Abstract

This paper is concerned with a stability problem for a class of stochastic recurrent impulsive neural networks with both discrete and distributed time-varying delays. Based on Lyapunov-Krasovskii functional and the linear matrix inequality (LMI) approach, we analyze the global asymptotic stability of impulsive neural networks. Two numerical examples are given to illustrate the effectiveness of the stability results.

Reference

28. Q. Zhang, X. Wei, J. Xu, Global exponential stability for nonautonomous cellular neural

Index Terms

Computer Science

Algorithms

Key words

Global asymptotic stability

Linear matrix inequality

Lyapunov-Krasovskii functional

Time-varying delays

Stochastic recurrent neural networks

distributed delays

impulsive