

1. Record Nr.	UNINA9910254164903321
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Titolo	Secure and Privacy-Preserving Data Communication in Internet of Things // by Liehuang Zhu, Zijian Zhang, Chang Xu
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2017
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (VII, 78 p. 22 illus., 10 illus. in color.)
Collana	SpringerBriefs in Signal Processing, , 2196-4076
Disciplina	620
Soggetti	Electrical engineering Data encryption (Computer science) System safety Communications Engineering, Networks Cryptology Security Science and Technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Secure Data Aggregation in Wireless Sensor Network -- Privacy preserving Meter Reading Transmission in Smart Grid -- Key Agreement and Management in Vehicular Ad-hoc Network -- Conclusion.
Sommario/riassunto	This book mainly concentrates on protecting data security and privacy when participants communicate with each other in the Internet of Things (IoT). Technically, this book categorizes and introduces a collection of secure and privacy-preserving data communication schemes/protocols in three traditional scenarios of IoT: wireless sensor networks, smart grid and vehicular ad-hoc networks recently. This book presents three advantages which will appeal to readers. Firstly, it broadens reader's horizon in IoT by touching on three interesting and complementary topics: data aggregation, privacy protection, and key agreement and management. Secondly, various cryptographic schemes/protocols used to protect data confidentiality and integrity is presented. Finally, this book will illustrate how to design practical systems to implement the algorithms in the context of IoT communication. In summary, readers can simply learn and directly

apply the new technologies to communicate data in IoT after reading this book.
