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Checking; 6.4 Some Identities for Pseudoinverse Matrices; 6.5 Solution of Least Squares Problem Using Pseudoinverse; 6.6 Cline's Formulas; 6.7 Pseudo-Ellipsoids; Chapter 7. Hermitian and Quadratic Forms; 7.1 Definitions; 7.2 Nonnegative Definite Matrices; 7.3 Sylvester Criterion; 7.4 The Simultaneous Transformation of a Pair of Quadratic Forms; 7.5 Simultaneous Reduction of more than Two Quadratic Forms
7.6 A Related Maximum-Minimum Problem7.7 The Ratio of Two Quadratic Forms; Chapter 8. Linear Matrix Equations; 8.1 General Type of Linear Matrix Equation; 8.2 Sylvester Matrix Equation; 8.3 Lyapunov Matrix Equation; Chapter 9. Stable Matrices and Polynomials; 9.1 Basic Definitions; 9.2 Lyapunov Stability; 9.3 Necessary Condition of the Matrix Stability; 9.4 The Routh-Hurwitz Criterion; 9.5 The Lienard-Chipart Criterion; 9.6 Geometric Criteria; 9.7 Polynomial Robust Stability; 9.8 Controllable, Stabilizable, Observable and Detectable Pairs; Chapter 10. Algebraic Riccati Equation
10.1 Hamiltonian Matrix10.2 All Solutions of the Algebraic Riccati Equation; 10.3 Hermitian and Symmetric Solutions; 10.4 Nonnegative Solutions; Chapter 11. Linear Matrix Inequalities; 11.1 Matrices as Variables and LMI Problem; 11.2 Nonlinear Matrix Inequalities Equivalent to LMI; 11.3 Some Characteristics of Linear Stationary Systems (LSS); 11.4 Optimization Problems with LMI Constraints; 11.5 Numerical Methods for LMI Resolution; Chapter 12. Miscellaneous; 12.1 Lambda-Matrix Inequalities; 12.2 Matrix Abel Identities; 12.3 S-Procedure and Finsler Lemma; 12.4 Farkas Lemma
12.5 Kantorovich Matrix Inequality

Sommario/riassunto

This book provides a blend of Matrix and Linear Algebra Theory, Analysis, Differential Equations, Optimization, Optimal and Robust Control. It contains an advanced mathematical tool which serves as a fundamental basis for both instructors and students who study or actively work in Modern Automatic Control or in its applications. It is includes proofs of all theorems and contains many examples with solutions. It is written for researchers, engineers, and advanced students who wish to increase their familiarity with different topics of modern and classical mathematics related to System and A