

**IEEE Transactions on Vehicular Technology (TVT)**  
**selected references on the VPP (Vehicle Power Propulsion) topics**

*Updated in December 2017, by Prof. A. Bouscayrol, chair of VPP-TechCom of IEEE-VTS.*

This list is a **non-exhaustive** selection of papers published in TVT on the topics related to VPP, since 2010 and high-citation papers before 2010. This list aims to show the possible VPP topics in TVT and also to provide possible references to potential authors in order to better position their paper. Moreover, you are encouraged to have a look on the “Early access” page of TVT for accepted papers not yet fully published.

**2017**

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**vol. 66 no. 11, November 2017**

- Z. Yi, P. Bauer, “Adaptive Multiresolution Energy Consumption Prediction for Electric Vehicles ategy”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 10, November 2017, pp. 10515 - 10525.
- M. Montazeri-Gh, Z. Pourbafarani, “Near-Optimal SOC Trajectory for Traffic-Based Adaptive PHEV Control Strategy”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 10, November 2017, pp. 9753 - 9760.
- F. Naets, S. van Aalst, B. Boulkroune, N. El Ghouti, W. Desmet, “Design and Experimental Validation of a Stable Two-Stage Estimator for Automotive Sideslip Angle and Tire Parameters”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 10, November 2017, pp. 9727 - 9742.
- J. Ni, J. Hu, C. Xiang, “Envelope Control for Four-Wheel Independently Actuated Autonomous Ground Vehicle Through AFS/DYC Integrated Control”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 10, November 2017, pp. 9712 - 9726.
- A. De Keyser, M. Vandeputte, G. Crevecoeur, “Convex Mapping Formulations Enabling Optimal Power Split and Design of the Electric Drivetrain in All-Electric Vehicles”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 10, November 2017, pp. 9702 - 9711.
- P. Golchoubian, N. Azad, “Real-Time Nonlinear Model Predictive Control of a Battery–Supercapacitor Hybrid Energy Storage System in Electric Vehicles”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 10, November 2017, pp. 9678 - 9688.
- S. Delprat, T. Hofman, S. Paganelli, “Hybrid Vehicle Energy Management: Singular Optimal Control”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 10, November 2017, pp. 9654 - 9666.
- Z. Zhang, L. Wang, J. Zhang, R. Ma, “Study on Requirements for Load Emulation of the Vehicle With an Electric Braking System”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 10, November 2017, pp. 9638 - 9653.

**vol. 66 no. 10, October 2017**

- H. Chaoui, C. Ibe-Ekeocha, “State of Charge and State of Health Estimation for Lithium Batteries Using Recurrent Neural Networks”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 10, October 2017, pp. 8773 - 8783.
- M. Woldelibanos Beraki, J. Trovão, M. Perdigão, M. Dubois, “Variable Inductor Based Bidirectional DC–DC Converter for Electric Vehicles”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 10, October 2017, pp. 8764 - 8772.
- X. Lu, Z. Liu, J. Zhang, H. Wang, Y. Song, F. Duan, “Prior-Information-Based Finite-Frequency textHinfy Control for Active Double Pantograph in High-Speed Railway”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 10, October 2017, pp. 8723 - 8733.
- Z. Liu, S. Onori, A. Ivanco, “Synthesis and Experimental Validation of Battery Aging Test Profiles Based on Real-World Duty Cycles for 48-V Mild Hybrid Vehicles”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 10, October 2017, pp. 8702 - 8709.
- Q. Yu, R. Xiong, C. Lin; W. Shen, L. Deng, “Lithium-Ion Battery Parameters and State-of-Charge Joint Estimation Based on H-Infinity and Unscented Kalman Filters”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 10, October 2017, pp. 8693 - 8701.
- W. Lhomme, A. Bouscayrol, S.A. Syed, S. Roy, F. Gailly, O. Pape, “Energy Savings of a Hybrid Truck Using a Ravigneaux Gear Train”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 10, October 2017, pp. 8682 - 8692.

**vol. 66 no. 9, September 2017**

- P. Wang, L. Zhou, Y. Zhang, J. Li, M. Sumner, “Input-Parallel Output-Series DC-DC Boost Converter With a Wide Input Voltage Range, For Fuel Cell Vehicles”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 9, September 2017, pp. 7771 - 7781.
- H. Eduardo Perez, X. Hu, S. Dey, S. Moura, “Optimal Charging of Li-Ion Batteries With Coupled Electro-Thermal-Aging Dynamics”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 9, September 2017, pp. 7761 - 7770.
- J. Lopez-Sanz, C. Ocampo-Martinez; J. Álvarez-Flórez, M. Moreno-Eguilaz, R. Ruiz-Mansilla, J. Kalmus; M. Gräeber, G. Lux, “Thermal Management in Plug-In Hybrid Electric Vehicles: A Real-Time Nonlinear Model Predictive Control Implementation”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 9, September 2017, pp. 7751 - 7760.
- B.K. Lee, J.P. Kim, S.G. Kim, J.Y. Lee, “An Isolated/Bidirectional PWM Resonant Converter for V2G(H) EV On-Board Charger”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 9, September 2017, pp. 7741 - 7750.

**vol. 66 no. 8, August 2017**

- R. Wang, G. Xiao, P. Wang, “Hybrid Centralized-Decentralized (HCD) Charging Control of Electric Vehicles”, *IEEE trans. on Vehicular Technology*, vol. 66, no. 8, August 2017, pp. 6728 - 6741.

- S. De Pinto, C. Chatzikomis, A. Sorniotti, G. Mantriota, "Comparison of Traction Controllers for Electric Vehicles With On-Board Drivetrains", *IEEE trans. on Vehicular Technology*, vol. 66, no. 8, August 2017, pp. 6715 - 6727.
- D. Cambron, A. Cramer, "A Lithium-Ion Battery Current Estimation Technique Using an Unknown Input Observer", *IEEE trans. on Vehicular Technology*, vol. 66, no. 8, August 2017, pp. 6707 - 6714.
- D.H. Kim, B.K. Lee, "Asymmetric Control Algorithm for Increasing Efficiency of Nonisolated On-Board Battery Chargers With a Single Controller", *IEEE trans. on Vehicular Technology*, vol. 66, no. 8, August 2017, pp. 6693 - 6706.
- H. Lim, C. Mi, W. Su, "A Distance-Based Two-Stage Ecological Driving System Using an Estimation of Distribution Algorithm and Model Predictive Control", *IEEE trans. on Vehicular Technology*, vol. 66, no. 8, August 2017, pp. 6663 - 6675.
- A. Tabakhpour Langerudyn, A. Mariscotti, M. Abolhassani, "Power Quality Conditioning in Railway Electrification: A Comparative Study", *IEEE trans. on Vehicular Technology*, vol. 66, no. 8, August 2017, pp. 6653 - 6662.

**vol. 66 no. 7, July 2017**

- Z. Huang, S.C. Wong, C.K. Tse, "Design of a Single-Stage Inductive-Power-Transfer Converter for Efficient EV Battery Charging", *IEEE trans. on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 5808 - 5821.
- B. Jiang, Y. Fei, "A PHEV Power Management Cyber-Physical System for On-Road Applications", *IEEE trans. on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 5797 - 5807.
- G. Li, D. Wu, J. Hu, Y. Li, M. Shamim Hossain, A. Ghoneim, "HELOS: Heterogeneous Load Scheduling for Electric Vehicle-Integrated Microgrids", *IEEE trans. on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 5775 - 5784.
- Z. Zhou, M. Bailo Camara, B. Dakyo, "Coordinated Power Control of Variable-Speed Diesel Generators and Lithium-Battery on a Hybrid Electric Boat", *IEEE trans. on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 5775 - 5784.
- A. G. Sarigiannidis, M. E. Beniakar, A. G. Kladas, "Fast Adaptive Evolutionary PM Traction Motor Optimization Based on Electric Vehicle Drive Cycle", *IEEE trans. on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 5762 - 5774.
- G. Chen, Y. Deng, J. Dong, Y. Hu, L. Jiang, X. He, "Integrated Multiple-Output Synchronous Buck Converter for Electric Vehicle Power Supply", *IEEE trans. on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 5752 - 5761.
- J. Han, D. Kum, Y. Park, "Synthesis of Predictive Equivalent Consumption Minimization Strategy for Hybrid Electric Vehicles Based on Closed-Form Solution of Optimal Equivalence Factor", *IEEE trans. on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 5604 - 5616.
- A. Mohamed, A. Berzoy, O. Mohammed, "Experimental Validation of Comprehensive Steady-State Analytical Model of Bidirectional WPT System in EVs Applications", *IEEE trans. on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 5584 - 5594.
- P. Saenger, N. Devillers, K. Deschinkel, M.C. Péra, R. Couturier, F. Gustin, "Optimization of Electrical Energy Storage System Sizing for an Accurate Energy Management in an Aircraft", *IEEE trans. on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 5572 - 5583.
- C. Mayet, P. Delarue, A. Bouscayrol, E. Chattot, "Hardware-In-the-Loop Simulation of Traction Power Supply for Power Flows Analysis of Multitrain Subway Lines", *IEEE trans. on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 5564 - 5571.
- J.W. Naranjo, L. E. Muñoz Camargo, J. E. Pereda, C. Cortes, "Design of Electric Buses of Rapid Transit Using Hybrid Energy Storage and Local Traffic Parameters", *IEEE trans. on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 5551 - 5563.
- J.P. Trovao, M.A. Roux, E. Ménard, M. Dubois, "Energy- and Power-Split Management of Dual Energy Storage System for a Three-Wheel Electric Vehicle", *IEEE trans. on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 5540 - 5550.
- M. S. Rahimi Mousavi, H. V. Alizadeh, B. Boulet, "Estimation of Synchronmesh Frictional Torque and Output Torque in a Clutchless Automated Manual Transmission of a Parallel Hybrid Electric Vehicle", *IEEE trans. on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 5531 - 5539.
- O. Gomozov, J.P. Trovao, X. Kestelyn, M. Dubois, "Adaptive Energy Management System Based on a Real-Time Model Predictive Control With Nonuniform Sampling Time for Multiple Energy Storage Electric Vehicle", *IEEE trans. on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 5520 - 5530.
- L. Boulon, C. Rossi, A. Stefanopoulou, R. Trigui, "Guest Editorial Special Section on Design, Modeling, and Control of Hybrid and Multi-source Vehicles", *IEEE trans. on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 5518 - 5519.

**vol. 66 no. 6, June 2017**

- Z. Zhao, X. Li; L. He, C. Wu, J. K. Hedrick, "Estimation of Torques Transmitted by Twin-Clutch of Dry Dual-Clutch Transmission During Vehicle's Launching Process", *IEEE trans. on Vehicular Technology*, vol. 66, no. 6, June 2017, pp. 4727 - 4741.
- L.J. Kere; S. Kelouwani, K. Agbossou, Y. Dubé, "Improving Efficiency Through Adaptive Internal Model Control of Hydrogen-Based Genset Used as a Range Extender for Electric Vehicles", *IEEE trans. on Vehicular Technology*, vol. 66, no. 6, June 2017, pp. 4716 - 4726.
- E. Oksuztepe, "In-Wheel Switched Reluctance Motor Design for Electric Vehicles by Using a Pareto-Based Multiobjective Differential Evolution Algorithm", *IEEE trans. on Vehicular Technology*, vol. 66, no. 6, June 2017, pp. 4706 - 4715.
- L. Horrein, A. Bouscayrol, W. Lhomme, C. Dépature, "Impact of Heating System on the Range of an Electric Vehicle", *IEEE trans. on Vehicular Technology*, vol. 66, no. 6, June 2017, pp. 4668 - 4677.

C. M. Martinez, X. Hu, D. Cao, E. Efstathios Velenis, B. Gao, M. Wellers, "Energy Management in Plug-in Hybrid Electric Vehicles: Recent Progress and a Connected Vehicles Perspective", *IEEE trans. on Vehicular Technology*, vol. 66, no. 6, June 2017, pp. 4534 - 4549.

**vol. 66 no. 5, May 2017**

F. Naseri, E. Farjah, T. Ghanbari, "An Efficient Regenerative Braking System Based on Battery/Supercapacitor for Electric, Hybrid, and Plug-In Hybrid Electric Vehicles With BLDC Motor", *IEEE trans. on Vehicular Technology*, vol. 66, no. 5, May 2017, pp. 3724 - 3738.

