

## Asst. Prof. CEMAL KELEŞ

### Personal Information

**Office Phone:** [+90 422 377 3000](tel:+904223773000) Extension: 4797

**Fax Phone:** [+90 422 377 4939](tel:+904223774939)

**Email:** [cemal.keles@inonu.edu.tr](mailto:cemal.keles@inonu.edu.tr)

**Web:** <http://inonu.edu.tr/tr/cemal.keles>

**Address:** İnönü Üniversitesi Mühendislik Fakültesi EEM Bölümü, D Blok, 2. Kat, 44280, Malatya

### International Researcher IDs

ORCID: 0000-0002-6818-7970

Publons / Web Of Science ResearcherID: B-9025-2016

Yoksis Researcher ID: 42177

### Biography

Cemal Keles received his B.S., M.S., and PhD degrees in Electrical-Electronics Engineering from İnönü University, Malatya, Turkey, in 2008, 2012, 2017, respectively. He is Assist. Prof. Dr. with the Electrical-Electronics Engineering Department, İnönü University, Malatya, Turkey. His current research interests include smart grid, renewable energy integration, transmission lines, and fault location.

### Education Information

Doctorate, İnönü University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Turkey 2012 - 2017

Postgraduate, İnönü University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Turkey 2009 - 2012

Undergraduate, İnönü University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, Turkey 2004 - 2008

### Certificates, Courses and Trainings

Industrial Rights, Intellectual Property Rights, Patent, Licensing, TPE Bilgi ve Doküman Birimi Temsilcisi Eğitimi, Türk Patent ve Marka Kurumu, 2015

Other, Erasmus Öğrenci Öğrenim Hareketliliği, Linköping University/Electrical Engineering Dept., 2008

### Dissertations

Doctorate, Akıllı Şebekelerde Yenilenebilir Enerji Üretimine Sahip Akıllı Evlerin Enerji ve Yük Yönetimi, İnönü University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, 2017

Postgraduate, Elektrik Güç Sistemlerinde Güç Bölgeleri Arasındaki Salınımların Kontrolü, İnönü University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, 2012

### Research Areas

Electrical and Electronics Engineering, Energy, Electric Power Transmission, Distribution and Protection, Renewable energy, High Voltage Technique, Engineering and Technology

## Academic Titles / Tasks

Assistant Professor, Inonu University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2018 - Continues  
Research Assistant PhD, Inonu University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2017 - 2018  
Research Assistant, Inonu University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği (Dr), 2011 - 2017

## Academic and Administrative Experience

Vice Dean, Inonu University, Mühendislik Fakültesi, 2021 - Continues  
Inonu University, Elektrik-Elektronik Mühendisliği, 2018 - Continues

## Courses

Elektrik-Elektronik Tasarım II, Undergraduate, 2021 - 2022  
Electrical Installation and Lighting, Undergraduate, 2021-2022  
Elektrik Devre Laboratuvarı I, Undergraduate, 2021-2022  
Yüksek Gerilim Laboratuvarı, Undergraduate, 2021-2022  
Elektrik-Elektronik Tasarım I, Undergraduate, 2021-2022  
Elektrik-Elektronik Tasarım I, Undergraduate, 2021 - 2022  
Elektrik-Elektronik Tasarım I, Undergraduate, 2020-2021  
Elektrik Devre Laboratuvarı I, Undergraduate, 2020-2021  
Electrical Installation and Lighting, Undergraduate, 2020-2021  
Yüksek Gerilim Laboratuvarı, Undergraduate, 2020-2021  
Elektrik Devre Laboratuvarı I, Undergraduate, 2019-2020  
Electrical Installation and Lighting, Undergraduate, 2019-2020  
Alternatif Enerji Kaynakları, Undergraduate, 2019-2020  
Elektrik Elektronik Tasarım I, Undergraduate, 2019-2020  
ELEKTRİK DEVRE LABORATUVARI II, Undergraduate, 2017 - 2018  
Elektrik Elektronik Tasarım I, Undergraduate, 2018-2019  
Bitirme Çalışması I, Undergraduate, 2018-2019  
BİTİRME ÇALIŞMASI I, Undergraduate, 2017 - 2018  
Elektrik Elektronik Bilgisi, Undergraduate, 2018-2019  
ELEKTROMANYETİK HİDRODİNAMİK, Undergraduate, 2017 - 2018  
BİTİRME ÇALIŞMASI II, Undergraduate, 2017 - 2018  
Elektrik Devre Laboratuvarı I, Undergraduate, 2018-2019  
Elektrik Devre Laboratuvarı II, Undergraduate, 2018-2019  
EMTP and Applications Lab., Undergraduate, 2018-2019  
Elektrik-Elektronik Tasarım II, Undergraduate, 2018-2019  
ELEKTRONİK LABORATUVARI II, Undergraduate, 2017 - 2018  
Electrical Installation and Lighting, Undergraduate, 2018-2019  
Elektrik Devre Laboratuvarı II, Undergraduate, 2017-2018  
Elektromanyetik Hidrodinamik, Undergraduate, 2017-2018  
Bitirme Çalışması I, Undergraduate, 2017-2018  
Elektronik Laboratuvarı I, Undergraduate, 2017-2018  
Bitirme Çalışması II, Undergraduate, 2017-2018  
Elektronik Laboratuvarı II, Undergraduate, 2017-2018  
Elektrik Devre Laboratuvarı I, Undergraduate, 2017-2018

