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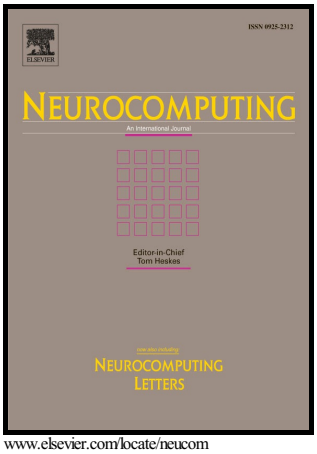

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Dynamical behaviors of coupled neural networks with reaction-diffusion terms: analysis, control and applications

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Recently, the dynamical behaviors of neural networks (NNs) have been extensively investigated by researchers. The main reason for that is their wide applications in optimization, associative memory, signal processing, pattern classification, image processing, and so on. Therefore, a great many important results on analysis and control of dynamical behaviors have been established for various NNs. More recently, coupled neural networks (CNNs) have received considerable attention. Because CNNs can exhibit some interesting phenomena and can be utilized in engineering fields such as harmonic oscillation generation, chaos generators design, secure communication, and so on. CNNs is a special class of complex networks, in which a node de-

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