

Asst. Prof. MURAT KÖSEOĞLU

Personal Information

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Address: İnönü Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü

International Researcher IDs

ORCID: 0000-0003-3774-1083

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Education Information

Doctorate, Inonu University, Fen Bilimleri, Elektrik-Elektronik Mühendisliği, Turkey 2004 - 2010

Postgraduate, Inonu University, Fen Bilimleri, Elektrik-Elektronik Mühendisliği, Turkey 2000 - 2003

Undergraduate, Inonu University, Mühendislik Fakültesi, Elektrik-Elektronik, Turkey 1996 - 2000

Foreign Languages

English, C1 Advanced

German, A1 Beginner

Dissertations

Doctorate, Elektriksel boşalma ortamından poliimid (PI) yüzeyine çöktürülmüş nano-boyutlu karbon örtünün dielektriğin elektro-fiziksel özelliklerine etkisi, Inonu University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, 2010

Postgraduate, Yüksek Gerilim Üreten Dizel Jeneratörlerden Oluşan Bir Sistemin Sinyalizasyon Analizi, Inonu University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, 2003

Research Areas

Electrical and Electronics Engineering, Electronic, Sensing Devices and Transducers, Electronic Circuits, MEMS, Dielectric Materials and Devices, Semiconducting Materials and Devices, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Inonu University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2018 - Continues

Assistant Professor, Inonu University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2011 - 2018

Research Assistant PhD, Inonu University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2010 - 2011

Research Assistant, Inonu University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2002 - 2010

Academic and Administrative Experience

Head of Department, Inonu University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2011 - 2020
Deputy Head of Department, Inonu University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2011 - 2020

Courses

Elektrik Elektronik Tasarım II, Undergraduate, 2021 - 2022
Elektrik-Elektronik Tasarım I, Undergraduate, 2021 - 2022
Electrical Properties of Polymers, Doctorate, 2019 - 2020
Dielektrik Fiziği, Postgraduate, 2019 - 2020

Advising Theses

Köseoğlu M., Çoklu ortam ses dosyalarının zaman-frekans yöntemiyle analizi ve karşılaştırılması, Postgraduate, H.UYANIK(Student), 2021
Köseoğlu M., Görüntü işleme yöntemleriyle temel devre elemanlarının sınıflandırılması, Postgraduate, M.GÜNAY(Student), 2021
Köseoğlu M., IoT tabanlı enstrümantasyon sistemi kullanılarak farklı frekansların kurşun asit akülerin desülfasyonu üzerine etkilerinin incelenmesi, Postgraduate, Ö.FIRAT(Student), 2019
Köseoğlu M., Android tabanlı akıllı saatler için diyabet uygulaması, Postgraduate, Ö.PEKTAŞ(Student), 2018
Köseoğlu M., LAZER MESAFE ÖLÇER İLE OTONOM MOBİL ROBOTLARIN NAVİGASYON PLANLAMASI, Postgraduate, O.MURAT(Student), 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **An effective analog circuit design of approximate fractional-order derivative models of M-SBL fitting method**
KÖSEOĞLU M., DENİZ F. N. , ALAGÖZ B. B. , ALİSOY H.
ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH, vol.33, 2022 (Peer-Reviewed Journal)
- II. **An efficient PID-based optimizer loop and its application in De Jong's functions minimization and quadratic regression problems**
ALAGÖZ B. B. , DENİZ F. N. , KÖSEOĞLU M.
SYSTEMS & CONTROL LETTERS, vol.159, 2022 (Peer-Reviewed Journal)
- III. **Behavioural modelling of delayed imbalance dynamics in nature: a parametric modelling for simulation of delayed instability dynamics**
ALAGÖZ B. B. , DENİZ F. N. , KÖSEOĞLU M.
INTERNATIONAL JOURNAL OF GENERAL SYSTEMS, 2022 (Peer-Reviewed Journal)
- IV. **Revisiting four approximation methods for fractional order transfer function implementations: Stability preservation, time and frequency response matching analyses**
DENİZ F. N. , ALAGÖZ B. B. , TAN N., KÖSEOĞLU M.
ANNUAL REVIEWS IN CONTROL, vol.49, pp.239-257, 2020 (Peer-Reviewed Journal)
- V. **The Changes in Electrical and Interfacial Properties of Polyimide Exposed to Dielectric Barrier Discharge in SF6 Medium**
ALİSOY H. Z. , KÖSEOĞLU M.
SCIENTIFIC WORLD JOURNAL, 2013 (Peer-Reviewed Journal)
- VI. **Effect of Plasma Deposited Thin Carbon Layer on Dielectric Characteristics of Au-PI-Au Structures**
KÖSEOĞLU M., ALİSOY H. Z.
IEEE TRANSACTIONS ON DIELECTRICS AND ELECTRICAL INSULATION, vol.19, no.6, pp.2137-2144, 2012 (Peer-

