1. Record Nr. UNISA996465348403316 Autore Venugopal K. R Titolo QoS Routing Algorithms for Wireless Sensor Networks [[electronic resource] /] / by K. R. Venugopal, Shiv Prakash T., M. Kumaraswamy Singapore:,: Springer Singapore:,: Imprint: Springer,, 2020 Pubbl/distr/stampa **ISBN** 981-15-2720-2 Edizione [1st ed. 2020.] 1 online resource (XXV, 163 p. 68 illus., 32 illus. in color.) Descrizione fisica 681.2 Disciplina Soggetti Computer communication systems Algorithms Data protection Computer Communication Networks Security Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di bibliografia Includes bibliographical references and index. Nota di contenuto An Introduction to QoS in Wireless Sensor Networks -- LRTHR: Link-Reliability Based Two-Hop Routing for WSNs -- FTQAC: Fault Tolerant QoS Adaptive Clustering for WSNs -- ETXTD: ETX and RTT Delay based Fault Detection Algorithm for WSNs -- DQTSM: Distributed Qos in Time Synchronized MAC Protocol for WSNs -- ERRAP: Efcient Retransmission Qos-Aware MAC Scheme for WSNs -- CBH-MAC: Contention Based Hybrid MAC Protocol for WSNs. Sommario/riassunto This book provides a systematic introduction to the fundamental concepts, major challenges, and effective solutions for Quality of Service in Wireless Sensor Networks (WSNs). Unlike other books on the topic, it focuses on the networking aspects of WSNs, discussing the most important networking issues, including network architecture design, medium access control, routing and data dissemination, node clustering, node localization, query processing, data aggregation, transport and quality of service, time synchronization, and network security. Featuring contributions from researchers, this book strikes a

> balance between fundamental concepts and new technologies, providing readers with unprecedented insights into WSNs from a networking perspective. It is essential reading for a broad audience,

including academics, research engineers, and practitioners, particularly postgraduate/postdoctoral researchers and engineers in industry. It is also suitable as a textbook or supplementary reading for graduate computer engineering and computer science courses.