
□ 2

**TECHNICAL ELECTRODYNAMICS
2012**

CONTENTS

Subject Categories: Theoretical electrical engineering

Title: [Scalar electric and vector magnetic potentials in theory of electromagnetic field](#)

Authors: GLUKHENKYI O.I., GORYSLAVETS Yu.M.

Source: Tekhnichna Elektrodynamika 2: 7–8, 2012

Title: [On magnetic field determination of the current contour above flat surface of perfect electrical conductivity body](#)

Authors: VASETSKYI Yu.M., VLASOV D.I.

Source: Tekhnichna Elektrodynamika 2: 9–10, 2012

Title: [Bionic parametric pareto-optimal synthesis of axially symmetric magnetic field sources with ferromagnetic constructive elements](#)

Authors: HALCHENKO V.Ya., YAKYMOV O.M., OSTAPUSHCHENKO D.L.

Source: Tekhnichna Elektrodynamika 2: 11–12, 2012

Title: [Cylindrical harmonics of magnetic field of linear magnetized cylinder](#)

Authors: GETMAN A.V., KONSTANTINOV A.V.

Source: Tekhnichna Elektrodynamika 2: 13–14, 2012

Title: [Decision of equations of magnetic field in rectangular window space with current, having zone with constant magnetic permeability](#)

Authors: ZAGIRNYAK M.V., BRANSPIZ Yu.A., VELCHENKO A.A.

Source: Tekhnichna Elektrodynamika 2: 15–16, 2012

Title: [Consideration of hysteresis phenomena in numerical simulation of two-dimensional periodic electromagnetic field in ferromagnetic](#)

Authors: PETUKHOV I.S.

Source: Tekhnichna Elektrodynamika 2: 17–18, 2012

Title: [Patterns of the electric fields distribution in a dielectric medium at changing of sizes and shapes of the conducting inclusions](#)

Authors: SHCHERBA M.A.

Source: Tekhnichna Elektrodynamika 2: 19–20, 2012

Title: [The magnetic field of power transmission lines and the methods of its mitigation to a safe level](#)

Authors: ROZOV V.Yu., REUTSKIY S.Yu., PELEVIN D.Ye., PILIUGINA O.Yu.

Source: Tekhnichna Elektrodynamika 2: 21–22, 2012

Subject Categories: Electric power systems and installations

Title: [Power system steady-state stability margins' monitoring based on voltage phasors' measurements](#)

Authors: BUTKEVYCH O.F., LEVKONIUK A.V., RYBINA O.B.

Source: Tekhnichna Elektrodynamika 2: 23–24, 2012

Title: [Scientific and technical aspects of connection of Integrated Ukrainian Power System to Entso-E](#)

Authors: ZHARKIN A.F., PAVLOVSKYI V.V., LUKIANENKO L.N.

Source: Tekhnichna Elektrodynamika 2: 25–27, 2012

Title: [Power electronic transformers – is it the future of power systems?](#)

Authors: STRZELECKI R.

Source: Tekhnichna Elektrodynamika 2: 28–29, 2012

Title: [Requirements for mathematical software of electricity balancing market in Ukraine](#)

Authors: BLINOV I.V., PARUS E.V.

Source: Tekhnichna Elektrodynamika 2: 30–31, 2012

Title: [Organization of calculating the stability of complex EPS based microprocessor regulator turbine power plant](#)

Authors: AVRAMENKO V.N., YUNEEVA N.T., KOROVKO A.N.

Source: Tekhnichna Elektrodynamika 2: 32–33, 2012

Title: [Influence of dispersed generation on the quality of distributive electric networks](#)

Authors: KOMAR V.O., KOVALCHUK A.A., KUZMYK O.V.

Source: Tekhnichna Elektrodynamika 2: 34–35, 2012

Title: [The dvoistoy problem solution of the optimal control by normal regimes of EPS with using neuro-fuzzy modelling](#)

Authors: PETRUSHENKO O.YU., PETRUSHENKO YU.O., RUBANENKO E.A.

Source: Tekhnichna Elektrodynamika 2: 36–37, 2012

Title: [Optimization of partition of load between the dispersed energy sources in the in-plant electric system](#)

Authors: LEZHNIUK P.D., NIKITOROVYCH O.V., NETREBSKYI V.V.

