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Nota di contenuto	Frontmatter -- Contents -- List of Figures -- List of Tables -- Preface -- 1. Introduction -- 2. Review of orthogonal polynomials -- 3. Homogenous polynomials and spherical harmonics -- 4. Review of special functions -- 5. Spheroidal-type wavelets -- 6. Some applications -- Bibliography
Sommario/riassunto	This monograph is concerned with wavelet harmonic analysis on the sphere. By starting with orthogonal polynomials and functional Hilbert spaces on the sphere, the foundations are laid for the study of spherical harmonics such as zonal functions. The book also discusses the construction of wavelet bases using special functions, especially Bessel, Hermite, Tchebychev, and Gegenbauer polynomials. Contents Review of orthogonal polynomials Homogenous polynomials and spherical harmonics Review of special functions Spheroidal-type wavelets Some applications Some applications