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Nota di contenuto	Memristor Theory And Concepts -- Memresistive Devices -- Spin Based And Magnetic Memristive Systems -- Memristor Spice Model -- Current-Controlled Memristor Emulations -- Simple Current–Controlled Memristive Emulators -- Voltage-Controlled Memristor Emulations -- Simple Flux–Controlled Memristive Emulators -- Analog And Digital Modulation Using Memristor -- Conclusion and Future Work.
Sommario/riassunto	This book provides a comprehensive study of the research outcomes on memristor emulator circuits and includes various analog applications as examples. The authors describe in detail how to design different types of memristor emulators, using active and passive components for different applications. Most of the emulator circuits presented in this book are new and are the outcomes of the authors' recent research. Coverage also includes the latest technological advances in memristor and memristor emulators. Readers will benefit from an understanding of the fundamental concepts and potential applications related to memristors, since these emulator circuits can be built in the laboratory using inexpensive, off-the-shelf circuit components. Introduces readers to memristor emulator circuit design, using regular off-the-

shelf circuit components; Describes analog applications of memristors that can be verified by the proposed emulator circuits; Includes a brief overview of the updated mathematical models of the memristor device, with different material implementations; Equips readers to understand the three fingerprints of memristors, which make them unique, compared to the three known, passive elements (resistor, inductor and capacitor).