

Asst. Prof. HALİT YAHYA

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAD-2716-2020

ScopusID: 57202966631

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Biography

Dr. Khalid Yahya earned his Ph.D. in Electrical Engineering from Kocaeli University, Turkey, in 2018. He currently serves as an Assistant Professor in the Department of Electrical and Electronics Engineering at Istanbul Gelişim University, Turkey. With a strong academic and professional background, Dr. Yahya has authored or coauthored over 40 peer-reviewed articles in prestigious journals and international conferences, showcasing his expertise in diverse areas of electrical engineering. His research interests encompass microelectronic circuit analysis and design, renewable energy systems, power electronics, and energy harvesting systems, with a particular focus on MPPT algorithms for thermoelectric generators and photovoltaic systems. His work also extends to blockchain applications in renewable energy, exploring innovative solutions to enhance energy management and supply chain transparency. Dr. Yahya's interdisciplinary approach is evident in his contributions to areas such as antenna design for UAV-assisted networks, efficient authentication protocols for IoT environments, and optimization techniques for hybrid renewable energy systems. He has conducted groundbreaking research on wireless power transfer systems for electric vehicles and advanced control strategies for robotic systems. Dr. Yahya has been recognized for his academic excellence with awards such as the Best Paper Award at the 2nd Engineering International Conference on Electrical, Energy, and Artificial Intelligence (EICEEAI) in 2023. As an active reviewer for numerous journals and conferences, he contributes to advancing knowledge in his field. He has also delivered keynote speeches on the role of artificial intelligence in renewable energy systems, highlighting his commitment to integrating cutting-edge technologies into sustainable energy solutions. Dr. Yahya's work bridges theoretical research and practical applications, contributing significantly to the advancement of electrical engineering and its impact on global challenges in energy and sustainability.

Research Areas

Computer Sciences, Biomedical Engineering, Electrical and Electronics Engineering, Natural Sciences, Engineering and Technology

Courses

GÜÇ ELEKTRONİĞİ (EEM303), Undergraduate, 2023 - 2024

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A Comprehensive Evaluation Model for Sustainable Supply Chain Capabilities in the Energy Sector**
Safaei M., Yahya K., Dawsari S. A.
Sustainability (Switzerland), vol.16, no.21, 2024 (SCI-Expanded)
- II. **Performance analysis of majority-based transmit antenna selection and maximal ratio combining in MIMO-NOMA networks**
Kumson P. K., Aldababsa M., YAHYA H., Obaid M., Mwais A. A.
Annales des Telecommunications/Annals of Telecommunications, vol.79, no.7-8, pp.567-576, 2024 (SCI-Expanded)
- III. **A Security Enhanced Chaotic-Map Based Authentication Protocol for Internet of Drones**
Mahmood K., Ghaffar Z., Farooq M., YAHYA H., Das A. K., Chaudhry S. A.
IEEE Internet of Things Journal, vol.11, no.12, pp.22301-22309, 2024 (SCI-Expanded)
- IV. **Outage performance analysis of antenna selection schemes in UAV-assisted networks**
Al-Qarahghli I., YAHYA H., Aldababsa M.
AEU - International Journal of Electronics and Communications, vol.178, 2024 (SCI-Expanded)
- V. **Sustainable Development of a Direct Methanol Fuel Cell Using the Enhanced LSHADE Algorithm and Newton Raphson Method**
Singla M. K., Gupta J., Alsharif M. H., Jahid A., Yahya K.
Sustainability (Switzerland), vol.16, no.1, 2024 (SCI-Expanded)
- VI. **Hash Table Assisted Efficient File Level De-Duplication Scheme in SD-IoV Assisted Sensing Devices**
Said G., Ullah A., Ghani A., Azeem M., YAHYA H., Bilal M., Shah S. C.
Intelligent Automation and Soft Computing, vol.38, no.1, pp.83-99, 2024 (SCI-Expanded)
- VII. **Enhancing UAV communication links with Reconfigurable intelligent surfaces**
Salih N. M., Aldababsa M., Yahya K.
AEU - International Journal of Electronics and Communications, vol.171, 2023 (SCI-Expanded)
- VIII. **Bandwidth and power efficient lightweight authentication scheme for healthcare systems★★★★★**
Jan S. U., Ghani A., Alzahrani A., Saqlain S. M., YAHYA H., Sajjad H.
Journal of King Saud University - Computer and Information Sciences, vol.35, no.7, 2023 (SCI-Expanded)
- IX. **A Comprehensive Study on the Performance of Various Tracker Systems in Hybrid Renewable Energy Systems, Saudi Arabia**
Alanazi M., Attar H., Amer A., Amjad A., Mohamed M., Majid M. S., Yahya K., Salem M.
Sustainability (Switzerland), vol.15, no.13, 2023 (SCI-Expanded)
- X. **A Comprehensive Review of Electric Vehicle Charging Stations with Solar Photovoltaic System Considering Market, Technical Requirements, Network Implications, and Future Challenges**
Alrubaie A. J., Salem M., Yahya K., Mohamed M., Kamarol M.
Sustainability (Switzerland), vol.15, no.10, 2023 (SCI-Expanded)
- XI. **Biogeography-Based Teaching Learning-Based Optimization Algorithm for Identifying One-Diode, Two-Diode and Three-Diode Models of Photovoltaic Cell and Module**
Rai N., Abbadi A., Hamidia F., Douifi N., Abdul Samad B., Yahya K.
Mathematics, vol.11, no.8, 2023 (SCI-Expanded)
- XII. **A Novel MPPT Based Reptile Search Algorithm for Photovoltaic System under Various Conditions**
Douifi N., Abbadi A., Hamidia F., Yahya K., Mohamed M., Rai N.
Applied Sciences (Switzerland), vol.13, no.8, 2023 (SCI-Expanded)
- XIII. **Optimal Design of Hybrid Renewable Systems, Including Grid, PV, Bio Generator, Diesel Generator, and Battery**
He M., Forootan Fard H., Yahya K., Mohamed M., Alhamrouni I., Awal L. J.
Sustainability (Switzerland), vol.15, no.4, 2023 (SCI-Expanded)
- XIV. **Evaluating the Performance of Fuzzy-PID Control for Lane Recognition and Lane-Keeping in Vehicle Simulations**
Samuel M., Yahya K., Attar H., Amer A., Mohamed M., Badmos T. A.

