

Sponsored by the

- Kırklareli University,
- Klaipeda University
- Inonu University
- Istanbul Technical University
- City University London
- Sriwijaya University



This journal is accredited by the Kırklareli University subsidy purposes. It is abstracted and indexed in Copernicus, Index Google Scholarship, the PSCR, DOAJ, Research Bible, Indian Open Access Journals (OAJ), Institutional Repositories (IR), Journal TOCs, J-Gate (Informatics India), Ulrich's, ResearchGate, International Society of Universal Research in Sciences, DRJI, EyeSource.

General Publication Director & Editor-in-Chief

Ş.Serhat Seker

Guest Editor

Lambros Economou, City University, London, UK.
Amir Tokić, University of Tuzla, Bosnia and Herzegovina

Editorial board

Eleonora Guseinovienė, Klaipeda University, Lithuania
Hafiz Alisoy, Inonu University, Turkey
Serdar Ethem Hamamci, Inonu University, Turkey
Deris Stiawan, Sriwijaya University, Indonesia
Tahir Cetin Akinci, Kırklareli University, Turkey

Scientific Committee

YangQuan Chen (USA)
Gunay Karli (Bosnia and Herzegovina)
Arif M. Hasimov (Azerbaijan)
Aleksandar Georgiev (Bulgaria)
Ahmet Hamdi Kayran (Turkey)
Murari Mohan Saha (Sweden)
Ferhat Sahin (USA)
Vladimir Berzan (Moldova)
Sabih Atadan (Turkey)
Daniela Dzhonova-Atanasova (Bulgaria)
Vitalijus Volkovas (Lithuania)
Tuiebakhova Zoya Kaimovna (Kazakhstan)
Tahir M. Lazimov (Azerbaijan)
Okayay Kaynak (Turkey)
Jan Izykowski (Poland)
Javier Bilbao Landatxe (Spain)
H. Selcuk Nogay (Turkey)
Yevgeni Dimitriev (Russia)
Arunas Lipnickas (Lithuania)
Kunihiiko Nabeshima (Japan)
Ozgur E. Mustecaplioglu (Turkey)
Belle R. Upadhyaya (USA)
Ahmet Nayir (Turkey)
Mourad Houabes (Algeria)
Mehmet Korurek (Turkey)
Onur Toker (Turkey)
Sead Berberovic (Croatia)
A. Korhan Tanc (Turkey)
Muhammad Hadi (Australia)
Sadik Kara (Turkey)
Milena Lazarova (Bulgaria)
Hakan Temeltaş (Turkey)
Tulay Adali (USA)
Ibrahim Akduman (Turkey)
Marija Eidukeviciute (Lithuania)
Seta Bogosyan (USA)
Gursel Alici (Australia)
Ali Karci (Turkey)
Brijender Kahanwal (India)
Audrius Senulis (Lithuania)
Rumen Popov (Bulgaria)
Marcel Istrate (Romania)
Veselina Nedeva (Bulgaria)

Aim & Scope

The journal publishes original papers in the extensive field of Electrical-Electronics and Computer engineering. It accepts contributions which are fundamental for the development of electrical engineering, computer engineering and its applications, including overlaps to physics. Manuscripts on both theoretical and experimental work are welcome. Review articles and letters to the editors are also included.

Application areas include (but are not limited to): Electrical & Electronics Engineering, Computer Engineering, Software Engineering, Biomedical Engineering, Electrical Power Engineering, Control Engineering, Signal and Image Processing, Communications & Networking, Sensors, Actuators, Remote Sensing, Consumer Electronics, Fiber-Optics, Radar and Sonar Systems, Artificial Intelligence and its applications, Expert Systems, Medical Imaging, Biomedical Analysis and its applications, Computer Vision, Pattern Recognition, Robotics, Industrial Automation.

BALKAN Journal of
Electrical & Computer
Engineering
An International Peer Reviewed Refereed indexed and Open Access Journal

© BAJECE

ISSN: 2147- 284X
Vol: 2
No : 1
Year: March 2014

CONTENTS

H. Šamić, S.Makham;	The Influence of Radiation on the Solar Cell Efficiency,.....	2-5
O.N. Sinchuk, E.S. Guzov, R.A.Parkhomenko;	Refinement of Calculation Methods for Electrical Load in Industry,.....	6-9
K.Mendaz, H.Bounoua, M.Feliti, H.Miloudi;	Diagnostic of Inverter Seven Levels Associated with Asynchronous Machine,.....	10-15
H. Šiljak, S.Seker;	Hurst Analysis of Induction Motor Vibrations from Aging Process ,.....	16-19
T. Kupka, M. Patt;	Hybrid Photovoltaic Inverter for Smart Grids ,.....	20-22
A.Attou, A.Massoum, M.Saidi;	Photovoltaic Power Control Using MPPT and Boost Converter,.....	23-27
B.B Alagoz, H.Z. Alisoy;	Sequence Partitioning and Compression Rate,	28-33
S.İkizoglu, M. Akyol;	Fault Detection Considerations in Silicon Based MEMS Resonators by Observing Changes in Dynamic Behaviour,	34-38
M.M. Mirabadi, N.R. Abjadi, S. Hoghoughi-Isfahani, S. Shojaeian;	Dynamic Stability Improvement of a Power System Based on a PSO-Tuned H2 Controller,.....	39-44

BALKAN JOURNAL OF ELECTRICAL & COMPUTER ENGINEERING

(An International Peer Reviewed, Refereed, indexed and Open Access Journal)

Contact

[https://www.bajece.com](http://www.bajece.com)

e-mail: editor@bajece.com
bajece@bajece.com

Phone: +90 288 214 05 14

Fax: +90 288 214 05 16

Kırklareli University, Department of Electrical & Electronics Engineering, 39060, Kırklareli-Turkey.