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	Disciplina	629.8
	Soggetti	Automatic control
		Neural networks (Computer science)
		Artificial intelligence
		Statistical physics
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		Control and Systems Theory
		Mathematical Models of Cognitive Processes and Neural Networks
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	Lingua di pubblicazione	Inglese
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	Nota di contenuto	Introduction -- Pinning control strategies for synchronization of Coupled Reaction-Diffusion Neural Networks -- Pinning control for synchronization of Coupled Reaction-Diffusion Neural Networks with directed topologies -- Impulsive control for the synchronization of Coupled Reaction-Diffusion Neural Networks -- Novel adaptive strategies for synchronization of Coupled Reaction-Diffusion Neural Networks -- Synchronization and adaptive control of Coupled Reaction-Diffusion Neural Networks with hybrid coupling -- Passivity-based synchronization of Coupled Reaction-Diffusion Neural Networks with time-varying delay -- Passivity and synchronization of Coupled Reaction-Diffusion Neural Networks with adaptive coupling -- Passivity analysis of Coupled Reaction-Diffusion Neural Networks with Dirichlet boundary conditions -- Passivity of directed and undirected Coupled Reaction-Diffusion Neural Networks with adaptive coupling weights.

Sommario/riassunto   This book introduces selected recent findings on the analysis and control of dynamical behaviors for coupled reaction-diffusion neural networks. It presents novel research ideas and essential definitions concerning coupled reaction-diffusion neural networks, such as passivity, adaptive coupling, spatial diffusion coupling, and the relationship between synchronization and output strict passivity. Further, it gathers research results previously published in many flagship journals, presenting them in a unified form. As such, the book will be of interest to all university researchers and graduate students in Engineering and Mathematics who wish to study the dynamical behaviors of coupled reaction-diffusion neural networks.