

Table of Contents

Jonathan Jürgens André Brune Bernd Ponick	Innovative Salient-Pole Synchronous Machine for Use as a Wheel Hub Motor in an EV	7
Jan-Niklas Weber André Brune Bernd Ponick	Rotary Transformer for Brushless Excitation of Synchronous Machines	9
Francesco Quattrone	Design of Permanent Magnet Synchronous Machines for Self-Sensing Control at Low and Zero Speed	11
Viktor Valouch Martin Bejvl Petr Šimek Jiří Škramlík	Power Control of Converter Connected to Unbalanced Grid	15
Lubomír Musálek	Rotational Induction Heating Device with External Rotor	17
Jan Gruber Jiří Šonský Jan Hlína	Analysis of Thermal Plasma Radiation by Fourier Transform, Wavelet Analysis and Phase Portraits	19
Jiří Škramlík Petr Šimek Martin Bejvl Viktor Valouch	Analytical Closed-Form Solution of Current Responses of Multilevel Converter Connected to Unbalanced Grid	21
Luděk Schreier Jiří Bendl Miroslav Chomát	IM with Six-Phase Combined Stator Winding – Analysis and Experimental Verification	23
Luděk Schreier Jiří Bendl Miroslav Chomát	Mathematical Description of Combined Stator Winding of Induction Machines	25
Olga Korolova	Prediction of Efficiency-Optimized Electrically Excited Synchronous Machines' Operating Range Using a Coupled Numerical-Analytical Method	27
Malte John Patricio Mendoza-Araya Giri Venkataramanan	Small Signal Impedance Measurement in Droop Controlled AC Microgrids	31
Rashid Karimi Axel Mertens	Multi-Phase Interleaved DC/DC Converters for Electric Vehicle Applications	35
Jaroslav Koupeny Axel Mertens	Offline and Online Parameter Estimation of Controlled Electric Drives	43
Stefan Luecke	Sensor-Less Speed Estimation of Induction Machines	47