Record Nr. UNINA9910142433603321 Autore Elachi Charles Titolo Introduction to the physics and techniques of remote sensing [[electronic resource]] Hoboken, N.J., : Wiley-Interscience, c2006 Pubbl/distr/stampa **ISBN** 1-280-45020-7 9786610450206 0-470-24261-2 0-471-78338-2 0-471-78339-0 1-60119-095-6 Edizione [2nd ed.] Descrizione fisica 1 online resource (572 p.) Collana Wiley series in remote sensing Altri autori (Persone) Van ZylJakob <1967-> Disciplina 621.36/78 621.3678 Soggetti Remote sensing Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Introduction to the Physics and Techniques of Remote Sensing; Contents; Preface; 1 Introduction; 1-1 Types and Classes of Remote Sensing Data: 1-2 Brief History of Remote Sensing: 1-3 Remote Sensing Space Platforms; 1-4 Transmission Through the Earth and Planetary Atmospheres; References and Further Reading; 2 Nature and Properties of Electromagnetic Waves; 2-1 Fundamental Properties of Electromagnetic Waves: 2-1-1 Electromagnetic Spectrum: 2-1-2 Maxwell's Equations; 2-1-3 Wave Equation and Solution; 2-1-4 Quantum Properties of Electromagnetic Radiation: 2-1-5 Polarization: 2-1-6 Coherency 2-1-7 Group and Phase Velocity2-1-8 Doppler Effect; 2-2 Nomenclature and Definition of Radiation Quantities; 2-2-1 Radiation

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## Sommario/riassunto

The science and engineering of remote sensing--theory and applications The Second Edition of this authoritative book offers readers the essential science and engineering foundation needed to understand remote sensing and apply it in real-world situations. Thoroughly updated to reflect the tremendous technological leaps made since the publication of the first edition, this book covers the gamut of knowledge and skills needed to work in this dynamic field, including:\* Physics involved in wave-matter interaction, the building blocks for interpreting data\* Techniques used to

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