

February 2025

Electric Vehicles:

An online reading list from the IET Library



These eBooks and ejournals, available to IET members 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

- [Charging](#)
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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.



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).



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.



Sodium-Ion Batteries : Technologies and Applications, Xiaobo Ji et al. (2024). This guide systematically summarises the development, directions, potential, and core issues of sodium-ion batteries.

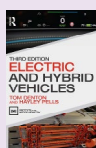
Design



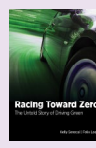
The Science of Electric Vehicles : Concepts and Applications, Frank R. Spellman. (2023). This book examines the history and development of electric vehicles.



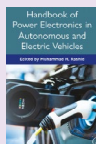
Power Converters for Electric Vehicles, L. Ashok Kumar and S. Albert Alexander. (2021). This book provides the complete solution for the power converters for EV applications along with simulation exercises and experimental results.



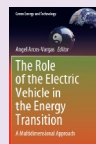
Electric and Hybrid Vehicles, Tom Denton and Hayley Pells. (2024). Covers the different types of electric vehicle, costs and emissions and the charging infrastructure as well as how hybrid and electric vehicles work.



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.



Handbook of Power Electronics in Autonomous and Electric Vehicles, Muhammad H. Rashid. (2024). Provides advanced knowledge on electric propulsion in electric vehicles, radars and sensors, and relevant aspects of energy storage and battery charging.



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.



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.

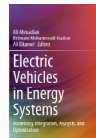
Grid Integration



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 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.



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.

Intelligent Systems



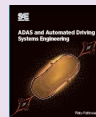
AI Techniques for Renewable Source Integration and Battery Charging Methods in Electric Vehicle Applications, S. Angalaeswari et al. (2023). Focuses on artificial intelligence techniques for the evolving power system field, electric vehicle market, and energy storage.



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.



Autonomous Vehicles and Virtual Reality : The New Automobile Industrial Revolution, Andras Kemeny. (2024). This book concisely describes the technologies, human perception, and cognition issues relevant to autonomous vehicles.

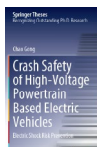


ADAS and Automated Driving : Systems Engineering, Plato Pathrose. (2024). This book explores systems engineering's crucial role in designing, safety-critical cyber-physical systems.



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.

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.

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 and modal analysis, and vehicular electronics.)

Automotive News. (Articles, special reports, statistics and financial information on manufacturing and sales of the automobile manufacturing industry worldwide.)

International Journal of Vehicle Structures & Systems (IJVSS). (Promotes technical education and research in the fields of mechanical and aerospace engineering.)