Assoc. Prof. KORHAN KAYIŞLI



Personal Information

Office Phone: <u>+90 312 582 3330</u> Email: korhankayisli@gazi.edu.tr Web: https://avesis.gazi.edu.tr/korhankayisli Address: korhankayisli@gazi.edu.tr

International Researcher IDs ScholarID: JJEzpRYAAAAJ ORCID: 0000-0001-8456-1478 Publons / Web Of Science ResearcherID: AAP-7790-2021 ScopusID: 36543848200

Education Information

Doctorate, Firat University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, Turkey 2004 - 2012 Postgraduate, Firat University, Institute Of Science, Elektronik Bilgisayar Eğitimi, Turkey 2001 - 2004 Undergraduate, Sakarya University, Faculty Of Technical Education, Department Of Electronics And Computer Education, Turkey 1997 - 2001

Biography

Dr.Korhan Kayisli received a BSc degree in electronics education from Sakarya University, Sakarya, Turkey, in 2001, and an MSc degree in Electronics and Computer Science from Firat University, Elazig, Turkey, in 2004. He received PhD degree at the area of power electronics in Electric and Electronics Engineering at Firat University, Elazig, Turkey, in 2012. He worked as a research assistant between 2002 and 2012. He has worked in Firat University, Bitlis Eren University, Gelisim University, Nisantasi University, respectively. He is currently an associate professor in the Department of Electrical Electronics Engineering, Engineering Faculty, Gazi University, Ankara, Turkey. He is an IEEE Senior Member. Also, he is the co-editor of International Journal of Renewable Energy Research and International Journal of Engineering Science and Application. He also served as reviewer to many high ranked scientific journals. His fields of interest are power electronics, converter circuits, power factor correction, robust control, and educational technologies. He has published journal and conference papers on these areas. Additionally, he has worked as researcher in two EU mobility projects and other some projects.

Dissertations

Doctorate, Birim güç faktörlü dayanıklı dönüştürücü devresinin tasarlanması ve gerçekleştirilmesi, Firat University, Institute Of Science, Elektrik Elektronik Mühendisliği, 2012 Postgraduate, Asenkron motorun kayma mod algılayıcısız hız kontrolü, Firat University, Institute Of Science, Elektronik, 2004

Research Areas



Robotics and Mechatronics Systems, Artificial Intelligence, Computer Learning and Pattern Recognition, Renewable energy, Power Electronics, Power Converters, Power Quality, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Gazi University, Mühendislik Fakültesi, Elektrik - Elektronik Mühendisliği, 2023 - Continues Assistant Professor, Gazi University, Mühendislik Fakültesi, Elektrik - Elektronik Mühendisliği, 2021 - 2023 Assistant Professor, Nisantasi University, Faculty Of Engineering-Architecture, Department Of Electrical And Electronic Engineering, 2016 - 2021 Assistant Professor, Istanbul Gelisim University, Faculty Of Engineering-Architecture, Department Of Computer Engineering, 2013 - 2016 Assistant Professor, Bitlis Eren University, Faculty Of Engineering-Architecture, Department Of Computer Engineering, 2012 - 2013

Academic and Administrative Experience

Deputy Head of Department, Gazi University, Mühendislik Fakültesi, Elektrik - Elektronik Mühendisliği, 2024 - Continues Deputy Director of Continuing Education Center, Gazi University, Sürekli Eğtim Uygulama Ve Araştırma Merkezi, 2022 -2024 Head of Department, Nisantasi University, Faculty Of Engineering-Architecture, Department Of Mechatronics Engineering, 2016 - 2021 Vice Dean, Nisantasi University, Faculty Of Engineering-Architecture, 2016 - 2020 Head of Department, Istanbul Gelisim University, Faculty Of Engineering-Architecture, Department Of Mechatronics Engineering, 2013 - 2016 Vice Dean, Istanbul Gelisim University, Faculty Of Engineering-Architecture, 2013 - 2016 Assistant Director of the Institute, Istanbul Gelisim University, Institute Of Science, 2013 - 2014 Head of Department, Bitlis Eren University, Faculty Of Engineering-Architecture, Department Of Industrial Engineering, 2012 - 2013

Courses

Postgraduate

DYNAMIC BEHAVIOR AND CONTROL OF AC DRIVES, Postgraduate, 2023 - 2024, 2022 - 2023 POWER ELECTRONIC APPLICATIONS IN SYSTEMS, Postgraduate, 2024 - 2025, 2023 - 2024, 2021 - 2022 MULTIPORT POWER CONVERTERS IN SMART GRIDS, Postgraduate, 2021 - 2022 GÜÇ ELEKTRONİĞİNİN GÜÇ SİSTEMİ UYGULAMALARI, Postgraduate, 2022 - 2023, 2021 - 2022 **Undergraduate** EE Engineering Design I, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023 EE Engineering Design II, Undergraduate, 2024 - 2025, 2022 - 2023, 2021 - 2022 Control Systems I, Undergraduate, 2023 - 2024, 2021 - 2022 Electrical Motors and Drives, Undergraduate, 2023 - 2024 Industrial Control, Undergraduate, 2024 - 2025, 2023 - 2024, 2021 - 2022 Discrete Time Control Systems, Undergraduate, 2021 - 2022

Supervised Theses

Kayışlı K., CONTROL AND DESIGN OF MICROCONTROLLER BASED CAPACITOR CHARGING POWER SUPPLY USING PEAK CURRENT CONTROL MANAGEMENT, Postgraduate, F.DEMİRBAŞ(Student), 2025 Kayışlı K., ELEKTRİK GÜÇ SİSTEMİ KARARLILIĞININ İYİLEŞTİRİLMESİNDE YENİLENEBİLİR ENERJİ KULLANIMIN ETKİSİ, Postgraduate, A.HUSSEIN(Student), 2025

Kayışlı K., DEVELOPMENT AND CONTROL OF GaN-BASED PHASE SHIFTED FULL BRIDGE CONVERTER FOR MILITARY APPLICATIONS, Postgraduate, S.BAYRAM(Student), 2024

