

# Smart Technologies: An online reading list from the IET Library



These ebooks and ejournals, available via the IET Virtual Library, focus on the topic of smart technologies, covering cities, data, grids and health care applications.

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# Ebooks (provided by EBSCO and Knovel)

**Green and Smart Technologies for Smart Cities, Pradeep Tomar and Gurjit Kaur. (2020).** The book starts with an overview of the role of cities in climate change and environmental pollution worldwide, followed by the concept description of smart cities and their expected features, focusing on green technology innovation.

**Smart Grid Systems: Modeling and Control, N. Ramesh Babu. (2019).** This book provides a comprehensive discussion from a number of experts and practitioners and describes the challenges and the future scope of the technologies related to smart grid.

**Blockchain-Based Smart Grids, Miadreza Shafie-khah. (2020).** Aimed at moving towards blockchain-based smart grids with renewable applications, this book is useful to researchers and practitioners in all sectors of smart grids.

**Optimal Planning of Smart Grid With Renewable Energy Resources, Naveen Jain et al. (2022).** Covering topics such as electric drives and energy systems, this publication is ideal for researchers, academicians, industry professionals, engineers, scholars, instructors, and students.

**Intelligent Pervasive Computing Systems for Smarter Healthcare, Arun Kumar Sangaiah, S.P. Shantharajah and Padma Theagarajan. (2019).** This book examines a wealth of topics such as the design and development of pervasive healthcare technologies, data modeling and information management, wearable biosensors and their systems, and more.

**The Rise of Autonomous Smart Cities: Technology, Economic Performance and Climate Resilience, Zaheer Allam. (2021).** This book introduces the concept of the 'autonomous city'- a concept that has been developed from the 'smart cities' model that is based on a city's ability to gather data and taking it one step further.

**Biometric Data in Smart Cities: Methods and Models of Collective Behavior, Stepan Bilan et al. (2021).** This book is intended for undergraduate, graduate students and specialists working and conducting research in the field of biometric information processing, as well as in the development and construction of distributed intelligent systems.

**Smart Cities: Introducing Digital Innovation to Cities, Oliver Gassmann, Jonas Böhm and Maximilian Palmié. (2019).** The book identifies and addresses the core elements and potential of smart cities, best practice methods and tools to be implemented.

**Smart Medical Data Sensing and IoT Systems Design in Healthcare, Chinmay Chakraborty. (2020).** This book is an essential reference source that focuses on robust and easy solutions for the delivery of medical information from patients to doctors and explores deployable IoT system options in healthcare systems.

**Nanotechnology for Smart Concrete, Ghasan Fahim Huseien, Nur Hafizah A. Khalid and Jahangir Mirza. (2022).** This book discusses the advantages and applications of nanomaterials in the concrete industry, including high-strength performance, microstructural improvement, self-healing, energy storage, and coatings.

**Demystifying Smart Cities : Practical Perspectives on How Cities Can Leverage the Potential of New Technologies, Anders Lisdorf. (2020).** In this book, the real-world implementations of successful Smart City technology are analyzed, and insights are gained from recorded attempts that have not reached their full potential.

**Handbook of Research on Developing Smart Cities Based on Digital Twins, Matteo Del Giudice and Anna Osello. (2021).** This book contains in-depth research focused on the description of methods, processes, and tools that can be adopted to achieve smart city goals.

# Ejournals (provided by EBSCO)

**Energy Future.** (Innovations in energy and power.)

**Journal of Ambient Intelligence and Smart Environments.** (This journal covers enabling technologies such as multi-modal sensing and vision processing.)

**Computational Intelligence.** (Covers research in the field of artificial intelligence. Publication of both experimental and theoretical research, as well as surveys and impact studies.)

**Future Studies Research Journal.** Trends and Strategy. (Features theoretical and empirical articles in the future studies and strategy fields.)

**Minds and Machines.** (Examines issues concerning machines and mentality, artificial intelligence, epistemology, simulation, and modeling.)

**Intelligent Decision Technologies.** (Focuses on intelligent technologies and their application to decision making.)

**Machine Learning.** (Provides information about research on computational approaches to learning.)

## Further resources from the IET

- [IET Smart Grid \(Open Access Journal\)](#)
- [IET Smart Cities \(Open Access Journal\)](#)
- [Communities and Networks](#)
- [Factfiles](#)
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