X. Zheng, X. Liu, Y. He, G. Zeng, "Active Vehicle Battery Equalization Scheme in the Condition of Constant-Voltage/Current Charging and Discharging", *IEEE trans. on Vehicular Technology*, vol. 66, no. 5, May 2017, pp. 3714 - 3723.

E. Asadi, R. Ribeiro, M. Behrad Khamesee, A. Khajepour "Analysis, Prototyping, and Experimental Characterization of an Adaptive Hybrid Electromagnetic Damper for Automotive Suspension Systems", *IEEE trans. on Vehicular Technology*, vol. 66, no. 5, May 2017, pp. 3703 - 3713.

H. Zhang, J. Wang, "Active Steering Actuator Fault Detection for an Automatically-Steered Electric Ground Vehicle", *IEEE trans. on Vehicular Technology*, vol. 66, no. 5, May 2017, pp. 3685 - 3702.

A. Chis, J. Lunden, V. Koivunen, "Reinforcement Learning-Based Plug-in Electric Vehicle Charging With Forecasted Price", *IEEE trans. on Vehicular Technology*, vol. 66, no. 5, May 2017, pp. 3674 - 3684.

M. Roche, W. Shabbir, S. A. Evangelou, "Voltage Control for Enhanced Power Electronic Efficiency in Series Hybrid Electric Vehicles", *IEEE trans. on Vehicular Technology*, vol. 66, no. 5, May 2017, pp. 3645 - 3658.

J. Lopez-Sanz, C. Ocampo-Martinez, J. Alvarez-Florez, M. Moreno-Eguilaz, R. Ruiz-Mansilla, J. Kalmus, M. Gräeber, G. Lux, "Nonlinear Model Predictive Control for Thermal Management in Plug-in Hybrid Electric Vehicles", *IEEE trans. on Vehicular Technology*, vol. 66, no. 5, May 2017, pp. 3632 - 3644.

**vol. 66 no. 4, April 2017**

L. Wang, S. Sharkh, A. Chipperfield, A. Cruden, "Dispatch of Vehicle-to-Grid Battery Storage Using an Analytic Hierarchy Process", *IEEE trans. on Vehicular Technology*, vol. 66, no. 4, April 2017, pp. 2952 - 2965.

A. Mallik, W.W. Ding, A. Khaligh, "A Comprehensive Design Approach to an EMI Filter for a 6-kW Three-Phase Boost Power Factor Correction Rectifier in Avionics Vehicular Systems", *IEEE trans. on Vehicular Technology*, vol. 66, no. 4, April 2017, pp. 2942 - 2951.

F. Altaf, B. Egardt, "Comparative Analysis of Unipolar and Bipolar Control of Modular Battery for Thermal and State-of-Charge Balancing", *IEEE trans. on Vehicular Technology*, vol. 66, no. 4, April 2017, pp. 2927 - 2941.

Z. Sun, X. Zhou, J. Du, X. Liu, "When Traffic Flow Meets Power Flow: On Charging Station Deployment With Budget Constraints", *IEEE trans. on Vehicular Technology*, vol. 66, no. 4, April 2017, pp. 2915 - 2926.

Y. Cao, N. Wang, "Toward Efficient Electric-Vehicle Charging Using VANET-Based Information Dissemination", *IEEE trans. on Vehicular Technology*, vol. 66, no. 4, April 2017, pp. 2886 - 2901.

**vol. 66 no. 3, March 2017**

O. Béthoux, E. Labouré, G. Remy, E. Berthelot, "Real-Time Optimal Control of a 3-Phase PMSM in 2-Phase Degraded Mode", *IEEE trans. on Vehicular Technology*, vol. 66, no. 3, March 2017, pp. 2044 - 2052.

S.E. Li, Q. Guo, L. Xin, B. Cheng, K. Li, "Fuel-Saving Servo-Loop Control for an Adaptive Cruise Control System of Road Vehicles With Step-Gear Transmission", *IEEE trans. on Vehicular Technology*, vol. 66, no. 3, March 2017, pp. 2033 - 2043.

H.F. Yuan, L.R. Dung, "Offline State-of-Health Estimation for High-Power Lithium-Ion Batteries Using Three-Point Impedance Extraction Method", *IEEE trans. on Vehicular Technology*, vol. 66, no. 3, March 2017, pp. 2019 - 2032.

T. Kim, S. Kwak, "A Flexible Voltage Bus Converter for the 48-/12-V Dual Supply System in Electrified Vehicles", *IEEE trans. on Vehicular Technology*, vol. 66, no. 3, March 2017, pp. 2010 - 2018.

H. Chaoui, A. El Mejdoubi, H. Gualous, "Online Parameter Identification of Lithium-Ion Batteries With Surface Temperature Variations", *IEEE trans. on Vehicular Technology*, vol. 66, no. 3, March 2017, pp. 2000 - 2009.

P. Nyberg, E. Frisk, L. Nielsen, "Driving Cycle Equivalence and Transformation", *IEEE trans. on Vehicular Technology*, vol. 66, no. 3, March 2017, pp. 1963 - 1974.

**vol. 66 no. 2, February 2017**

W. Deng, Y. Zhao, J. Wu, "Energy Efficiency Improvement via Bus Voltage Control of Inverter for Electric Vehicles", *IEEE trans. on Vehicular Technology*, vol. 66, no. 2, February 2017, pp. 1063 - 1073.

D. Chakraborty, E. Breaz, A. Kumar Rathore, F. Gao, "Parasitics-Assisted Soft-Switching and Secondary Modulated Snubberless Clamping Current-Fed Bidirectional Voltage Doubler for Fuel Cell Vehicles", *IEEE trans. on Vehicular Technology*, vol. 66, no. 2, February 2017, pp. 1053 - 1062.

M. Shahverdi, M.S. Mazzola, Q. Grice, M. Doude, "Bandwidth-Based Control Strategy for a Series HEV With Light Energy Storage System", *IEEE trans. on Vehicular Technology*, vol. 66 no. 2, February 2017, pp. 1040 - 1052.

- J. Zhang, H. Yao, G. Rizzoni, "Fault Diagnosis for Electric Drive Systems of Electrified Vehicles Based on Structural Analysis", *IEEE trans. on Vehicular Technology*, vol. 66, no. 2, February 2017, pp. 1027 - 1039.
- Y. Kim, J. Kwak, S. Chong, "Dynamic Pricing, Scheduling, and Energy Management for Profit Maximization in PHEV Charging Stations", *IEEE trans. on Vehicular Technology*, vol. 66, no. 2, February 2017, pp. 1011 - 1026.
- S.B. Lee, S. Ahn, I. G. Jang, "Simulation-Based Feasibility Study on the Wireless Charging Railway System With a Ferriteless Primary Module", *IEEE trans. on Vehicular Technology*, vol. 66, no. 2, February 2017, pp. 1004 - 1010.
- A. Zaboli, B. Vahidi, S. Yousefi, M.M. Hosseini-Biyouki, "Evaluation and Control of Stray Current in DC-Electrified Railway Systems", *IEEE trans. on Vehicular Technology*, vol. 66, no. 2, February 2017, pp. 974 - 980.

**vol. 66 no. 1, January 2017**

- E. Silvas, T. Hofman, N. Murgovski, L.F.P. Etman, M. Steinbuc "Review of Optimization Strategies for System-Level Design in Hybrid Electric Vehicles", *IEEE trans. on Vehicular Technology*, vol. 66, no. 1, January 2017, pp. 57 - 70.

**2016**

- B.V. Padmarajan, A. McGordon, P.A. Jennings, "Blended Rule-Based Energy Management for PHEV: System Structure and Strategy", *IEEE trans. on Vehicular Technology*, vol. 65, no. 10, October 2016, pp. 8757 - 8762.
- T.H. Pham, J.T.B.A. Kessels, P.P.J. van den Bosch, R.G. M. Huisman, "Analytical Solution to Energy Management Guaranteeing Battery Life for Hybrid Trucks", *IEEE trans. on Vehicular Technology*, vol. 65, no. 10, October 2016, pp. 7956 - 7971.
- F. Akar, Y. Tavlasoglu, E. Ugur, B. Vural, I. Aksoy, "A Bidirectional Nonisolated Multi-Input DC-DC Converter for Hybrid Energy Storage Systems in Electric Vehicles", *IEEE trans. on Vehicular Technology*, vol. 65, no. 10, October 2016, pp. 7944 - 7955.
- E. Vinot, V. Reinbold, R. Trigui, "Global Optimized Design of an Electric Variable Transmission for HEVs", *IEEE trans. on Vehicular Technology*, vol. 65, no. 8, August 2016, pp. 6794 - 6798.
- J.Y. Yang, L.D. Chou, Y.J. Chang, "Electric-Vehicle Navigation System Based on Power Consumption", *IEEE trans. on Vehicular Technology*, vol. 65, no. 8, August 2016, pp. 5930 - 5943.
- T. Miro-Padovani, G. Colin, A. Ketfi-Chérif, Y. Chamailard, "Implementation of an Energy Management Strategy for Hybrid Electric Vehicles Including Drivability Constraints", *IEEE trans. on Vehicular Technology*, vol. 65, no. 8, August 2016, pp. 5918 - 5929.
- F. Odeim, J. Roes, A. Heinzl, "Power Management Optimization of a Fuel Cell/Battery/Supercapacitor Hybrid System for Transit Bus Applications", *IEEE trans. on Vehicular Technology*, vol. 65, no. 7, July 2016, pp. 5783 - 5788.
- S. Ziaeinejad, Y. Sangsefidi, A. Mehrizi-Sani, "Fuel Cell-Based Auxiliary Power Unit: EMS, Sizing, and Current Estimator-Based Controller", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4826 - 4835.
- W. Zhou, C. Zhang, J. Li, H.K. Fathy, "A Pseudospectral Strategy for Optimal Power Management in Series Hybrid Electric Powertrains", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4813 - 4825.
- X. Zhang, S. Eben Li, H. Peng, J. Sun, "Design of Multimode Power-Split Hybrid Vehicles—A Case Study on the Voltec Powertrain System", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4790 - 4801.
- W. Zhang, C.C. Mi, "Compensation Topologies of High-Power Wireless Power Transfer Systems", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4768 - 4778.
- L. Zhai, T. Sun, J. Wang, "Electronic Stability Control Based on Motor Driving and Braking Torque Distribution for a Four In-Wheel Motor Drive Electric Vehicle", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4726 - 4739.
- J. Yang, G. Zhu, "Stochastic Predictive Boundary Management for a Hybrid Powertrain", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4700 - 4713.
- Y. Yang, N. Schofield, A. Emadi, "Integrated Electromechanical Double-Rotor Compound Hybrid Transmissions for Hybrid Electric Vehicles", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4687 - 4699.
- S. Xu, S. Eben Li, H. Peng, B. Cheng, X. Zhang, Z. Pan, "Fuel-Saving Cruising Strategies for Parallel HEVs", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4676 - 4686.
- Hui Xiong, Yatao Fu, Kun Dong, "A Novel Point-to-Point Energy Transmission Voltage Equalizer for Series-Connected Supercapacitors", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4669 - 4675.
- Di Tan ; Chao Lu, "The Influence of the Magnetic Force Generated by the In-Wheel Motor on the Vertical and Lateral Coupling Dynamics of Electric Vehicles", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4655 - 4668.
- W.S. Vaz, A.K. Nandi, U.O. Koylu, "A Multiobjective Approach to Find Optimal Electric-Vehicle Acceleration: Simultaneous Minimization of Acceleration Duration and Energy Consumption", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4633 - 4644.
- M. Shehab El Dinn M.F. Abdel-Hafez, A.A. Hussein, "Enhancement in Li-Ion Battery Cell State-of-Charge Estimation Under Uncertain Model Statistics", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4608 - 4618.

