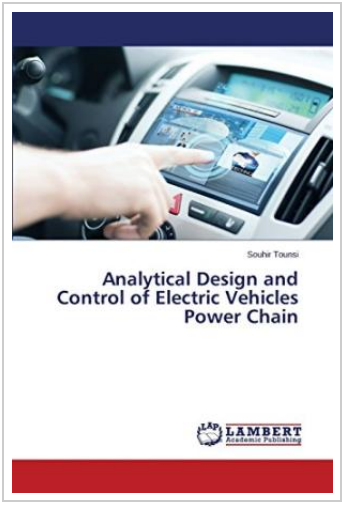

Analytical Design and Control of Electric Vehicles Power Chain

By Souhir Tounsi

LAP Lambert Academic Publishing Jan 2015, 2015. Taschenbuch. Book Condition: Neu. 220x150x3 mm. This item is printed on demand - Print on Demand Neuware - In this book, we describe a methodology of systemic design of electric vehicles (EVs) power chain, reducing the cost and the consumption. This methodology rests on the choice of the structure and the components of this chain reducing jointly the cost and the consumption of EVs. Indeed, a synchronous motor structure to permanent magnets and axial flux reducing the production cost that can presented under several configurations is defined and restraint in relation to the equivalent structure with coiled rotor or to double excitation. The choice of the static converter oriented toward a structure to two levels voltage and to electromagnetic switches is in the goal to increase the reliability of the global system and to push the multiple inconveniences of the IGBTs. The adaptation of this low-frequency converter structure is assured by insertion of a speed amplifier to gearing. Finally, the modelling under the environment of Matlab/Simulink of the power chain integrating a system of energy recuperation and a system of minimization of the consumption by stacking of three modules on the axis of...

Reviews

This book is wonderful. It really is writter in easy words and never difficult to understand. I am quickly can get a satisfaction of reading a created ebook.
-- ***Carley Huels***

Absolutely essential study book. It normally is not going to charge excessive. I am delighted to inform you that this is basically the finest ebook we have study during my very own lifestyle and can be he greatest publication for at any time.
-- ***Dr. Willis Paucek II***