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Sommario/riassunto

This book explores the field of nonlinear optical technology, tracing its development and applications. The author, Elsa M. Garmire, a noted figure in the field, delves into key concepts such as second-order and third-order nonlinearity, second harmonic generation, and optical parametric processes. The work also covers advanced topics like high harmonic generation, ultra-short pulse applications, and nonlinear scattering phenomena. The book serves as a comprehensive resource for understanding the fundamental principles and technological advancements in nonlinear optics. It is aimed at students, researchers, and professionals in the fields of optical engineering and photonics, providing both theoretical insights and practical applications.