- S. Overington, S. Rajakaruna, "Combined High-Efficiency Region Controller to Improve Fuel Consumption of Power-Split HEVs", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4597 - 4607.
- J. Park, Y. Lu Murphey, M. A. Masrur, "Intelligent Energy Management and Optimization in a Hybridized All-Terrain Vehicle With Simple On-Off Control of the Internal Combustion Engine", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4584 - 4596.
- M. Nikkhah Mojdehi ; P. Ghosh, "An On-Demand Compensation Function for an EV as a Reactive Power Service Provider", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4572 - 4583.
- P. Moreno-Torres Concha, P. Velez, M. Lafoz, J.R. Arribas, "Passenger Exposure to Magnetic Fields due to the Batteries of an Electric Vehicle", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4564 - 4571.
- A. Mozaffari, N.L. Azad, J.K. Hedrick, "A Nonlinear Model Predictive Controller With Multiagent Online Optimizer for Automotive Cold-Start Hydrocarbon Emission Reduction", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4548 - 4563.
- V. Monteiro, J. P. Carmo, J.G. Pinto, J.L. Afonso, "A Flexible Infrastructure for Dynamic Power Control of Electric Vehicle Battery Chargers", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4535 - 4547.
- S. Marinkov, N. Murgovski, B. de Jager, "Convex Modeling and Sizing of Electrically Supercharged Internal Combustion Engine Powertrain", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4523 - 4534.
- P. Malysz, J. Ye, R. Gu, H. Yang, A. Emadi, "Battery State-of-Power Peak Current Calculation and Verification Using an Asymmetric Parameter Equivalent Circuit Model", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4512 - 4522.
- A. Lievre, A. Sari, P. Venet, A. Hijazi, M. Ouattara-Brigaudet, S. Pelissier, "Practical Online Estimation of Lithium-Ion Battery Apparent Series Resistance for Mild Hybrid Vehicles", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4505 - 4511.
- Yu-Shian Lin, Kai-Wei Hu, Tsu-Hao Yeh, Chang-Ming Liaw, "An Electric-Vehicle IPMSM Drive With Interleaved Front-End DC/DC Converter", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4471 - 4479.
- Chunjie Li, Wenxin Huang, Ruiwu Cao, Feifei Bu, Changxin Fan, "An Integrated Topology of Charger and Drive for Electric Buses", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4471 - 4479.
- Liang Li, Bingjie Yan, Chao Yang, Yuanbo Zhang, Zheng Chen, Guirong Jiang, "Application-Oriented Stochastic Energy Management for Plug-in Hybrid Electric Bus With AMT", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4459 - 4470.
- Weihan Li, Han Zhao, Junjun Deng, Siqi Li, Chunting Chris Mi, "Comparison Study on SS and Double-Sided LCC Compensation Topologies for EV/PHEV Wireless Chargers", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4429 - 4439.
- Yoon-Jae Kim, Jun-Young Lee, "Full-Bridge+SRT Hybrid DC/DC Converter for a 6.6-kW EV On-Board Charger", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4419 - 4428.
- N. Kim, A. Rousseau, E. Rask, "Parameter Estimation for a Lithium-Ion Battery From Chassis Dynamometer Tests", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4393 - 4400.
- D. Kasinathan, A. Kasaiezadeh, A. Wong, A. Khajepour, S.K. Chen, B. Litkouhi, "An Optimal Torque Vectoring Control for Vehicle Applications via Real-Time Constraints", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4368 - 4378.
- A. Jain, T. Nueesch, C. Naegele, P. Macri Lassus, C. H. Onder, "Modeling and Control of a Hybrid Electric Vehicle With an Electrically Assisted Turbocharger", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4344 - 4358.
- J. Jagemont, L. Boulon, P. Venet, Y. Dubé, A. Sari, "Lithium-Ion Battery Aging Experiments at Subzero Temperatures and Model Development for Capacity Fade Estimation", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4328 - 4343.
- Y. Hu, L. Yang, B. Yan, T. Yan, P. Ma, "An Online Rolling Optimal Control Strategy for Commuter Hybrid Electric Vehicles Based on Driving Condition Learning and Prediction", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4312 - 4327.
- C.Y. Hsieh, M. Moallem, F. Golnaraghi, "A Bidirectional Boost Converter With Application to a Regenerative Suspension System", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4301 - 4311.
- H. Her, Y. Koh, E. Joa, K. Yi, K. Kim, "An Integrated Control of Differential Braking, Front/Rear Traction, and Active Roll Moment for Limit Handling Performance", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4288 - 4300.
- P. Fajri, S. Lee, V.A. Kishore Prabhala, M. Ferdowsi, "Modeling and Integration of Electric Vehicle Regenerative and Friction Braking for Motor/Dynamometer Test Bench Emulation", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4264 - 4273.
- A. El Mejdoubi, A. Oukaour, H. Chaoui, H. Gualous, J. Sabor, Y. Slamani, "Prediction Aging Model for Supercapacitor's Calendar Life in Vehicular Applications", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4253 - 4263.
- A. El Mejdoubi, A. Oukaour, H. Chaoui, Y. Slamani, J. Sabor, H. Gualous, "Online Supercapacitor Diagnosis for Electric Vehicle Applications", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4241 - 4252.
- J. Druant, F. De Belie, P. Sergeant, J. Melkebeek, "Field-Oriented Control for an Induction-Machine-Based Electrical Variable Transmission", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4230 - 4240.

- L. Canals Casals, A.M. Schiffer Gonzalez, B. A. García, J. Llorca, "PHEV Battery Aging Study Using Voltage Recovery and Internal Resistance From Onboard Data", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4209 - 4216.
- J. C. Alvarez Anton, P. J. García Nieto, E. García Gonzalo, J. C. Viera Perez, M. Gonzalez Vega, C. Blanco Viejo, "A New Predictive Model for the State-of-Charge of a High-Power Lithium-Ion Cell Based on a PSO-Optimized Multivariate Adaptive Regression Spline Approach", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4197 - 4208.
- A. T. Al-Awami, E. Sortomme, G. M. Asim Akhtar, S. Faddel, "A Voltage-Based Controller for an Electric-Vehicle Charger", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4185 - 4196.
- S.G. Yoon, Y.J. Choi, J.K. Park, S. Saewoong Bahk, "Stackelberg-Game-Based Demand Response for At-Home Electric Vehicle Charging", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4172 - 4184.
- R. Wang, P. Wang, G. Xiao, "Two-Stage Mechanism for Massive Electric Vehicle Charging Involving Renewable Energy", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4159 - 4171.
- E. Silvas, K. Hereijgers, H. Peng, T. Hofman, M. Steinbuch, "Synthesis of Realistic Driving Cycles With High Accuracy and Computational Speed, Including Slope Information", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4118 - 4128.
- H. Imine, M. Djemaï, "Switched Control for Reducing Impact of Vertical Forces on Road and Heavy-Vehicle Rollover Avoidance", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4044 - 4052.
- C. Hu, R. Wang, F. Yan, N. Chen, "Output Constraint Control on Path Following of Four-Wheel Independently Actuated Autonomous Ground Vehicles", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4033 - 4043.
- J. R. M. Delos Reyes, R. V. Parsons, R. Hoensen, "Winter Happens: The Effect of Ambient Temperature on the Travel Range of Electric Vehicles", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 4016 - 4022.
- E. A. Grunditz, T. Thiringer, "Characterizing BEV Powertrain Energy Consumption, Efficiency, and Range During Official and Drive Cycles From Gothenburg, Sweden", *IEEE trans. on Vehicular Technology*, vol. 65, no. 6, June 2016, pp. 3964 - 3980.
- D. Patil, V. Agarwal, "Compact Onboard Single-Phase EV Battery Charger With Novel Low-Frequency Ripple Compensator and Optimum Filter Design", *IEEE trans. on Vehicular Technology*, vol. 65, no. 4, April, pp. 1948 - 1956.
- X. Chen, W. Shen, M. Dai, Z. Cao, J. Jin, A. Kapoor, "Robust Adaptive Sliding-Mode Observer Using RBF Neural Network for Lithium-Ion Battery State of Charge Estimation in Electric Vehicles", *IEEE trans. on Vehicular Technology*, vol. 65, no. 4, April 2016, pp. 1936 - 1947.
- J. Zhao, J. Wang, "Integrated Model Predictive Control of Hybrid Electric Vehicles Coupled With Aftertreatment Systems", *IEEE trans. on Vehicular Technology*, vol. 65, no. 3, March 2016, pp. 1199 - 1211.
- G. Xu, K. Xu, C. Zheng, X. Zhang, T. Zahid, "Fully Electrified Regenerative Braking Control for Deep Energy Recovery and Maintaining Safety of Electric Vehicles", *IEEE trans. on Vehicular Technology*, vol. 65, no. 3, March 2016, pp. 1186 - 1198.
- H. Zhang, Y. Zhang, C. Yin, "Hardware-in-the-Loop Simulation of Robust Mode Transition Control for a Series-Parallel Hybrid Electric Vehicle", *IEEE trans. on Vehicular Technology*, vol. 65, no. 3, March 2016, pp. 1059 - 1069.
- H. Yang, X. Xie, A. V. Vasilakos, "Noncooperative and Cooperative Optimization of Electric Vehicle Charging Under Demand Uncertainty: A Robust Stackelberg Game", *IEEE trans. on Vehicular Technology*, vol. 65, no. 3, March 2016, pp. 1043 - 1058.
- C. Mayet, P. Delarue, A. Bouscayrol, E. Chattot, J. N. Verhille, "Comparison of Different EMR-Based Models of Traction Power Substations for Energetic Studies of Subway Lines", *IEEE trans. on Vehicular Technology*, vol. 65, no. 3, March 2016, pp. 1021 - 1029.
- V. Monteiro, J. G. Pinto, J. L. Afonso, "Operation Modes for the Electric Vehicle in Smart Grids and Smart Homes: Present and Proposed Modes", *IEEE trans. on Vehicular Technology*, vol. 65, no. 3, March 2016, pp. 1007 - 1020.
- P. Keil, M. Englberger, A. Jossen, "Hybrid Energy Storage Systems for Electric Vehicles: An Experimental Analysis of Performance Improvements at Subzero Temperatures", *IEEE trans. on Vehicular Technology*, vol. 65, no. 3, March 2016, pp. 998 - 1006.
- A. Bouscayrol, L. Boulon, T. Hofman, C.C. Chan, "Guest Editorial, Special Section on Advanced Powertrains for More Electric Vehicles", *IEEE trans. on Vehicular Technology*, vol. 65, no. 3, March 2016, pp. 995-997
- A. Ghayebloo, A. Radan, "Superiority of Dual-Mechanical-Port-Machine-Based Structure for Series-Parallel Hybrid Electric Vehicle Applications", *IEEE trans. on Vehicular Technology*, vol. 65, no. 2, February 2016, pp. 589 - 602.
- H. Kim, D. Kim, I. Shu, K. Yi, "Time-Varying Parameter Adaptive Vehicle Speed Control", *IEEE trans. on vehicular technology*, vol. 65, no. 2, February 2016, pp. 581 - 588.
- Q. Dong, D. Niyato, P. Wang, Z. Han, "The PHEV Charging Scheduling and Power Supply Optimization for Charging Stations", *IEEE trans. on vehicular technology*, vol. 65, no. 2, February 2016, pp. 566 - 580.
- H. I. Dokuyucu, M. Cakmakci, "Concurrent Design of Energy Management and Vehicle Traction Supervisory Control Algorithms for Parallel Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 65, no. 2, February 2016, pp. 555 - 565
- H. Zhang, J. Wang, "Vehicle Lateral Dynamics Control Through AFS/DYC and Robust Gain-Scheduling Approach", *IEEE trans. on vehicular technology*, vol. 65, no. 1, January 2016, pp. 489 - 494

- F. Machado, J. Trovao, C. H. Antunes, "Effectiveness of Supercapacitors in Pure Electric Vehicles Using a Hybrid Metaheuristic Approach", *IEEE trans. on vehicular technology*, vol. 65, no. 1, January 2016, pp. 29 - 36
- J. Jaguemont, L. Boulon, Y. Dube, "Characterization and Modeling of a Hybrid-Electric-Vehicle Lithium-Ion Battery Pack at Low Temperatures", *IEEE trans. on vehicular technology*, vol. 65, no. 1, January 2016, pp. 1 – 14.

