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Titolo	Basic Linear Algebra [[electronic resource] /] / by Thomas S. Blyth, Edmund F. Robertson
Pubbl/distr/stampa	London : , : Springer London : , : Imprint : Springer, , 1998
ISBN	1-4471-3496-6
Edizione	[1st ed. 1998.]
Descrizione fisica	1 online resource (XI, 201 p.)
Collana	Springer Undergraduate Mathematics Series, , 1615-2085
Disciplina	512/.5
Soggetti	Algebra Mathematics Matrix theory Mathematics, general Linear and Multilinear Algebras, Matrix Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	1. The Algebra of Matrices -- 2. Some Applications of Matrices -- 3. Systems of Linear Equations -- 4. Invertible Matrices -- 5. Vector Spaces -- 6. Linear Mappings -- 7. The Matrix Connection -- 8. Determinants -- 9. Eigenvalues and Eigenvectors -- 10. The Minimum Polynomial -- 11. Solutions to the Exercises.
Sommario/riassunto	Basic Linear Algebra is a text for first year students, working from concrete examples towards abstract theorems, via tutorial-type exercises. The book explains the algebra of matrices with applications to analytic geometry, systems of linear equations, difference equations, and complex numbers. Linear equations are treated via Hermite normal forms, which provides a successful and concrete explanation of the notion of linear independence. Another highlight is the connection between linear mappings and matrices, leading to the change of basis theorem which opens the door to the notion of similarity. The authors are well known algebraists with considerable experience of teaching introductory courses on linear algebra to students at St Andrews. This book is based on one previously published by Chapman and Hall, but it has been extensively updated to include further explanatory text and fully worked solutions to the exercises that all 1st year students should

be able to answer.
