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Autore	Yan Lei
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Nota di contenuto	Physical rationale of polarized remote sensing -- Remote sensing of ground objects 1: physical characteristics of multi-angle polarized reflectance -- Remote sensing of ground objects 2: multispectral chemical characteristics of surface polarization reflection -- Remote sensing of ground objects 3: Surface roughness and density structure of polarization reflectance -- Remote sensing of land surfaces 4: Signal-to-background high contrast ratio filtering of polarimetric reflections -- Remote sensing of land surfaces 5: Characteristics of radiative transfer on surface polarization -- Atmospheric remote sensing 1: the nature and physical characteristics of the full-sky polarization pattern -- Atmospheric remote sensing 2: Neutral point areas of atmospheric polarization and land-atmosphere parameter separation -- Atmospheric remote sensing 3: atmospheric polarization characteristics and multi-angular three-dimensional chromatography -- New areas in polarization 1: bionic polarization for automatic navigation using the Earth's polarization vector field -- New areas in

polarization 2: remote sensing for advanced space exploration and global change research.

Sommario/riassunto

This book elaborates on the physical principles of polarization remote sensing. It explains the reflective characteristics of surface objects and atmosphere separately, including theory, experiment, instrument and application. In addition, it introduces how polarization remote sensing works in advanced research programs as it can be used in aviation, astronomy, disaster risk prevention and navigation fields. This book serves as a fundamental and comprehensive reference for researchers and students.