

PRZEGLĄD ELEKTROTECHNICZNY Vol 2022, No 7

Contents

01	Bogdan DZIADAK, Adam JÓSKO, Łukasz MAKOWSKI, Andrzej MICHALSKI, Zbigniew Watral - State of the art review on air quality monitoring	1
02	Anwer Jabbar Hasan Al-saedi, Jesus Carretero Perez - A Review: Compact Size and Isolation of MIMO Antenna	11
03	Mohamed Mankour, M'hamed Sekour, Mustapha Koulali - Simulation and Characterization of SOFC Fuel Cell Model	18
04	Khaled A. Mahafzah, Qais Al Azzam, Ibrahim Altawil - A Soft Switched Single Ended Primary Inductor Converter Power Factor Correction Circuit for Low Power Applications	25
05	Mohammad A Obeidat - Genetic PID and Feedforward Controllers for DC-DC Chopper Converter	30
06	THABET Mohammed, YSSAAD Benyssaad, LITIME EL Mostafa, BENADDA Abdelouahid - Hinf-FEEDBACK / FEEDFRWORD linear control applied to the 3DOF DELTA parallel robot	36
07	Konrad GAC, Maciej Petko - The assembly of a five-axis hybrid robot consisting of the parallel and the serial manipulator	42
08	Aleksandr KULIKOV, Pavel PELEVIN, Anton LOSKUTOV, Evgeny KRYUKOV, Alexey LOSKUTOV - Methods for the implementation of automatic reclosing on combined overhead and underground cable power lines 110-500 kV	50
09	Kiagus Ahmad Roni, Taufik, Sri Martini, Elfidiah, Cekmas Cekdin - The identification of open loop recording curve on heat exchanger to determine PID control parameters and eliminate overshoot occurrence	56
10	Stanislaw BEDNAREK - Application of tunnel effect in very sensitive accelerometers	61
11	R. Jesinthaangel, G. Gomathi Jawahar, K. Aruna - Fourth Order Qualitative Inspection of Nonlinear Neutral Delay Difference Equation	66
12	Mohammad Dehan Rahman, Tanzila Akter, Susmita Khan' Golam Sarowar - Design and Analysis of Passive LC ³ Component Boost-SEPIC Converter	70
13	Hana' A. Rabab'ah, Yaser N. Anagreh - Stand-alone Hybrid System for Extracting Maximum Power and Constant Voltage under Load Variation	76
14	Abdelkader H. BOUZIANE, Mohammed B. DEBBAT, Ahmed TAHOUR - An Adaptive FLC-GAFOPi Controller for WRSG Based Wind Turbine	81
15	Ravi Raj, Andrzej Kos - A Novel Method of Islanding Detection in a Distributed Power Generation System Integrated with Photovoltaic-Array	88
16	Piotr GUZDEK, Grzegorz KOŁASZCZYŃSKI, Jacek PIEKARSKI, Ewa KLIMIEC, Krzysztof ZARASKA - IoT modules for monitoring the parameters of the working environment in the risk zone of harmful factors	95
17	Yahia FOUGHALI, Mohamed MANKOUR, Mohamed SEKOUR, Hocine Abdelhak AZZEDDINE, Ahmed LARBAOUI, Djamel-eddine CHAOUCH, Mohammed BERKA - A RBF artificial neural network to predict a fuel cell maximum power point	100
18	Ahmed Al-Naib - Design an Industrial Robot Arm Controller Based on PLC	105
19	Montree CHEUNPIROM, Deacha PUANGDOWNREONG - Optimal Design of PI ² D ² A ^v Controller for Wind Turbine Systems by Cuckoo Search	110
20	Mariusz STOSUR, Kacper SOWA, Piotr ORAMUS, Adam RUSZCZYK, Pawel ALOSZKO - Inrush current impact limitation in smart building applications	116
21	Dariusz KURZ, Ryszard NAWROWSKI, Szczepan KAŁUŻA - Analysis of changes in electrical parameters of photovoltaic roof tiles depending on the place of shading and connection configuration	124
22	N. A. SHAIRI, N. M. SANUSI, A. OTHMAN, Z. ZAKARIA, I. M. IBRAHIM, A. M. ZOBILAH, A. JORET - SP8T Switch Design using Cascaded SPDT Switches for Monostatic Microwave Imaging System in Medical Application	131
23	Diego GIRAL-RAMÍREZ, Cesar HERNÁNDEZ-SUAREZ, José CORTES-TORRES - Intelligent Fault Location Algorithms for Distributed Generation Distribution Networks: A Review	137
24	S. ALI, Mahidur R SARKER, Mohamad Hanif Md SAAD, Ramizi MOHAMED - Overview of Control System Topology of Flywheel Energy Storage System in Renewable Energy Application for Alternative Power Plant	145
25	Vadim PAZIUK, Yurii SNEZHKIN, Natalia DMYTRENKO, Serhii IVANOV, Oleksii TOKARCHUK, Ihor KUPCHUK - Thermal and physical properties and heat-mass transfer processes of drying pumpkin seeds	154
26	Yuriy SHAPOVALOV, Dariya BACHYK, Ksenia DETSYK - Multivariate Modelling of the LPTV Circuits in the MAOPCs Software Environment	158
27	Kheira BELHACEL, Mohamed BOUDIAF, Mohamed MOUDJAHED, Abderrahmane BERKANI - Improvement of energy quality through the application of BtB STATCOM in a power system	164
28	Mohamed Elamine Bouleriah, Karim Medles, Omar Dahou³ - Design of experiments for the adjustment of fuzzy logic-based controls of an Electrostatic Separation Process	171
29	Paweł MILEWSKI, Tomasz BUDA, Gerard WISNIEWSKI - Energy storage devices and bidirectional power electronic converters as the basis of a smart energy management system (SEMS)	178
30	Fitsum Gizachew Deriba, Ayodeji Olalekan SALAU, Shaimaa Hadi Mohammed, Tsegay Mullu Kassa, Wubetu Barud Demilie - Development of a Compressive Framework Using Machine Learning Approaches for SQL Injection Attacks	181
31	Alya H. Al-Rifaie, Mohammed Ahmed Ibrahim, Hiba-Allah Tariq Abdullah - Design and Implementation of Differential Relay Based on Graphical User Interface	188