

---

**No 4**  
**TECHNICAL ELECTRODYNAMICS**  
**2008**

---

**CONTENTS**

**Subject Categories:** □ □ □ □ □ Theoretical electrical engineering and electrophysics

**Title:** [Analysis of microinhomogeneity of an electric field as a factor intensity increase of threshold electrophysical processes in a polymeric insulation of high-voltage cables and self-carrying insulated wires](#)

**Authors:** SHIDLOVSKY A.K., SCHERBA A.A., PERETJATKO Yu.V., ZOLOTARJEV V.M.

**Source:** Tekhnichna Elektrodynamika 4: 3–14, 2008

**Title:** [Analysis of processes in a protective circuit from leakage currents considering nonlinearity of a flux linkage](#)

**Authors:** SHYDLOVSKA N.A., VARENIK E.A., DZJUBAN V.S., SHKRABETS F.P.

**Source:** Tekhnichna Elektrodynamika 4: 14–18, 2008

**Title:** [Simulation of a variable electromagnetic field in a ferromagnetic conducting environment by the finite elements method](#)

**Authors:** PETUKHOV I.S.

**Source:** Tekhnichna Elektrodynamika 4: 18–26, 2008

**Title:** [Power characteristics at initial conditions change of an oscillating charge of a capacitor from a direct voltage source](#)

**Authors:** SUPRUNOVSKAYA N.I.

**Source:** Tekhnichna Elektrodynamika 4: 27–33, 2008

**Subject Categories:** □ □ □ □ □ **Conversion of electric energy parameters**

**Title:** [Relatively-continuous gain-frequency characteristic of an inverter voltage in the problem of a parameter optimization of power SIN- filters](#)

**Authors:** VOLKOV I.V., PODOL'NY S.V.

**Source:** Tekhnichna Elektrodynamika 4: 34–38, 2008

**Title:** [Special features of computation of single sectionalized autotransformers with different operation modes](#)

**Authors:** LYPKIVSKY K.O.

**Source:** Tekhnichna Elektrodynamika 4: 39–42, 2008

**Subject Categories:** □ □ □ □ □ **Electromechanical energy conversion**

**Title:** [Application of supercondensers in an autonomous storage battery electric transport](#)

**Authors:** SHYDLOVSKY A.K., PAVLOV V.B., POPOV A.V.

**Source:** Tekhnichna Elektrodynamika 4: 43–47, 2008

**Title:** [Simulation of multipole magnetic systems of magnetoelectric engines taking into account interpole extraneous fields](#)

**Authors:** ANTONOV A.E., KIREJEV V.G.

**Source:** Tekhnichna Elektrodynamika 4: 47–50, 2008

**Title:** [Increase of power efficiency of powerful turbo-generators with hydrogen cooling systems](#)

**Authors:** SOLOVEY V.V., FEDORENKO G.M., ZEVIN L.I., KENSYTSKY O.G., OSTAPCHUK L.B., DUBIK G.O.

**Source:** Tekhnichna Elektrodynamika 4: 51–56, 2008

**Subject Categories:** □ □ □ □ □ **Electric power systems and installations**

**Title:** [Simulation of diagnostic signals of electric power equipment by means of linear random processes with discrete time within the framework of a power theory](#)

**Authors:** MARCHENKO N.B., MYSLOVICH M.V.

**Source:** Tekhnichna Elektrodynamika 4: 57–61, 2008

**Title:** [Factor analysis of efficiency of electric energy consumption of coal mines](#)

**Authors:** ROSEN V.P., VOLYNETS V.I.

**Source:** Tekhnichna Elektrodynamika 4: 61–64, 2008

**Title:** [Investigation of frequency characteristics of a high-voltage potential divider at different location of a low-voltage arm](#)

**Authors:** RJABENKY V.M., DJAKONOV A.S.

**Source:** Tekhnichna Elektrodynamika 4: 65–68, 2008

## Electrotechnology

**Title:** [Electromagnetic field and parameters of a device of continuous fining of liquid metal](#)

**Authors:** ГОРИСЛАВЕЦ Ю.М.

**Source:** Tekhnichna Elektrodynamika 4: 69–74, 2008

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

**Title:** [A method of-non-linearity determination of precision thermometric measuring devices](#)

**Authors:** MIKHAL A.A., SEMENYCHEVA L.N., SURDU M.N.

**Source:** Tekhnichna Elektrodynamika 4: 75–79, 2008

## [Abstracts](#)

