

February 2024

Electric Vehicles:

An online reading list from the IET Library



These eBooks and eJournals, available via the [IET Library](#), have been selected on the topic of electric vehicles. They cover topics such as charging, design and intelligent systems.



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eBooks

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eJournals

eBooks

Charging



Battery Management Algorithm for Electric Vehicles, Rui Xiong. (2020). This book introduces readers to the core algorithms of battery management system (BMS) for electric vehicles.



Managing Electric Vehicle Power, Sam Davis. (2020). This book provides complete coverage for understanding how best to utilize the primary power source across all the EV's Electric Control Units.

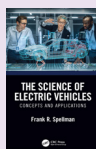


Decentralized Charging Coordination of Large-scale Plug-in Electric Vehicles in Power Systems, Zhongjing Ma. (2020). This book focuses on the design of decentralized optimization methods applied to charging strategies for large-scale PEVs.

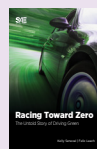


Wireless Power Transfer for Electric Vehicles: Foundations and Design Approach, Alicia Triviño-Cabrera et al. (2020). This book describes the fundamentals and applications of wireless power transfer (WPT) in electric vehicles (EVs).

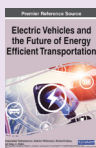
Design



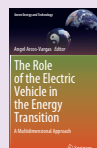
The Science of Electric Vehicles : Concepts and Applications, Frank R. Spellman. (2023). This book examines the history and development of electric vehicles.



Racing Toward Zero : The Untold Story of Driving Green, Kelly Senecal and Felix Leach. (2021). This book reviews the types of propulsion systems and vehicle options and discuss low-carbon fuels and alternative energy sources.



Electric Vehicles and the Future of Energy Efficient Transportation, Umashankar Subramaniam et al. (2021). This book is for engineers, technicians, researchers, and students looking for updated information on all aspects of electric vehicles.



The Role of the Electric Vehicle in the Energy Transition : A Multidimensional Approach, Angel Arcos-Vargas. (2021). This book explores the part that electric vehicles can play in reducing carbon dioxide emissions and the progress being made in designing electric vehicles.

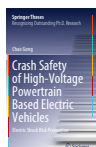


Power Converters for Electric Vehicles, L. Ashok Kumar and S. Albert Alexander. (2021). This book provides the complete solution for the power converters for EV applications along with simulation exercises and experimental results.



The Fully Charged Guide to Electric Vehicles & Clean Energy. (2020). In The Fully Charged Guide to Electric Vehicles & Clean Energy, experts from around the globe explore how sustainable technology is getting cheaper, more effective and more available.

Safety

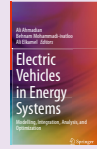


Crash Safety of High-Voltage Powertrain Based Electric Vehicles : Electric Shock Risk Prevention, Chao Gong. (2022). This book introduces fast winding-based discharge strategies used for permanent magnet synchronous machine-based drives in electric vehicles.

Grid Integration



Smart Grids for Renewable Energy Systems, Electric Vehicles and Energy Storage Systems, Rajkumar Viral et al. (2022). This book discusses the analysis and modeling of the large-scale integration of renewable energy systems, electric vehicles, and energy storage systems.



Electric Vehicles In Energy Systems : Modelling, Integration, Analysis, And Optimization, Ali Ahmadian et al. (2020). This book discusses the technical, economic, and environmental aspects of electric vehicles and their impact on electrical grids and energy systems.



Electric Vehicle Integration in a Smart Microgrid Environment, Mohammad Saad Alam and Mahesh Krishnamurthy. (2021). This book captures state-of-the-art development in smart microgrid management with EV integration and their applications.

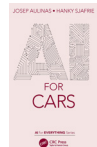


From Vehicles To Grid To Electric Vehicles To Green Grid: Many A Little Makes A Miracle, Fuhuo Li et al. (2020). This book paves the way for a proper understanding of current and future issues on global warming, air pollution, depletion of natural resources, and cyberattacks on smart grids.

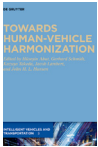
Intelligent Systems



AI Techniques for Renewable Source Integration and Battery Charging Methods in Electric Vehicle Applications, S. Angalaeswari et al. (2023). Focuses on artificial intelligence techniques for the evolving power system field, electric vehicle market, and energy storage.



AI for Cars, Josep Aulinas and Hanky Sjafrie. (2022). This book provides a brief tour through many different AI landscapes including robotics, image and speech processing, recommender systems and onto deep learning.



Towards Human-Vehicle Harmonization, Huseyin Abut et al. (2023). Features a wide spectrum of automotive fields towards human-vehicle harmonization covering in-vehicle signal processing, driver modeling, systems and safety.

eJournals

International journal of green energy. (Covers all aspects of environmentally friendly energy technologies.)

Journal of Mechatronics, Electrical Power & Vehicular Technology. (Publishes original research papers, review articles and case studies focused on vehicular technology.)

International Journal of Automotive Technology. (Covers all aspects of the field including thermal engineering, flow, structural & modal analysis, and vehicular electronics.)

Automotive Logistics. (Features, reports, interviews and news on vehicle logistics globally.)

Automotive Design and Production. (Covering automotive product development and manufacturing processes.)