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Nota di contenuto	1. Connected Vehicles in the IoV: Concepts, Technologies and Architectures -- 2. Spatial Intelligence and Vehicle-to-Vehicle Communication: Topologies and Architectures -- 3. Seamless V2I Communication in HetNet: State-of-the-Art and Future Research Directions -- 4. Integrating Vehicular Technologies within the IoT Environment: A Case of Egypt -- 5. Protocols and Design Structures for Vehicular Networks -- 6. Intelligent Traffic Management Systems for Next Generation IoV in Smart City Scenario.
Sommario/riassunto	This book presents an overview of the latest smart transportation systems, IoV connectivity frameworks, issues of security and safety in VANETs, future developments in the IoV, technical solutions to address key challenges, and other related topics. A connected vehicle is a vehicle equipped with Internet access and wireless LAN, which allows the sharing of data through various devices, inside as well as outside the vehicle. The ad-hoc network of such vehicles, often referred to as

VANET or the Internet of vehicles (IoV), is an application of IoT technology, and may be regarded as an integration of three types of networks: inter-vehicle, intra-vehicle, and vehicular mobile networks. VANET involves several varieties of vehicle connectivity mechanisms, including vehicle-to-infrastructure (V2I), vehicle-to-vehicle (V2V), vehicle-to-cloud (V2C), and vehicle-to-everything (V2X). According to one survey, it is expected that there will be approximately 380 million connected cars on the roads by 2020. IoV is an important aspect of the new vision for smart transportation. The book is divided into three parts: examining the evolution of IoV (basic concepts, principles, technologies, and architectures), connectivity of vehicles in the IoT (protocols, frameworks, and methodologies), connected vehicle environments and advanced topics in VANETs (security and safety issues, autonomous operations, machine learning, sensor technology, and AI). By providing scientific contributions and workable suggestions from researchers and practitioners in the areas of IoT, IoV, and security, this valuable reference aims to extend the body of existing knowledge.
