
№ 5

TECHNICAL ELECTRODYNAMICS 2016

Issue DOI: <https://doi.org/10.15407/techned2016.05>

CONTENTS

Subject Categories: Theoretical electrical engineering and electrophysics

Title: [Coupled Electrical and Mechanical Processes in Polyethylene Insulation with Water Tree Having Branches of Complex Structure](#)

Authors: KUCHERIAVA I.M.

Source: Tekhnichna Elektrodynamika 5: 5–10, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.005>

Title: [Solution of the Problem of the Magnetic Field Continuation From Cylindrical Surface by Using Green's Function](#)

Authors: KONOVALOV O.YA., MIKHAILOV V.M., PETRENKO M.P.

Source: Tekhnichna Elektrodynamika 5: 11–13, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.011>

Subject Categories: Conversion of electric energy parameters

Title: [Frequency Converter with the Reduced THD of the Output Voltage](#)

Authors: PAVLOV G.V., VINNICHENKO I.L., OBRUBOV A.V.

Source: Tekhnichna Elektrodynamika 5: 14–16, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.011>

[016.05.014](#)

Title: [Analysis and Synthesis of Symmetrical Output Voltage of Three-Level Converters with Space-Vector PWM](#)

Authors: OLESCHUK V., ERMURATSKII V., BARRERO F.

Source: Tekhnichna Elektrodynamika 5: 17–19, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.017>

Title: [Output Voltage Simulation of Multilevel Inverter with Space Vector Modulation of Two Delta Voltages](#)

Authors: LOPATKIN N.N.

Source: Tekhnichna Elektrodynamika 5: 20–22, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.020>

Title: [Analysis of the Electromagnetic Processes in Circuit with Semiconductor Converter with Seventeen Zoned Regulations of the Output Voltage](#)

Authors: SENKO V.I., MIKHAYLENKO V.V., YURCHENKO M.M., YURCHENKO O.M., CHUNYAK YU.M.

Source: Tekhnichna Elektrodynamika 5: 23–25, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.023>

Title: [Adaptive Quasi-Optimal Control in Pulse Convertors with Artificial Neural Network Model of Power Part](#)

Authors: VOYTENKO V.P.

Source: Tekhnichna Elektrodynamika 5: 26–28, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.026>

Title: [The Analysis of the Relation of Combined System Power Supplies Efficiency with Control Parameters](#)

Authors: SHIDLOVSKYI A.K., PAVLOV V.B., PAVLENKO V.E.

Source: Tekhnichna Elektrodynamika 5: 29–31, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.029>

Title: [Remote Control of Electromechanical Devices in The Climate Control System](#)

Authors: KHIZHNIAK T.A., HUSEV O.O., LIPINSKYI I.S.

Source: Tekhnichna Elektrodynamika 5: 32–34, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.032>

Subject Categories: Electromechanical energy conversion

Title: [Improving Dynamic of the System Based on Permanent Magnet Synchronous Motor Using Optimal Control Strategies](#)

Authors: TOLOCHKO O.I., BUHROVYI A.A.

Source: Tekhnichna Elektrodynamika 5: 35–37, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.035>

Title: [Power Effective Modes Electromechanical System of Pump Installation of the Multistorey Building](#)

Authors: BIBIK O.V., POPOVYCH O.M., SHEVCHUK S.P.

Source: Tekhnichna Elektrodynamika 5: 38–45, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.038>

Title: [Comparative Analysis of Linear Pulse Electromechanical Converters Electromagnetic and Induction Types](#)

Authors: BOLYUKH V.F., OLEKSENKO S.V., SHCHUKIN I.S.

Source: Tekhnichna Elektrodynamika 5: 46–48, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.046>

Title: [The Transfer Functions of the Diesel Generator in Separate Frequency Ranges](#)

Authors: OSYPENKO K.S., ZHUIKOV V.J.

Source: Tekhnichna Elektrodynamika 5: 49–51, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.049>

Subject Categories: Electric power systems and installations

Title: [Simulation of Modes of Electric Networks of Medium Voltage When Connecting Solar](#)

Power Plants

Authors: ZHARKIN A.F., NOVSKY V.O., MALAKHATKA D.O.