## 2015

---

- X. Zhu, H. Zhang, J. Wang, Z. Fang, "Robust Lateral Motion Control of Electric Ground Vehicles With Random Network-Induced Delays", *IEEE trans. on vehicular technology*, vol. 64, no. 11, November 2015, pp. 4985 - 4995
- F. Soriano, M. Moreno-Eguilas, J. Alvarez-Florez, "Drive Cycle Identification and Energy Demand Estimation for Refuse-Collecting Vehicles", *IEEE trans. on vehicular technology*, vol. 64, no. 11, November 2015, pp. 4965 – 4973.
- Y. Ko, J. Lee, H. Lee, "A Supervisory Control Algorithm for a Series Hybrid Vehicle With Multiple Energy Sources", *IEEE trans. on vehicular technology*, vol. 64, no. 11, November 2015, pp. 4942 – 4953
- K. Maalej, S. Kelouwani, K. Agbossou, Y. Dube, N. Henao, "Long-Trip Optimal Energy Planning With Online Mass Estimation for Battery Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 64, no. 11, November 2015, pp. 4929 - 4941
- A. Ostadi, M. Kazerani, "A Comparative Analysis of Optimal Sizing of Battery-Only, Ultracapacitor-Only, and Battery–Ultracapacitor Hybrid Energy Storage Systems for a City Bus", *IEEE trans. on vehicular technology*, vol. 64, no. 10, October 2015, pp. 4449 - 4460.
- A.M. Gee, R.W. Dunn, "Analysis of Trackside Flywheel Energy Storage in Light Rail Systems", *IEEE trans. on vehicular technology*, vol. 64, no. 10, October 2015, pp. 3858 - 3869.
- Kukhyun Ahn ; A.E. Bayrak, P.Y. Papalambros, P.Y. "Electric Vehicle Design Optimization: Integration of a High-Fidelity Interior-Permanent-Magnet Motor Model", *IEEE trans. on vehicular technology*, vol. 64, no. 10, October 2015, pp. 3870 – 3877.
- V. Ivanov, D. Savitski, B. Shyrokau, B. "A Survey of Traction Control and Antilock Braking Systems of Full Electric Vehicles With Individually Controlled Electric Motors", *IEEE trans. on vehicular technology*, vol. 64, no. 10, October 2015, pp. 3878 - 3896.
- M. Schori, T.J. Boehme, B. Frank, B.P. Lampe, "Optimal Calibration of Map-Based Energy Management for Plug-In Parallel Hybrid Configurations: A Hybrid Optimal Control Approach", *IEEE trans. on vehicular technology*, vol. 64, no. 9, September 2015, pp. 3897 – 3907.
- S. Khosravani, A. Kasaiezadeh, A. Khajepour, B. Fidan, S. Chen, B. Litkouhi, "Model Parametrization and Adaptation Based on the Invariance of Support Vectors With Applications to Battery State-of-Health Monitoring", *IEEE trans. on vehicular technology*, vol. 64 no. 9, September 2015, pp. 3908 – 3917.
- Caihao Weng, Jing Sun, Hui Peng, "Torque-Vectoring-Based Vehicle Control Robust to Driver Uncertainties", *IEEE trans. on vehicular technology*, vol. 64 no. 8, August 2015, pp. 3359 – 3367.
- J. Yang, G.G. Zhu, "Adaptive Recursive Prediction of the Desired Torque of a Hybrid Powertrain", *IEEE trans. on vehicular technology*, vol. 64 no. 8, August 2015, pp. 3402 – 3413.
- A; Alahyari, M. Fotuhi-Firuzabad, M. Rastegar, "Incorporating Customer Reliability Cost in PEV Charge Scheduling Schemes Considering Vehicle-to-Home Capability", *IEEE trans. on vehicular technology*, vol. 64 no. 7, July 2015, pp. 2783 – 2791.
- L. Li, C. Yang, Y. Zhang, L. Zhang, J. Song, "Correctional DP-Based Energy Management Strategy of Plug-In Hybrid Electric Bus for City-Bus Route", *IEEE trans. on vehicular technology*, vol. 64 no. 7, July 2015, pp. 2792 - 2803.
- A. Rezaeian, R. Zarringhalam, S. Fallah, W. Melek, A. Khajepour, S.K. Chen, N. Moshchuck, B. Litkouhi, "Novel Tire Force Estimation Strategy for Real-Time Implementation on Vehicle Applications", *IEEE trans. on vehicular technology*, vol. 64 no. 6, June 2015, pp. 2231 – 2241.
- Minghui Hu ; Jianfeng Zeng ; Shaozhi Xu ; Chunyun Fu ; Datong Qin, "Efficiency Study of a Dual-Motor Coupling EV Powertrain", *IEEE trans. on vehicular technology*, vol. 64 no. 6, June 2015, pp. 2252 - 2260.
- F. Tianheng, Y. Lin, G. Qing, H. Yanqing, Y. Ting, Y. Bin, "A Supervisory Control Strategy for Plug-In Hybrid Electric Vehicles Based on Energy Demand Prediction and Route Preview", *IEEE trans. on vehicular technology*, vol. 64 no. 5, May 2015, pp. 1691 – 1700.
- T. Goggia, A. Sorniotti, I. De Novellis, A. Ferrara, P. Gruber, J. Theunissen, D. Steenbeke, B. Knauder, J. Zehetner, "Integral Sliding Mode for the Torque-Vectoring Control of Fully Electric Vehicles: Theoretical Design and Experimental Assessment", *IEEE trans. on vehicular technology*, vol. 64 no. 5, May 2015, pp. 1701 - 1715.
- J. Morales-Morales, I. Cervantes, U. Cano-Castillo, "On the Design of Robust Energy Management Strategies for FCHEV", *IEEE trans. on vehicular technology*, vol. 64 no. 5, May 2015, pp. 1716 - 1728.
- M. Tabari, A. Yazdani, "A Mathematical Model for Stability Analysis of a DC Distribution System for Power System Integration of Plug-In Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 64 no. 5, May 2015, pp. 1729 - 1738.
- Y. Hai, "Central Electric-Motoring-Assisted Handling Control System for Electrified Vehicles", *IEEE trans. on vehicular technology*, vol. 64 no.3, March 2015, pp. 912 - 925.

- V. Ruuskanen, J. Nerg, J. Pyrhonen, S. Ruotsalainen, R. Kennel, "Drive Cycle Analysis of a Permanent-Magnet Traction Motor Based on Magnetostatic Finite-Element Analysis", *IEEE trans. on vehicular technology*, vol. 64 no. 3, March 2015, pp. 1249 - 1254.
- M. Ibrahim, L. Pichon, L. Bernard, A. Razek, J. Houivet, O. Cayol, "Advanced Modeling of a 2-kW Series-Series Resonating Inductive Charger for Real Electric Vehicle", *IEEE trans. on vehicular technology*, vol. 64 no. 2, February 2015, pp. 421 - 430.
- Jiweon Ko, Sungyeon Ko, Hanho Son, Byoungsoo Yoo, Jaeseung Cheon, Hyunsoo Kim, "Development of Brake System and Regenerative Braking Cooperative Control Algorithm for Automatic-Transmission-Based Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 64 no. 2, February 2015, pp. 431 - 440.
- K. Youngki, A. Salvi, A. G. Stefanopoulou, T. Ersal, "Reducing Soot Emissions in a Diesel Series Hybrid Electric Vehicle Using a Power Rate Constraint Map", *IEEE trans. on vehicular technology*, vol. 64 no. 1, January 2015, pp. 2 - 12.
- R. Ahmed, M. El Sayed, S.A. Gadsden, Jimi Tjong, S. Habibi, "Automotive Internal-Combustion-Engine Fault Detection and Classification Using Artificial Neural Network Techniques", *IEEE trans. on vehicular technology*, vol. 64 no. 1, January 2015, pp. 21 - 33.
- S. Overington, S. Rajakaruna, "High-Efficiency Control of Internal Combustion Engines in Blended Charge Depletion/Charge Sustainance Strategies for Plug-In Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 64 no. 1, January 2015, pp. 48 - 61.

## 2014

---

- A. Battiston, E.H. Miliari, J.P. Martin, N. Nahid-Mobarakeh, S. Pierfederici, F. Meibody-Tabar, "A Control Strategy for Electric Traction Systems Using a PM-Motor Fed by a Bidirectional Z-Source Inverter", *IEEE trans. on vehicular technology*, vol. 63 no. 9, November 2014, pp. 4178 - 4191.
- K. van Berkel, S. Rullens, T. Hofman, B. Vroemen, M. Steinbuch, "Topology and Flywheel Size Optimization for Mechanical Hybrid Powertrains", *IEEE trans. on vehicular technology*, vol. 63 no. 9, November 2014, pp. 4192 - 4205.
- M. Uno, A. Kukita, "Single-Switch Single-Transformer Cell Voltage Equalizer Based on Forward-Flyback Resonant Inverter and Voltage Multiplier for Series-Connected Energy Storage Cells", *IEEE trans. on vehicular technology*, vol. 63 no. 9, November 2014, pp. 4192 - 4205.
- Mooryong Choi, S.B. Choi, "Model Predictive Control for Vehicle Yaw Stability With Practical Concerns", *IEEE trans. on vehicular technology*, vol. 63 no. 8, October 2014, pp. 3539 - 3548.
- P. Elbert, T. Nuesch, A. Ritter, N. Murgovski, L. Guzzella, "Engine On/Off Control for the Energy Management of a Serial Hybrid Electric Bus via Convex Optimization", *IEEE trans. on vehicular technology*, vol. 63 no. 8, October 2014, pp. 3549 - 3559.
- M. Kim, D. Jung, K. Min, "Hybrid Thermostat Strategy for Enhancing Fuel Economy of Series Hybrid Intracity Bus", *IEEE trans. on vehicular technology*, vol. 63, no. 8, October 2014, pp. 3569 - 3579.
- M. Choi, J.S. Lee, S.W. Seo, "Real-Time Optimization for Power Management Systems of a Battery/Supercapacitor Hybrid Energy Storage System in Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 63 no. 8, October 2014, pp. 3600 - 3611.
- L. De Novellis, A. Sornioti, P. Gruber, A. Pennycott, "Comparison of Feedback Control Techniques for Torque-Vectoring Control of Fully Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 63 no. 8, October 2014, pp. 3612 - 3623.
- Ngoc Nguyen, S.K. Oruganti, Kyungmin Na, F. Bien, "An Adaptive Backward Control Battery Equalization System for Serially Connected Lithium-ion Battery Packs", *IEEE trans. on vehicular technology*, vol. 63 no. 8, October 2014, pp. 3651 - 3660.
- Yantao Song, Bingsen Wang, "Evaluation Methodology and Control Strategies for Improving Reliability of HEV Power Electronic System", *IEEE trans. on vehicular technology*, vol. 63 no. 8, October 2014, pp. 3661 - 3676.
- A. Davoudi, C.S. Edrington, J. Jatskevich, J.M. Miller, "Guest Editorial Special Section on Advanced Modeling, Simulation, Control, and Optimization Paradigms for Vehicular Power Systems", *IEEE trans. on vehicular technology*, vol. 63, no. 7, September 2014, pp. 2998 - 3000.
- Di Han, J. Noppakunkajorn, B. Sarlioglu, "Comprehensive Efficiency, Weight, and Volume Comparison of SiC- and Si-Based Bidirectional DC-DC Converters for Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 63, no. 7, September 2014, pp. 3001 - 3010.
- H. El Fadil, F. Giri, J.M. Guerrero, A. Tahri, "Modeling and Nonlinear Control of a Fuel Cell/Supercapacitor Hybrid Energy Storage System for Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 63, no. 7, September 2014, pp. 3011 - 3018.
- S. Gao, K.T. Chau, C. Liu, D. Wu, C.C. Chan, "Integrated Energy Management of Plug-in Electric Vehicles in Power Grid With Renewables", *IEEE trans. on vehicular technology*, vol. 63, no. 7, September 2014, pp. 3019 - 3027.
- M. Moeini-Aghaie, A. Abbaspour, M. Fotuhi-Firuzabad, "Online Multicriteria Framework for Charging Management of PHEVs", *IEEE trans. on vehicular technology*, vol. 63, no. 7, September 2014, pp. 3028 - 3037.
- S.M.M. Sangdehi, S. Hamidifar, N.C. Kar, "A Novel Bidirectional DC/AC Stacked Matrix Converter Design for Electrified Vehicle Applications", *IEEE trans. on vehicular technology*, vol. 63, no. 7, September 2014, pp. 3038 - 3050.
- Y. Li, X. Lu, N.C. Kar, "Rule-Based Control Strategy With Novel Parameters Optimization Using NSGA-II for Power-Split PHEV Operation Cost Minimization", *IEEE trans. on vehicular technology*, vol. 63, no. 7, September 2014, pp. 3051 - 3061.



