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International Researcher IDs

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Publons / Web Of Science ResearcherID: ABH-1005-2020

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Education Information

Doctorate, University of Sussex, Biomedical, United Kingdom 1994 - 1997

Postgraduate, Gaziantep University, Faculty Of Engineering, Elektrik Elektronik, Turkey 1990 - 1992

Undergraduate, Middle East Technical University, Faculty Of Engineering, Elektrik Elektronik, Turkey 1984 - 1990

Dissertations

Postgraduate, Modulation Response of A 1.55 μm InGaAsP Semiconductor Laser Diode, Gaziantep University, Mühendislik Fakültesi, Elektrik Elektronik, 1992

Research Areas

Electrical and Electronics Engineering, Electronic, Electronic Circuits, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Inonu University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2012 - Continues

Assistant Professor, Inonu University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1998 - 2012

Research Assistant, Inonu University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1994 - 1998

Research Assistant, Gaziantep University, Faculty Of Engineering, Elektrik-Elektronik Mühendisliği Bölümü (İngilizce), 1990 - 1993

Courses

Dalgacık teorisi ve çok boyutlu işaret işleme, Undergraduate Minor, 2023-2024

Zaman Frekans İşaret işleme Teknikleri, Undergraduate Minor, 2023-2024

Sayısal İşaret İşleme, Undergraduate Double Major, 2023-2024

00436 Sayısal Haberleşme, Undergraduate, 2013-2014

00415 Medikal Elektronik I, Undergraduate, 2013-2014

00431 Haberleşme, Undergraduate, 2013-2014

Advising Theses

TAĞLUK M. E., Davranışsal öğrenme bazlı bir yapay makine öğrenme yönteminin geliştirilmesi, Doctorate, Ö.FARUK(Student), 2015

TAĞLUK M. E., Small-World modelinde yeniden yapılandırma ve gürültülü sinaptik iletkenliğin talamokortikal yavaş dalgalar üzerindeki etkileri, Doctorate, R.TEKİN(Student), 2015

TAĞLUK M. E., Geniş bant kablosuz ağlarda sembolik modülasyonların hata analizi, Postgraduate, İ.İŞİK(Student), 2014

TAĞLUK M. E., Bilgisayarlı tomografi ile elde edilen volumetrik verinin işlenerek üç boyutlu görüntüye dönüştürülmesi, Postgraduate, F.NUR(Student), 2011

TAĞLUK M. E., Geliştirilen önişlemeli?sinir ağı modelleri ile yetişkin insanlarda uyku apne ve çeşitlerinin teşhisini, Doctorate, N.SEZGİN(Student), 2010

TAĞLUK M. E., Üçüncü nesil mobil telekomünikasyon sistemlerinin gelişimi ve radyo yükleme stratejileri, Postgraduate, B.ŞAHİN(Student), 2010

TAĞLUK M. E., Yüksek gerilim üreten dizel jeneratörlerden oluşan bir sistemin sinyalizasyon analizi, Postgraduate, M.KÖSEOĞLU(Student), 2003

Published journal articles indexed by SCI, SSCI, and AHCI

I. Analysis of the electronic integrate and fire neuron model

İŞİK İ., TAĞLUK M. E.

NEUROCOMPUTING, vol.488, pp.261-270, 2022 (SCI-Expanded)

II. Interference and molecule reception probability analysis in nano/micro scale communication systems using Fick's diffusion law

İŞIK İ., TAĞLUK M. E., Isik E.

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.37, no.2, pp.967-983, 2022 (SCI-Expanded)

III. Effect of receiver shape and volume on the Alzheimer disease for molecular communication via diffusion

İŞIK İ., Yilmaz H. B., Demirkol I., TAĞLUK M. E.

IET NANOBIO TECHNOLOGY, vol.14, no.7, pp.602-608, 2020 (SCI-Expanded)

IV. Design and development of travelling-wave-frequency-based transmission line fault locator using TMS320 DSP

ARKAN M., AKMAZ D., MAMİŞ M. S., TAĞLUK M. E.

IET SCIENCE MEASUREMENT & TECHNOLOGY, vol.13, no.4, pp.518-522, 2019 (SCI-Expanded)

V. Communication in nano devices: Electronic based biophysical model of a neuron

TAĞLUK M. E., İŞİK İ.

