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Nota di contenuto	Chapter 1 Memristive devices and circuits -- Chapter 2: Organic memristive device -- Chapter 3: Oscillators based on organic memristive devices -- Chapter 4: Models -- Chapter 5: Logic elements and neuron networks -- Chapter 6: Neuromorphic systems -- Chapter 7: 3D systems with stochastic architecture.
Sommario/riassunto	This book describes the essential requirements for the realization of neuromorphic systems, where memristive devices play a key role. A comprehensive description to organic memristive devices, including working principles and models of the function, preparation methods, properties and different applications is presented. A comparative analysis of organic and inorganic systems is given. The author discusses all aspects of current research in organic memristive devices: fabrication techniques, properties, synapse mimicking circuits, and neuromorphic systems (including perceptrons), etc. Describes requirements of electronic circuits and systems to be considered as neuromorphic systems; Provides a single-source reference to the state-of-the-art in memristive devices as key elements of neuromorphic systems; Provides a comparative analysis of advantages and drawbacks between organic and inorganic devices and systems; Includes a systematic overview of organic memristive devices, including

fabrication methods, properties, synapse mimicking circuits, and neuromorphic systems; Discusses a variety of unconventional applications, based on bio-inspired circuits and neuromorphic systems.