Kayışlı K., A high efficient and robust MPPT control of a hybrid, Postgraduate, R.Zafer(Student), 2023 Kayışlı K., DESIGN AND IMPLEMENTATION OF A DC CURRENT SENSOR WITHDC TRANSFORMER, Postgraduate, M.ÇALAR(Student), 2023

Published journal articles indexed by SCI, SSCI, and AHCI

- I. PV-MPPT Lab: A GUI-Based Education Tool for MPPT Techniques Kayışlı K., Caglayan R. Z., Colak I. IEEE TRANSACTIONS ON EDUCATION, vol.67, no.3, pp.453-461, 2024 (SCI-Expanded) II. Fuzzy logic-based Energy Management System (EMS) of hybrid power sources: Battery/Super capacitor for electric scooter supply Boumediene S., Nasri A., Hamza T., Hicham C., KAYIŞLI K., Garg H. JOURNAL OF ENGINEERING RESEARCH, vol.12, no.1, pp.148-159, 2024 (SCI-Expanded) III. Output Regulation-Based Optimal Control System for Maximum Power Extraction of a Machine-Side **Power Converter in Variable-Speed WECS** Sarsembayev B., Zhakiyev N., Kushekkaliyev A., KAYIŞLI K., Do T. D. IEEE ACCESS, vol.12, pp.8422-8431, 2024 (SCI-Expanded) IV. Optimization of Sliding Mode Control for Doubly Fed Induction Generator Systems Using Particle Swarm and Grey Wolf Algorithms Ibrahim B., Abdelkader H., Hartani M. A., KAYIŞLI K. ELECTRIC POWER COMPONENTS AND SYSTEMS, vol.52, no.10, pp.1782-1795, 2024 (SCI-Expanded) V. Strain Energy Prediction of Single Wall Carbon Nanotubes Using General Regression Neural Network and Adaptive Neuro - Fuzzy Inference System Evecioglu O., KAYIŞLI K., Beken M. ELECTRIC POWER COMPONENTS AND SYSTEMS, vol.52, no.8, pp.1437-1447, 2024 (SCI-Expanded) VI. Design of sustainable multi-source power systems using lithium batteries Layadi T. M., Champenois G., Mostefai M., Colak I., KAYIŞLI K. Journal of Energy Storage, vol.60, 2023 (SCI-Expanded) VII. Super twisting sliding mode-type 2 fuzzy MPPT control of solar PV system with parameter optimization under variable irradiance conditions Kayışlı K. Ain Shams Engineering Journal, vol.14, no.1, 2023 (SCI-Expanded) VIII. Advanced Control of Three-Phase PWM Rectifier Using Interval Type-2 Fuzzy Neural Network **Optimized by Modified Golden Sine Algorithm** Acikgoz H., Coteli R., Tanyildizi E., Dandil B., KAYIŞLI K. Electric Power Components and Systems, vol.51, no.10, pp.933-948, 2023 (SCI-Expanded) IX. An Enhanced Hybrid Rhino Herd-PSO Optimizer for Optimal Technical and Economic Operation of **Power Systems Considering Environmental Concerns** Taleb N., Bentouati B., Chettih S., Abdelkader H., KAYIŞLI K. Electric Power Components and Systems, vol.51, no.18, pp.2193-2209, 2023 (SCI-Expanded) X. Distribution Locational Marginal Price Based Transactive Energy Management in Distribution Systems with Smart Prosumers—A Multi-Agent Approach Amanbek Y., Kalakova A., Zhakiyeva S., Kayisli K., Zhakiyev N., Friedrich D. Energies, vol.15, no.7, pp.1-18, 2022 (SCI-Expanded)
 - XI. A DIRECT ADAPTIVE SLIDING MODE HIGH VOLTAGE GAIN PEAK POWER TRACKER FOR THERMOELECTRIC APPLICATIONS

BELKAID A., ÇOLAK İ., KAYIŞLI K.

Revue Roumaine Des Sciences Techniques-Serie Electrotechnique Et Energetique, vol.66, no.2, pp.131-136, 2021 (SCI-Expanded)

| XII. | A Novel Approach of Perturb and Observe Technique Adapted to Rapid Change of Environmental |
|--------|--|
| | Conditions and Load |
| | Belkaid A., Colak I., Kayisli K. |
| | ELECTRIC POWER COMPONENTS AND SYSTEMS, vol.48, pp.375-387, 2020 (SCI-Expanded) |
| XIII. | Backstepping control of a separately excited DC motor |
| | Harrouz A., Becheri H., Colak I., Kayisli K. |
| | ELECTRICAL ENGINEERING, vol.100, no.3, pp.1393-1403, 2018 (SCI-Expanded) |
| XIV. | Implementation of a modified P&O-MPPT algorithm adapted for varying solar radiation conditions |
| | Belkaid A., Colak I., Kayisli K. |
| | ELECTRICAL ENGINEERING, vol.99, no.3, pp.839-846, 2017 (SCI-Expanded) |
| XV. | Closure to "Prediction of Discharge Capacity over Two-Cycle Labyrinth Side Weir Using ANFIS" by M. |
| | Cihan Aydin and Korhan Kayisli |
| | Aydin M. C., Kayisli K. |
| | JOURNAL OF IRRIGATION AND DRAINAGE ENGINEERING, vol.143, no.7, 2017 (SCI-Expanded) |
| XVI. | A Novel Power Factor Correction System Based on Sliding Mode Fuzzy Control |
| | Kayisli K., Tuncer S., Poyraz M. |
| | ELECTRIC POWER COMPONENTS AND SYSTEMS, vol.45, no.4, pp.430-441, 2017 (SCI-Expanded) |
| XVII. | Prediction of Discharge Capacity over Two-Cycle Labyrinth Side Weir Using ANFIS |
| | Aydin M. C., Kayisli K. |
| | JOURNAL OF IRRIGATION AND DRAINAGE ENGINEERING, vol.142, no.5, 2016 (SCI-Expanded) |
| XVIII. | PMSM Drive Fed by Sliding Mode Controlled PFC Boost Converter |
| | Aydogmus O., Deniz E., Kayisli K. |
| | ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.39, no.6, pp.4765-4773, 2014 (SCI-Expanded) |
| XIX. | An educational tool for fundamental DC-DC converter circuits and active power factor correction |
| | applications |
| | Kayisli K., Tuncer S., Poyraz M. |
| | COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, vol.21, no.1, pp.113-134, 2013 (SCI-Expanded) |