Electronics (Switzerland), vol.12, no.3, 2023 (SCI-Expanded)

- XV. **LAS-SG: An Elliptic Curve-Based Lightweight Authentication Scheme for Smart Grid Environments**
Chaudhry S. A., Yahya K., Garg S., Kaddoum G., Hassan M. M., Zikria Y. B.
IEEE Transactions on Industrial Informatics, vol.19, no.2, pp.1504-1511, 2023 (SCI-Expanded)
- XVI. **Analysing Various Control Techniques for Manipulator Robotic System (Robogymnast)**
Mohamed M., Samad B. A., Anayi F., Packianather M., YAHYA H.
Computers, Materials and Continua, vol.75, no.3, pp.4681-4696, 2023 (SCI-Expanded)
- XVII. **FHAAPS: Efficient Anonymous Authentication with Privacy Preservation Scheme for Farm-to-Home Communication**
Rajasekaran A. S., Azees M., YAHYA H.
Security and Communication Networks, vol.2023, 2023 (SCI-Expanded)
- XVIII. **Simple Mathematical and Simulink Model of Stepper Motor**
Iqteit N. A., Yahya K., Makahleh F. M., Attar H., Amer A., Solyman A. A. A., Qudaimat A., Tamizi K.
Energies, vol.15, no.17, 2022 (SCI-Expanded)
- XIX. **A Comprehensive Review on Multilevel Inverters for Grid-Tied System Applications**
Salem M., Richelli A., Yahya K., Hamidi M. N., Ang T., Alhamrouni I.
Energies, vol.15, no.17, 2022 (SCI-Expanded)
- XX. **A Privacy Enhanced Authentication Scheme for Securing Smart Grid Infrastructure**
Chaudhry S. A., Nebhan J., Yahya K., Al-Turjman F.
IEEE Transactions on Industrial Informatics, vol.18, no.7, pp.5000-5006, 2022 (SCI-Expanded)
- XXI. **Rotating behind Privacy: An Improved Lightweight Authentication Scheme for Cloud-based IoT Environment**
Chaudhry S. A., Irshad A., Yahya K., Kumar N., Alazab M., Zikria Y. B.
ACM Transactions on Internet Technology, vol.21, no.3, 2021 (SCI-Expanded)
- XXII. **GCACS-IoD: A certificate based generic access control scheme for Internet of drones**
Chaudhry S. A., Yahya K., Karuppiyah M., Kharel R., Bashir A. K., Zikria Y. B.
Computer Networks, vol.191, 2021 (SCI-Expanded)
- XXIII. **A new maximum power point tracking algorithm based on power differentials method for thermoelectric generators**
Yahya K., Alomari O.
International Journal of Energy Research, vol.45, no.5, pp.7476-7486, 2021 (SCI-Expanded)
- XXIV. **Toward Optimal Cost-Energy Management Green Framework for Sustainable Future Wireless Networks**
Alsharif M. H., Jahid A., Albreem M. A., Uthansakul P., Nebhen J., Yahya K.
Computers, Materials and Continua, vol.68, no.1, pp.1321-1339, 2021 (SCI-Expanded)
- XXV. **Strategic Market Growth and Policy Recommendations for Sustainable Solar Energy Deployment in South Korea**
Alsharif M. H., Yahya K., Geem Z. W.
Journal of Electrical Engineering and Technology, vol.15, no.2, pp.803-815, 2020 (SCI-Expanded)
- XXVI. **Machine learning algorithms for smart data analysis in internet of things environment: Taxonomies and research trends**
Alsharif M. H., Kelechi A. H., Yahya K., Chaudhry S. A.
Symmetry, vol.12, no.1, 2020 (SCI-Expanded)
- XXVII. **A Secure and Reliable Device Access Control Scheme for IoT Based Sensor Cloud Systems**
Chaudhry S. A., Yahya K., Al-Turjman F., Yang M.
IEEE Access, vol.8, pp.139244-139254, 2020 (SCI-Expanded)
- XXVIII. **A Novel Pairing-Free Lightweight Authentication Protocol for Mobile Cloud Computing Framework**
Irshad A., Chaudhry S. A., Alomari O. A., Yahya K., Kumar N.
IEEE SYSTEMS JOURNAL, vol.15, no.3664, pp.1-9, 2020 (SCI-Expanded)
- XXIX. **Application of machine intelligence technology in the detection of vaccines and medicines for SARS-CoV-2**