Source: Tekhnichna Elektrodynamika 2: 38–39, 2012

Title: [Abnormal steady-state overvoltage in transmission lines of UHV](#)

Authors: KUZNETSOV V.G., TUGAY Yu.I., KUCHANSKIY V.V.

Source: Tekhnichna Elektrodynamika 2: 40–41, 2012

Title: [Unbalanced current and the pulsating current at asymmetrical voltage](#)

Authors: SIROTIN YU.O.

Source: Tekhnichna Elektrodynamika 2: 42–43, 2012

Title: [Model of zero sequence noise in small current grounding system](#)

Authors: LYSENKO V.A.

Source: Tekhnichna Elektrodynamika 2: 44–45, 2012

Title: [System of protection from wire break search sites and damage in distribution networks voltage 6–35 kV](#)

Authors: KUTINA M.V.

Source: Tekhnichna Elektrodynamika 2: 46–47, 2012

Title: [Complex analysis of emergency situations of generating equipment of power-stations](#)

Authors: FEDORENKO G.M., KENSYTSKYI O.G.

Source: Tekhnichna Elektrodynamika 2: 48–49, 2012

Subject Categories: Conversion of electric energy parameters

Title: [Time domain digital state-space modeling of pwm converter](#)

Authors: OSADCHIJ A.L., ROGAL V.V.

Source: Tekhnichna Elektrodynamika 2: 50–50, 2012

Title: [Multilevel inverter output voltage generation based on orthogonal conversion](#)

Authors: TERESHCHENKO T.O., BEZHENAR V.A.

Source: Tekhnichna Elektrodynamika 2: 51–52, 2012

Title: [Extension of the input reactive power regulation range of a matrix converter by control means](#)

Authors: MIKHALSKYI V.M., SOBOLEV V.M., SHAPOVAL I.A., CHOPIK V.V.

Source: Tekhnichna Elektrodynamika 2: 53–54, 2012

Title: [Control of three phase matrix frequency converters on base of first harmonics method in space with two time variables](#)

Authors: KOROTYEV I.Ye., KLYTTA M.
Source: Tekhnichna Elektrodynamika 2: 55–56, 2012

Title: [Comparison of the characteristics of resonant converters of different topologies using simulation](#)

Authors: PAVLOV G.V., SHCHERBYNIN T.V.
Source: Tekhnichna Elektrodynamika 2: 57–58, 2012

Title: [Electromagnetic analysis of a single-phase three-level NPC converter](#)

Authors: BROVANOV S.V., DYBKO M.A., GRISHANOV E.V.
Source: Tekhnichna Elektrodynamika 2: 59–60, 2012

Title: [Comparison of dual z-source inverter with the classical voltage source inverter for aircraft power generation](#)

Authors: KHLEBNIKOV A.S., BACHURIN P.A., GEIST A.V., RESHETNIKOV A.N., BALAGUROV M.V.
Source: Tekhnichna Elektrodynamika 2: 61–62, 2012

Title: [Investigation of mechatronic system for autonomous voltage generating with variable frequency constant amplitude based on magnetoelectric generator and semiconductor converter](#)

Authors: VOLKOV A.G., KHARITONOV S.A., ZINOVIEV G.S.
Source: Tekhnichna Elektrodynamika 2: 63–64, 2012

Title: [Increase of electromagnetic compatibility of converter of frequency of current with the load](#)

Authors: SKURJATIN Yu.V., DENISEVICH N.A.
Source: Tekhnichna Elektrodynamika 2: 65–66, 2012

Title: [The evaluation of current regulation accuracy of multicell-type transistor converter with combined control](#)

Authors: BONDARENKO Yu.V., SYDORETS V.M., SAFRONOV P.S., BONDARENKO O.F.
Source: Tekhnichna Elektrodynamika 2: 67–68, 2012

Title: [The processes and algorithms to switching's in power transformer-key nodes](#)

Authors: LYPKIVSKYI K.O., KHALIKOV V.A.

Source: Tekhnichna Elektrodynamika 2: 69–70, 2012

Title: [Features direct current converter control](#)

Authors: ZHUYIKOV V.Ya., VERBITSKYI I.V.

Source: Tekhnichna Elektrodynamika 2: 71–72, 2012

Title: [Features of formation pulses in matching nodes of magnetic semiconductor generators](#)

Authors: VOLKOV I.V., ZOZULEV V.I., SPIRIN V.M., SHOLOKH D.O.