Articles Published in Other Journals

- I. Energy Management based on Supertwisting Sliding Mode in the Standalone Photovoltaic Power System with Battery Backup ÇÖTELİ R., ÇAĞLAYAN R. Z., KAYIŞLI K. International Journal of Smart Grid, vol.8, no.4, pp.191-198, 2024 (Peer-Reviewed Journal)
- II. Predicting LAN switch failures: An integrated approach with DES and machine learning techniques (RF/LR/DT/SVM)
 Myrzatay A., Rzayeva L., Bandini S., Shayea I. A. M., Saoud B., Çolak I., KAYIŞLI K.

RESULTS IN ENGINEERING, vol.23, 2024 (ESCI)

III. Smart Power Conditioning Unit Utilizing Enhanced Inc-Con MPPT for Photovoltaic Power Plants BELKAID A., KAYIŞLI K., ÇOLAK İ., HADJI S., GUENOUNOU O. International Journal of Smart grid, vol.8, no.1, pp.41-45, 2024 (Peer-Reviewed Journal)

IV. Pioneering Battery-Supercapacitor Hybrid Energy Management for E-Scooters for Sustainable Urban Transportation

SAIED B., Nasri A., Tedjini H., Hicham C., KAYIŞLI K.

PRZEGLAD ELEKTROTECHNICZNY, vol.2024, no.4, pp.113-117, 2024 (ESCI)

V. DEEP RECURRENT NEURAL NETWORKS IN ENERGY DEMAND FORECASTING: A CASE STUDY OF KAZAKHSTANS ELECTRICAL CONSUMPTION

Kabdygali S., Omirgaliyev R., Tursynbayev T., KAYIŞLI K., Zhakiyev N. SEXES, vol.16, pp.16-29, 2023 (Peer-Reviewed Journal)

VI. A Comparative Analysis of P&O, IC and Supertwisting Sliding Mode based MPPT methods for PV and Fuel Cell sourced Hybrid System Caglayan R. Z., KAYIŞLI K., Roscia M., Belkaid A., Nasri A. International Journal of Renewable Energy Research, vol.13, no.3, pp.1431-1442, 2023 (ESCI) VII. Twisting Sliding Mode Control based Maximum Power Point Tracking KAYIŞLI K., ÇAĞLAYAN R. Z. Balkan Journal of Electrical and Computer Engineering, vol.10, no.4, pp.356-362, 2022 (Peer-Reviewed Journal) VIII. A Review of Hybrid Renewable Energy Systems and MPPT Methods ÇAĞLAYAN R. Z., KAYIŞLI K., Zhakiyev N., HARROUZ A., ÇOLAK İ. International Journal of Smart Grid - ijSmartGrid, vol.6, no.3, pp.72-82, 2022 (Peer-Reviewed Journal) Blockchain-Based Decentralized Peer-to-Peer Negawatt Trading in Demand-Side Flexibility Driven IX. **Transactive Energy System** Zhanbolatov A., Zhakiyeva S., Zhakiyev N., KAYIŞLI K. INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH, vol.12, no.3, pp.1475-1483, 2022 (ESCI) X. Power Stabilization with STATCOM on DFIG Based Wind Farm for Renewable Energy HARROUZ A., KAYIŞLI K., Houcien B., ÇOLAK İ. Algerian Journal of Renewable Energy and Sustainable Development, vol.4, no.1, pp.84-93, 2022 (Peer-Reviewed Journal) XI. A Novel Method of Electric Scooter Torque Estimation Using the Space Vector Modulation Control Hicham C., Nasri A., KAYIŞLI K. International Journal of Renewable Energy Development, vol.10, no.2, pp.355-364, 2021 (ESCI) NON-LINEAR BACKSTEPPING SPEED CONTROL FOR ASIAN ELECTRIC SCOOTER USES XII. Hicham C., Nasri A., KAYIŞLI K. JOURNAL OF FUNDAMENTAL AND APPLIED SCIENCES, vol.13, no.1, pp.400-423, 2021 (Peer-Reviewed Journal) XIII. Fuzzy Logic Speed Control for Three-Wheel Electric Scooter Hicham C., Nasri A., KAYIŞLI K. INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH, vol.9, no.3, pp.1443-1452, 2019 (Scopus) XIV. Design and Implementation of a Cuk Converter Controlled by a Direct Duty Cycle INC-MPPT in PV **Battery System** BELKAID A., ÇOLAK İ., KAYIŞLI K., BAYINDIR R. International Journal of Smart Grid, vol.3, no.1, pp.18-24, 2019 (Peer-Reviewed Journal) XV. Speed control of three-wheel electric scooter with fuzzy logic control Hicham C., Nasri A., KAYIŞLI K. International Journal of Renewable Energy Research, vol.9, no.3, pp.1443-1450, 2019 (ESCI) XVI. Performance comparison of different maximum power point trackers for photovoltaic system under fast varying of environmental conditions BELKAID A., ÇOLAK İ., KAYIŞLI K. Revue des Energies Renouvelables, vol.21, no.4, pp.601-621, 2018 (Peer-Reviewed Journal) XVII. Modeling of a Permanent Magnet Synchronous Generator in a Power Wind Generation System with an Electrochemical Energy Storage BELKAID A., ÇOLAK İ., KAYIŞLI K., BAYINDIR R. International Journal of Smart Grid, vol.2, no.4, pp.197-202, 2018 (Peer-Reviewed Journal) XVIII. 3 Serbestlik Dereceli Bir Robot Kolun Bulanık Mantık ve PID ile Kontrolü KAYISLI K., UĞUR M. Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.5, no.4, pp.223-234, 2017 (Peer-Reviewed Journal) XIX. Implementation of a Humanoid Robotic Hand Tezel C., KAYIŞLI K., Günay O. International Journal of Engineering Science and Application, vol.1, no.4, pp.137-141, 2017 (Peer-Reviewed