- R. Esteves Araujo, R. de Castro, C. Pinto, P. Melo, D. Freitas, "Combined Sizing and Energy Management in EVs With Batteries and Supercapacitors", *IEEE trans. on vehicular technology*, vol. 63, no. 7, September 2014, pp. 3062 - 3076.
- A. Ostadi, M. Kazerani, "Optimal Sizing of the Battery Unit in a Plug-in Electric Vehicle", *IEEE trans. on vehicular technology*, vol. 63, no. 7, September 2014, pp. 3077 - 3084.
- Y. Haizhong A. Emadi, "A Six-Phase Current Reconstruction Scheme for Dual Traction Inverters in Hybrid Electric Vehicles With a Single DC-Link Current Sensor", *IEEE trans. on vehicular technology*, vol. 63, no. 7, September 2014, pp. 3077 - 3084.
- Fei Yang, Chenguang Jiang, A. Taylor, Hua Bai, A. Kotrba, A. Yetkin, A. Gundogan, "Design of a High-Efficiency Minimum-Torque-Ripple 12-V/1-kW Three-Phase BLDC Motor Drive System for Diesel Engine Emission Reductions", *IEEE trans. on vehicular technology*, vol. 63, no. 7, September 2014, pp. 3107 - 3115.
- Qu Xiaodong, Wang Qingnian, Yu YuanBin, "Power Demand Analysis and Performance Estimation for Active-Combination Energy Storage System Used in Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 63, no. 7, September 2014, pp. 3128 - 3136.
- D.A. Howey, P.D. Mitcheson, V. Yufit, G.J. Offer, N.P. Brandon, "Online Measurement of Battery Impedance Using Motor Controller Excitation", *IEEE trans. on vehicular technology*, vol. 63, no. 6, July 2014, pp. 2557 - 2566.
- Cong Li, L. Herrera, Jizhou Jia, Lixing Fu, A. Isurin, A. Cook, Yi Huang, Jin Wang, "Design and Implementation of a Bidirectional Isolated Ćuk Converter for Low-Voltage and High-Current Automotive DC Source Applications", *IEEE trans. on vehicular technology*, vol. 63, no. 6, July 2014, pp. 2567 - 2577.
- W. Wang, M. Cheng, Y. Wang, B. Zhang, Y. Zhu, S. Ding, W. Chen, "A Novel Energy Management Strategy of Onboard Supercapacitor for Subway Applications With Permanent-Magnet Traction System", *IEEE trans. on vehicular technology*, vol. 63, no. 6, July 2014, pp. 2578 - 2588.
- T. Zhang, W. Chen, Z. Han, Z. Cao, "Charging Scheduling of Electric Vehicles With Local Renewable Energy Under Uncertain Electric Vehicle Arrival and Grid Power Price", *IEEE trans. on vehicular technology*, vol. 63, no. 6, July 2014, pp. 2600 - 2612.
- N. Murgovski, L.M. Johannesson, B. Egardt, "Optimal Battery Dimensioning and Control of a CVT PHEV Powertrain", *IEEE trans. on vehicular technology*, vol. 63, no. 5, June 2014, pp. 2151 - 2161.
- P. Giani, F. Todeschini, M. Tanelli, S.M. Savaresi, M. Santucci, "Automatic Gear Shifting in Sport Motorcycles", *IEEE trans. on vehicular technology*, vol. 63, no. 5, June 2014, pp. 2173 - 2182.
- K. Karakoc, A. Suleman, E.J. Park, "Optimized Braking Torque Generation Capacity of an Eddy Current Brake With the Application of Time-Varying Magnetic Fields", *IEEE trans. on vehicular technology*, vol. 63, no. 4, May 2014, pp. 1530 - 1538.
- K. van Berkel, W. Klemm, T. Hofman, B. Vroemen, M. Steinbuch, "Optimal Control of a Mechanical Hybrid Powertrain With Cold-Start Conditions", *IEEE trans. on vehicular technology*, vol. 63, no. 4, May 2014, pp. 1555 - 1566.
- Z. Chen, C.C. Mi, J. Xu, X. Gong, C.n You, "Energy Management for a Power-Split Plug-in Hybrid Electric Vehicle Based on Dynamic Programming and Neural Networks", *IEEE trans. on vehicular technology*, vol. 63, no. 4, May 2014, pp. 1567 - 1580.
- Junjun Deng, Siqi Li, Sideng Hu, C.C. Mi, Ruiqing Ma, "Design Methodology of LLC Resonant Converters for Electric Vehicle Battery Chargers", *IEEE trans. on vehicular technology*, vol. 63, no. 4, May 2014, pp. 1581 - 1592.
- L. De Novellis, A. Sornioti, P. Gruber, "Wheel Torque Distribution Criteria for Electric Vehicles With Torque-Vectoring Differentials", *IEEE trans. on vehicular technology*, vol. 63, no. 4, May 2014, pp. 1581 - 1592.
- Haoyu Wang, S. Dusmez, A. Khaligh, "Design and Analysis of a Full-Bridge LLC-Based PEV Charger Optimized for Wide Battery Voltage Range", *IEEE trans. on vehicular technology*, vol. 63, no. 4, May 2014, pp. 1603 - 1613.
- Jun Xu, C.C. Mi, Binggang Cao, Junjun Deng, Zheng Chen, Siqi Li, "The State of Charge Estimation of Lithium-Ion Batteries Based on a Proportional-Integral Observer", *IEEE trans. on vehicular technology*, vol. 63, no. 4, May 2014, pp. 1614 - 1621.
- Binyan Zhao, Yi Shi, Xiaodai Dong, "Pricing and Revenue Maximization for Battery Charging Services in PHEV Markets", *IEEE trans. on vehicular technology*, vol. 63, no. 4, May 2014, pp. 1987 - 1993.
- C. Mayet, J. Pouget, A. Bouscayrol, W. Lhomme, "Influence of an Energy Storage System on the Energy Consumption of a Diesel-Electric Locomotive", *IEEE trans. on vehicular technology*, vol. 63, no. 3, March 2014, pp. 1032 - 1040.
- H.K. Roy, A. McGordon, P.A. Jennings, "A Generalized Powertrain Design Optimization Methodology to Reduce Fuel Economy Variability in Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 63, no. 3, March 2014, pp. 1055 - 1070.
- Shupeng Zhang, Guoming Zhu, Zongxuan Sun, "A Control-Oriented Charge Mixing and Two-Zone HCCI Combustion Model", *IEEE trans. on vehicular technology*, vol. 63, no. 3, March 2014, pp. 1079 - 1090.
- J.G. Pinto, V. Monteiro, H. Goncalves, J.L. Afonso, "Onboard Reconfigurable Battery Charger for Electric Vehicles With Traction-to-Auxiliary Mode", *IEEE trans. on vehicular technology*, vol. 63, no. 3, March 2014, pp. 1104 - 1116.
- F. Musavi, M. Craciun, D.S. Gautam, W. Eberle, "Control Strategies for Wide Output Voltage Range LLC Resonant DC-DC Converters in Battery Chargers", *IEEE trans. on vehicular technology*, vol. 63, no. 3, March 2014, pp. 1117 - 1125.
- C. Mayet, L. Horrein, A. Bouscayrol, P. Delarue, J.N. Verhille, E. Chattot, B. Lemaire-Semail, "Comparison of Different Models and Simulation Approaches for the Energetic Study of a Subway", *IEEE trans. on vehicular technology*, vol. 63, no. 2, February 2014, pp. 556 - 565.

- Jaewoong Choi, Kyongsu Yi, Jeeyoon Suh, Bongchul Ko, "Coordinated Control of Motor-Driven Power Steering Torque Overlay and Differential Braking for Emergency Driving Support", *IEEE trans. on vehicular technology*, vol. 63, no. 2, February 2014, pp. 566 - 579.
- Manh Tuan Do, Zhihong Man, Cishen Zhang, Hai Wang, Fei Siang Tay, "Robust Sliding Mode-Based Learning Control for Steer-by-Wire Systems in Modern Vehicles", *IEEE trans. on vehicular technology*, vol. 63, no. 2, February 2014, pp. 580 - 590.
- Zhibin Shuai, Hui Zhang, Junmin Wang, Jianqiu Li, Minggao Ouyang, "Combined AFS and DYC Control of Four-Wheel-Independent-Drive Electric Vehicles over CAN Network with Time-Varying Delays", *IEEE trans. on vehicular technology*, vol. 63, no. 2, February 2014, pp. 591 - 602.
- Y. Zhang, H. Liu, Q. Guo, "Varying-Domain Optimal Management Strategy for Parallel Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 63, no. 2, February 2014, pp. 603 - 616.
- A. Raisemche, M. Boukhniher, C. Larouci, D. Diallo, "Two Active Fault-Tolerant Control Schemes of Induction-Motor Drive in EV or HEV", *IEEE trans. on vehicular technology*, vol. 63, no. 1, January 2014, pp. 19 - 29.
- R. Loureiro, S. Benmoussa, Y. Touati, R. Merzouki, B.O. Bouamama, "Integration of Fault Diagnosis and Fault-Tolerant Control for Health Monitoring of a Class of MIMO Intelligent Autonomous Vehicles", *IEEE trans. on vehicular technology*, vol. 63, no. 1, January 2014, pp. 30 - 39.
- E. Vinot, R. Trigui, Yuan Cheng, C. Espanet, A. Bouscayrol, V. Reinbold, "Improvement of an EVT-Based HEV Using Dynamic Programming", *IEEE trans. on vehicular technology*, vol. 63, no. 1, January 2014, pp. 40 - 50.
- D. Zhao, F. Gao, D. Bouquain, M. Dou, A. Miraoui, "Sliding-Mode Control of an Ultrahigh-Speed Centrifugal Compressor for the Air Management of Fuel-Cell Systems for Automotive Applications", *IEEE trans. on vehicular technology*, vol. 63, no. 1, January 2014, pp. 51 - 61.
- C. Morton, V. Pickert, M. Armstrong, "Self-Alignment Torque as a Source of Energy Recovery for Hybrid Electric Trucks", *IEEE trans. on vehicular technology*, vol. 63, no. 1, January 2014, pp. 62 - 71.

## 2013

---

- Siqi Li , Junjun Deng, C.C. Mi, "Single-Stage Resonant Battery Charger With Inherent Power Factor Correction for Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 62, no. 9, November 2013, pp. 4336 - 4344.
- A. Jaafar, B. Sareni, X. Roboam, "A Systemic Approach Integrating Driving Cycles for the Design of Hybrid Locomotives", *IEEE trans. on vehicular technology*, vol. 62, no. 8, October 2013, pp. 3541 - 3550.
- F.A. Bender, M. Kaszynski, O. Sawodny, "Drive Cycle Prediction and Energy Management Optimization for Hybrid Hydraulic Vehicles", *IEEE trans. on vehicular technology*, vol. 62, no. 8, October 2013, pp. 3581 - 3592.
- Jeongwon Sohn, Seungwoo Hong , Myoungcho Sunwoo, "Alternator Torque Model Based on Equivalent Circuit of Synchronous Generator for Electric Power Management", *IEEE trans. on vehicular technology*, vol. 62, no. 8, October 2013, pp. 3593 - 3602.
- R. Al Nazer, V. Cattin, P. Granjon, M. Montaru, M. Ranieri, "Broadband Identification of Battery Electrical Impedance for HEVs", *IEEE trans. on vehicular technology*, vol. 62, no. 7, September 2013, pp. 2896 - 2905.
- Chenrui Jin, Jian Tang, P. Ghosh, "Optimizing Electric Vehicle Charging: A Customer's Perspective", *IEEE trans. on vehicular technology*, vol. 62, no. 7, September 2013, pp. 2919 - 2927.
- Young Ok Lee, Young Seop Son, Chung Choo Chung, "Clamping Force Control for an Electric Parking Brake System: Switched System Approach", *IEEE trans. on vehicular technology*, vol. 62, no. 7, September 2013, pp. 2937 - 2948.
- N. Murgovski, L.M. Johannesson, J. Sjoberg, "Engine On/Off Control for Dimensioning Hybrid Electric Powertrains via Convex Optimization", *IEEE trans. on vehicular technology*, vol. 62, no. 7, September 2013, pp. 2949 - 2962.
- M.A. Obeidat, Le YiWang, Feng Lin, "Real-Time Parameter Estimation of PMDC Motors Using Quantized Sensors", *IEEE trans. on vehicular technology*, vol. 62, no. 7, September 2013, pp. 2977 - 2986.
- Jiuchun Jiang, Caiping Zhang, Jiapeng Wen , Weige Zhang, S.M. Sharkh, "An Optimal Charging Method for Li-Ion Batteries Using a Fuzzy-Control Approach Based on Polarization Properties", *IEEE trans. on vehicular technology*, vol. 62, no. 7, September 2013, pp. 3000 - 3009.
- Xi Zhang, "Sensorless Induction Motor Drive Using Indirect Vector Controller and Sliding-Mode Observer for Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 62, no. 7, September 2013, pp. 3010 - 3018.
- S. Fallah, B. Yue, O. Vahid-Araghi, A. Khajepour, "Energy Management of Planetary Rovers Using a Fast Feature-Based Path Planning and Hardware-in-the-Loop Experiments", *IEEE trans. on vehicular technology*, vol. 62, no. 6, July 2013, pp. 2389 - 2401.
- R.M. Patil, J.C. Kelly, Z. Filipi, H.K. Fathy, "A Framework for the Integrated Optimization of Charging and Power Management in Plug-in Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 62, no. 6, July 2013, pp. 2402 - 2412.
- Younghoon Cho, Jih-Sheng Lai, "High-Efficiency Multiphase DC-DC Converter for Fuel-Cell-Powered Truck Auxiliary Power Unit", *IEEE trans. on vehicular technology*, vol. 62, no. 6, July 2013, pp. 2421 - 2429.
- Ling-Yuan Hsu, Tsung-Lin Chen, "An Optimal Wheel Torque Distribution Controller for Automated Vehicle Trajectory Following", *IEEE trans. on vehicular technology*, vol. 62, no. 6, July 2013, pp. 2430 - 2440.