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

- I. **Modeling of the Particle Build-Up Evolution on a Single-Wire Magnetic Capture from Axial Stream Flow**  
BİLGİLİ H., KELEŞ C., ABBASOV T.  
MAGNETOCHEMISTRY, vol.8, no.2, 2022 (SCI-Expanded)
- II. **Lightning surge analysis of Faraday cage using alternative transient program-electromagnetic transients program**  
MAMİŞ M. S., KELEŞ C., ARKAN M., Kaya R.  
IET GENERATION TRANSMISSION & DISTRIBUTION, vol.10, no.4, pp.1016-1022, 2016 (SCI-Expanded)
- III. **Power regulated DC/DC driver design by hierarchical control**  
ALAGÖZ B. B., KELEŞ C., KAYGUSUZ A., KAPLAN Y., KARABİBER A.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.24, no.3, pp.1325-1339, 2016 (SCI-Expanded)
- IV. **Implicit disturbance rejection performance analysis of closed loop control systems according to communication channel limitations**  
ALAGÖZ B. B., TAN N., DENİZ F. N., KELEŞ C.  
IET CONTROL THEORY AND APPLICATIONS, vol.9, no.17, pp.2522-2531, 2015 (SCI-Expanded)
- V. **Disturbance rejection performance analyses of closed loop control systems by reference to disturbance ratio**  
Alagoz B. B., DENİZ F. N., KELEŞ C., TAN N.  
ISA TRANSACTIONS, vol.55, pp.63-71, 2015 (SCI-Expanded)
- VI. **A smart building power management concept: Smart socket applications with DC distribution**  
KELEŞ C., Karabiber A., AKCIN M., KAYGUSUZ A., ALAGOZ B. B., Gul O.  
INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.64, pp.679-688, 2015 (SCI-Expanded)
- VII. **Transmission lines fault location using transient signal spectrum**  
MAMİŞ M. S., ARKAN M., KELEŞ C.  
INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.53, pp.714-718, 2013 (SCI-Expanded)
- VIII. **Renewable energy integration for smart sites**  
KAYGUSUZ A., KELEŞ C., ALAGÖZ B. B., Karabiber A.  
ENERGY AND BUILDINGS, vol.64, pp.456-462, 2013 (SCI-Expanded)
- IX. **An approach for the integration of renewable distributed generation in hybrid DC/AC microgrids**  
KARABİBER A., KELEŞ C., KAYGUSUZ A., ALAGÖZ B. B.  
RENEWABLE ENERGY, vol.52, pp.251-259, 2013 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Yapay Arı Kolonisi Algoritması Kullanarak Yenilenebilir Enerji Kaynakları İçeren Mikro Şebekelerde Enerji Karışım Oranlarının Belirlenmesi**  
KÖMÜRGÖZ E., KELEŞ C.  
Yeni Türkiye - Yenilenebilir Enerji Özel Sayısı, vol.27, no.118, pp.373-384, 2021 (Peer-Reviewed Journal)
- II. **Kapalı Çevrim PID Kontrolör Tasarımında Birim Basamak Cevabı Çoklu Ölçüt Performans Haritalaması**  
DENİZ F. N., KELEŞ C., ALAGÖZ B. B., TAN N.  
Sakarya Üniversitesi Fen Bilimleri Enstitüsü, vol.18, no.3, pp.157-165, 2014 (Peer-Reviewed Journal)
- III. **Damping inter-area oscillations in power systems using a CDM-based PID controller**  
KELEŞ C., KAYGUSUZ A.  
Journal of Electrical Engineering, vol.14, no.1, pp.355-362, 2014 (Scopus)