Journal)

- Sliding Mode Control of Vehicle Suspension System under Different Road Conditions
 KAYIŞLI K., KARAMAN V.
 International Journal of Engineering Science and Application, vol.1, no.2, pp.72-77, 2017 (Peer-Reviewed Journal)
- XXI. Design and Implementation of a Tank Rescue Robot Controlled With Android Software KAYIŞLI K., Tezel C., Günay O., Demir E. INTERNATIONAL JOURNAL of ENGINEERING SCIENCE AND APPLICATION, vol.1, no.1, pp.18-23, 2017 (Peer-Reviewed Journal)
- XXII. Web Based Education for Power Electronics Supported with Animations KAYIŞLI K. Technics Technologies Education Management, vol.8, no.4, pp.1780-1789, 2013 (Peer-Reviewed Journal)

 XXIII. Kayma Mod ile Asenkron Motorun Algılayıcısız Hız Kontrolü KAYIŞLI K., GÜLDEMİR H.
 Bitlis Eren Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.1, no.2, pp.92-106, 2012 (Peer-Reviewed Journal)
 XXIV. Kayma Mod Denetleyici Kullanılarak Aktif Güç Faktörü Düzeltimi

KAYIŞLI K., TUNCER S., POYRAZ M. Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, vol.14, no.1, pp.253-260, 2008 (Peer-Reviewed Journal)

Books

I. Blockchain and smart charging infrastructure of electric vehicles
 Lazaroiu G. C., Roscia M., Dumbrava V., KAYIŞLI K.
 in: Holistic Approach for Decision Making Towards Designing Smart Cities, Lazaroiu George Cristian, Roscia
 Mariacristina, Dancu Vasile Sebastian, Editor, Springer International Publishing, California, pp.175-198, 2022

Papers Published in Refereed Scientific Meetings

- I. Design and Lag Compansated Control of a GaN Based Phase Shifted Full Bridge Converter Bayram S., KAYIŞLI K., Nasri A.
 2024 13th International Conference on Renewable Energy Research and Applications (ICRERA), Nagasaki, Japan, 09 November 2024, pp.1041-1049
- II. Increasing Electric Power System Stability by Integrating Renewable Energy Korot A. H. M., KAYIŞLI K., AL-YOZBAKY O. S. A. Y. IEEE Global Energy Conference 2024, Rivers, Canada, 4 - 06 December 2024, pp.373-378
- III. Design of a Phase Shifted Full Bridge DC-DC ZVS Converter with Analog Control Sağlam A., KAYIŞLI K.
 - IEEE Global Energy Conference 2024, Rivers, Canada, 4 06 December 2024, pp.304-309
- IV. The past, present and future of Electric Vehicles
 - Kayışlı K.

The 1st International Conference on Applications and Technologies of Renewable Energy Systems, Djelfa, Algeria, 18 - 19 December 2024

V. Systems of Smart Load Management for More Electrical Aircraft Yıldız M. Ş., KAYIŞLI K.

IEEE Global Energy Conference 2024, Rivers, Canada, 4 - 06 December 2024, pp.368-372

- VI. Design and Control of a Two Switch Forward Converter with Supertwisting Sliding Mode KAYIŞLI K., ÇAĞLAYAN R. Z., ÇÖTELİ R., Roscia M., HARROUZ A., BELKAID A.
 2024 13th International Conference on Renewable Energy Research and Applications (ICRERA), Nagasaki, Japan, 09 November 2024, pp.1299-1303
- VII. Energy Management of DC Microgrid-based Photovoltaic/Battery and Super Capacitor

Berboucha A., Aissou S., ÇOLAK İ., Djermouni K., BELKAID A., Amirouche E., KAYIŞLI K. 2024 13th International Conference on Renewable Energy Research and Applications (ICRERA), Nagasaki, Japan, 09 November 2024, pp.1316-1321

- VIII. Energy Management Strategies for Hybrid Electric Vehicles
 Demiroğlu C., KAYIŞLI K.
 2024 13th International Conference on Renewable Energy Research and Applications (ICRERA), Nagasaki, Japan, 09 November 2024, pp.1175-1185
 - IX. Comparative Analysis of The Control Algorithms for The Capacitor Charging Power Supplies Demirbaş F., KAYIŞLI K., Zhakiyev N.
 2024 13th International Conference on Renewable Energy Research and Applications (ICRERA), Nagasaki, Japan, 09 November 2024, pp.952-958
 - X. Intelectual Methods for Analysis of Renewables in the Energy Balance for Low Emission Strategy Omirgaliyev R., Zhakiyeva S., KAYIŞLI K., Bapiyev I., Nurlan Z., Satan A.
 2024 13th International Conference on Renewable Energy Research and Applications (ICRERA), Nagasaki, Japan, 09 November 2024, pp.1152-1157
 - XI. Artificial Intelligent Applications in Smart Cities
 ÇAĞLAYAN R. Z., KAYIŞLI K., ÇÖTELİ R., Omirgaliyev R., Zhakiyev N.
 2024 IEEE 4th International Conference on Smart Information Systems and Technologies (SIST), Astana,
 Kazakhstan, 15 17 May 2024, pp.467-472
- XII. Comparative Study of Different Deep Learning Approaches for State of Charge Estimation in Lithium Iron Phosphate Battery

Korbaa N. E. H., BOUCHETATA N., BELARBI A. W., KAYIŞLI K., KAPLAN O.