- Alsharif M., Alsharif Y., Albreem M., Jahid A., Solyman A., Yahya K., Alomari O., Hossain M.
European Review for Medical and Pharmacological Sciences, vol.24, no.22, pp.11977-11981, 2020 (SCI-Expanded)
- XXX. **Deep learning applications to combat the dissemination of COVID-19 disease: A review**
Alsharif M., Alsharif Y., Yahya K., Alomari O., Albreem M., Jahid A.
European Review for Medical and Pharmacological Sciences, vol.24, no.21, pp.11455-11460, 2020 (SCI-Expanded)
- XXXI. **Practical implementation of maximum power tracking based short-current pulse method for thermoelectric generators systems**
YAHYA H., BİLGİN M. Z., ERFİDAN T.
Journal of Power Electronics, vol.18, no.4, pp.1201-1210, 2018 (SCI-Expanded)

Articles Published in Other Journals

- I. **Development of an Ultra-Sensitive Magnetic-Based Biosensor; a Simulation Study**
Yahya H., Husseini A. A., Dirican O., Attar H., Aldababsa M., Hafez M.
2023 2nd International Engineering Conference on Electrical, Energy, and Artificial Intelligence (EICEEAI), vol.1, no.1, pp.1-4, 2024 (Scopus)
- II. **Improving Energy Harvesting System from Ambient RF Sources in Social Systems with Overcrowding**
Agieb R., Mansour I., Amer A., SOLYMAN A. A. A., YAHYA k., Samir A.
International Journal of Crowd Science, vol.8, pp.1-16, 2024 (Peer-Reviewed Journal)
- III. **A Review of Wireless Pavement System Based on the Inductive Power Transfer in Electric Vehicles**
Bozhi , Mohamed M., Gilani V. N. M., Amjad A., Majid M. S., Yahya H., Salem M.
SUSTAINABILITY, vol.15, no.(20) , pp.14893-14908, 2023 (Peer-Reviewed Journal)
- IV. **Investigating and calculating the temperature of hot-spot factor for transformers**
YAHYA H., Attar H., Issa H., Ramadan Dofan J. A., Iqteit N. A., Yahya A. E., SOLYMAN A. A. A.
Indonesian Journal of Electrical Engineering and Computer Science, vol.30, no.3, pp.1297-1307, 2023 (Scopus)
- V. **Obstacle Detection Method Based on Non-iterative K-means Algorithm**
Hu H., Su R., Zhang Z., Wang Y., Yin Z., YAHYA H.
Journal of Network Intelligence, vol.8, no.2, pp.421-432, 2023 (Scopus)
- VI. **Evolution of wireless communication networks: from 1G to 6G and future perspective**
Ahmed Solyman A. A., Yahya K.
International Journal of Electrical and Computer Engineering, vol.12, no.4, pp.3943-3950, 2022 (Scopus)
- VII. **Key performance requirement of future next wireless networks (6G)**
Solyman A. A. A., Yahya K.
Bulletin of Electrical Engineering and Informatics, vol.10, no.6, pp.3249-3255, 2021 (Scopus)
- VIII. **Simulink model of transformer differential protection using phase angle difference based algorithm**
Iqteit N. A., Yahya K.
International Journal of Power Electronics and Drive Systems, vol.11, no.2, pp.1088-1098, 2020 (Scopus)
