H-infinity control theory deals with the minimization of the H-infinity-norm of the transfer matrix from an exogenous disturbance to a pertinent controlled output of a given plant. Robust and H-infinity Control examines both the theoretical and practical aspects of H-infinity control from the angle of the structural properties of linear systems. Constructive algorithms are provided for finding solutions to: • general singular H-infinity control problems; • general H-infinity almost disturbance decoupling problems; • robust and perfect tracking problems. Theories are also applied to real-life problems with actual implementations. This book can be used for graduate courses in departments of aeronautics and astronautics, applied mathematics, chemical engineering, electrical engineering and mechanical engineering. It should also be of great value to engineers practising in industry.

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