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Titolo	Applications of Emerging Memory Technology : Beyond Storage / / edited by Manan Suri
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Nota di contenuto	Towards Spintronics Non-Volatile Caches -- CMOS-OxRAM based Hybrid Non-Volatile SRAM and Flip-Flop: Circuit Implementations -- Phase Change Memory Devices for Physical Unclonable Functions -- Applications of Resistive Switching Memory as Hardware Security Primitive -- Memristive Biosensors for Ultrasensitive Diagnostics and Therapeutics -- Optimized Programming for STT-MTJ Based TCAM for Low Energy Approximate Computing -- Greedy Edge-wise Training of Resistive Switch Arrays -- mMPU - a Real Processing-in-Memory Architecture to combat the von Neumann Bottleneck -- Spintronic Logic-In-Memory Paradigms and Implementations. .
Sommario/riassunto	The book intends to bring under one roof research work of leading groups from across the globe working on advanced applications of emerging memory technology nanodevices. The applications dealt in the text will be beyond conventional storage application of semiconductor memory devices. The text will deal with material and device physical principles that give rise to interesting characteristics and phenomena in the emerging memory device that can be exploited

for a wide variety of applications. Applications covered will include system-centric cases such as – caches, NVSRAM, NVTCAM, Hybrid CMOS-RRAM circuits for: Machine Learning, In-Memory Computing, Hardware Security - RNG/PUF, Biosensing and other misc beyond storage applications. The book is envisioned for multi-purpose use as a textbook in advanced UG/PG courses and a research text for scientists working in the domain.