- IX. **Supervised machine learning for smart data analysis in internet of things environment: An overview**
Alsharif M. H., Mosier W. A., Alomari O. A., Yahya K.
Journal of Theoretical and Applied Information Technology, vol.98, no.4, pp.672-683, 2020 (Scopus)
- X. **Analyzing and evaluating the energy efficiency based on multi-5G small cells with a mm-waves in the next generation cellular networks**
Alsharif M. H., Yahya K., Chaudhry S. A.
International Journal of Electrical and Computer Engineering, vol.10, no.4, pp.3492-3500, 2020 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **Non-Line-of-Sight Target Localization Based on Multipath Exploitation**
Wen K., Wu Y., YAHYA H.

5th Asia-Pacific Conference on Image Processing, Electronics and Computers, IPEC 2024, Dalian, China, 12 - 14 April 2024, vol.57, pp.161-170

II. Construction of Smart Transportation City System Based on Digital Twins

Shen S., Xiao J., He Y., He Z., YAHYA H.

1st International Conference on Intelligent Transportation and Smart Cities, ICITSC 2024, Wuhan, China, 7 - 08 March 2024, vol.55, pp.76-86

III. A Parameter Identification Method of Battery Equivalent Circuit Model based on Impedance Spectrum

Wu H., Wu R., Li C., Wen Z., Wei Y., Tang J., Lyu C., YAHYA H.

2023 Asia-Pacific Conference on Image Processing, Electronics and Computers, IPEC 2023, Hybrid, Dalian, China, 14 - 16 April 2023, pp.135-140

IV. A Review on Deformable Voronoi Diagrams for Robot Path Planning in Dynamic Environments

Samuel M., YAHYA H., Aldababsa M., Amer A., Dofan J. A. R., Merchan-Cruz E. A., Hafez M.

2nd International Engineering Conference on Electrical, Energy, and Artificial Intelligence, EICEEAI 2023, Zarqa, Jordan, 27 - 28 December 2023

V. Adaptive Step Load Voltage-Based MPPT Technique for TEG Systems

YAHYA H.

2nd International Engineering Conference on Electrical, Energy, and Artificial Intelligence, EICEEAI 2023, Zarqa, Jordan, 27 - 28 December 2023

VI. Analyzing the Impact of Temperature Variations on the Performance of Thermoelectric Generators

Yahya A. E. M., Sarreb R. D., YAHYA H., Attar H., Aldababsa M., Hafez M.

2nd International Engineering Conference on Electrical, Energy, and Artificial Intelligence, EICEEAI 2023, Zarqa, Jordan, 27 - 28 December 2023

VII. Optimizing PV System Placement in Kirkuk City Power System Using PSO Algorithm

Ali I. T., Yahya A. E. M., Amer A., Sarreb R. D., YAHYA H., Aldababsa M., Hafez M.

2nd International Engineering Conference on Electrical, Energy, and Artificial Intelligence, EICEEAI 2023, Zarqa, Jordan, 27 - 28 December 2023

VIII. Optimum-Location of PV in Distribution System using NR Method with Matlab-ETap Program

Ali I. T., YAHYA H., Aldababsa M., Amer A., Hafez M., Sarreb R. D.

