عنوان مقاله:
Network-Based Robust H

محل انتشار:
بیست و یکمین کنفرانس مهندسی برق ایران (سال: 1392)

تعداد صفحات اصل مقاله: 6

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خلاصه مقاله:
This paper deals with the problem of the stability analysis and controller gain synthesis for networked control systems with the network-induced delay, data packet dropout,parameters' uncertainties and disturbance input. To achieve less conservative results compared with existing methods in theliterature, a novel Lyapunov-Krasovskii functional is constructed and new free-weighting matrices are introduced to increase degrees of freedom in the sufficient robust stability conditions. The maximum allowable delay bound, minimum attenuation level and the gain of memoryless controller is obtained by solving a set of linear matrix inequalities (LMIs). Finally an illustrative example is given to reveal the effectiveness of the proposed approach

کلمات کلیدی:
Networked Control Systems, Robust Control, Stabilization, Lyapunov-Krasovskii Theorem

لینک ثابت مقاله در پایگاه سیویلیکا: