

## Assoc. Prof. ATABERK NECATİ

### Personal Information

**Email:** ataberknajafi@ogu.edu.tr

**Web:** <https://avesis.ogu.edu.tr/4602>

### International Researcher IDs

ORCID: 0000-0003-0319-7032

Publons / Web Of Science ResearcherID: ACG-7791-2022

Yoksis Researcher ID: 269382

### Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği (Dr), Turkey 2011 - 2016

Postgraduate, Islamic Azad University, mühendislik fakültesi, elektrik- elektronik, Iran 2006 - 2009

Undergraduate, Islamic Azad University, Elektrik-Elektronik, Iran 2000 - 2004

### Dissertations

Doctorate, DAĞITIM TRANSFORMATÖRLERİNDEKİ DENGESİZ GERİLİM ETKİLERİNİN SONLU ELEMANLAR YÖNTEMİ KULLANILARAK DEĞERLENDİRİLMESİ VE TERMAL MODELLEMESİ, Gazi University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği (Dr), 2016

### Research Areas

Electrical and Electronics Engineering, Power Electronics, Electrical Machine Theory and Design, Electric Motor Drivers, Power Quality, Engineering and Technology

### Academic Titles / Tasks

Associate Professor, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Elektrik Elektronik Mühendisliği Bölümü, 2023 - Continues

Assistant Professor, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Elektrik Elektronik Mühendisliği Bölümü, 2019 - 2023

Assistant Professor, Ondokuz Mayıs University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2017 - 2019

### Courses

#### Doctorate

DOKTORA SEMİNER(A), Doctorate, 2023 - 2024

#### Postgraduate

SPECIALIZATION FIELD COURSE (MSc)(E), Postgraduate, 2023 - 2024

UZMANLIK ALAN DERSİ (YL)(P), Postgraduate, 2023 - 2024

DESIGN OF ELECTRICAL MACHINES(A), Postgraduate, 2023 - 2024

#### **Undergraduate**

POWER SYSTEMS ANALYSIS I(A), Undergraduate, 2023 - 2024

HIGH VOLTAGE TECHNIQUES(A), Undergraduate, 2023 - 2024

ELECTRICAL ENGINEERING DESIGN(G), Undergraduate, 2023 - 2024

ELECTRICAL DISTRIBUTION SYSTEMS(A) , Undergraduate, 2023 - 2024

ELECTRICAL MACHINERY(A), Undergraduate, 2023 - 2024

HIGH VOLTAGE TECHNIQUES(A), Undergraduate, 2018 - 2019

ELECTRICAL MACHINERY(A), Undergraduate, 2018 - 2019

introduction to power electronics, Undergraduate, 2018 - 2019

ELECTRICAL DISTRIBUTION SYSTEMS(A), Undergraduate, 2018 - 2019

#### **Published journal articles indexed by SCI, SSCI, and AHCI**

- I. **Distribution Transformer Winding Fault Detection Based on Hybrid Wavelet-CNN**  
Afandi O., NECATİ A.  
INTERNATIONAL TRANSACTIONS ON ELECTRICAL ENERGY SYSTEMS, no.1, 2025 (SCI-Expanded)
- II. **Optimization and Performance Improvement of Grid-Connected PV Plant Based on ANN-PSO and P&O Algorithms**  
Ali A. H., NAJAFI A.  
INTERNATIONAL TRANSACTIONS ON ELECTRICAL ENERGY SYSTEMS, vol.2022, 2022 (SCI-Expanded)
- III. **Optimized Thermal Modeling and Broken Rotor Bar Fault Detection of BDFIG with Discrete Wavelet Transform**  
NAJAFI A., ÇAVUŞ B.  
ELECTRIC POWER COMPONENTS AND SYSTEMS, vol.50, no.14-15, pp.776-787, 2022 (SCI-Expanded)
- IV. **Comparison of core loss and magnetic flux distribution in amorphous and silicon steel core transformers**  
Najafi A., Iskender I.  
ELECTRICAL ENGINEERING, vol.100, no.2, pp.1125-1131, 2018 (SCI-Expanded)
- V. **An improved thermal model for distribution transformer under unbalanced voltage conditions**  
Najafi A., Iskender I.  
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.104, pp.373-385, 2016 (SCI-Expanded)
- VI. **A new approach to reduce the leakage flux and electromagnetic force on distribution transformer under unbalanced faults based on finite element method**  
Najafi A., Iskender I.  
INTERNATIONAL TRANSACTIONS ON ELECTRICAL ENERGY SYSTEMS, vol.26, no.4, pp.901-916, 2016 (SCI-Expanded)
- VII. **Electromagnetic force investigation on distribution transformer under unbalanced faults based on time stepping finite element methods**  
Najafi A., Iskender I.  
INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.76, pp.147-155, 2016 (SCI-Expanded)
- VIII. **A novel concept for derating of transformer under unbalance voltage in the presence of non linear load by 3-D finite element method**  
Najafi A., Iskender I.  
ELECTRICAL ENGINEERING, vol.97, no.1, pp.45-56, 2015 (SCI-Expanded)

