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Autore	Rawat Danda B
Titolo	Vehicular Cyber Physical Systems : Adaptive Connectivity and Security / / by Danda B. Rawat, Chandra Bajracharya
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ISBN	3-319-44494-8
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (88 p.)
Disciplina	620
Soggetti	Electrical engineering Computer security Transportation Communications Engineering, Networks Systems and Data Security
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	An Overview of Vehicular Networking and Cyber Physical Systems -- Adaptive Connectivity for Vehicular Cyber Physical Systems -- Adaptive Connectivity for Spectrum-agile VANETs in Fading Channels -- Securing VANETs for Vehicular CPS -- Computing, Communications and Other Open Issues in Vehicular CPS.
Sommario/riassunto	This book provides probabilistic, deterministic and geolocation-aware approaches for adaptive connectivity, robust security and privacy-aware communications for vehicular cyber physical systems (CPS). It presents mathematical models and numerical results obtained from experiments and simulations, and a trade-off between connectivity, security and privacy for vehicular communications. Connectivity between vehicles is crucial for vehicular CPS. Intelligent vehicular CPS provides not only road safety and traffic efficiency by exchanging information among vehicles, but also offers infotainment services to passengers using a variety of wireless technologies to forward the traffic/trajectory information with Vehicle-to-Vehicle (V2V), vehicular ad hoc network (VANET), and Vehicle-to-Roadside-to-Vehicle (V2R2V) communications. The book covers how to ensure that the message

received from other vehicles is secure and trustworthy, rather than malicious. Further, it reveals how to make sure that the privacy of participants is not revealed while validating the received message. Researchers and professionals working with vehicular networks, smart systems, cyber physical systems, and mobile privacy will find this book valuable.