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Nota di contenuto	Preface to "Low Power Memory/Memristor Devices and Systems" vii -- A Novel Inductorless Design Technique for Linear Equalization in Optical Receivers 1 -- Towards Integration of a Dedicated Memory Controller and Its Instruction Set to Improve Performance of Systems Containing Computational SRAM 21 -- Silicon-Compatible Memristive Devices Tailored by Laser and Thermal Treatments 33 -- Design of In-Memory Parallel-Prefix Adders 55 -- A New Physical Design Flow for a Selective State Retention Based Approach 71 -- Energy-Efficient Non-Von Neumann Computing Architecture Supporting Multiple Computing Paradigms for Logic and Binarized Neural Networks 87 -- Minimization of the Line Resistance Impact on Memdiode-Based Simulations of Multilayer Perceptron Arrays Applied to Pattern Recognition 105 -- A Morphable Physically Unclonable Function and True Random Number Generator Using a Commercial Magnetic Memory 123 -- Continuous-Time Programming of Floating-Gate Transistors for Nonvolatile Analog Memory Arrays † 139 -- Logic-in-Memory Computation: Is It Worth It? A Binary Neural Network Case Study 161 -- Rediscovering Majority Logic in the Post-CMOS Era: A Perspective from In-Memory Computing 195 -- Graph Coloring via Locally-Active Memristor Oscillatory Networks 211.
Sommario/riassunto	This book focusses on achieving low-power computation using memristive devices. The topic was designed as a convenient reference

point: it contains a mix of techniques starting from the fundamental manufacturing of memristive devices all the way to applications such as physically unclonable functions, and also covers perspectives on, e.g., in-memory computing, which is inextricably linked with emerging memory devices such as memristors. Finally, the book contains a few articles representing how other communities (from typical CMOS design to photonics) are fighting on their own fronts in the quest towards low-power computation, as a comparison with the memristor literature. We hope that readers will enjoy discovering the articles within.

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