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Nota di bibliografia	Includes bibliographical references (p. 331-337) and index.
Nota di contenuto	Contents; Introduction; I Absolute invariants for open manifolds and bundles; II Non-linear Sobolev structures; III The heat kernel of generalized Dirac operators; IV Trace class properties; V Relative index theory; VI Relative (-functions, 1]-functions, determinants and torsion; VII Scattering theory for manifolds with injectivity radius zero; References; List of notations; Index
Sommario/riassunto	For closed manifolds, there is a highly elaborated theory of number-valued invariants, attached to the underlying manifold, structures and differential operators. On open manifolds, nearly all of this fails, with the exception of some special classes. The goal of this monograph is to establish for open manifolds, structures and differential operators an applicable theory of number-valued relative invariants. This is of great use in the theory of moduli spaces for nonlinear partial differential equations and mathematical physics. The book is self-contained: in particular, it contains an outline