

Collection Spotlight: An online reading list from the IET Library

These ebooks and ejournals, available via the [IET Virtual Library](#), have been selected to highlight some of the most popular titles used by our members as well as new additions to the collection, covering a wide range of engineering topics.



Ebooks (provided by EBSCO and Knovel)

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 self-healing, energy storage, and coatings.

Nuclear Power Plants: Recent Progress and Future Directions, John K. Compton. (2022). In this volume, recent research on nuclear power plants is presented across four chapters covering a range of topics relating to nuclear power plants in an accessible way.

Electrical Engineering Fundamentals, S. Bobby Rauf. (2020). Through this book, the reader will gain a clear and strong grasp of electrical engineering fundamentals, and a better understanding of electrical engineering terms, concepts, principles, laws, analytical techniques, solution strategies, and computational techniques.

Wind and Solar Power Systems : Design, Analysis, and Operation, Mukund R. Patel and Omid Beik. (2021). This book provides technological and socio- economic coverage of renewable energy. It discusses wind power technologies, solar photovoltaic technologies, large-scale energy storage technologies, and ancillary power systems.

Electrical Safety Engineering of Renewable Energy Systems, Massimo Mitolo and Rodolfo Araneo. (2022). Written for students and professional electrical engineers, Electrical Safety Engineering of Renewable Energy Systems explores the safety challenges of renewable systems and proposes a safety-by-design approach.

High Voltage Direct Current Transmission, Dragan Jovcic. (2019). This new edition covers all HVDC transmission technologies including Line Commutated Converter (LCC) HVDC; Voltage Source Converter (VSC) HVDC, and the latest VSC HVDC based on Modular Multilevel Converters (MMC), as well as the principles of building DC transmission grids.

Energy Storage Devices for Renewable Energy-Based Systems - Rechargeable Batteries and Supercapacitors, Nihal Kularatna and Kosala Gunawardane. (2021). This book is a fully revised edition of this comprehensive overview of the concepts, principles and practical knowledge on energy storage devices.

Design of Smart Power Grid Renewable Energy Systems, Ali Keyhani. (2019). The revised Third Edition of this book integrates three areas of electrical engineering: power systems, power electronics, and electric energy conversion systems.

Introduction to Python for Science and Engineering, David J. Pine. (2019). This guide offers a quick and incisive introduction to Python programming for anyone. The author has carefully developed a concise approach to using Python in any discipline of science and engineering.

An Introduction to Passive Radar, Hugh D. Griffiths and Christopher J. Baker. (2022). This book introduces the basic principles of passive radar technology and provides a comprehensive overview of the recent developments and advances in this field.

IET Wiring Regulations: Inspection, Testing and Certification, Brian Scadden. (2019). Simplifies the advice found in the Wiring Regulations, explaining how they apply to working practice for inspection, testing and certification.

Energy Storage : Systems and Components, Alfred Rufer. (2018). This book provides an overview of the development of new solutions and products that address key topics, including electric/hybrid vehicles, ultrafast battery charging, smart grids, renewable energy, peak shaving, and reduction of energy consumption.

Electric Power System Fundamentals, Savador Acha Daza. (2016). This comprehensive resource presents the fundamentals of power systems, including the theory, practical steps, and methods used in the design and management of energy systems.

The Prospect of Industry 5.0 in Biomanufacturing, Pau Loke Show, Kit Wayne Chew and Tau Chuan Ling. (2022). This is the first book to present the idea of Industry 5.0 in biomanufacturing and bioprocess engineering, both upstream and downstream, and covers its applications and challenges.

Ejournals (provided by EBSCO)

Energies. Covers topics related to energy sources, systems, policy, and management.

Harvard Business Review. Presents analysis of management problems and practice in all fields of management and administration.

International Journal of Production Research. Deals with technology and fundamental behaviour of production resources.

Polymers. Covers analysis and research across a wide range of topics within organic chemistry.

Advances in Materials Science & Engineering. Publishes original research on all areas of materials science and engineering.

Business Strategy and the Environment. Original contributions which add to the understanding of business responses to improving environmental performance. Of interest to a broad interdisciplinary audience.

Astronomy. Publishes original astronomical research, with an emphasis on significant scientific results derived from observations.

Railway Gazette International. Dedicated to reporting news, analysing trends, and campaigning for development and investment in the rail industry.

Electrical Engineering. Features original articles drawn from the entire range of electrical and electronic engineering, including related fields in mathematics and physics.

Further resources from the IET

- [Communities and Networks](#)
- [Factfiles](#)
- [IET Academy](#)
- [IET Digital Library](#)
- [Technical Webinars](#)

Help and contacts

If you need any assistance on using library collections and resources you can contact us via email at libdesk@theiet.org. You can also discover more resources and support provided by the IET Library and Archives at our [homepage](#).

IET members can access the Virtual Library via the single sign-on (SSO) service. If you are experiencing difficulties logging in via the SSO please contact the membership services team at membership@theiet.org.

Visit theiet.org/virtual-library to view more content.