- A. Kolli, O. Bethoux, A. De Bernardinis, E. Laboure, G. Coquery, "Space-Vector PWM Control Synthesis for an H-Bridge Drive in Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 62, no. 6, July 2013, pp. 2441 - 2452.
- M. Pourabdollah, N. Murgovski, A. Grauers, B. Egardt, "Optimal Sizing of a Parallel PHEV Powertrain", *IEEE trans. on vehicular technology*, vol. 62, no. 6, July 2013, pp. 2469 - 2480.
- S. H. Kim, M.C. Shin, C. N. Chu, "Development of EHPS Motor Speed Map Using HILS System", *IEEE trans. on vehicular technology*, vol. 62, no. 4, May 2013, pp. 1553 - 1567.
- F. Musavi, W. Eberle, W.G. Dunford, "A Phase-Shifted Gating Technique With Simplified Current Sensing for the Semi-Bridgeless AC-DC Converter", *IEEE trans. on vehicular technology*, vol. 62, no. 4, May 2013, pp. 1568 - 1576.
- D. Diallo, M.E.H. Benbouzid, M.A. Masrur, "Special Section on Condition Monitoring and Fault Accommodation in Electric and Hybrid Propulsion Systems", *IEEE trans. on vehicular technology*, vol. 62, no. 3, March 2013, pp. 962 - 964.
- B. Tabbache, N. Rizoug, M.E.H. Benbouzid, A. Kheloui, "A Control Reconfiguration Strategy for Post-Sensor FTC in Induction Motor-Based EVs", *IEEE trans. on vehicular technology*, vol. 62, no. 3, March 2013, pp. 965 - 971.
- Rongrong Wang, Junmin Wang, "Passive Actuator Fault-Tolerant Control for a Class of Overactuated Nonlinear Systems and Applications to Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 62, no. 3, March 2013, pp. 972 - 985.
- M.A. Djeziri, R. Merzouki, B.O. Bouamama, M. Ouladsine, "Fault Diagnosis and Fault-Tolerant Control of an Electric Vehicle Overactuated", *IEEE trans. on vehicular technology*, vol. 62, no. 3, March 2013, pp. 986 - 994.
- F. Meinguet, P. Sandulescu, X. Kestelyn, E. Semail, "A Method for Fault Detection and Isolation Based on the Processing of Multiple Diagnostic Indices: Application to Inverter Faults in AC Drives", *IEEE trans. on vehicular technology*, vol. 62, no. 3, March 2013, pp. 995 - 1009.
- Zheng Chen, Yuhong Fu, C.C. Mi, "State of Charge Estimation of Lithium-Ion Batteries in Electric Drive Vehicles Using Extended Kalman Filtering", *IEEE trans. on vehicular technology*, vol. 62, no. 3, March 2013, pp. 1020 - 1030.
- L. He, T. Shen, L. Yu, N. Feng, J. Song, "A Model-Predictive-Control-Based Torque Demand Control Approach for Parallel Hybrid Powertrains", *IEEE trans. on vehicular technology*, vol. 62, no. 3, March 2013, pp. 1041 - 1052.
- J. Wang, X. Yuan, K. Atallah, "Design Optimization of a Surface-Mounted Permanent-Magnet Motor With Concentrated Windings for Electric Vehicle Applications", *IEEE trans. on vehicular technology*, vol. 62, no. 3, March 2013, pp. 1053 - 1064.
- B. Tabbache, M.E.H. Benbouzid, A. Kheloui, J. Bourgeot, "Virtual-Sensor-Based Maximum-Likelihood Voting Approach for Fault-Tolerant Control of Electric Vehicle Powertrains", *IEEE trans. on vehicular technology*, vol. 62, no. 3, March 2013, pp. 1075 - 1083.
- F. Zhu, L. Chen, C. Yin, "Design and Analysis of a Novel Multimode Transmission for a HEV Using a Single Electric Machine", *IEEE trans. on vehicular technology*, vol. 62, no. 3, March 2013, pp. 1097 - 1110.
- L. Boulon, A. Bouscayrol, D. Hissel, O. Pape, M.C. Pera, "Inversion-Based Control of a Highly Redundant Military HEV", *IEEE trans. on vehicular technology*, vol. 62, no. 2, February 2013, pp. 500 - 510.
- J. Lin, K.W.E. Cheng, Z. Zhang, N.C. Cheung, X. Xue, T. Wang, "Active Suspension System Based on Linear Switched Reluctance Actuator and Control Schemes", *IEEE trans. on vehicular technology*, vol. 62, no. 2, February 2013, pp. 562 - 572.
- E. Tara, S. Filizadeh, E. Dirks, "Battery-in-the-Loop Simulation of a Planetary-Gear-Based Hybrid Electric Vehicle", *IEEE trans. on vehicular technology*, vol. 62, no. 2, February 2013, pp. 573 - 581.
- D. Fodorean, L. Idoumghar, L. Szabo, "Motorization for an Electric Scooter by Using Permanent-Magnet Machines Optimized Based on a Hybrid Metaheuristic Algorithm", *IEEE trans. on vehicular technology*, vol. 62, no. 1, January 2013, pp. 39 - 49.
- H.B. Jensen, E. Schaltz, P.S. Koustrup, S.J. Andreasen, S.K. Kaer, "Evaluation of Fuel-Cell Range Extender Impact on Hybrid Electrical Vehicle Performance", *IEEE trans. on vehicular technology*, vol. 62, no. 1, January 2013, pp. 50 - 60.
- H. Khayyam, "Stochastic Models of Road Geometry and Wind Condition for Vehicle Energy Management and Control", *IEEE trans. on vehicular technology*, vol. 62, no. 1, January 2013, pp. 61 - 68.
- Y.L. Murphey, Jungme Park, L. Kiliaris, M.L. Kuang, M.A. Masrur, A.M. Phillips, Qing Wang, "Intelligent Hybrid Vehicle Power Control—Part II: Online Intelligent Energy Management", *IEEE trans. on vehicular technology*, vol. 62, no. 1, January 2013, pp. 69 - 79.
- L. Nehaoua, H. Arioui, S. Mammar, "Motorcycle Riding Simulator: How to Estimate Robustly the Rider's Action", *IEEE trans. on vehicular technology*, vol. 62, no. 1, January 2013, pp. 80 - 88.
- V. Schwarzer, R. Ghorbani, "Drive Cycle Generation for Design Optimization of Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 62, no. 1, January 2013, pp. 89 - 97.
- C. Alaoui, "Solid-State Thermal Management for Lithium-Ion EV Batteries", *IEEE trans. on vehicular technology*, vol. 62, no. 1, January 2013, pp. 98 - 107.
- Rui Xiong, Hongwen He, Fengchun Sun, Kai Zhao, "Evaluation on State of Charge Estimation of Batteries With Adaptive Extended Kalman Filter by Experiment Approach", *IEEE trans. on vehicular technology*, vol. 62, no. 1, January 2013, pp. 108 - 117.
- Zhen Zhang, K.T. Chau, Zheng Wang, "Analysis and Stabilization of Chaos in the Electric-Vehicle Steering System", *IEEE trans. on vehicular technology*, vol. 62, no. 1, January 2013, pp. 118 - 126.

- C. Antaloae, J. Marco, F. Assadian, "A Novel Method for the Parameterization of a Li-Ion Cell Model for EV/HEV Control Applications", *IEEE trans. on vehicular technology*, vol. 61, no. 9, November 2012, pp. 3881 - 3892.
- S. Kachroudi, M. Grossard, N. Abroug, "Predictive Driving Guidance of Full Electric Vehicles Using Particle Swarm Optimization", *IEEE trans. on vehicular technology*, vol. 61, no. 9, November 2012, pp. 3909 - 3919.
- Fangwen Fu, M. van der Schaar, "Structure-Aware Stochastic Control for Transmission Scheduling", *IEEE trans. on vehicular technology*, vol. 61, no. 9, November 2012, pp. 3931 - 3945.
- Xibo Yuan, Jiabin Wang, "Torque Distribution Strategy for a Front- and Rear-Wheel-Driven Electric Vehicle", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3365 - 3374.
- A. Khaligh, M. Krishnamurthy, Z. Nie, "Special Section on Sustainable Transportation Systems", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3362 - 3364.
- A. Tani, M.B. Camara, B. Dakyo, "Torque Energy Management Based on Frequency Approach for Hybrid Electric Vehicle Applications: Fuel-Cell/Lithium-Battery and Ultracapacitors", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3375 - 3386.
- A. Lajunen, J. Suomela, "Evaluation of Energy Storage System Requirements for Hybrid Mining Loaders", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3387 - 3393.
- Woosuk Sung, Jincheol Shin, Yu-seok Jeong, "Energy-Efficient and Robust Control for High-Performance Induction Motor Drive With an Application in Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3394 - 3405.
- J.J. Escudero-Garzas, A. Garcia-Armada, G. Seco-Granados, "Fair Design of Plug-in Electric Vehicles Aggregator for V2G Regulation", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3406 - 3419.
- N. Watrin, R. Roche, H. Ostermann, B. Blunier, A. Miraoui, "Multiphysical Lithium-Based Battery Model for Use in State-of-Charge Determination", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3420 - 3429.
- M. Kabalo, D. Paire, B. Blunier, D. Bouquain, M.G. Simoes, A. Miraoui, "Experimental Validation of High-Voltage-Ratio Low-Input-Current-Ripple Converters for Hybrid Fuel Cell Supercapacitor Systems", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3430 - 3440.
- R.C.B. Sampaio, A.C. Hernandez, V. do Valle Magalhães Fernandes, M. Becker, A.A.G. Siqueira, "A New Control Architecture for Robust Controllers in Rear Electric Traction Passenger HEVs", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3441 - 3453.
- G. Souffran, L. Miegerville, P. Guerin, "Simulation of Real-World Vehicle Missions Using a Stochastic Markov Model for Optimal Powertrain Sizing", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3454 - 3465.
- D.S. Gautam, F. Musavi, M. Edington, W. Eberle, W.G. Dunford, "An Automotive Onboard 3.3-kW Battery Charger for PHEV Application", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3466 - 3474.
- A. Khaligh, S. Dusmez, "Comprehensive Topological Analysis of Conductive and Inductive Charging Solutions for Plug-In Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3475 - 3489.
- Yutao Luo, Di Tan, "Study on the Dynamics of the In-Wheel Motor System", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3510 - 3518.
- Y.L. Murphey, Jungme Park, Zhihang Chen, M.L. Kuang, M.A. Masrur, A.M. Phillips, "Intelligent Hybrid Vehicle Power Control—Part I: Machine Learning of Optimal Vehicle Power", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3519 - 3530.
- V. Ngo, T. Hofman, M. Steinbuch, A. Serrarens, "Optimal Control of the Gearshift Command for Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3531 - 3543.
- Xiaowu Zhang, Chiao-Ting Li, Dongsuk Kum, Huei Peng, "Prius and Volt: Configuration Analysis of Power-Split Hybrid Vehicles With a Single Planetary Gear", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3544 - 3552.
- R. de Castro, R.E. Araujo, J.P.F. Trovao, P.G. Pereirinha, P. Melo, D. Freitas, "Robust DC-Link Control in EVs With Multiple Energy Storage Systems", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3553 - 3565.
- S. Hasanzadeh, S. Vaez-Zadeh, A.H. Isfahani, "Optimization of a Contactless Power Transfer System for Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 61, no. 8, October 2012, pp. 3566 - 3573.
- S. Ebbesen, P. Elbert, L. Guzzella, "Battery State-of-Health Perceptive Energy Management for Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 61, no. 7, September 2012, pp. 2893 - 2900.
- Le Yi Wang, M.P. Polis, G.G. Yin, G.G., Wen Chen, Yuhong Fu, C.C. Mi, "Battery Cell Identification and SOC Estimation Using String Terminal Voltage Measurements", *IEEE trans. on vehicular technology*, vol. 61, no. 7, September 2012, pp. 2925 - 2935.
- Li Chen, Gang Xi, Jing Sun, "Torque Coordination Control During Mode Transition for a Series-Parallel Hybrid Electric Vehicle", *IEEE trans. on vehicular technology*, vol. 61, no. 7, September 2012, pp. 2936 - 2949.
- Huiqing Wen, Weidong Xiao, Xuhui Wen, P. Armstrong, "Analysis and Evaluation of DC-Link Capacitors for High-Power-Density Electric Vehicle Drive Systems", *IEEE trans. on vehicular technology*, vol. 61, no. 7, September 2012, pp. 2950 - 2964.