NANO COMMUNICATION NETWORKS, vol.19, pp.134-147, 2019 (SCI-Expanded)

VI. Forecasting financial indicators by generalized behavioral learning method

ERTUĞRUL Ö. F., TAĞLUK M. E.

SOFT COMPUTING, vol.22, no.24, pp.8259-8272, 2018 (SCI-Expanded)

VII. Fpga Tabanlı Dijital Haberleşme Sistemlerinin System Generator Aracı İle Analizi

İŞIK İ., TAĞLUK M. E.

Selçuk Journal of Applied Mathematics, vol.6, no.1, pp.25-31, 2018 (SCI-Expanded)

VIII. Transmission line fault location using traveling wave frequencies and extreme learning machine

Akmaz D., MAMİŞ M. S., ARKAN M., TAĞLUK M. E.

ELECTRIC POWER SYSTEMS RESEARCH, vol.155, pp.1-7, 2018 (SCI-Expanded)

IX. A novel machine learning method based on generalized behavioral learning theory

- Ertugrul O. F., TAĞLUK M. E.
NEURAL COMPUTING & APPLICATIONS, vol.28, no.12, pp.3921-3939, 2017 (SCI-Expanded)
- X. **Forecasting Local Mean Sea Level by Generalized Behavioral Learning Method**
Ertugrul O. F., TAĞLUK M. E.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.42, no.8, pp.3289-3298, 2017 (SCI-Expanded)
- XI. **A novel version of k nearest neighbor: Dependent nearest neighbor**
ERTUĞRUL Ö. F., TAĞLUK M. E.
APPLIED SOFT COMPUTING, vol.55, pp.480-490, 2017 (SCI-Expanded)
- XII. **Effects of Small-World Rewiring Probability and Noisy Synaptic Conductivity on Slow Waves: Cortical Network**
TEKİN R., TAĞLUK M. E.
NEURAL COMPUTATION, vol.29, no.3, pp.679-715, 2017 (SCI-Expanded)
- XIII. **Fault location determination for transmission lines with different series-compensation levels using transient frequencies**
Akmaç D., MAMİŞ M. S., ARKAN M., TAĞLUK M. E.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.25, no.5, pp.3764-3775, 2017 (SCI-Expanded)
- XIV. **A fast feature selection approach based on extreme learning machine and coefficient of variation**
ERTUĞRUL Ö. F., TAĞLUK M. E.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.25, no.4, pp.3409-3420, 2017 (SCI-Expanded)
- XV. **Beneficial effects of dexpanthenol on mesenteric ischemia and reperfusion injury in experimental rat model**
CAGIN Y. F., ATAYAN Y., Sahin N., PARLAKPINAR H., POLAT A., VARDI N., TAĞLUK M. E., TANBEK K., YILDIZ A.
FREE RADICAL RESEARCH, vol.50, no.3, pp.354-365, 2016 (SCI-Expanded)
- XVI. **A joint generalized exemplar method for classification of massive datasets**
TAĞLUK M. E., ERTUĞRUL Ö. F.
APPLIED SOFT COMPUTING, vol.36, pp.487-498, 2015 (SCI-Expanded)
- XVII. **The influence of ion concentrations on the dynamic behavior of the Hodgkin-Huxley model-based cortical network**
TAĞLUK M. E., TEKİN R.
COGNITIVE NEURODYNAMICS, vol.8, no.4, pp.287-298, 2014 (SCI-Expanded)
- XVIII. **Dual effects of melatonin on uterine myoelectrical activity of non-pregnant rats.**
SIMŞEK Y., PARLAKPINAR H., TURHAN U., TAĞLUK M. E., Ateş B.
Journal of the Turkish German Gynecological Association, vol.15, pp.86-91, 2014 (SCI-Expanded)
- XIX. **Effects of electromagnetic radiation from 3G mobile phone on heart rate, blood pressure and ECG parameters in rats**
COLAK C., PARLAKPINAR H., ERMIŞ N., TAĞLUK M. E., ÇOLAK C., SARIHAN E., DILEK O. F., TURAN B., BAKIR S., ACET A.
TOXICOLOGY AND INDUSTRIAL HEALTH, vol.28, no.7, pp.629-638, 2012 (SCI-Expanded)
- XX. **A new approach for estimation of obstructive sleep apnea syndrome**
TAĞLUK M. E., SEZGİN N.
EXPERT SYSTEMS WITH APPLICATIONS, vol.38, no.5, pp.5346-5351, 2011 (SCI-Expanded)
- XXI. **Classification of Sleep Apnea through Sub-band Energy of Abdominal Effort Signal Using Wavelets plus Neural Networks**
TAĞLUK M. E., SEZGİN N.
JOURNAL OF MEDICAL SYSTEMS, vol.34, no.6, pp.1111-1119, 2010 (SCI-Expanded)
- XXII. **Estimation of Sleep Stages by an Artificial Neural Network Employing EEG, EMG and EOG**
TAĞLUK M. E., SEZGİN N., AKIN M.
JOURNAL OF MEDICAL SYSTEMS, vol.34, no.4, pp.717-725, 2010 (SCI-Expanded)
- XXIII. **Virtual hysterosalpingography and hysteroscopy: assessment of uterine cavity and fallopian tubes**

