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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preliminaries and notational conventions -- Infra-nilmanifolds and Almost-Bieberbach groups -- Algebraic characterizations of almost-crystallographic groups -- Canonical type representations -- The Cohomology of virtually nilpotent groups -- Infra-nilmanifolds and their topological invariants -- Classification survey.
Sommario/riassunto	Starting from basic knowledge of nilpotent (Lie) groups, an algebraic theory of almost-Bieberbach groups, the fundamental groups of infra-nilmanifolds, is developed. These are a natural generalization of the well known Bieberbach groups and many results about ordinary Bieberbach groups turn out to generalize to the almost-Bieberbach groups. Moreover, using affine representations, explicit cohomology computations can be carried out, or resulting in a classification of the almost-Bieberbach groups in low dimensions. The concept of a polynomial structure, an alternative for the affine structures that sometimes fail, is introduced.