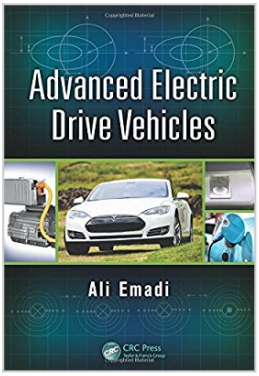

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This comprehensive work:

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- Describes the electrification technologies applied to nonpropulsion loads, such as power steering and air-conditioning systems
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- Considers vehicle-to-grid (V2G) interface and electrical infrastructure issues, energy management, and optimization in advanced electric drive vehicles
- Contains numerous illustrations, practical examples, case studies, and challenging questions and problems throughout to ensure a solid understanding of key concepts and applications

Advanced Electric Drive Vehicles makes an ideal textbook for senior-level undergraduate or graduate engineering courses and a user-friendly reference for researchers, engineers, managers, and other professionals interested in transportation electrification.

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Editorial Review

Review

"I strongly recommend this attractive textbook to a wide audience of engineering educators, students, and engineers in industry who are interested in automotive power electronics and drives."
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"... covers an extreme variety of procedures and aspects for advanced electric drive vehicles providing helpful illustrations, practical examples, and case studies. All seventeen chapters are written by experts in the respective fields offering the knowledge that is required for the current trends of HEVs, PHEVs, and EVs, as well as for the future pathways. Each chapter comes with a set of exercises and solved examples, which would be very convenient for students following Master courses. Moreover, detailed references are included, providing the original sources and directions for further reading. I was delighted to see analytical discussions of application-specific examples, case studies, challenging questions and assignments that are addressed to electric vehicle engineers and transportation electrification scientists, who seek to extend their knowledge in similar applications. As a summary, I could easily say that this book is one of the best in its field, since it covers almost about everything a transport engineer has to know about EVs and the related innovative technologies."
?Christos-Nikolaos E. Anagnostopoulos, from *IEEE Intelligent Transportation Systems Magazine*, Summer 2015

"…This is a hot topic in electrical engineering and the book is a good document to keep updated on the latest advances in this area."
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"This is the most comprehensive book covering all major aspects of various advanced electric drive vehicles including hybrid electric vehicles (HEVs), plug-in hybrid electric vehicles (PHEVs), and electric vehicles (EVs). ... It is a state-of-the-art textbook with a modern approach in teaching. It includes presentation files, numerous illustrations, practical examples, questions, and hands-on laboratory instructions. ... The chapters not only provide an excellent overview of the innovations of HEVs, PHEVs, and EVs over the past century, but also point to innovative pathways for the future. They teach the readers the skills that are required to excel in today’s rapidly changing automotive industry. ... I am very confident that this will be a very excellent textbook for academic as well as industry professionals. Each topic in this book is written by world renowned experts; such a collaborative work has not been seen so far in textbooks available in this area. ... I can definitely use this book for internal technical trainings within my company and for short course trainings."
?Dr. Anand Sathyan, McMaster University, Hamilton, Ontario, Canada

About the Author

Ali Emadi received his BS and MS with the highest distinction from Sharif University of Technology, Tehran, Iran, and his Ph.D from Texas A&M University, College Station, USA. He is currently the Canada excellence research chair in hybrid powertrain and director of the McMaster Institute for Automotive Research and Technology at McMaster University in Hamilton, Ontario, Canada. Previously he was the

Harris Perlstein endowed chair professor of engineering and director of the Electric Power and Power Electronics Center and Grainger Laboratories at Illinois Institute of Technology (IIT), Chicago, USA. He was also the founder, chairman, and president of Hybrid Electric Vehicle Technologies, Inc.?a spinoff from IIT.

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