- IV. **Monte Carlo simulation-based planning method for overload safe electrical power systems**  
KAYGUSUZ A., ALAGÖZ B. B., AKCIN M., KELEŞ C., Karabiber A., Gul O.  
Journal of Electrical Engineering, vol.14, no.1, pp.328-335, 2014 (Scopus)
- V. **Dağıtık Kontrol ile Akıllı Şebekelerde Geniş-Alan Yönetimi ve Geleceğe Dönük Projeksiyonlar**  
AKCIN M., ALAGÖZ B. B., KELEŞ C., KARABİBER A., KAYGUSUZ A.  
Sakarya Üniversitesi Fen Bilimleri Dergisi, vol.17, no.3, pp.457-470, 2013 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Cost Efficient Multi-Source Energy Mixing For Renewable Energy Microgrids Using Hybrid ABC-PSO Algorithm**  
KÖMÜRGÖZ E., KELEŞ C.  
Sinteza 2021 - International Scientific Conference on Information Technology and Data Related Research, Belgrade, Serbia, 25 June 2021, pp.39-45
- II. **Contributions of Fault Detection of Solar Panels on Sustainable Regional Development**  
YİĞİT Y., ERDEM E., KELEŞ C.  
5th International Regional Development Conference (IRDC'2019), 26 - 28 September 2019
- III. **Implementation of Demand Side Load Management by Domestic Load Shedding Algorithm for Conventional Electricity Meters**  
KELEŞ C., YİĞİT Y.  
International Artificial Intelligence and Data Processing Symposium (IDAP'xx19), 21 - 22 September 2019
- IV. **Possible Contributions of Smart Grids to Regional Development of Countries**  
KAYGUSUZ A., TUTTOKMAGI O., KELEŞ C., ALAGÖZ B. B.  
International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 28 - 30 September 2018
- V. **Multi-Source Energy Mixing for Renewable Energy Microgrids by Particle Swarm Optimization**  
KELEŞ C., ALAGÖZ B. B., KAYGUSUZ A.  
2017 International Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, Turkey, 16 - 17 September 2017
- VI. **THE PERFORMANCE ANALYSIS OF DATA MINING APPROACH FOR ENERGY COST REDUCTION IN SMART GRIDS**  
ÖZTEMİZ F., KELEŞ C., HAMAMCI S. E., KAYGUSUZ A.  
ENTECH 16 (INTERNATIONAL ENERGY TECHNOLOGIES CONFERENCE), İstanbul, Turkey, 15 December 2016, pp.82-93
- VII. **The Performance Analysis of Data Mining Approach for Energy Cost Reduction in Smart Grids**  
ÖZTEMİZ F., KELEŞ C., HAMAMCI S. E., KAYGUSUZ A.  
ENTECH '16 IV. International Energy Technologies Conference, İstanbul, Turkey, 15 - 16 December 2016, pp.82-93
- VIII. **Cost Efficient Multi Source Energy Mixing for Renewable Energy Microgrids by Random Search Optimization**  
KELEŞ C., ALAGÖZ B. B., KAYGUSUZ A.  
International Conference on Artificial Intelligence and Data Processing (IDAP) 2016, Malatya, Turkey, 17 - 18 September 2016, pp.1-5
- IX. **Multi-source Energy Mixing by Time Rate Multiple PWM for Microgrids**  
KELEŞ C., KAYGUSUZ A., ALAGÖZ B. B.  
4th International Istanbul Smart Grid Congress and Fair (ICSG), İstanbul, Turkey, 20 - 21 April 2016, pp.18-22
- X. **Opportunities for Energy Efficiency in Smart Cities**  
Akcın M., Kaygusuz A., Karabiber A., Alagöz S., Alagöz B. B., Keleş C.  
4th International Istanbul Smart Grid Congress and Fair (ICSG), İstanbul, Turkey, 20 - 21 April 2016, pp.65-69
- XI. **Frequency Deviation Indicators for Estimation of Energy Balance State in Smart AC Grids**  
ALAGÖZ B. B., KELEŞ C., KAYGUSUZ A., AKCIN M.

