The Institution of Engineering and Technology

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Renewable energy update: An online reading list from the IET Library

These ebooks and ejournals, available via the IET Virtual Library, have been selected to provide an introduction to the topic of renewable energy. This updates the previous reading list on renewable energy covering smart grids, solar panels, wind turbines and much more.

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Ebooks (provided by EBSCO)

The Fully Charged Guide to Electric Vehicles & Clean Energy, (2020). Experts from around the globe explore how sustainable technology – everything from solar panels to wind turbines and electric vehicles – is getting cheaper, more effective and more available.

Energy Storage: Systems and Components, Rufer, A.. (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.

Optimal Planning of Smart Grid With Renewable Energy Resources, 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.

Solar Energy Conversion Systems in the Built Environment, Visa et al. (2020). This book focuses on solar energy conversion systems that can be implemented in the built environment, at building or at community level.

Small-Scale Renewable Energy Systems: Independent Electricity for Community, Business and Home, Ruin, S., Siden, G.. (2020). The book introduces the reader to a number of renewable energy sources, to different options for storing electricity and to smart use of electricity, particularly in the context of small isolated systems.

Photovoltaics From Milliwatts to Gigawatts : Understanding Market and Technology Drivers Toward Terawatts, Bruton, T.. (2021). An essential guide aimed at researchers and students in electrical engineering and physical sciences through the rapid evolution of PV technology and the challenges ahead for global deployment.

Heat Pumps: Fundamentals and Applications, Grassi, W.. (2018). The text describes the main features of currently available heat pumps, focusing on system operation and interactions with external heat sources.

Novel Systems and Applications in Clean Energy, Colmenar Santos, A.. (2019). This book acts as a reference that provides readers with the broadest available single volume coverage of leading edge advances in the development and optimization of clean energy technologies.

Visions of Energy Futures: Imagining and Innovating Low-Carbon Transitions, Sovacool, B. K.. (2019). This book examines the visions, fantasies, frames, discourses, imaginaries, and expectations associated with six state-of-the-art energy systems.

Green and Smart Technologies for Smart Cities, Tomar, P., Gurjit, K.. (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.

Wind and Solar Power Systems: Design, Analysis, and Operation, Patel, M., Beik. O.. (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.

Ejournals (provided by EBSCO)

International Journal of Green Energy (Covers all aspects of energy and energy technologies and advanced technologies for energy conversion and power generation.)

Solar Today (A source for the latest technology, policy advances and analysis in renewable energy.)

International Journal of Photoenergy (Consolidates research activities in chemistry, physics and technology of photochemistry, and solar energy utilization.)

Renewable Energy Law and Policy Review (Covers renewable energy as relating to law and policy.)

Journal of Power Technologies (Covers all aspects of the science, technology and developing of turbomachinery, boilers, hydro power, nuclear energy, fuel cells, renewable energy, thermodynamics.)

Wind Engineering (Devoted to the technology of wind energy; includes papers on the aerodynamics of rotors and blades, machine subsystems and components.)

Energy, Sustainability & Society (Covers various aspects of energy production, energy sources and power generation with a focus on sustainability.)

International Journal of Sustainable Energy (Covers biomass, wave generators and wave power. Examines experimental, theoretical, and applied results.)

Worldwide Energy (Provides news & information on all types of energy sources and applications including renewables.)

Green Futures (Covers a wide range of sustainability topics including renewable energy.)

Further resources from the IET

- Communities and Networks
- Factfiles
- IET Digital Library
- Technical Webinars

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