2024 12th IEEE International Conference on Smart Grid (icSmartGrid), Setúbal, Portugal, 27 - 29 May 2024, pp.714-718

- XIII. A Comparative Analysis of Cuk, SEPIC, and Zeta Converters as Maximum Power Point Trackers HADJI S., BELKAID A., KAYIŞLI K., ÇOLAK İ., Aissou S., larbi l.
 2024 12th IEEE International Conference on Smart Grid (icSmartGrid), Setúbal, Portugal, 27 - 29 May 2024, pp.539-544
- XIV. High Gain Voltage SEPIC Converter for PV System
 HADJI S., BELKAID A., larbi l., ÇOLAK İ., KAYIŞLI K., Aissou S.
 2024 12th IEEE International Conference on Smart Grid (icSmartGrid), Setúbal, Portugal, 27 29 May 2024, pp.618-622
- XV. Delay-Dependent Stability Analysis of Micro-Grid with Electric Vehicles Aggregator using Direct Method

Dakhil S. A., Al-Shalah M., AYASUN S., KAYIŞLI K.

2024 12th IEEE International Conference on Smart Grid (icSmartGrid), Setúbal, Portugal, 27 - 29 May 2024, pp.107-111

XVI. Supervised Artificial Neural Networks by Field-Oriented Control applied to PMSG-based Variable-Speed Wind Turbine

AOUMRI M., HARROUZ A., Ibrahim Y., ÇOLAK İ., KAYIŞLI K., Dumbrava V. 2024 12th IEEE International Conference on Smart Grid (icSmartGrid), Setúbal, Portugal, 27 - 29 May 2024, pp.187-191

XVII. Robust Active and Reactive Power Control by using Single-Phase Grid connected H-Bridge Inverter ÇÖTELİ R., KAYIŞLI K., ÇAĞLAYAN R. Z. 2024 12th IEEE Intermetional Conference on Smort Crid (inSmortCrid). Set/(hel. Bortugal. 27, 20 May 2024.

2024 12th IEEE International Conference on Smart Grid (icSmartGrid), Setúbal, Portugal, 27 - 29 May 2024, pp.614-617

- XVIII. TEG & Fuel Cell Hybrid System with Sliding Mode Control Based MPPT
 Çağlayan R. Z., Kayışlı K., Belkaıd A., Çolak İ., Nasri A.
 2023 12th IEEE International Conference on Renewable Energy Research and Applications (ICRERA), Oshawa,
 Canada, 29 August 01 September 2023, pp.324-330
- XIX. Enhanced Control of DFIG Power under Variable Wind Speed Adopting Offline Tuning based GWO

Approach Ibrahim B., HARROUZ A., Farid M., Ibrahim Y., ÇOLAK İ., KAYIŞLI K., Dumbrava V. 2023 11th IEEE International Conference on Smart Grid (icSmartGrid), Paris, France, 4 - 07 June 2023, pp.207-213 XX. PV&TEG Hybrid System controlled with Fuzzy based MPPT Caglayan R. Z., Kayışlı K., Roscia M., Harrouz A., Bayındır R., Colak I. 11th International Conference on Smart Grid, icSmartGrid 2023, Paris, France, 4 - 07 June 2023 Synchronous Reference Frame Control of Transformer Based DC mA Current Sensor XXI. Calar M., Kayışlı K. 11th International Conference on Smart Grid, icSmartGrid 2023, Paris, France, 4 - 07 June 2023 Fuzzy-MPPT Controller Based Solar Shunt Active Power Filter XXII. Sarra M., BELKAID A., ÇOLAK İ., Boudechiche G., KAYIŞLI K. 2022 11th IEEE International Conference on Renewable Energy Research and Applications, İstanbul, Turkey, 18 September 2022, pp.436-440 XXIII. Multi Input-Multi Output (MIMO) converter system fed by Wind Energy Gürbüz F. B., Kayışlı K., Demirbaş Ş., Bayındır R., Çolak İ., Roscia M. 2022 11th IEEE International Conference on Renewable Energy Research and Applications, İstanbul, Turkey, 18 September 2022, pp.179-185 XXIV. A Multi-Carrier Energy Method for Self-Consumption Enhancement in Smart Residential Buildings Zhanbolatov A., Zhakiyeva S., Azibek B., Zhakiyev N., KAYIŞLI K., Tursyngul D. 2022 11th IEEE International Conference on Renewable Energy Research and Applications, İstanbul, Turkey, 18 September 2022, pp.388-394 XXV. Smart Contracts for Households Managed by Smart Meter Equipped with Blockchain and Chain 2 Lazaroiu G. C., KAYIŞLI K., Roscia M., Steriu I. A. 2022 11th IEEE International Conference on Renewable Energy Research and Applications, İstanbul, Turkey, 18 September 2022, pp.340-345 XXVI. A Case Study: Standalone Hybrid Renewable Energy Systems ÇAĞLAYAN R. Z., KAYIŞLI K., Zhakiyev N., HARROUZ A., ÇOLAK İ. 2022 11th IEEE International Conference on Renewable Energy Research and Applications, İstanbul, Turkey, 18 September 2022, pp.284-292 XXVII. Fuzzy-Sliding Mode Control Second Order of Wind Turbine Based on DFIG Saihi L., Bakou Y., HARROUZ A., Boura M., ÇOLAK İ., KAYIŞLI K. 2022 10th IEEE International Conference on Smart Grid (icSmartGrid), İstanbul, Turkey, 27 June 2022 Study and Sliding Mode Control of the Permanent Magnet Synchronous Machine XXVIII. Ikram N., HARROUZ A., ÇOLAK İ., Beltrache D., Dumbrava V., KAYIŞLI K. 2022 10th IEEE International Conference on Smart Grid (icSmartGrid), İstanbul, Turkey, 27 June 2022 Robust Sensor-less SMC under Variable-Speed Wind Turbine Systems of DFIG based on FKE XXIX. Saihi L., Bakou Y., HARROUZ A., Boura M., ÇOLAK İ., KAYIŞLI K. 2022 10th IEEE International Conference on Smart Grid (icSmartGrid), İstanbul, Turkey, 27 June 2022 Photovoltaic/Wind Hybrid System Power Stations to Produce Electricity in Adrar Region XXX. Bamdjid H., Benhami M., HARROUZ A., Abbas R., ÇOLAK İ., Bouazza F., Dumbrava V., KAYIŞLI K. 2022 10th IEEE International Conference on Smart Grid (icSmartGrid), İstanbul, Turkey, 27 June 2022 XXXI. Servomechanism based Optimal Control System Design for Maximum Power Extraction from WECS with PMSG Sarsembayev B., Zhakiyev N., Akhmetbayev A., KAYIŞLI K. 2022 10th IEEE International Conference on Smart Grid (icSmartGrid), İstanbul, Turkey, 27 - 29 June 2022 XXXII. 3-Phase Multi-Pulse Rectifiers with Different Phase Shifting Transformers and Comparison of Total Harmonic Distortion Çalar M., Durna E., Kayışlı K. 2022 9th IEEE International Conference on Electrical and Electronics Engineering, Antalya, Turkey, 29 March 2022 XXXIII. **Control Strategy of the Permanent Magnet Stepper Motor** HARROUZ A., Hachemi G., ÇOLAK İ., KAYIŞLI K., Dumbrava V.