2nd International Engineering Conference on Electrical, Energy, and Artificial Intelligence, EICEEAI 2023, Zarqa, Jordan, 27 - 28 December 2023

IX. Analysis of Electrical Power Losses in Low-Voltage Distribution Networks: A Study of Technical and Non-Technical Losses

Mezban A., YAHYA H., Aldababsa M., Amer A., Hafez M., Yahya A. E. M.

2nd International Engineering Conference on Electrical, Energy, and Artificial Intelligence, EICEEAI 2023, Zarqa, Jordan, 27 - 28 December 2023

X. Simulating LQR and PID controllers to stabilise a three-link robotic system

Mohamed M., Anayi F., Packianather M., Samad B. A., Yahya K.

2nd International Conference on Advance Computing and Innovative Technologies in Engineering, ICACITE 2022, Greater Noida, India, 28 - 29 April 2022, pp.2033-2036

XI. The Role of Smart Environment Initiatives on Environmental Degradation: Consolidating the Resilient Built Landscape

AGBOOLA O. P., MOVEH S., Yahya K., Attar H., Amer A.

1st International Engineering Conference on Electrical, Energy, and Artificial Intelligence, EICEEAI 2022, Zarqa, Jordan, 6 - 08 December 2022

XII. A Parameter Extraction Based on PSO for A Signal PV Module Using MATLAB

Nashoor H., YAHYA H., Aldababsa M., Amer A., Abusuilik S.

1st International Engineering Conference on Electrical, Energy, and Artificial Intelligence, EICEEAI 2022, Zarqa, Jordan, 6 - 08 December 2022

XIII. Design a PLC-Based Automated and Controlled Liquid Filling-Capping System

Mahrez A., Hilmy A., Alasoad A., Yahya A. E., YAHYA H., Amer A., Attar H.

1st International Engineering Conference on Electrical, Energy, and Artificial Intelligence, EICEEAI 2022, Zarqa, Jordan, 6 - 08 December 2022

XIV. On the Security of an Authentication Scheme for Smart Metering Infrastructure

Yahya K., Chaudhry S. A., Al-Turjman F.

2020 International Conference on Emerging Technology in Computing, Communication and Electronics, ETCCE 2020, Virtual, Dhaka, Bangladesh, 21 - 22 December 2020

XV. Performance evaluation of different solar photovoltaic technologies in Libya

Almaktar M., Albreki A., Mohamed F. A., Yahya K., Hussein T.

11th International Renewable Energy Congress, IREC 2020, Virtual, Hammamet, Tunisia, 29 - 31 October 2020

XVI. Improving the performance of the MPPT for thermoelectric generator system by using Kalman filter

Yahya K., BİLGİN M. Z., ERFİDAN T., ÇAKIR B.

5th International Conference on Electrical and Electronics Engineering, ICEEE 2018, İstanbul, Turkey, 3 - 05 May 2018, pp.129-132

Scientific Refereeing

Processes, SCI Journal, October 2024

IEEE ACCESS, SCI Journal, October 2024

IEEE ACCESS, SCI Journal, September 2024

APPLIED SCIENCES, SCI Journal, September 2024

Transactions on Emerging Telecommunications Technologies, SCI Journal, August 2024

JOURNAL OF MARINE SCIENCE AND ENGINEERING, SCI Journal, August 2024

Processes, SCI Journal, July 2024

Processes, SCI Journal, June 2024

Processes, SCI Journal, May 2024

SENSORS, SCI Journal, February 2024

IET RENEWABLE POWER GENERATION, SCI Journal, January 2024

JOURNAL OF MARINE SCIENCE AND ENGINEERING, SCI Journal, December 2023

SENSORS, SCI Journal, November 2023

ENERGIES, SCI Journal, January 2023

SECURITY AND COMMUNICATION NETWORKS, SCI Journal, September 2021

SCIENTIFIC REPORTS, SCI Journal, July 2021

IEEE SYSTEMS JOURNAL, SCI Journal, March 2021

IET POWER ELECTRONICS, SCI Journal, August 2020

Scientific Consultations

Abu Dhabi University, Scientific Consultancy, Istanbul Gelisim University, FACULTY OF ENGINEERING AND ARCHITECTURE, ELECTRICAL AND ELECTRONICS ENGINEERING, Turkey, 2023 - Continues

Metrics

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Citation (WoS): 463

Citation (Scopus): 686

H-Index (WoS): 12

H-Index (Scopus): 13

Invited Talks

4th International Conference on Advance Computing, Conference, Galgotias College of Engineering & Technology , India,
May 2024