

1. Record Nr.	UNISA996465350003316
Autore	Li Beibei
Titolo	Detection of false data injection attacks in smart grid cyber-physical systems // Beibei Li, Rongxing Lu, Gaoxi Xiao
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2020] ©2020
ISBN	3-030-58672-3
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XVI, 157 p. 61 illus., 39 illus. in color.)
Collana	Wireless Networks, , 2366-1186
Disciplina	621.31028558
Soggetti	Smart power grids - Security measures
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Foundations and Related Literature -- SPNTA: Stochastic Petri-Net-Based Reliability Analysis under Topology Attacks -- DHCD: Distributed Host-Based Collaborative Detection for FDI Attacks -- DDOA: Dirichlet-Based Detection for Opportunistic Attacks -- PFDD: On Feasibility and Limitations of Detecting FDI Attacks Using DFACTS -- Conclusion.
Sommario/riassunto	This book discusses cybersecurity issues of smart grid cyber-physical systems, focusing on the detection techniques against false data injection attacks. The authors discuss passive and proactive techniques that combat and mitigate two categories of false data injection attacks, false measurement data injections and false command data injections in smart grid cyber-physical systems. These techniques are easy to follow for either professionals or beginners. With this book, readers can quickly get an overview of this topic and get ideas of new solutions for false data injections in smart grid cyber-physical systems. Readers include researchers, academics, students, and professionals. Presents a comprehensive summary for the detection techniques of false data injection attacks in smart grid cyber-physical systems; Reviews false data injections for either measurement data or command data; Analyzes passive and proactive approaches to smart grid cyber-physical systems.