

论文

非自治分布时滞BAM神经网络的绝对指数稳定性

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摘要:

利用Brouwer不动点理论和不等式技巧, 讨论了非自治分布时滞BAM神经网络的绝对指数稳定性, 给出了实用有效的判定条件, 仅要求激活函数满足局部Lipschitz条件, 所得结果更容易验证。例子说明结果的有效性。

关键词: BAM神经网络 分布时滞 绝对指数稳定性 不动点

The absolute exponential stability of BAM neural networks with variable coefficients and mixed delays

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Abstract:

The absolute exponential stability for BAM neural networks with continuously distributed signal transmission delays along the axon of a neuron was investigated, using the Brouwer fixed point theorem and inequality techniques. Some novel criteria were obtained for checking the equilibrium point, in which the activation functions only need to be partially Lipschitz continuous, but not to be bounded or differentiable. An example shows the effectiveness of the results.

Keywords: BAM neural networks distributed delay absolutely exponential stability fixed point

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