- 4th International Istanbul Smart Grid Congress and Fair (ICSG), İstanbul, Turkey, 20 - 21 April 2016, pp.112-116
- XII. **Power Converters Modeling in Matlab/Simulink for Microgrid Simulations**  
Karabiber A., KELEŞ C., KAYGUSUZ A., Alagoz B. B., AKCIN M.  
4th International Istanbul Smart Grid Congress and Fair (ICSG), İstanbul, Turkey, 20 - 21 April 2016, pp.99-103
- XIII. **Recent Energy Trends in Energy Policies: Clean and Renewable Energies**  
AKCIN M., KELEŞ C., KAYGUSUZ A., KARABIBER A., ALAGÖZ B. B.  
ENTECH'15 III. Energy Technologies Conference, İstanbul, Turkey, 21 - 22 December 2015, pp.8-17
- XIV. **Bir Su Türbini Güç Sisteminin Yük Frekans Kontrolü**  
Keleş C., Hamamcı S. E., Kaygusuz A.  
Türk Otomatik Kontrol Ulusal Toplantısı, TOK 2015, Denizli, Turkey, 10 - 12 September 2015, pp.1-4
- XV. **Towards Energy Webs: Hierarchical Tree Topology for Future Smart Grids**  
ALAGÖZ B. B., KELEŞ C., KAYGUSUZ A.  
3rd International Istanbul Smart Grid Congress and Fair (ICSG), İstanbul, Turkey, 29 - 30 April 2015
- XVI. **A Note On Demand Side Load Management by Maximum Power Limited Load Shedding Algorithm For Smart Grids**  
KELEŞ C., ALAGÖZ B. B., KAYGUSUZ A.  
3rd International Istanbul Smart Grid Congress and Fair (ICSG), İstanbul, Turkey, 29 - 30 April 2015
- XVII. **Communication Opportunities in Smart Grids**  
KELEŞ C., KAYGUSUZ A.  
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.1885-1888
- XVIII. **Design of Fractional-Order PI Controllers for Disturbance Rejection Using RDR Measure**  
DENİZ F. N., ALAGÖZ B. B., KELEŞ C., TAN N.  
International Conference on Fractional Differentiation and its Applications (ICFDA), Catania, Italy, 23 - 25 June 2014
- XIX. **A photovoltaic system model for Matlab/Simulink simulations**  
KELEŞ C., ALAGÖZ B. B., AKCIN M., KAYGUSUZ A., KARABIBER A.  
2013 4th International Conference on Power Engineering, Energy and Electrical Drives, POWERENG 2013, İstanbul, Turkey, 13 - 17 May 2013, pp.1643-1647
- XX. **Eğitim Amaçlı SCADA Kontrollü Elektrik Dağıtım Otomasyonu**  
Erdem E., Keleş C., Hamamcı S. E., Tan N.  
Otomatik Kontrol Ulusal Toplantısı, TOK2013, Malatya, Turkey, 26 - 28 September 2013, pp.50-55
- XXI. **Görüntü İşleme ile PID Kararlılık Bölgesi Kontrolör Performansı Haritalaması**  
DENİZ F. N., KELEŞ C., ALAGÖZ B. B., TAN N.  
Otomatik Kontrol Ulusal Toplantısı, TOK2013, Malatya, Turkey, 26 - 28 September 2013, pp.874-878
- XXII. **Akıllı Şebekelerde Kontrol ve Haberleşme Günümüzden Geleceğe Fırsatlar**  
AKCIN M., KAYGUSUZ A., KELEŞ C., KARABIBER A., ALAGÖZ B. B.  
Otomatik Kontrol Ulusal Toplantısı, TOK2013, Malatya, Turkey, 26 - 28 September 2013, pp.8-13
- XXIII. **Darbe Generatörünün Maksimum Enerjisi Hakkında Varyasyonel Problem**  
ALİSOY H., ALİSOY G. T., KELEŞ C., DENİZ F. N., IŞIK İ., İÇEL Y.  
Otomatik Kontrol Ulusal Toplantısı, TOK2013, Malatya, Turkey, 26 - 28 September 2013, pp.1272-1276
- XXIV. **Hiyerarşik Kontrol ile Güç Regülasyonlu DC/DC Sürücü Tasarımı**  
Alagöz B. B., Keleş C., Kaygusuz A., Kaplan Y., Karabiber A.  
Otomatik Kontrol Ulusal Toplantısı, TOK2013, Malatya, Turkey, 26 - 28 September 2013, pp.2-7
- XXV. **Elektromanyetik Filtrelerin Tasarımı ve Çalışma Karakteristiklerinin Hesaplanması**  
ABBASOV T., KELEŞ C.  
Elektrik-Elektronik ve Bilgisayar Mühendisliği Sempozyumu, ELECO'12, Bursa, Turkey, 29 November - 01 December 2012, vol.1, pp.1-4
- XXVI. **ATP Simulation of A Faraday Cage for The Analysis of Lightning Surges**  
MAMİŞ M. S., KELEŞ C., ARKAN M., KAYA R.  
European EMTP-ATP Conference, EEUG'12, Zwickau, Germany, 17 - 18 September 2012, pp.30-39

