**Abstract**

 In this proposed article, a framework is presented for the analysis of the problem of synchronization ofMarkovian jumping discrete-time complex dynamical networks (CDNs) with probabilistic interval time-varying delay in the dynamical node and in the network coupling. The networks are expressed in terms ofKronecker product technique. The delay in time is taken to be unexpected and the probability distribution isknown a prior. The synchronization is achieved by introducing a non-fragile procedure. This controller issubject to randomly occurring perturbation and is assumed to belong to the Binomial sequence. A suitableLyapunov–Krasovskii functional (LKF) with triple summation terms is considered. By utilizing thereciprocal convex combination approach and Finsler's Lemma, conditions for the synchronization ofnetworks are established in terms of linear matrix inequalities (LMIs). The effectiveness of the resultsobtained theoretically are illustrated through two numerical examples.