

Modern Automotive Electrical Systems

Theory | Development | and Simulations for Electric Vehicles

THIS BOOK CHAPTER WILL BE

Indexed by Wiley, Scopus, Web of Science, and will be offered to Thomson & Reuter's

IMPORTANT DATES

Abstract submission (~500): **25/12/2020**

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BOOK CHAPTER CALL SCOPE

- Introduction to modern transportation electrification: benefits and challenges
- Data-driven environmental impact of traditional and electrified vehicles
- The life cycle of the electrical, and electronic components in automotive applications
- Overview of powertrain configurations in e-mobility: theory, modelling, and technology
- Digital and power electronics in automotive electrical systems
- Cabling design and sizing technology
- Advances in electric propulsion systems: electrical machines and drives
- Intelligent techniques for demand-side management
- Energy storage systems modelling for electrified vehicles
- Control techniques and algorithms in automotive electrical, and electronic systems
- Energy management strategies and algorithms in automotive systems
- Charger and charging technologies
- Electric Vehicles Systems and Technology: auxiliary systems
- Application of deep learning and reinforcement learning for electrical systems
- Artificial intelligent techniques for electric vehicles
- IoT for electric vehicles
- Wireless electric vehicle charging infrastructure
- Blockchain technologies for electrical systems
- Optimisation methods for electrical units sizing (battery, e-motors, etc.)
- Typhoon software for electric vehicle modelling and simulation
- Case studies on the above subjects using MATLAB Simulink software

HOW TO SUBMIT

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