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Titolo	Emerging Non-Volatile Memories [[electronic resource] /] / edited by Seungbum Hong, Orlando Auciello, Dirk Wouters
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ISBN	1-4899-7537-3
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (280 p.)
Disciplina	530.41 620.11 620.11295 620.11297
Soggetti	Optical materials Electronic materials Solid state physics Spectroscopy Microscopy Electrical engineering Optical and Electronic Materials Solid State Physics Spectroscopy and Microscopy Electrical Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Part I: Ferroic Memories Review of the Science and Technology for Low and High-density Non-volatile Ferroelectric Memories Hybrid CMOS/magnetic memories (MRAM) and logic circuits Emerging Multi-Ferroic Memories Part II: Resistance and Phase Change Memories Phase-Change Materials for Data Storage Applications Emerging Oxide Resistance Change Memories Oxide based memristive nanodevices Part III: Probe Memories Ferroelectric Probe Storage Devices.
Sommario/riassunto	This book is an introduction to the fundamentals of emerging non- volatile memories and provides an overview of future trends in the

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field. Readers will find coverage of seven important memory technologies, including Ferroelectric Random Access Memory (FeRAM), Ferromagnetic RAM (FMRAM), Multiferroic RAM (MFRAM), Phase-Change Memories (PCM), Oxide-based Resistive RAM (RRAM), Probe Storage, and Polymer Memories. Chapters are structured to reflect diffusions and clashes between different topics. Emerging Non-Volatile Memories is an ideal book for graduate students, faculty, and professionals working in the area of non-volatile memory. This book also: Covers key memory technologies, including Ferroelectric Random Access Memory (FeRAM), Ferromagnetic RAM (FMRAM), and Multiferroic RAM (MFRAM), among others. Provides an overview of non-volatile memory fundamentals. Broadens readers' understanding of future trends in non-volatile memories.