

Contents

01	Przemysław KOMARNICKI, Christoph WENGE, Robert PIETRACHO - Electromobility - integration of electric vehicles with the power grid infrastructure	1
02	Joanna BARANIAK¹, Bartosz PAWLICKI, Stanisław WINCENCIAK - The opportunities and threats that result from the development of electromobility	14
03	Krzysztof ZAGRAJEK, Konrad WRÓBLEWSKI, Piotr BICZEL, Łukasz SOSNOWSKI - Operation of Electrical Vehicles Fast Charging Stations in Warsaw - Case study of innogyGO! collecting point	20
04	Mateusz DUTKA, Krzysztof PIĄTEK, Tomasz SIOSTRZONEK, Szymon BARCZENTEWICZ, Bogusław ŚWIĄTEK - The use of OpenDSS software for computer simulation of distribution network operation	26
05	Andrzej LANGE, Marian PASKO - Selected aspects of photovoltaic power station operation in the power system	30
06	Zbigniew KRZEMIŃSKI - Voltage regulation in LV network with distributed energy sources	35
07	Andrzej FIRLIT, Bogusław ŚWIĄTEK, Zbigniew HANZELKA, Krzysztof PIĄTEK, Mateusz DUTKA, Tomasz SIOSTRZONEK - Analysis of selected power quality indicators at non-measured distribution network points based on measurements at other points	39
08	Tomasz SIOSTRZONEK, Krzysztof CHMIELOWIEC, Andrzej FIRLIT, Szymon BARCZENTEWICZ - Advantages and disadvantages of using multi-pulse systems in the electric drive of hoisting machines	43
09	Szymon BARCZENTEWICZ, Zbigniew HANZELKA, Bogusław ŚWIĄTEK, Andrzej FIRLIT, Krzysztof PIĄTEK, Krzysztof CHMIELOWIEC - Individual emission assessment of electromagnetic disturbances based on aggregated data	47
10	Szymon BARCZENTEWICZ, Krzysztof DUDA, Andrzej BIEN - Monitoring of Electric Arc Furnace Supply Voltage Frequency using Phasor Analysis	51
11	Leszek ŁADNIAK - Graphical assessment of power supply conditions for non-linear receivers	55
12	Antoni SAWICKI¹, Sławomir GRYŚ - The effect of arc disturbances on the interaction of the plasma gliding arc receiver on the power supply network	59
13	Michał MNICH, Maciej WILK, Wojciech A. PLUTA - Determining the relationship between anisotropy and parameters of the ODF model of power losses in electrical sheets	63
14	Natalia HOPPE-MALISZEWSKA, Marta KOLASA - Impact of weekends and other non-working days on the shape of the load profiles of electricity consumers	67
15	Tomasz MATUSIAK, Karolina LASZCZYK - Graphite-glass screen-printed film electron emitters	75
16	Robert PIOTROWSKI¹, Maciej SZAFRAŃSKI¹, Konrad ŻUK - Design of optimal state feedback controller with observer for multidimensional electrical system	79
17	Saktanong WONGCHAROEN, Sansak DEEON - Application of Multi-Stage Window Comparator Circuit with Safety Mode for Swell Voltage Control in Low Voltage Systems	84
18	Tomasz RYMARCZYK, Tomasz CIEPLAK, Grzegorz KŁOSOWSKI, Edward KOZŁOWSKI - The use of LSTM networks in the detection of outliers in IoT-based air quality monitoring systems	91
19	Edward KOZŁOWSKI, Tomasz RYMARCZYK, Grzegorz KŁOSOWSKI, Tomasz CIEPLAK - Logistic regression in image reconstruction in electrical impedance tomography	95