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Autore	Krylov Piotr
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Descrizione fisica	1 online resource (VIII, 156 p.)
Collana	Algebra and Applications, , 1572-5553 ; ; 23
Disciplina	512.9434
Soggetti	<p>Associative rings Rings (Algebra) Category theory (Mathematics) Homological algebra K-theory Matrix theory Algebra Associative Rings and Algebras Category Theory, Homological Algebra K-Theory Linear and Multilinear Algebras, Matrix Theory</p>
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Construction of Formal Matrix Rings of Order 2 -- Modules over Formal Matrix Rings -- Formal Matrix Rings over a Given Ring -- Grothendieck and Whitehead Groups of Formal Matrix Rings.
Sommario/riassunto	<p>This monograph is a comprehensive account of formal matrices, examining homological properties of modules over formal matrix rings and summarising the interplay between Morita contexts and K theory. While various special types of formal matrix rings have been studied for a long time from several points of view and appear in various textbooks, for instance to examine equivalences of module categories and to illustrate rings with one-sided non-symmetric properties, this particular class of rings has, so far, not been treated systematically. Exploring formal matrix rings of order 2 and introducing the notion of</p>

the determinant of a formal matrix over a commutative ring, this monograph further covers the Grothendieck and Whitehead groups of rings. Graduate students and researchers interested in ring theory, module theory and operator algebras will find this book particularly valuable. Containing numerous examples, Formal Matrices is a largely self-contained and accessible introduction to the topic, assuming a solid understanding of basic algebra.