 2021 10th IEEE International Conference on Renewable Energy Research and Application (ICRERA), İstanbul, Turkey, 26 - 29 September 2021
 XXXIV. A Novel Control Approach of Multi Motor Electric Scooter Drive

Hicham C., Nasri A., HARROUZ A., KAYIŞLI K. 2021 10th IEEE International Conference on Renewable Energy Research and Application (ICRERA), İstanbul, Turkey, 26 - 29 September 2021

- XXXV. An Improved DTC Strategy for a DFIG using an Artificial Neural Network Controller
 Ibrahim Y., HARROUZ A., Boussaid I., Semmah A., Wira P., ÇOLAK İ., KAYIŞLI K.
 2021 9th IEEE International Conference on Smart Grid (icSmartGrid), Setúbal, Portugal, 29 June 2021
- XXXVI. Reducing Voltage and Frequency Fluctuations in Power Systems using Smart Power Electronics Technologies: A Review Çolak A. M., KAYIŞLI K.
 - 2021 9th IEEE International Conference on Smart Grid (icSmartGrid), Setúbal, Portugal, 29 June 2021
- XXXVII. Reliable Power Flow Control in Parallel Transmission Lines Based on UPFC HARROUZ A., BOULAL E., Saidi A., ÇOLAK İ., KAYIŞLI K.
 2020 9th International Conference on Renewable Energy Research and Application (ICRERA), Glasgow, United Kingdom, 27 - 30 September 2020, pp.423-427
- XXXVIII. Social Acceptance of Renewable Energy dedicated to Electric Production HARROUZ A., Belatrache D., KA B., ÇOLAK İ., KAYIŞLI K.
 2020 9th International Conference on Renewable Energy Research and Application (ICRERA), Glasgow, United Kingdom, 27 - 30 September 2020, pp.283-288
 - XXXIX. Indirect Sliding Mode Voltage Control of Buck Converter
 BELKAID A., ÇOLAK İ., KAYIŞLI K., BAYINDIR R.
 2020 8th International Conference on Smart Grid (icSmartGrid), Paris, France, 17 19 June 2020
 - XL. Improving PV System Performance using High Efficiency Fuzzy Logic Control
 BELKAID A., ÇOLAK İ., KAYIŞLI K., BAYINDIR R.
 2020 8th International Conference on Smart Grid (icSmartGrid), Paris, France, 17 19 June 2020
 - XLI. Robust Controller Based on Sliding Mode Technique of DFIG Integrated to Wind Energy System HARROUZ A., Bakou Y., ÇOLAK İ., Aissaoui A. G., KAYIŞLI K., BAYINDIR R.
 2019 7th International Conference on Smart Grid (icSmartGrid), Newcastle, Australia, 9 - 11 December 2019
 - XLII. Modeling and Simulation of Polycrystalline Silicon Photovoltaic Cells
 BELKAID A., ÇOLAK İ., KAYIŞLI K.
 2019 7th International Conference on Smart Grid (icSmartGrid), Newcastle, Australia, 9 11 December 2019
 - XLIII. Energy Modeling Output of Wind System based on Wind Speed
 HARROUZ A., ÇOLAK İ., KAYIŞLI K.
 2019 8th International Conference on Renewable Energy Research and Applications (ICRERA), Brasov, Romania, 3
 06 November 2019
 - XLIV. A Comparative Study Between Robust Control Sliding Mode and Backstepping of a DFIG Integrated to Wind Power System

HARROUZ A., Saihi L., Bakou Y., ÇOLAK İ., KAYIŞLI K., BAYINDIR R.
 2019 7th International Conference on Smart Grid (icSmartGrid), Newcastle, Australia, 9 - 11 December 2019
 XLV. Performance Comparison of Different Machine Learning Algorithms on the Prediction of Wind
 Turbine Power Generation
 EYECİOĞLU Ö., HANGÜN B., KAYIŞLI K., YEŞİLBUDAK M.

2019 8th International Conference on Renewable Energy Research and Applications (ICRERA), Brasov, Romania, 3 - 06 November 2019

XLVI. Performance Enhancement of Hybrid Solar PV-Wind System Based on Fuzzy Power Management Strategy: A Case Study

HARROUZ A., Saidi A., ÇOLAK İ., KAYIŞLI K., BAYINDIR R.

2019 7th International Conference on Smart Grid (icSmartGrid), Newcastle, Australia, 9 - 11 December 2019