## XXVII. Güç Sistemlerinde Güç Bölgeleri Arasında Meydana Gelen Salınımların Kontrolü

Keleş C., Kaygusuz A.

Fırat Elektrik-Elektronik ve Bilgisayar Sempozyumu, FEEB'11, Elazığ, Turkey, 5 - 07 October 2011, pp.212-216

## Scientific Refereeing

Simulation Modelling Practice and Theory, SCI Journal, July 2018

IET Renewable Power Generation, SCI Journal, June 2018

Gaziosmanpaşa Bilimsel Araştırma Dergisi, Other journals, June 2018

The Open Electrical & Electronic Engineering Journal, Other Indexed Journal, June 2018

Anatolian Science - Bilgisayar Bilimleri Dergisi, Other journals, June 2018

Anatolian Science - Bilgisayar Bilimleri Dergisi, Other journals, April 2018

Transactions of the Institute of Measurement and Control, SCI Journal, February 2018

Turkish Journal Of Electrical Engineering and Computer Science, SCI Journal, December 2017

Turkish Journal of Electrical Engineering and Computer Sciences, SCI Journal, September 2017

Journal of Solar Energy Engineering, Journal Indexed in AHCI, May 2017

Transactions of the Institute of Measurement and Control, SCI Journal, May 2017

Indonesian Journal of Electrical Engineering and Informatics (IJEEI), Journal Indexed in AHCI, April 2017

Journal of The Franklin Institute, SCI Journal, April 2017

Computer Applications in Engineering Education, Journal Indexed in AHCI, April 2017

## Scientific Research / Working Group Memberships

Akıllı Şebekeler Çalışma Grubu, İNÖNÜ ÜNİVERSİTESİ, Türkiye, <https://cms.inonu.edu.tr/tr/cms/eemuh/icerik/3641>, 2012 - Continues

## Metrics

Publication: 60

Citation (WoS): 296

Citation (Scopus): 305

H-Index (WoS): 8

H-Index (Scopus): 8

## Awards

KELEŞ C., Young Researcher Best Paper Awards, The Award Committee of 3rd International Istanbul Smart Grid Congress and Fair, April 2015

## Non Academic Experience

Other Public Institution, İl Emniyet Müdürlüğü

Diyarbakır İl Emniyet Müdürlüğü