- using 64-detector computed tomography data sets**
 Celik O., Karakas H. M., Hascalik S., TAĞLUK M. E.
 FERTILITY AND STERILITY, vol.93, no.7, pp.2383-2384, 2010 (SCI-Expanded)
- XXIV. Classification of sleep apnea by using wavelet transform and artificial neural networks**
 TAĞLUK M. E., AKIN M., Sezgin N.
 EXPERT SYSTEMS WITH APPLICATIONS, vol.37, no.2, pp.1600-1607, 2010 (SCI-Expanded)
- XXV. Effects of highly purified urinary FSH and human menopausal FSH on uterine myoelectrical dynamics**
 Hascalik S., Celik O., TAĞLUK M. E., Yildirim A., Aydin N. E.
 MOLECULAR HUMAN REPRODUCTION, vol.16, no.3, pp.200-206, 2010 (SCI-Expanded)
- XXVI. Energy based feature extraction for classification of sleep apnea syndrome**
 SEZGIN N., TAĞLUK M. E.
 COMPUTERS IN BIOLOGY AND MEDICINE, vol.39, no.11, pp.1043-1050, 2009 (SCI-Expanded)
- XXVII. Use of porcine small intestinal submucosa to reconstruct an ovarian defect**
 Celik O., Esrefoglu M., Hascalik S., GÜL M., TAĞLUK M. E., Elter K., Aydin E.
 INTERNATIONAL JOURNAL OF GYNECOLOGY & OBSTETRICS, vol.106, no.3, pp.218-222, 2009 (SCI-Expanded)
- XXVIII. Spectrotemporal changes in electrical activity of myometrium due to recombinant follicle-stimulating hormone preparations follitropin alfa and beta**
 Celik O., TAĞLUK M. E., Hascalik S., Elter K., Celik N., Aydin N. E.
 FERTILITY AND STERILITY, vol.90, pp.1348-1356, 2008 (SCI-Expanded)
- XXIX. Assessment of myoelectrical signal parameters in estrogen, progesterone, and human chorionic gonadotropin administered in nonpregnant rat myometrium after ovariectomy**
 CELIK O., HASCALIK S., TAĞLUK M. E., ELTER K., PARLAKPINAR H., Acet A.
 FERTILITY AND STERILITY, vol.89, no.1, pp.188-198, 2008 (SCI-Expanded)
- XXX. Bearing and misalignment fault detection in induction motors by using the space vector angular fluctuation signal**
 Arkan M., CALIS H., TAGLUK M. E.
 ELECTRICAL ENGINEERING, vol.87, no.4, pp.197-206, 2005 (SCI-Expanded)

Articles Published in Other Journals

- I. **Nano Sistemlerde Hücreler Arası Haberleşmenin Analiz Edilmesi**
 İŞIK İ., TAĞLUK M. E., İŞIK E.
 Journal of Intelligent Systems: Theory and Applications, vol.4, no.2, 2021 (Peer-Reviewed Journal)
- II. **EFFECT of THE VISCOSITY FOR MOBILE NANO SYSTEMS**
 İŞIK E., İŞIK İ., TAĞLUK M. E.
 Türk Doğa ve Fen Dergisi, vol.10, no.1, 2021 (Peer-Reviewed Journal)
- III. **Characterization of the influence of Amyloid β (1-42) By Way of Modeling Synaptic Cleft with an RC Electronic Circuit**
 TAĞLUK M. E., İŞIK İ.
 DÜMF Mühendislik Dergisi, vol.12, no.1, pp.53-59, 2021 (Peer-Reviewed Journal)
- IV. **Analisis of Half Sphere receiver Model in molecular Communucation Through Diffusion**
 İŞIK İ., TAĞLUK M. E., ER M. B.
 Journal of Physical Chemistry and Functional Materials, 2020 (Peer-Reviewed Journal)
- V. **FPGA TABANLI DİJİTAL HABERLEŞME SİSTEMLERİNİN SYSTEM GENERATOR ARACI İLEANALİZİ**
 İŞIK İ., TAĞLUK M. E.
 Selcuk Univ. J. Eng. Sci. Tech, vol.6, no.2, pp.255-265, 2018 (Peer-Reviewed Journal)