Source: Tekhnichna Elektrodynamika 5: 52–54, 2016 **DOI:** <https://doi.org/10.15407/technd2016.05.052>

Title: The Optimal Reconfiguration of Distribution Power System

Authors: TSYGANENKO B.

Source: Tekhnichna Elektrodynamika 5: 55–57, 2016 **DOI:** <https://doi.org/10.15407/technd2016.05.055>

Title: Fault Indicators Location and Quantity Selection on Distribution Line as a Problem of Combinatorial Optimization

Authors: PARUS Ye.V., BLINOV I.V., BETS O.Yu.

Source: Tekhnichna Elektrodynamika 5: 58–60, 2016 **DOI:** <https://doi.org/10.15407/technd2016.05.058>

Title: Flow Control Active and Reactive Power in Electric Networks

Authors: GOVOROV F.P., GOVOROV V.F.

Source: Tekhnichna Elektrodynamika 5: 61–63, 2016 **DOI:** <https://doi.org/10.15407/technd2016.05.061>

Title: Optimization of Control Systems in a Smart Grid the Power Grid on the Basis of Generalization of Information Flows

Authors: NIKIFOROV A.P.

Source: Tekhnichna Elektrodynamika 5: 64–66, 2016 **DOI:** <https://doi.org/10.15407/technd2016.05.064>

Title: Distributed Simulation Environment of Modes for Full-Scale Mode Simulator for Ukrainian Energy Systems

Authors: GURIEIEV V.O., SANGINOVA O.V.

Source: Tekhnichna Elektrodynamika 5: 67–69, 2016 **DOI:** <https://doi.org/10.15407/technd2016.05.067>

Title: Maximizing the Profit of a HPP Cascade Considering Hydraulic Link via Reservoirs

Authors: MAHNITKO A.Y., GERHARDS J.H., LOMANE T.V., VARFOLOMEJEVA R.V., OBOSKALOV V.P., KOLJASNIKOV K.S.

Source: Tekhnichna Elektrodynamika 5: 70–72, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.070>

Title: [The Switching in Voltage Transformer](#)

Authors: TUGAY Yu.I., GANUS O.I., STARKOV K.O.

Source: Tekhnichna Elektrodynamika 5: 73–75, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.073>

Title: [The Method of Assessing the State of Isolation Disconnected Connections 6-10 kV Networks with Isolated Neutral](#)

Authors: GREBCHENKO N.V., KOZHUKHAR A.V., DEMCHENKO O.V.

Source: Tekhnichna Elektrodynamika 5: 76–78, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.076>

Title: [Hardware Electrical Safety Problems with Operation of Electrotechnical Complexes with Regulated Electric Drives in Mining Area Distribution Networks up to 1200 V](#)

Authors: SINCHUK O.N., LIKARENKO A.G., PETRYCHENKO A.A., ZIMANKOV R.V., SHKRABETS F.P.

Source: Tekhnichna Elektrodynamika 5: 79–81, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.079>

Subject Categories: □ □ □ □ □ Information-measuring systems in power engineering

Title: [Digital-to-Analog Converter for Higher Current Applications in Portable Metrology Power Sources](#)

Authors: TESIK Yu.F., KARASINSKIY O.L., MOROZ R.N.

Source: Tekhnichna Elektrodynamika 5: 82–84, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.082>

Title: [Positioning Precision Evaluation of Video Systems](#)

Authors: TERESHCHENKO T.A., YAMNENKO Y.S., LAZARIEV D.V.

Source: Tekhnichna Elektrodynamika 5: 85–87, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.082>

[016.05.085](#)

Title: [The Method for Determining the Spatial Fotosinteznoy Irradiation](#)

Authors: CHERVINSKY L., USENKO S., KNIZHKA T., LUTSAK Ya.

Source: Tekhnichna Elektrodynamika 5: 88–90, 2016 **DOI:** <https://doi.org/10.15407/techned2016.05.088>

Title: [To the 80th ANNIVERSARY of K.O.LYPKIVSKYI](#)

Source: Tekhnichna Elektrodynamika 5: 91–92, 2016

Institute of Electrodynamics, 2016