Boukas, E. K.; **Liu, Z. K.**

Robust H_∞ control of discrete-time Markovian jump linear systems with mode-dependent time-delays. (English) Zbl 1005.93050

IEEE Trans. Autom. Control 46, No. 12, 1918-1924 (2001).

Sufficient conditions for stability, stabilization and H_∞ control are presented for discrete-time Markovian jump linear systems with mean bounded uncertainties and mode depending time delay by mainly making use of linear matrix inequalities. A numerical example is given to prove the power of the results.

Reviewer: Michael Kohlmann (Bonn)

MSC:

93E20	Optimal stochastic control
93B36	H^∞-control
93D09	Robust stability
93E15	Stochastic stability in control theory
15A39	Linear inequalities of matrices

Keywords:

discrete time Markovian jump linear system; H_∞ control; stability; stabilization; delay; linear matrix inequalities

Full Text: DOI