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论文

ROBUST KALMAN FILTERING FOR SYSTEMS UNDER NORM BOUNDED UNCERTAINTIES IN ALL SYSTEM MATRICES AND ERROR COVARIANCE CONSTRAINTS

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摘要 This paper concerns robust Kalman filtering for systems under norm bounded uncertainties in all the system matrices and error covariance constraints. Sufficient conditions are given for the existence of such filters in terms of Riccati equations. The solutions to the conditions can be used to design the filters. Finally, an illustrative example is given to demonstrate the effectiveness of the proposed design procedure.

关键词 Kalman filtering, robust filtering, unce

分类号

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Key words Kalman filtering robust filtering uncertain systems error covariance Riccati equation approach

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