#### **Articles Published in Other Journals**

- I. **PERFORMANCE INVESTIGATION OF A 5 MW PHOTOVOLTAIC SYSTEM: ALFASHIR SUDAN**  
Mohammed Ali A., Najafi A.  
Eskişehir Osmangazi Üniversitesi mühendislik ve mimarlık fakültesi dergisi (online), vol.32, no.1, pp.1192-1203, 2024 (Peer-Reviewed Journal)
- II. **AN ECONOMIC AND TECHNICAL REVIEW FOR THE UTILIZATION OF HVDC IN TURKEY AND IN THE WORLD**  
ACAROĞLU H., NAJAFI A., KARA Ö., YÜRÜK B.  
Konya mühendislik bilimleri dergisi (Online), vol.9, no.3, pp.809-835, 2021 (Peer-Reviewed Journal)
- III. **Electromagnetic-Temperature Analysis of Amorphous Core Transformer by Multiple Physics Method**  
Najafi A., Iskender I.  
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.21, pp.1086-1096, 2021 (Peer-Reviewed Journal)
- IV. **Çatı Üstü Termal ve Elektrik Enerjisi Üretimini Ekonomik ve Çevresel Getirilerinin Araştırılarak Optimal PV-T Tasarımı**  
Najafi A., Uyar S.  
EMO Bilimsel Dergi, vol.1, pp.21-30, 2021 (Peer-Reviewed Journal)
- V. **Zasey'e Dayalı Harmonikli Yük ve Dengesiz Besleme Gerilimi Altında Transformatörün İndirgenmesinin Karşılaştırılması**  
Najafi A.  
Konya journal of engineering Science, vol.8, pp.336-353, 2020 (Peer-Reviewed Journal)
- VI. **Impacts Of Amorphous Core To Reduce The Losses In Distribution Transformer Based On Time Stepping Finite Element Method**  
Najafi A., Iskender I.  
International Journal of Technical and Physical Problems of engineering "(IJTPE) , vol.4, pp.53-57, 2015 (Peer-Reviewed Journal)
- VII. **Thermal Modeling and Electromagnetic Analysis of 1000 kVA Distribution Transformer Based on Electrical-Thermal Equivalent circuit and Fem**  
Najafi A.  
Global Advanced Research Journal of Engineering, Technology and Innovation (GARJETI), vol.4, no.2, pp.24-30, 2015 (Peer-Reviewed Journal)

## Papers Published in Refereed Scientific Meetings

- I. **600W DC DC CONVERTER DESIGN USING FLYBACK, HALF BRIDGE, FULL BRIDGE LLC TOPOLOGIES AND COMPARISON OF SIMULATION RESULTS**  
Ekici Ö. E., Najafi A., Dirisağlık F.  
International Conference on Technology, Engineering and Science (IConTES), Antalya, Turkey, 4 - 07 November 2021, vol.16, pp.219-224
- II. **A Dual-Band Microstrip Patch Antenna for Brain-Machine Interface Applications**  
Salimitorkamani M., ODABAŞI H., NAJAFI A.  
15th European Conference on Antennas and Propagation, EuCAP 2021, Düsseldorf, Germany, 22 - 26 March 2021

## Metrics

Publication: 33

Citation (WoS): 64

Citation (Scopus): 84

H-Index (WoS): 5

H-Index (Scopus): 6