- P. Arboleya, G. Diaz, M. Coto, "Unified AC/DC Power Flow for Traction Systems: A New Concept", *IEEE trans. on vehicular technology*, vol. 61, no. 6, July 2012, pp. 2421 - 2430.
- Feng Guo, E. Inoa, Woongchul Choi, Jin Wang, "Study on Global Optimization and Control Strategy Development for a PHEV Charging Facility", *IEEE trans. on vehicular technology*, vol. 61, no. 6, July 2012, pp. 2431 - 2441.
- T. Hofman, S. Ebbesen, L. Guzzella, "Topology Optimization for Hybrid Electric Vehicles With Automated Transmission", *IEEE trans. on vehicular technology*, vol. 61, no. 6, July 2012, pp. 2442 - 2451.
- A. Ravey, B. Blunier, A. Miraoui, "Control Strategies for Fuel-Cell-Based Hybrid Electric Vehicles: From Offline to Online and Experimental Results", *IEEE trans. on vehicular technology*, vol. 61, no. 6, July 2012, pp. 2452 - 2457.
- Fengjun Yan, Junmin Wang, Kaisheng Huang, "Hybrid Electric Vehicle Model Predictive Control Torque-Split Strategy Incorporating Engine Transient Characteristics", *IEEE trans. on vehicular technology*, vol. 61, no. 6, July 2012, pp. 2458 - 2467.
- C. Attaianesi, M. Di Monaco, G. Tomasso, "Power Control for Fuel-Cell-Supercapacitor Traction Drive", *IEEE trans. on vehicular technology*, vol. 61, no. 5, June 2012, pp. 1961 - 1971.
- Kanghyun Nam, H. Fujimoto, Y. Hori, "Lateral Stability Control of In-Wheel-Motor-Driven Electric Vehicles Based on Sideslip Angle Estimation Using Lateral Tire Force Sensors", *IEEE trans. on vehicular technology*, vol. 61, no. 5, June 2012, pp. 1972 - 1985.
- E. Tazelaar, B. Veenhuizen, P. van den Bosch, M. Grimminck, "Analytical Solution of the Energy Management for Fuel Cell Hybrid Propulsion Systems", *IEEE trans. on vehicular technology*, vol. 61, no. 5, June 2012, pp. 1986 - 1998.
- R. Carter, A. Cruden, P.J. Hall, "Optimizing for Efficiency or Battery Life in a Battery/Supercapacitor Electric Vehicle", *IEEE trans. on vehicular technology*, vol. 61, no. 4, May 2012, pp. 1526 - 1533.
- Yan Chen, Junmin Wang, "Design and Evaluation on Electric Differentials for Overactuated Electric Ground Vehicles With Four Independent In-Wheel Motors", *IEEE trans. on vehicular technology*, vol. 61, no. 4, May 2012, pp. 1534 - 1542.
- Menyang Zhang, Yan Yang, C.C. Mi, "Analytical Approach for the Power Management of Blended-Mode Plug-In Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 61, no. 4, May 2012, pp. 1554 - 1566.
- Shengbo Eben Li, Hui Peng, Keqiang L, Jianqiang Wang, "Minimum Fuel Control Strategy in Automated Car-Following Scenarios", *IEEE trans. on vehicular technology*, vol. 61, no. 3, March 2012, pp. 998 - 1007.
- J.O. Estima, A.J. Marques Cardoso, "Efficiency Analysis of Drive Train Topologies Applied to Electric/Hybrid Vehicles", *IEEE trans. on vehicular technology*, vol. 61, no. 3, March 2012, pp. 1021 - 1031.
- S.S. Raghavan, A. Khaligh, "Electrification Potential Factor: Energy-Based Value Proposition Analysis of Plug-In Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 61, no. 3, March 2012, pp. 1052 - 1059.
- P. Thounthong, "Control of a Three-Level Boost Converter Based on a Differential Flatness Approach for Fuel Cell Vehicle Applications", *IEEE trans. on vehicular technology*, vol. 61, no. 3, March 2012, pp. 1467 - 1472.
- J. de Santiago, H. Bernhoff, B. Ekergård, S. Eriksson, S. Ferhatovic, R. Waters, M. Leijon, "Electrical Motor Drivelines in Commercial All-Electric Vehicles: A Review", *IEEE trans. on vehicular technology*, vol. 61, no. 2, February 2012, pp. 475 - 484.
- K. van Berkel, T. Hofman, B. Vroemen, M. Steinbuch, "Optimal Control of a Mechanical Hybrid Powertrain", *IEEE trans. on vehicular technology*, vol. 61, no. 2, February 2012, pp. 485 - 497.
- Bo Geng, J. K. Mills, Dong Sun, "Two-Stage Energy Management Control of Fuel Cell Plug-In Hybrid Electric Vehicles Considering Fuel Cell Longevity", *IEEE trans. on vehicular technology*, vol. 61, no. 2, February 2012, pp. 498 - 508.

## 2011

---

- A. Bouscayrol, D. Hissel, R. Trigui, A. Emadi, "Special Section on Advanced Transportation Systems", *IEEE trans. on vehicular technology*, vol. 60, no. 9, November 2011, pp. 4102 - 4105.
- Yuan Cheng, R. Trigui, C. Espanet, A. Bouscayrol, C. Shumei, "Specifications and Design of a PM Electric Variable Transmission for Toyota Prius II", *IEEE trans. on vehicular technology*, vol. 60, no. 9, November 2011, pp. 4106 - 4114.
- S. Haghbin, S. Lundmark, M. Alakula, O. Carlson, "An Isolated High-Power Integrated Charger in Electrified-Vehicle Applications", *IEEE trans. on vehicular technology*, vol. 60, no. 9, November 2011, pp. 4115 - 4126.
- T. Azib, O. Bethoux, G. Remy, C. Marchand, "Saturation Management of a Controlled Fuel-Cell/Ultracapacitor Hybrid Vehicle", *IEEE trans. on vehicular technology*, vol. 60, no. 9, November 2011, pp. 4127 - 4138.
- J. Solano Martinez, D. Hissel, M.C. Pera, M. Amiet, "Practical Control Structure and Energy Management of a Testbed Hybrid Electric Vehicle", *IEEE trans. on vehicular technology*, vol. 60, no. 9, November 2011, pp. 4139 - 4152.
- Tae-Kyung Lee, B. Adornato, Z.S. Filipi, "Synthesis of Real-World Driving Cycles and Their Use for Estimating PHEV Energy Consumption and Charging Opportunities: Case Study for Midwest/U.S.", *IEEE trans. on vehicular technology*, vol. 60, no. 9, November 2011, pp. 4153 - 4163.
- A. Ravey, N. Watrin, B. Blunier, D. Bouquain, A. Miraoui, "Energy-Source-Sizing Methodology for Hybrid Fuel Cell Vehicles Based on Statistical Description of Driving Cycles", *IEEE trans. on vehicular technology*, vol. 60, no. 9, November 2011, pp. 4164 - 4174.

- Y. Amara, S. Hlioui, R. Belfkira, G. Barakat, M. Gabsi, "Comparison of Open Circuit Flux Control Capability of a Series Double Excitation Machine and a Parallel Double Excitation Machine", *IEEE trans. on vehicular technology*, vol. 60, no. 9, November 2011, pp. 4194 - 4207.
- Bo Geng, J.K. Mills, Dong Sun, "Energy Management Control of Microturbine-Powered Plug-In Hybrid Electric Vehicles Using the Telemetry Equivalent Consumption Minimization Strategy", *IEEE trans. on vehicular technology*, vol. 60, no. 9, November 2011, pp. 4238 - 4248.
- Jonghoon Kim, B.H. Cho, "State-of-Charge Estimation and State-of-Health Prediction of a Li-Ion Degraded Battery Based on an EKF Combined With a Per-Unit System", *IEEE trans. on vehicular technology*, vol. 60, no. 9, November 2011, pp. 4249 - 4260.
- Rongrong Wang, Junmin Wang, "Fault-Tolerant Control With Active Fault Diagnosis for Four-Wheel Independently Driven Electric Ground Vehicles", *IEEE trans. on vehicular technology*, vol. 60, no. 9, November 2011, pp. 4276 - 4287.
- Xuesong Wang, Hua Bai, Zhengming Zhao, Liqiang Yuan, "Mathematical Models of the System-Level Safe Operational Areas of Power Electronic Converters in Plug-In Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 60, no. 9, November 2011, pp. 4288 - 4298.
- V. Sezer, M. Gokasan, S. Bogosyan, "A Novel ECMS and Combined Cost Map Approach for High-Efficiency Series Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 60, no. 8, October 2011, pp. 3557 - 3570.
- S.G. Li, S.M. Sharkh, F.C. Walsh, C.N. Zhang, "Energy and Battery Management of a Plug-In Series Hybrid Electric Vehicle Using Fuzzy Logic", *IEEE trans. on vehicular technology*, vol. 60, no. 8, October 2011, pp. 3571 - 3585.
- H. Rehman, Longya Xu, "Alternative Energy Vehicles Drive System: Control, Flux and Torque Estimation, and Efficiency Optimization", *IEEE trans. on vehicular technology*, vol. 60, no. 8, October 2011, pp. 3625 - 3634.
- M. Uno, K. Tanaka, "Single-Switch Cell Voltage Equalizer Using Multistacked Buck-Boost Converters Operating in Discontinuous Conduction Mode for Series-Connected Energy Storage Cells", *IEEE trans. on vehicular technology*, vol. 60, no. 8, October 2011, pp. 3635 - 3645.
- Trung-Kien Dao, Chih-Keng Chen, "Path Tracking Control of a Motorcycle Based on System Identification", *IEEE trans. on vehicular technology*, vol. 60, no. 7, September 2011, pp. 2927 - 2935.
- S. Stockar, V. Marano, M. Canova, G. Rizzoni, L. Guzzella, "Energy-Optimal Control of Plug-in Hybrid Electric Vehicles for Real-World Driving Cycles", *IEEE trans. on vehicular technology*, vol. 60, no. 7, September 2011, pp. 2949 - 2962.
- V.V. Viswanathan, M. Kintner-Meyer, "Second Use of Transportation Batteries: Maximizing the Value of Batteries for Transportation and Grid Services", *IEEE trans. on vehicular technology*, vol. 60, no. 7, September 2011, pp. 2963 - 2970.
- E. Ayana, P. Plahn, K. Wejrzanowski, N. Mohan, "Active Torque Cancellation for Transmitted Vibration Reduction of Low Cylinder Count Engines", *IEEE trans. on vehicular technology*, vol. 60, no. 7, September 2011, pp. 2971 - 2977.
- E. Inoa, Jin Wang, "PHEV Charging Strategies for Maximized Energy Saving", *IEEE trans. on vehicular technology*, vol. 60, no. 7, September 2011, pp. 2978 - 2986.
- Juyong Kang, Jinho Yoo, Kyongsu Yi, "Driving Control Algorithm for Maneuverability, Lateral Stability, and Rollover Prevention of 4WD Electric Vehicles With Independently Driven Front and Rear Wheels", *IEEE trans. on vehicular technology*, vol. 60, no. 7, September 2011, pp. 2987 - 3001.
- SeongWoo Kim, Eundong Lee, Mideum Choi, Hanyou Jeong, SeungWoo Seo, "Design Optimization of Vehicle Control Networks", *IEEE trans. on vehicular technology*, vol. 60, no. 7, September 2011, pp. 3002 - 3016.
- C.E. Nino-Baron, A.R. Tariq, Guoming Zhu, E.G. Strangas, "Trajectory Optimization for the Engine-Generator Operation of a Series Hybrid Electric Vehicle", *IEEE trans. on vehicular technology*, vol. 60, no. 6, July 2011, pp. 2438 - 2447.
- M. Einhorn, W. Roessler, J. Fleig, "Improved Performance of Serially Connected Li-Ion Batteries With Active Cell Balancing in Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 60, no. 6, July 2011, pp. 2448 - 2457.
- L. Wu, Y. Wang, X. Yuan, Z. Chen, "Multiobjective Optimization of HEV Fuel Economy and Emissions Using the Self-Adaptive Differential Evolution Algorithm", *IEEE trans. on vehicular technology*, vol. 60, no. 6, July 2011, pp. 2458 - 2470.
- Yeonho Kim, Jaesang Lee, Chihoon Jo, Yongha Kim, Minseok Song, Jonghyun Kim, Hyunsoo Kim, "Development and Control of an Electric Oil Pump for Automatic Transmission-Based Hybrid Electric Vehicle", *IEEE trans. on vehicular technology*, vol. 60, no. 5, June 2011, pp. 1981 - 1990.
- Phi Hung Nguyen, E. Hoang, M. Gabsi, "Performance Synthesis of Permanent-Magnet Synchronous Machines During the Driving Cycle of a Hybrid Electric Vehicle", *IEEE trans. on vehicular technology*, vol. 60, no. 5, June 2011, pp. 1991 - 1998.
- Xiaoyu Huang, Junmin Wang, "Lightweight Vehicle Control-Oriented Modeling and Payload Parameter Sensitivity Analysis", *IEEE trans. on vehicular technology*, vol. 60, no. 5, June 2011, pp. 1999 - 2011.
- Xinbo Liu, Yuanjun Zhou, Wei Zhang, Shuohan Ma, "Stability Criteria for Constant Power Loads With Multistage LC Filters", *IEEE trans. on vehicular technology*, vol. 60, no. 5, June 2011, pp. 2042 - 2049.
- Li Chen, Futang Zhu, Minmin Zhang, Yi Huo, Chengliang Yin, Huei Peng, "Design and Analysis of an Electrical Variable Transmission for a Series-Parallel Hybrid Electric Vehicle", *IEEE trans. on vehicular technology*, vol. 60, no. 5, June 2011, pp. 2354 - 2363.

