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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Introduction -- 2. Optical radiation and matter -- 3. Atomic and molecular spectroscopy -- 4. Spectral properties of materials -- 5. Remotely sensed spectral radiance -- 6. Imaging system design and analysis -- 7. Dispersive spectrometer design and analysis -- 8. Fourier transform spectrometer design and analysis -- 9. Additional imaging spectrometer designs -- 10. Imaging spectrometer calibration -- 11. Atmospheric compensation -- 12. Spectral data models -- 13. Hyperspectral image classification -- 14. Hyperspectral target detection.
Sommario/riassunto	Hyperspectral remote sensing is an emerging, multidisciplinary field with diverse applications that builds on the principles of material spectroscopy, radiative transfer, imaging spectrometry, and hyperspectral data processing. While there are many resources that suitably cover these areas individually and focus on specific aspects of the hyperspectral remote sensing field, this book provides a holistic treatment that thoroughly captures its multidisciplinary nature. The content is oriented toward the physical principles of hyperspectral remote sensing as opposed to applications of hyperspectral technology. Readers can expect to finish the book armed with the required knowledge to understand the immense literature available in this technology area and apply their knowledge to the understanding of

material spectral properties, the design of hyperspectral systems, the analysis of hyperspectral imagery, and the application of the technology to specific problems.