Source: Tekhnichna Elektrodynamika 2: 73–74, 2012

Subject Categories: Electric drive

Title: [Steady-state analysis of welding stand alone induction generator with inverter excitation using equivalent circuit model](#)

Authors: MAZURENKO L.I., ROMANENKO V.I., DZURA O.V.

Source: Tekhnichna Elektrodynamika 2: 75–76, 2012

Title: [Generalized method of the electromechanical battery \(EMB\) mass minimization](#)

Authors: PODGORNOV A., SIPOVYCH A.

Source: Tekhnichna Elektrodynamika 2: 77–78, 2012

Title: [Experimental research of robust control for rolling mills main drives with related through the rolled metal on twomass electromechanics system stand](#)

Authors: KUZNETSOV B.I., NIKITINA T.B., VOLOSHKO A.V., VINICHENKO Ye.V.

Source: Tekhnichna Elektrodynamika 2: 79–80, 2012

Title: [Robust speed sensorless vector control of induction motor based on reduced order adaptive observer](#)

Authors: PERESADA S.M., KOVBASA S.N., DYMKO S.S.

Source: Tekhnichna Elektrodynamika 2: 81–82, 2012

Subject Categories: Electromechanical energy conversion

Title: [Calculation of the magnetic field and torque of electric motor with salient poles on the stator](#)

Authors: GREBENIKOV V.V., PRYYMAK M.V.

Source: Tekhnichna Elektrodynamika 2: 83–84, 2012

Title: [Technical and economic aspects of application of synchronous-asynchronous structure electrogenerating capacities in a power supply system of Ukraine](#)

Authors: TITKO V.O.

Source: Tekhnichna Elektrodynamika 2: 85–86, 2012

Title: [Synchronous-asynchronous turbogenerators in structure of generating capacities of power supply systems. Scientific bases of creation and their operation](#)

Authors: TITKO O.I., VASKOVSKYI Yu.M.

Source: Tekhnichna Elektrodynamika 2: 87–88, 2012

Title: [Rationale for settlement circuit for induction motors](#)

Authors: RODKIN D.I., ROMASHIHIN Yu.V.

Source: Tekhnichna Elektrodynamika 2: 89–90, 2012

Title: [Problems of turbogenerators large and medium power cooling](#)

Authors: GRUBOI A.P., TRETIAK A.V.

Source: Tekhnichna Elektrodynamika 2: 91–92, 2012

Subject Categories: Electrotechnological complexes

Title: [Investigation of the effect of bushing on the current test signal monitoring devices speed characteristics of high-voltage switches](#)

Authors: KUTIN V.M., RUBANENKO O.E., MYSENKO S.V.

Source: Tekhnichna Elektrodynamika 2: 93–94, 2012

Title: [Simulation of the parameters and characteristics of lighting devices on the basis of energy-saving led light sources](#)

Authors: GOVOROV F., NOSANOV M., ROMANOVA T., KOROL O.

Source: Tekhnichna Elektrodynamika 2: 95–96, 2012

Title: [Analysis of the asymmetric modes in six electrode electric arc pulse current](#)

Authors: GUDYM V., DROZDOVSKIY P., POSTOLIUK A.

Source: Tekhnichna Elektrodynamika 2: 97–98, 2012

Title: [High voltage high frequency pulse current generator for exhausted gas treatment](#)

Authors: BOGUSLAVSKIY L.Z., MIROSHNICHENKO L.N., CAZARYAN YU.G., DIORDIYCHUK V.V., YAROSHINSKIY N.S.

Source: Tekhnichna Elektrodynamika 2: 99–100, 2012

Title: [Stationary and transient processes in electromechanical system for the application of polymeric on conductor of ehv cables](#)

Authors: SHCHERBA A.A., PODOLTSEV O.D., ZOLOTAREV V.M.

Source: Tekhnichna Elektrodynamika 2: 101–102, 2012

Title: [Self-oscillations in Circuit with Laser-Arc Discharge as the Basis of New Pulse Technologies](#)

Authors: BUSHMA A.I., ZHERNOSEKOV A.M.

Source: Tekhnichna Elektrodynamika 2: 103–104, 2012

Title: [The high-voltage complex with two high-frequency pulse generators for regulating the modes of corona discharges and barrier ones during a treatment of gas hydrocarbons](#)

Authors: BOYKO M.I., YEVDOSHENKO L.S., ZAROCHENTSEV O.I., IVANOV V.M., KONIAGA S.F.