Books & Book Chapters

I. Engelliler ve Teknoloji

TAN N., TAĞLUK M. E.

in: Her Yönüyle Engellilik, Sermin Timur Taşhan Behice Erci, Editor, Anadolu Nobel Tıp Kitapevleri, pp.328-343, 2018

Refereed Congress / Symposium Publications in Proceedings

I. Sevofluran Anestezisi Altındaki Tavşanlarda Bupivakain ile Oluşturulan Siyatik Sinir Bloğuna İnsülinin Klinik, Elektrofizyolojik ve Histopatolojik Etkisi

AKSİN Y., ÖZKAN A. S., AKBAŞ S., KARAASLAN E., ÖZHAN O., YILDIZ A., TAĞLUK M. E., DURMUŞ M.

Türk Anesteziyoloji ve Reanimasyon Derneği 55.Uluslararası Kongresi, Antalya, Turkey, 28 October 2021

II. Effect of A_β on the Probability of Molecule Reception in MCvD

İŞİK E., İŞİK İ., TAĞLUK M. E.

3rd International Conference on Data Science and Applications (ICONDATA'20), İstanbul, Turkey, 25 - 28 June 2020, vol.2, pp.48

III. STATISTICAL BASED ANALYSIS OF ALZHEIMER'S DISEASE

İŞİK İ., TAĞLUK M. E.

5th International Regional Development Conference (IRDC'2019), Turkey, 26 - 28 September 2019

IV. Series Compensation with Constant Capacitors in Transmission Lines

AKMAZ D., MAMİŞ M. S., ARKAN M., TAĞLUK M. E.

8th International advanced technology symposium, (Iats2017), Elazığ, Turkey, 19 - 22 October 2017

V. Comparison of HDL Coder and System Generator Tools in terms of QPSK Analysis

İŞİK İ., TAĞLUK M. E.

2nd International Conference on Artificial Intelligence and Data Processing (IDAP17), Malatya, Turkey, 16 - 17 September 2017, pp.1-5

VI. A Preliminary Investigation of Receiver Models in Molecular Communication via Diffusion

İŞİK İ., TAĞLUK M. E., Yılmaz H. B.

2nd International Conference on Artificial Intelligence and Data Processing (IDAP17), Malatya, Turkey, 16 - 17 September 2017, pp.1-5

VII. Analysis Methods in Molecular Communication via Diffusion

İŞİK İ., TAĞLUK M. E.

2nd International Energy and Engineering Conference, Gaziantep, Turkey, 12 - 14 September 2017, pp.1-5

VIII. Investigation of Correlation of Vibration to BurrHeight in Drilling Free Form Surfaces

ERDOĞDU Y. E., BAHÇE E., TAĞLUK M. E.

International Conference on Advances and Innovations in Engineering, Elazığ, Turkey, 10 - 12 May 2017, pp.580-585

IX. Determining relevant features in estimating short-term power load of a small house via feature selection by extreme learning machine

ERTUĞRUL Ö. F., SEZGİN N., ÖZTEKİN A., TAĞLUK M. E.

2017 International Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, Turkey, 16 - 17 September 2017

X. Classification of Hand Opening/Closing and Fingers by Using Two Channel Surface EMG Signal

SEZGİN N., ERTUĞRUL Ö. F., TEKİN R., TAĞLUK M. E.

2017 International Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, Turkey, 16 - 17 September 2017

XI. Comparison of HDL Coder and System Generator Tools in terms of QPSK Analysis

İŞİK İ., TAĞLUK M. E.

