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Finite time synchronization of Markovian jumping stochastic complex dynamical systems with mix delays via hybrid control strategy

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**Highlights**

- The main contributions of this paper can be summarized as follows:
- This paper considers a class of stochastic complex dynamical networks with mixed time delays and Markovian jump, which has just a little research due to its complexity and difficulty to derivation. The system model is quite comprehensive, which is more close to the engineering practice. Since finite-time synchronization has better disturbance rejection properties, the results of this work are of great importance.
- Hybrid controllers for the stochastic complex networks are presented to guarantee finite-time synchronization, which can further improve the effectiveness of convergence.
- By using Lyapunov function and finite-time stability theory of the impulsive system, the finitetime synchronization criteria are established, which are easy to verify.

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