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Autore	Gao Zhen <1989->
Titolo	Sparse Signal Processing for Massive MIMO Communications // Zhen Gao, Yikun Mei, and Li Qiao
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ISBN	981-9953-94-4
Edizione	[First edition.]
Descrizione fisica	1 online resource (XIV, 217 p. 72 illus., 69 illus. in color.)
Disciplina	621.384
Soggetti	MIMO systems Signal processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Massive MIMO Performance Analysis and Channel Estimation Scheme in Sparse Channels -- Channel Estimation Based on Structured Compressed Sensing Theory in FDD Massive MIMO Systems -- Channel Feedback Based on Distributed Compressed Sensing Theory in FDD Massive MIMO Systems -- Channel Estimation and Beamforming Based on Compressed Sensing Theory in mmWave Massive MIMO Systems -- Sparse Channel Estimation Based on Spectral Estimation Theory for mmWave Massive MIMO Systems -- Quasi-Optimal Signals Detection for Massive Spatial Modulation MIMO Systems Based on Structured Compressed Sensing -- Multiuser Signal Detection Based on Compressed Sensing for Massive Media Modulation MIMO Systems -- Compressed Sensing Mass Access Techniques in Medium Modulation Assisted IoT Machine Type Communication -- Time-varying Channel Estimation Based on Compressed Sensing Theory for TDS-OFDM Systems -- Summary and Prospects for Massive MIMO Technology.
Sommario/riassunto	The book focuses on utilizing sparse signal processing techniques in designing massive MIMO communication systems. As the number of antennas has been increasing rapidly for years, extremely high-dimensional channel matrix and massive user access urge for algorithms with much higher efficiency. This book provides in-depth discussions on compressive sensing techniques and simulates the performance on wireless systems. The easy-to-understand instructions

with detailed simulations and open-sourced codes provide convenience for readers such as researchers, engineers, and graduate students in the fields of wireless communications.