Reviewed Journal)

- VII. **An approach for unipolar corona discharge in N-2/O-2 gas mixture by considering townsend conditions**
ALISOY H. Z. , Yesil A., KÖSEOĞLU M., ÜNAL İ.
JOURNAL OF ELECTROSTATICS, vol.69, no.4, pp.284-290, 2011 (Peer-Reviewed Journal)
- VIII. **The analysis of the charge on a cylindrical dielectric particle in unipolar corona field**
KÖSEOĞLU M., ALISOY H. Z.
JOURNAL OF ELECTROSTATICS, vol.69, no.3, pp.176-179, 2011 (Peer-Reviewed Journal)
- IX. **Effect of dielectric barrier discharge on the sorption properties of disperse porous materials in CO₂-silicagel and SF₆-silicagel systems**
ALISOY H. Z. , Yeroglu C., KOSEOGLU M., TAN N.
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.46, no.13, pp.4468-4473, 2007 (Peer-Reviewed Journal)
- X. **Investigation of the characteristics of dielectric barrier discharge in the transition region**
ALISOY H., Yeroglu C., KOSEOGLU M., HANSU F.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.38, no.24, pp.4272-4277, 2005 (Peer-Reviewed Journal)
- XI. **Charging kinetics of spherical dielectric particles in a unipolar corona field**
ALISOY H., ALISOY G., Koseoglu M.
JOURNAL OF ELECTROSTATICS, vol.63, no.12, pp.1095-1103, 2005 (Peer-Reviewed Journal)
- XII. **Calculation of electrical field of spherical and cylindrical gas voids in dielectrics by taking surface conductivity into consideration**
ALISOY G., ALISOY H., Koseoglu M.
COMPEL-THE INTERNATIONAL JOURNAL FOR COMPUTATION AND MATHEMATICS IN ELECTRICAL AND ELECTRONIC ENGINEERING, vol.24, no.4, pp.1152-1163, 2005 (Peer-Reviewed Journal)
- XIII. **Combined kinetic charging of particles on the precipitating electrode in a corona field**
ALISOY H., ALISOY G., HAMAMCI S. E. , Koseoglu M.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.37, no.10, pp.1459-1466, 2004 (Peer-Reviewed Journal)

Articles Published in Other Journals

- I. **Drying process of apple slices in low frequency electromagnetic field**
Memmedov A., KÖSEOĞLU M., KARADAĞ T.
International Journal of Recent Technology and Engineering, vol.8, no.3, pp.120-126, 2019 (Peer-Reviewed Journal)
- II. **Monitoring System for Solar Panel using Xbee ZB Module based Wireless Sensor Networks**
CİHAN M., KÖSEOĞLU M.
International Journal of Engineering Research and Technology, vol.8, no.5, pp.290-295, 2019 (Peer-Reviewed Journal)
- III. **Modeling and analysis of dielectric materials by using gradient-descent optimization method**
ALAGÖZ B. B. , Alisoy H. Z. , KÖSEOĞLU M., ALAGÖZ S.
INTERNATIONAL JOURNAL OF MODELING SIMULATION AND SCIENTIFIC COMPUTING, vol.8, no.1, 2017 (Peer-Reviewed Journal)
- IV. **MODELING OF ELECTROMAGNETIC WAVE DRYING PROCESS FOR SOME PEPPER SPECIES**
Memmedov A., Köseoğlu M.
INTERNATIONAL JOURNAL OF ENGINEERING AND MATHEMATICAL MODELLING, vol.3, no.1, pp.43-53, 2016 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Classification of Hand-Drawn Circuit Components by Considering the Analysis of Current Methods**

GÜNAY M., KÖSEOĞLU M.

