

1. Record Nr.	UNINA9910795628303321
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Titolo	Non-Volatile In-Memory Computing by Spintronics [[electronic resource] /] / by Hao Yu, Lebin Ni, Yuhao Wang
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-031-02032-4
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XIII, 147 p.)
Collana	Synthesis Lectures on Emerging Engineering Technologies, , 2381-1439
Disciplina	620
Soggetti	Engineering Electrical engineering Electronic circuits Computers Materials science Surfaces (Technology) Thin films Technology and Engineering Electrical and Electronic Engineering Electronic Circuits and Systems Computer Hardware Materials Science Surfaces, Interfaces and Thin Film
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- Acknowledgments -- Introduction -- Non-volatile Spintronic Device and Circuit -- In-memory Data Encryption -- In-memory Data Analytics -- Authors' Biographies .
Sommario/riassunto	Exa-scale computing needs to re-examine the existing hardware platform that can support intensive data-oriented computing. Since the main bottleneck is from memory, we aim to develop an energy-efficient in-memory computing platform in this book. First, the models of spin-transfer torque magnetic tunnel junction and racetrack memory are

presented. Next, we show that the spintronics could be a candidate for future data-oriented computing for storage, logic, and interconnect. As a result, by utilizing spintronics, in-memory-based computing has been applied for data encryption and machine learning. The implementations of in-memory AES, Simon cipher, as well as interconnect are explained in details. In addition, in-memory-based machine learning and face recognition are also illustrated in this book.