Source: Tekhnichna Elektrodynamika 2: 105–106, 2012

Title: [Control of uninterruptible power supply system with minimization of fuel consumption](#)

Authors: PICHKALEV E.S., YAMNENKO Yu.S.

Source: Tekhnichna Elektrodynamika 2: 107–108, 2012

Title: [Method for forming of stable high-power current pulses in discharge-pulses technologies](#)

Authors: SUPRUNOVSKA N.I.

Source: Tekhnichna Elektrodynamika 2: 109–110, 2012

Title: [Mechanotronic system of automatic process control system for mine applications](#)

Authors: GARGANEEV A., GARGANEEV B., KARAKULOV A., KOLOMENSKY O., MASHINSKY V.

Source: Tekhnichna Elektrodynamika 2: 111–112, 2012

Title: [A dynamic model of a linear permanent magnet generator for converting wave energy](#)

Authors: KONDRATENKO I.P., RASHCHEPKIN A.P., VASHCHISHIN D.D.

Source: Tekhnichna Elektrodynamika 2: 113–114, 2012

Title: [Two-level system of electrosupply of modern cars on basis of structures with switched capacitors](#)

Authors: ZOTOV L.G.

Source: Tekhnichna Elektrodynamika 2: 115–116, 2012

Subject Categories: Systems of measurements and control

Title: [Research of dynamic processes in the high-frequency devices of correction of power-factor](#)

Authors: ROHAL V.V., DEMCHENKO Yu.S.

Source: Tekhnichna Elektrodynamika 2: 117–118, 2012

Title: [Self-parasitic and mutual parasitic parameters in power line filters for switching mode](#)

[power supplies](#)

Authors: GURIN V.K., PAVLOVSKYI V.O., YURCHENKO O.M.

Source: Tekhnichna Elektrodynamika 2: 119–120, 2012

Title: [Extrapolation of Complex Error Function of Control System with Feedback](#)

Authors: AGAMALOV O.N.

Source: Tekhnichna Elektrodynamika 2: 121–122, 2012

Title: [The choice of parameters of digital fuzzy controller](#)

Authors: DOMNIN I.F., LEVON E.A.

Source: Tekhnichna Elektrodynamika 2: 123–124, 2012

Title: [Intellectual control system for electropulse installations](#)

Authors: KOZYREV S.S., OVCHYNNIKOVA L.E.

Source: Tekhnichna Elektrodynamika 2: 125–126, 2012

Title: [Issues of improving of the accuracy of diagnostic parameters estimations in the spectral processing of vibration signals](#)

Authors: GYZHKO Yu.I., MYSLOVYCH M.V., SYSAK R.M.

Source: Tekhnichna Elektrodynamika 2: 127–128, 2012

Title: [Principles of the construction rotation signature-based systems for measuring the magnetic moment of technical object](#)

Authors: GETMAN A.V., KRAMCHANIN E.G.

Source: Tekhnichna Elektrodynamika 2: 129–130, 2012

Title: [Active screening of industrial frequency magnetic field system synthesis](#)

Authors: KUZNETSOV B.I., PELEVIN D.Ye., BOVDUI I.V., KOTLIAROV D.A.

Source: Tekhnichna Elektrodynamika 2: 131–132, 2012

Title: [Application of Walsh transform in video-tracking system for images correlation computation](#)

Authors: TERESHCHENKO T.A., LAZARIEV D.V., ALEXANDROV D.S.

Source: Tekhnichna Elektrodynamika 2: 133–134, 2012

Title: [Effect of the induced potential of sections of the high-voltage voltage divider on its characteristics](#)

Authors: ANOKHIN Yu.L., ATAROD S., BRZHEZITSKY V.A., GARAN Ya.A., MASLJUCHENKO I.N.

Source: Tekhnichna Elektrodynamika 2: 135–136, 2012

Title: [Estimation of life time of high-voltage capacitors on results of ac voltage tests](#)

Authors: BUTKO S.M., RUDAKOV V.V., SERGEEVA E.E., RUDAKOV S.V.

Source: Tekhnichna Elektrodynamika 2: 137–138, 2012

Title: [Analysis of effect of components parameters technological spread on characteristics of power supply with piezoelectric transformer](#)

Authors: KRYVOSHEI D.A.

Source: Tekhnichna Elektrodynamika 2: 139–140, 2012

Institute of Electrodynamics, 2012