2020 4th International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), İstanbul, Turkey, 22 - 24 October 2020

- II. **Performance Evaluation of Different Window Functions for Audio Fingerprint Based Audio Search Algorithm**
Uyanık H., Köseoğlu M.
2020 4th International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), İstanbul, Turkey, 22 - 24 October 2020, pp.1-4
- III. **Classification of Hand-Drawn Basic Circuit Components Using Convolutional Neural Networks**
GÜNAY M., KÖSEOĞLU M., YILDIRIM Ö.
2020 International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA), Ankara, Turkey, 26 - 28 June 2020
- IV. **The Effect of Different Noise Levels on The Performance of The Audio Search Algorithm**
UYANIK H., KÖSEOĞLU M.
2020 International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA), Ankara, Turkey, 26 - 28 June 2020
- V. **Nesnelerin İnterneti Tabanlı Batarya Yönetim Sistemi Tasarımı ve Uygulaması**
Köseoğlu M., Aydın Ö. F.
III. Uluslararası Battalgazi Bilimsel Çalışmalar Kongresi, Malatya, Turkey, 21 - 23 September 2019, pp.778-787
- VI. **Enzyme-based Amperometric Biosensors Used in CGM Technology**
PEKTAŞ Ö., KÖSEOĞLU M.
Academic Conference on Robotization, Engineering and Artificial Intelligence (AC-REAI 2019), Prag, Czech Republic, 8 - 10 August 2019, pp.186-193
- VII. **Kurşun Asit Aküler İçin Farklı Şarj Yöntemlerinin Karşılaştırılması**
Köseoğlu M., Aydın Ö. F.
EURASIA 3rd International Congress of Applied Sciences, Sivas, Turkey, 28 - 30 June 2019, pp.17-24
- VIII. **Smart and Wearable Technologies in Continuous Glucose Monitoring**
KÖSEOĞLU M., PEKTAŞ Ö.
International Engineering and Natural Sciences Conference - IENSC 2018, Diyarbakır, Turkey, 14 - 17 November 2018
- IX. **Utilizing the New Generation of Wearable Devices in a Combined Diabetes Diary Application**
Pektaş Ö., Muzny M., Arsand E., Hartvigsen G., Köseoğlu M.
International Conference on Advanced Technologies Treatments for Diabetes (ATTD), Vienna, Austria, 14 - 17 February 2018
- X. **Design of a smart glove for monitoring finger injury rehabilitation process via MQTT server**
KÖSEOĞLU M., Celik O. M. , Pektas O.
2nd International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), Kizilcahamam, Turkey, 19 - 21 October 2018, pp.620-625
- XI. **Artificial Lightning Control via MQTT Based IOT Server by a Smart Phone Application**
KÖSEOĞLU M., ORKAN MURAT Ç., PEKTAŞ Ö.
8th International Advanced Technologies Symposium (IATS'17), Elazığ, Turkey, 19 - 22 October 2017, pp.1576-1581
- XII. **Design of an Autonomous Mobile Robot Based on ROS**
KÖSEOĞLU M., Celik O. M. , Pektas O.
2017 International Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, Turkey, 16 - 17 September 2017
- XIII. **Space Charge Formation In Non-cristalline Polymers And GaSe By DBD In SF6 Medium**
ALISOY H. Z. , YEROĞLU C., KÖSEOĞLU M.
23rd International Symposium on Discharges and Electrical Insulation in Vacuum, Bucharest, Romania, 15 - 19 September 2008, pp.491-494

Supported Projects

TAĞLUK M. E. , KÖSEOĞLU M., IŞIK İ., Project Supported by Higher Education Institutions, DİFÜZYON TABANLI NANO AĞLARDAN MOLEKÜLER HABERLEŞMENİN MODELLEMESİ, 2018 - 2020

Metrics

Publication: 31

Citation (WoS): 49

Citation (Scopus): 56

H-Index (WoS): 4

H-Index (Scopus): 5

Non Academic Experience

Company, Enerden Energy LLC, Site of Construction

Company, Ankara Power Generation INC., Site of Construction