XLVII. DTC Control of the DFIG, Application to the Production of Electrical Energy

Bakou Y., Mohamed A., HARROUZ A., Ibrahim Y., ÇOLAK İ., KAYIŞLI K., Aissaoui A. G. 2019 8th International Conference on Renewable Energy Research and Applications (ICRERA), Brasov, Romania, 3 -06 November 2019 XLVIII. Information Systems and Renewable Energy in Algeria HARROUZ A., ABBES M., ÇOLAK İ., KAYIŞLI K. 2019 Algerian Large Electrical Network Conference (CAGRE), Algiers, Algeria, 26 - 28 February 2019, vol.1, pp.1-5 Maximum Power Extraction from a Photovoltaic Panel and a Thermoelectric Generator Constituting XLIX. a Hybrid Electrical Generation System Belkaid A., Colak I., KAYIŞLI K., BAYINDIR R., BÜLBÜL H. İ. 6th IEEE International Conference on Smart Grid, icSmartGrids 2018, Nagasaki, Japan, 4 - 06 December 2018, pp 276-282 L. The ANFIS as a Prediction Method of Efficiency of PV Cells BEKEN M., KAYIŞLI K., EYECİOĞLU Ö., yağcı ö., İÇELLİ O. 2018 7th International Conference on Renewable Energy Research and Applications (ICRERA), Paris, France, 14 -17 October 2018 LI. A Fuzzy Controller for Stabilization of Asynchronous Machine Kayışlı K. 2018 IEEE 7th International Conference on Renewable Energy Research and Applications (ICRERA), Paris, France, 14 - 17 October 2018, pp.1369-1373 LII. Design of an Intelligent Peak Power Converter for Solar Plants with Lead-acid Battery Kayışlı K. 2018 IEEE 7th International Conference on Renewable Energy Research and Applications (ICRERA), Paris, France, 14 - 17 October 2018, pp.1400-1406 LIII. Sensorless Control of Wind Turbine Conversion Equipped with a DFIG Using MPPT Strategy Becheri H., Bousserhane I. K., HARROUZ A., ÇOLAK İ., KAYIŞLI K. 2018 IEEE 18th International Power Electronics and Motion Control Conference (PEMC), Budapest, Hungary, 26 -30 August 2018 LIV. A comprehensive study of different photovoltaic peak power tracking methods BELKAID A., ÇOLAK İ., KAYIŞLI K. 2017 IEEE 6th International Conference on Renewable Energy Research and Applications (ICRERA), San Diego, CA, USA, 5 - 08 November 2017 LV. Modeling and simulation of thermo electrical generator with MPPT BELKAID A., ÇOLAK İ., KAYIŞLI K. 2017 IEEE 6th International Conference on Renewable Energy Research and Applications (ICRERA), San Diego, CA, USA, 5 - 08 November 2017 Smart grid and renewable energy in Algeria LVI. HARROUZ A., ABBES M., ÇOLAK İ., KAYIŞLI K. 2017 IEEE 6th International Conference on Renewable Energy Research and Applications (ICRERA), San Diego, CA, USA, 5 - 08 November 2017 LVII. Control of a small wind turbine system application HARROUZ A., ÇOLAK İ., KAYIŞLI K. 2016 IEEE International Conference on Renewable Energy Research and Applications (ICRERA), Birmingham, United Kingdom, 20 - 23 November 2016 LVIII. Optimum control strategy based on an equivalent sliding mode for solar systems with battery storage Belkaid A., ÇOLAK İ., KAYIŞLI K. 2016 IEEE International Power Electronics and Motion Control Conference (PEMC), Varna, Bulgaria, Bulgaria, 25 -28 September 2016, pp.1262-1268 LIX. Uzaktan Eğitim ve Sosyal Ağlar SEVİNDİK T., KAYIŞLI K., GENÇ Z., BAŞAL A. International Computer Instructional Technology Symposium, 22 - 24 September 2011, vol.1, pp.100-101

LX. The effect of social network on student attitudes KAYIŞLI K., HAZAR H., ÖZTÜRK U. International Congress of Educational Research, 4 - 07 May 2011, vol.1, pp.1085-1094
LXI. Çoklu zeka tespitinde yapay sinir ağları kullanımı SEVİNDİK T., KAYIŞLI K. 3. Uluslararası Bilgisayar ve Öğretim Teknolojileri Eğitimi Sempozyumu, 7 - 09 October 2009, vol.1, pp.367-371
LXII. Hysteresis Control of a Boost PFC Converter Circuit KAYIŞLI K., TUNCER S., POYRAZ M.

4nd FAE International Symposium, 4 - 06 May 2006, vol.1, pp.587-590

Supported Projects

Kayışlı K., Project Supported by Other Official Institutions, İnsansız Hava Araç Teknolojisinde Raspberry Pi kullanımı ve Nesne Tespiti, 2024 - 2025

Kayışlı K., TUBITAK Project, Modular Motor Drive Design for Electric Vehicles, 2024 - 2025

Kayışlı K., TUBITAK Project, Vehicle Control System for Hydrogen Fuel Cell and Dual Electric Motor Vehicles, 2024 - 2025 Kayışlı K., FP2 Project, E Commerce in Marble TR/06/A/F/EX1-1585 the Leonardo Da Vinci Pilot Project Topluluk Mesleki Eğitim Eylem Programı İKİNCİ AŞAMA : 2000 – 2006 HAREKETLİLİK, 2006 - 2006

Kayışlı K., FP2 Project, Computer Aided Design Sharing via The Distance Education in Vocational Schools, 2005 - 2005

Activities in Scientific Journals

Algerian Journal of Renewable Energy and Sustainable Development, Assistant Editor/Section Editor, 2023 - Continues ELECTRIC POWER COMPONENTS AND SYSTEMS, Editor, 2023 - Continues International Journal of Renewable Energy Researches, Assistant Editor/Section Editor, 2016 - Continues International Journal of Engineering Science and Application, Assistant Editor/Section Editor, 2017 - 2022

