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Descrizione fisica	1 online resource (325 pages)
Collana	Energy Engineering
Altri autori (Persone)	Ravi KumarV (Venkatesh) FlamminiFrancesco LinHong GouthamB SunilKumar B. R SivapragashC
Disciplina	621.31
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents -- About the Editors -- 1. Blockchain: a new era of technology Sunil Kumar B R, Gururaj H L, Goutham B, Ravikumar V, and Hong Lin -- 1.1 Introduction -- 1.2 Components of blockchain -- 1.3 Blockchain actors -- 1.4 Types of blockchain -- 1.5 Transaction flow -- 1.6 Cryptography in blockchain -- 1.7 Blockchain Merkle tree -- 1.8 Consensus in blockchain -- 1.9 Conclusion -- References -- 2. Integration of blockchain with IoT-enabled sensor networks for smart grids Francesco Flammini, Rakesh K R, and Jayanna S S -- 2.1 Introduction -- 2.2 Internet of Things -- 2.3 Wireless sensor networks -- 2.4 Smart grids -- 2.5 IoT-enabled sensor networks for smart grids -- 2.6 Blockchain for IoT -- 2.7 Vulnerabilities in IoT -- 2.8 Scalability in IoT -- 2.9 Conclusion -- References -- 3. Blockchain technology as a solution to address security and privacy issues in IoT D S Krishna Prasad, H R Prasanna Kumar, and Anand Nayar -- 3.1 Introduction -- 3.2 Security and

privacy concerns in the IoT -- 3.3 Blockchain technology concepts --
3.4 Open issues and research areas of blockchain in IoT -- 3.5
Conclusion

Sommario/riassunto

Blockchain technology for smart grids holds great promise for grid management and secure transactions. Written by an international team, this timely work introduces the concept of blockchain and covers applications in smart grids, including sensors, security and privacy, AI and the use of cryptocurrencies for energy transactions.
