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Descrizione fisica	1 online resource (xxvi, 404 pages) : illustrations
Collana	Mathematics and Statistics Series
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Soggetti	Neural networks (Computer science) Dynamics Mathematical Models of Cognitive Processes and Neural Networks Dynamical Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Introduction -- 2. LMI-Based Stability Criteria for BAM Neural Networks -- 3. Exponential Stability Criteria for Uncertain Inertial BAM Neural Networks -- 4. Exponential Stability of Impulsive Cohen-Grossberg BAM Neural Networks -- 5. Exponential Stability of Recurrent Neural Networks with Impulsive and Stochastic Effects -- 6. Stability of Markovian Jumping Stochastic Impulsive Uncertain BAM Neural Networks -- 7. Global Robust Exponential Stability of Stochastic Neural-Type Neural Networks -- 8. Exponential Stability of Discrete-Time Cellular Uncertain BAM Neural Networks -- 9. Exponential Stability of Discrete-Time Stochastic Impulsive BAM Neural Networks -- 10. Stability of Discrete-Time Stochastic Quaternion-Valued Neural Networks -- 11. Robust Finite-Time Passivity of Markovian Jump Discrete-Time BAM Neural Networks -- 12 Robust Stability of Discrete-Time Stochastic Genetic Regulatory Networks.
Sommario/riassunto	This book discusses recent research on the stability of various neural networks with constrained signals. It investigates stability problems for delayed dynamical systems where the main purpose of the research is to reduce the conservativeness of the stability criteria. The book mainly focuses on the qualitative stability analysis of continuous-time as well as discrete-time neural networks with delays by presenting the

theoretical development and real-life applications in these research areas. The discussed stability concept is in the sense of Lyapunov, and, naturally, the proof method is based on the Lyapunov stability theory. The present book will serve as a guide to enable the reader in pursuing the study of further topics in greater depth and is a valuable reference for young researcher and scientists. .

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