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Nota di contenuto	Frontmatter -- 1 Introduction -- 2 The ray transform of symmetric tensor fields on Euclidean space -- 3 Some questions of tensor analysis -- 4 The ray transform on a Riemannian manifold -- 5 The transverse ray transform -- 6 The truncated transverse ray transform -- 7 The mixed ray transform -- 8 The exponential ray transform -- Bibliography -- Index
Sommario/riassunto	Integral geometry can be defined as determining some function or a more general quantity, which is defined on a manifold, given its integrals over submanifolds or a prescribed class. In this book, only integral geometry problems are considered for which the submanifolds are one-dimensional. The book deals with integral geometry of symmetric tensor fields. This section of integral geometry can be considered as the mathematical basis for tomography or anisotropic media whose interaction with sounding radiation depends essentially on the direction in which the latter propagates. The main mathemat