- J.T. Chen, Z.Q. Zhu, S. Iwasaki, R.P. Deodhar, "A Novel Hybrid-Excited Switched-Flux Brushless AC Machine for EV/HEV Applications", *IEEE trans. on vehicular technology*, vol. 60, no. 4, May 2011, pp. 1365 - 1373.
- M. Chymera, A.C. Renfrew, M. Barnes, J. Holden, "Simplified Power Converter for Integrated Traction Energy Storage", *IEEE trans. on vehicular technology*, vol. 60, no. 4, May 2011, pp. 1374 - 1383.
- B.L.J. Gysen, T.P.J. van der Sande, J.J.H. Paulides, E.A. Lomonova, "Efficiency of a Regenerative Direct-Drive Electromagnetic Active Suspension", *IEEE trans. on vehicular technology*, vol. 60, no. 4, May 2011, pp. 1384 - 1393.
- L. Wang, E.G. Collins, Hi Li, "Optimal Design and Real-Time Control for Energy Management in Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 60, no. 4, May 2011, pp. 1419 - 1429.
- Bo-Chiuan Chen, Yuh-Yih Wu, Yi-Lin Wu, Chan-Chiao Lin, "Adaptive Power Split Control for a Hybrid Electric Scooter", *IEEE trans. on vehicular technology*, vol. 60, no. 4, May 2011, pp. 1430 - 1437.
- H. Hannoun, M. Hilairet, C. Marchand, "Experimental Validation of a Switched Reluctance Machine Operating in Continuous-Conduction Mode", *IEEE trans. on vehicular technology*, vol. 60, no. 4, May 2011, pp. 1453 - 1460.
- Hongwen He, Rui Xiong, Xiaowei Zhang, Fengchun Sun, JinXin Fan, "State-of-Charge Estimation of the Lithium-Ion Battery Using an Adaptive Extended Kalman Filter Based on an Improved Thevenin Model", *IEEE trans. on vehicular technology*, vol. 60, no. 4, May 2011, pp. 1461 - 1469.
- Houhua Jing, Zhiyuan Liu, Hong Chen, "A Switched Control Strategy for Antilock Braking System With On/Off Valves", *IEEE trans. on vehicular technology*, vol. 60, no. 4, May 2011, pp. 1470 - 1484.
- M. Uno, K. Tanaka, "Influence of High-Frequency Charge-Discharge Cycling Induced by Cell Voltage Equalizers on the Life Performance of Lithium-Ion Cells", *IEEE trans. on vehicular technology*, vol. 60, no. 4, May 2011, pp. 1505 - 1515.
- B. Zhang, C.C. Mi, M. Zhang, "Charge-Depleting Control Strategies and Fuel Optimization of Blended-Mode Plug-In Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 60, no. 4, May 2011, pp. 1516 - 1525.
- S. Kermani, R. Trigui, S. Delprat, B. Jeanneret, T.M. Guerra, "PHIL Implementation of Energy Management Optimization for a Parallel HEV on a Predefined Route", *IEEE trans. on vehicular technology*, vol. 60, no. 3, March 2011, pp. 782 - 792.
- S Jeongmin Kim, Talchol Kim, Byungsoon Min, Sungho Hwang, Hyunsoo Kim, "Mode Control Strategy for a Two-Mode Hybrid Electric Vehicle Using Electrically Variable Transmission (EVT) and Fixed-Gear Mode", *IEEE trans. on vehicular technology*, vol. 60, no. 3, March 2011, pp. 793 - 803.
- S. Bhide, Taehyun Shim, "Novel Predictive Electric Li-Ion Battery Model Incorporating Thermal and Rate Factor Effects", *IEEE trans. on vehicular technology*, vol. 60, no. 3, March 2011, pp. 819 - 829.
- H.A.H. Hussein, I. Batarseh, "A Review of Charging Algorithms for Nickel and Lithium Battery Chargers", *IEEE trans. on vehicular technology*, vol. 60, no. 3, March 2011, pp. 830 - 838.
- Yan Chen, Junmin Wang, "Adaptive Vehicle Speed Control With Input Injections for Longitudinal Motion Independent Road Frictional Condition Estimation", *IEEE trans. on vehicular technology*, vol. 60, no. 3, March 2011, pp. 839 - 848.
- S.G. Wirasingha, A. Emadi, "Pihef: Plug-In Hybrid Electric Factor", *IEEE trans. on vehicular technology*, vol. 60, no. 3, March 2011, pp. 1279 - 1284.
- G.A. Magallan, C.H. De Angelo, G.O. Garcia, "Maximization of the Traction Forces in a 2WD Electric Vehicle", *IEEE trans. on vehicular technology*, vol. 60, no. 2, February 2011, pp. 369 - 380.
- C.C. Antaloae, J. Marco, N.D. Vaughan, "Feasibility of High-Frequency Alternating Current Power for Motor Auxiliary Loads in Vehicles", *IEEE trans. on vehicular technology*, vol. 60, no. 2, February 2011, pp. 390 - 405.
- Shaofeng Lu, S. Hillmansen, C. Roberts, "A Power-Management Strategy for Multiple-Unit Railroad Vehicles", *IEEE trans. on vehicular technology*, vol. 60, no. 2, February 2011, pp. 406 - 420.
- Yaonan Wang, Xizheng Zhang, Xiaofang Yuan, Guorong Liu, "Position-Sensorless Hybrid Sliding-Mode Control of Electric Vehicles With Brushless DC Motor", *IEEE trans. on vehicular technology*, vol. 60, no. 2, February 2011, pp. 421 - 432.
- M. Zandi, A. Payman, J.P. Martin, S. Pierfederici, B. Davat, F. Meibody-Tabar, "Energy Management of a Fuel Cell/Supercapacitor/Battery Power Source for Electric Vehicular Applications", *IEEE trans. on vehicular technology*, vol. 60, no. 2, February 2011, pp. 433 - 443.
- A.R. Salisa, N. Zhang, J.G. Zhu, "A Comparative Analysis of Fuel Economy and Emissions Between a Conventional HEV and the UTS PHEV", *IEEE trans. on vehicular technology*, vol. 60, no. 1, January 2011, pp. 44 - 54.
- Jiabin Wang, Weiya Wang, K. Atallah, "A Linear Permanent-Magnet Motor for Active Vehicle Suspension", *IEEE trans. on vehicular technology*, vol. 60, no. 1, January 2011, pp. 55 - 63.
- Z. Amjadi, S.S. Williamson, "Modeling, Simulation, and Control of an Advanced Luo Converter for Plug-In Hybrid Electric Vehicle Energy-Storage System", *IEEE trans. on vehicular technology*, vol. 60, no. 1, January 2011, pp. 64 - 75.
- K.W.E. Cheng, B.P. Divakar, Hongjie Wu, Ding Kai, Ho Fai Ho, "Battery-Management System (BMS) and SOC Development for Electrical Vehicles", *IEEE trans. on vehicular technology*, vol. 60, no. 1, January 2011, pp. 76 - 88.
- W. Na, Taesik Park, Taehyung Kim, Sangshin Kwak, "Light Fuel-Cell Hybrid Electric Vehicles Based on Predictive Controllers", *IEEE trans. on vehicular technology*, vol. 60, no. 1, January 2011, pp. 89 - 97.

- B. Tabbache, A. Kheloui, M.E.H Benbouzid, "An Adaptive Electric Differential for Electric Vehicles Motion Stabilization", *IEEE trans. on vehicular technology*, vol. 60, no. 1, January 2011, pp. 104 - 110.
- S.G. Wirasingha, A. Emadi, "Classification and Review of Control Strategies for Plug-In Hybrid Electric Vehicles", *IEEE trans. on vehicular technology*, vol. 60, no. 1, January 2011, pp. 111 - 122.

#### **High-cited papers before 2010 (more than 75 citations)**

---

- A. Khaligh, Z. Li, "Battery, Ultracapacitor, Fuel Cell, and Hybrid Energy Storage Systems for Electric, Hybrid Electric, Fuel Cell, and Plug-In Hybrid Electric Vehicles: State of the Art", *IEEE trans. on vehicular technology*, vol. 59, no. 6, pp. 2806 - 2814, July 2010.
- C. C. Chan, A. Bouscayrol, K. Chen, "Electric, Hybrid, and Fuel-Cell Vehicles: Architectures and Modeling", *IEEE trans. on vehicular technology*, vol. 59, no. 2, pp. 589 - 598, February 2010.
- M. B. Camara, H. Gualous, F. Gustin, A. Berthon, "Design and New Control of DC/DC Converters to Share Energy Between Supercapacitors and Batteries in Hybrid Vehicles", *IEEE trans. on vehicular technology*, vol.57, no.5, pp.2721-2735, September 2008.
- F.R. Salmasi, "Control Strategies for Hybrid Electric Vehicles: Evolution, Classification, Comparison, and Future Trends", *IEEE trans. on vehicular technology*, vol. 56, no. 5, pp. 2393 - 2404, September 2007.
- M. Koot, J. Kessels, B. de Jager, W. Heemels, P. van den Bosch, M. Steinbuch, "Energy management strategies for vehicular electric power systems", *IEEE trans. on vehicular technology*, vol. 54, no 3, pp. 771 - 782, May 2005.
- A. Emadi, K. Rajashekara, S. S. Willaimson, S.M. Lukic, "Topological overview of Hybrid Electric and Fuel Cell vehicular power systems architectures and configurations", *IEEE trans. on vehicular technology*, vol. 54, no. 3, pp. 763-770, May 2005.
- S. Delprat, J. Lauber, T. M. Guerra, J. Rimaux, "Control of a parallel hybrid powertrain: optimal control", *IEEE trans. on vehicular technology*, vol. 53, no. 3, pp. 872-881, May 2004.
- K. L. Butler, M. Ehsani, P. Kamath, "A Matlab-based modeling and simulation package for electric and hybrid electric vehicle design", *IEEE trans. on vehicular technology*, vol. 48, no. 6, pp. 1770 - 1778, 1999.
- K. B. Wipke, M. R. Cuddy, and S. D. Burch, "Advisor 2.1: a user-friendly advanced powertrain simulation using a combined backward/ forward approach", *IEEE trans. on vehicular technology*, vol. 48, no. 6, pp. 1751-1761, 1999