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Nota di contenuto	Chapter 1. Morita Equivalent Leavitt Path Algebras -- Chapter 2. A survey on the ideal structure of Leavitt path algebras -- Chapter 3. The injective and projective Leavitt complexes -- Chapter 4. Graph C*-algebras -- Chapter 5. Steinberg Algebras -- Chapter 6. Leavitt path algebras -- Chapter 7. Relating the principles of Quillen-Suslin theory -- Chapter 8. Action on Alternating matrices and Compound matrices -- Chapter 9. On the relative Quillen-Suslin Local Global Principle -- Chapter 10. On the non-injectivity of the Vaserstein symbol for real threefolds -- Chapter 11. The quotient Unimodular Vector group is nilpotent -- Chapter 12. Symplectic linearization of an alternating

polynomial matrix -- Chapter 13. On a theorem of Suslin -- Chapter 14. On a group structure on unimodular rows of length three over a two dimensional ring -- Chapter 15. On an algebraic analogue of the Mayer-Vietoris sequence -- Chapter 16. On the completability of unimodular rows of length three -- Chapter 17. Sandwich classification for classical-like groups over commutative rings -- Chapter 18. A Survey on applications of K-theory in affine algebraic geometry -- Chapter 19. On the non-infectivity of the Vaserstein Symbol in dimension three -- Chapter 20. A survey on affine monoids and K-theory -- Chapter 21. A Survey on the elementary orthogonal groups.

Sommario/riassunto

The book offers a comprehensive introduction to Leavitt path algebras (LPAs) and graph C*-algebras. Highlighting their significant connection with classical K-theory—which plays an important role in mathematics and its related emerging fields—this book allows readers from diverse mathematical backgrounds to understand and appreciate these structures. The articles on LPAs are mostly of an expository nature and the ones dealing with K-theory provide new proofs and are accessible to interested students and beginners of the field. It is a useful resource for graduate students and researchers working in this field and related areas, such as C*-algebras and symbolic dynamics.