Memberships / Tasks in Scientific Organizations

IEEE, Principal Member, 2017 - Continues, United States Of America

Peer Reviews in Scientific Publications

IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, SCI Journal, March 2025 IEEE JOURNAL OF EMERGING AND SELECTED TOPICS IN POWER ELECTRONICS, SCI Journal, March 2025 IET POWER ELECTRONICS, SCI Journal, March 2025 IEEE TRANSACTIONS ON EDUCATION, SCI Journal, February 2025 COMPUTERS AND ELECTRICAL ENGINEERING, SCI Journal, January 2025 COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, SCI Journal, January 2025 IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, SCI Journal, January 2025 COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, SCI Journal, January 2025 IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, SCI Journal, January 2025 IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, SCI Journal, January 2025 IEEE TRANSACTIONS ON EDUCATION, SCI Journal, January 2025 IEEE TRANSACTIONS ON EDUCATION, SCI Journal, January 2025 IEEE TRANSACTIONS ON EDUCATION, SCI Journal, January 2025 IEEE TRANSACTIONS IN ENGINEERING EDUCATION, SCI Journal, January 2025 IEEE TRANSACTIONS IN ENGINEERING EDUCATION, SCI Journal, January 2025 IEEE TRANSACTIONS IN ENGINEERING EDUCATION, SCI Journal, January 2025 IEEE TRANSACTIONS IN ENGINEERING EDUCATION, SCI Journal, October 2024 COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, SCI Journal, October 2024 COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, SCI Journal, October 2024 IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, SCI Journal, October 2024 **IEEE TRANSACTIONS ON EDUCATION, SCI Journal, July 2024 COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, SCI Journal, July 2024** AIN SHAMS ENGINEERING JOURNAL, SCI Journal, January 2024 INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH, Journal Indexed in ESCI, January 2024 Balkan Journal of Electrical and Computer Engineering, National Scientific Refreed Journal, January 2024 **ENERGY REPORTS, SCI Journal, January 2024** SCIENTIFIC REPORTS, SCI Journal, January 2024 Engineered Science, Other Indexed Journal, December 2023 INTERNATIONAL JOURNAL OF POWER AND ENERGY CONVERSION, Other Indexed Journal, December 2023 **IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, SCI Journal, November 2023** Serbian Journal of Electrical Engineering, Other Indexed Journal, November 2023 **ELECTRIC POWER COMPONENTS AND SYSTEMS, SCI Journal, November 2023 ELECTRIC POWER COMPONENTS AND SYSTEMS, SCI Journal, November 2023 COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, SCI Journal, November 2023** Scientific African, Journal Indexed in ESCI, October 2023 **COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, SCI Journal, October 2023 ARTIFICIAL INTELLIGENCE REVIEW, SCI Journal, September 2023 IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS, SCI Journal, August 2023 ELECTRICAL ENGINEERING, SCI Journal, July 2023** Multiscale and Multidisciplinary Modeling, Experiments and Design, Journal Indexed in ESCI, June 2023 **APPLIED SCIENCES, SCI Journal, May 2023** Multiscale and Multidisciplinary Modeling, Experiments and Design, Journal Indexed in ESCI, May 2023 INTERNATIONAL JOURNAL OF AD HOC AND UBIQUITOUS COMPUTING, SCI Journal, May 2023 IEEE SYSTEMS JOURNAL, SCI Journal, April 2023 **ELECTRIC POWER COMPONENTS AND SYSTEMS, SCI Journal, April 2023 COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, SCI Journal, April 2023** SENSORS, SCI Journal, March 2023 IEEE INDUSTRY APPLICATIONS MAGAZINE, Journal Indexed in SCI-E, January 2023 Journal Of Circuits, Systems, And Computers, National Scientific Refreed Journal, January 2023 COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, Journal Indexed in SCI-E, January 2023 IEEE SYSTEMS JOURNAL, Journal Indexed in SCI-E, January 2023 IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, SCI Journal, December 2022 **IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, SCI Journal, December 2022** INTERNATIONAL JOURNAL OF AMBIENT ENERGY, Journal Indexed in SCI-E, November 2022 SUSTAINABILITY, Journal Indexed in SCI-E, November 2022 **COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, SCI Journal, November 2022** Journal of Circuits, Systems, and Computers, Other Indexed Journal, November 2022 **ENERGIES, SCI Journal, November 2022** INTERNATIONAL JOURNAL OF POWER ELECTRONICS AND DRIVE SYSTEMS, SCI Journal, October 2022 ELECTRIC POWER COMPONENTS AND SYSTEMS, SCI Journal, October 2022 ELECTRIC POWER COMPONENTS AND SYSTEMS, SCI Journal, October 2022 International Journal of Design Engineering, Other journals, October 2022 International Journal of Electrical and Computer Engineering, SCI Journal, May 2022 **IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, SCI Journal, January 2022**

Tasks In Event Organizations

Kayışlı K., Energy Systems, Artificial Intelligence, Plasma, Materials and Environment (ESAIPME'2024), Scientific Congress, Ghardaïa, Algeria, Ekim 2024 Kayışlı K., ICSMARTGRID 2024 12TH IEEE INTERNATIONAL CONFERENCE ON SMART GRID, Scientific Congress, Setúbal, Portugal, Mayıs 2024

Kayışlı K., Sixth International Conference on Electrotechnics ICEL'23, Scientific Congress, Oran, Algeria, Kasım 2023 Kayışlı K., ICRERA 2022 11TH IEEE INTERNATIONAL CONFERENCE ON RENEWABLE ENERGY RESEARCH AND APPLICATIONS, Scientific Congress, Oshawa, Canada, Eylül 2023

Kayışlı K., ICSMARTGRID 2023 11TH IEEE INTERNATIONAL CONFERENCE ON SMART GRID, Scientific Congress, Paris, France, Haziran 2023

Kayışlı K., 2023 IEEE International Conference on Smart Information Systems and Technologies (SIST), Scientific Congress, Astana, Kazakhstan, Mayıs 2023

Kayışlı K., ICRERA 2022 11TH INTERNATIONAL CONFERENCE ON RENEWABLE ENERGY RESEARCH AND APPLICATIONS, Scientific Congress, İstanbul, Turkey, Eylül 2022

Kayışlı K., ICSMARTGRID 2022 10TH INTERNATIONAL CONFERENCE ON SMART GRID, Scientific Congress, İstanbul, Turkey, Haziran 2022

Kayışlı K., AYAZ Z., Akıllı Şebekeler Ulusal Çalıştayı, Workshop Organization, Ankara, Turkey, Mayıs 2022

Metrics

Publication: 116 Citation (WoS): 581 Citation (Scopus): 918 H-Index (WoS): 12 H-Index (Scopus): 15

Congress and Symposium Activities

Sixth International Conference on Electrotechnics ICEL'23, Invited Speaker, Oran, Algeria, 2023