

1. Record Nr.	UNINA9910254825403321
Titolo	Secure and Trustworthy Transportation Cyber-Physical Systems [[electronic resource] /] / edited by Yunchuan Sun, Houbing Song
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2017
ISBN	981-10-3892-9
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XI, 159 p. 41 illus., 35 illus. in color.)
Collana	SpringerBriefs in Computer Science, , 2191-5768
Disciplina	621.39
Soggetti	Computer security Computer communication systems Electrical engineering Data encryption (Computer science) Quality control Reliability Industrial safety Systems and Data Security Computer Communication Networks Communications Engineering, Networks Cryptology Quality Control, Reliability, Safety and Risk
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Chapter 1 Secure and Trustworthy Transportation Cyber-Physical System by Yunchuan Sun, Lei Wu from Beijing Normal University -- Chapter 2 Smart Transportation Systems: Architecture, Enabling Technologies, and Open Issues by Wei Yu et. al. from Towson University, USA -- Chapter 3 Properties, Principles & Metrics in Transportation CPS by Syed Hassan Ahmed from Kyungpook National University, South Korea -- Chapter 4 Privacy relevant issues for Transportation CPS by Zhipeng Cai from Georgia State University, USA -- Chapter 5 Trust Management in Transportation CPS by Wenjia Li, et. al. from New York Institute of Technology, USA -- Chapter 6 Secure Data Dissemination for Intelligent Transportation Systems by Li Sun and

Sommario/riassunto

This book comprehensively reviews the cyber security and privacy issues in transportation cyber-physical systems (TCPSs). It examines theories and various state-of-the-art technologies and methodologies. Starting with a survey of the latest solutions in TCPSs, it introduces a smart-transport-system architecture design based on cyber-physical systems. It then discusses in detail the principles and metrics of evaluating safety and privacy in TCPSs and elaborates the verification and analysis of secure, robust and trustworthy TCPSs. Moreover, it demonstrates the advanced and novel tools commonly used in practice by several researchers. Lastly it provides an exhaustive case study on the authentication and attestation in TCPSs. This book is of interest not only to readers in the field of TCPSs, but also to those in interdisciplinary fields, such as energy, healthcare, bio-engineering etc.
