital Image Pixel Processing Theory I: Linear System with Space–Time Domain Convolution -- Basic Theory of Remote Sensing Digital Image Pixel Processing II: Time–Frequency Fourier Transform from Convolution to Multiplication -- Remote Sensing Digital Image Pixel Processing Theory III: Frequency Domain Filtering -- Remote Sensing Digital Image Pixel Processing Theory IV: Time Domain Sampling -- Basics of Remote Sensing Digital Image Pixel Transformation I: Space–Time Equivalent Orthogonal Basis -- Basis of Remote Sensing Digital Image Pixel Transformation II: Time–Frequency Orthogonal Basis -- Remote Sensing Digital Image Processing Technology -- Remote Sensing Digital Image Processing: Noise Reduction and Image Reconstruction -- Digital Image Compression -- Pattern recognition (image segmentation) -- Pattern recognition (feature extraction and classification) -- Applications of Remote Sensing Digital Image Processing IV: Color Transform and 3D Reconstruction -- Applications of Remote Sensing

Digital Image Processing.

Sommario/riassunto

This book focuses on the mathematical and physical foundations of remote sensing digital image processing and introduces key algorithms utilized in this area. The book fully introduces the basic mathematical and physical process of digital imaging, the basic theory and algorithm of pixel image processing, and the higher-order image processing algorithm and its application. This book skillfully and closely integrates theory, algorithms, and applications, making it simple for readers to understand and use. Researchers and students working in the fields of remote sensing, computer vision, geographic information science, electronic information, etc., can profit from this book. For their work and research in digital image processing, they can master the fundamentals of imaging and image processing techniques.