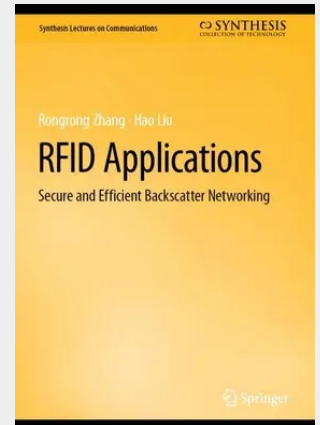


RFID Applications

Secure and Efficient Backscatter Networking

This book introduces current efficient and secure backscatter networking schemes for RFID. The authors integrate these schemes with a concrete example, namely RFID-based missing item detection. The book presents a large palette of tools indispensable in the RFID-based passive IoT (such as compute complexity analysis, approximate algorithm design, the probabilistic data structure, and the protocol stack in COTS and software-defined RFID tags) and how these tools can be carefully tuned and adapted to be practically applied in RFID systems. The book elaborates the state-of-the-art research bringing the conventional data structure and traffic engineering technology in the core network into the emerging IoT applications of RFID. This does not only boost the performance for RFID systems, but also inspires new research directions. The authors believe that this book will interest researchers, professionals, and graduates working in RFID system design and engineering, low-power IoT as well as other related fields.

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