2017 International Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, Turkey, 16 - 17

- September 2017
- XII. **Estimation of Short-Term Power Load of a Small House by Generalized Behavioural Learning Method**
ERTUĞRUL Ö. F., TAĞLUK M. E.
5th International Istanbul Smart Grid and Cities Congress and Fair (ICSG), İstanbul, Turkey, 19 - 21 April 2017,
pp.85-89
- XIII. **A Preliminary Investigation of Receiver Models in Molecular Communication via Diffusion**
İŞIK İ., Yilmaz H. B., TAĞLUK M. E.
2017 International Artificial Intelligence and Data Processing Symposium (IDAP), Malatya, Turkey, 16 - 17
September 2017
- XIV. **Influence of Rewiring on Spike Activity and Phase Coherence in a Small-World Cortical Network**
TEKİN R., TAĞLUK M. E.
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016,
pp.569-572
- XV. **European EMTP ATP Conference EEUG Meeting Courses 2015**
AKMAZ D., MAMİŞ M. S., TAĞLUK M. E., ARKAN M.
Travelling-wave based fault distance estimation for series compensated transmission lines using ATP-EMTP, 14 -
16 September 2015, pp.151-161
- XVI. **Travelling wave Based Fault Distance Estimation for Series Compensated Transmission Lines using
ATP EMTP**
AKMAZ D., MAMİŞ M. S., TAĞLUK M. E., ARKAN M.
European EMTP-ATP Conference, EEUG Meeting, Grenoble, France, 14 - 18 September 2015, pp.151-161
- XVII. **Detecting Fault Type and Fault Location in Power Transmission Lines by Extreme Learning Machines**
TAĞLUK M. E., MAMİŞ M. S., ARKAN M., Ertugrul O. F.
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015,
pp.1090-1093
- XVIII. **Fault Location on Series Compensated Power Transmission Lines Using Transient Spectrum**
Akmaç D., MAMİŞ M. S., ARKAN M., TAĞLUK M. E.
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015,
pp.951-954
- XIX. **LEARNING WITH CLASSICAL CONDITIONING**
ERTUĞRUL Ö. F., TAĞLUK M. E.
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April
2014, pp.927-930
- XX. **EMG Signal Classification by Extreme Learning Machine**
ERTUĞRUL Ö. F., TAĞLUK M. E., KAYA Y., TEKİN R.
21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013
- XXI. **Fault Detection at Power Transmission Lines by Extreme Learning Machine**
ERTUĞRUL Ö. F., TAĞLUK M. E., KAYA Y.
21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013
- XXII. **Bispectral Analysis of Epileptic EEG signals**
SEZGİN N., TAĞLUK M. E., ERTUĞRUL Ö. F., KAYA Y.
21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013
- XXIII. **Complexity and Irregularity Analysis of the Output Data of a Cortical Network**
TEKİN R., TAĞLUK M. E., ERTUĞRUL Ö. F., SEZGİN N.
21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013
- XXIV. **Design of PI and PID controllers for fractional order time delay systems**
Özyetkin M. M., Yeroğlu C., Tan N., Tağluk M. E.
9th IFAC Workshop on Time Delay Systems (IFAC TDS 2010), Prague, Czech Republic, June 7-9, 2010., Praha,
Czech Republic, 7 - 09 June 2010, pp.1-6
- XXV. **Medikal Görüntüler İçin Alternatif Bir Bölümleme Yaklaşımı**

DENİZ F. N., ALAGÖZ B. B., TAĞLUK M. E.

SIU2010 IEEE 18.Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Diyarbakır, Turkey, 22 - 24 April 2010

XXVI. Time-Frequency analysis of Snoring Sounds in Patients With Simple Snoring And OSAS

TAĞLUK M. E., AKIN M., SEZGİN N.

IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009,
pp.535-536

Supported Projects

TAĞLUK M. E., UĞUZ F., GÜÇ M. M., Project Supported by Higher Education Institutions, Elektrikli Araçlarda Motor Hız Kontrol Sistemine yönelik deney seti oluşturulması, 2020 - 2020

TAĞLUK M. E., IŞIK İ., Project Supported by Higher Education Institutions, Difüzyon Tabanlı Nano Ağlarda Amyloid Beta'nın Moleküller Haberleşme Üzerindeki Etkisinin Analizi, 2019 - 2020

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

TAĞLUK M. E., BOZ C., DOĞAN B., Project Supported by Higher Education Institutions, Elektrikli Araçlarda AC Motorun Hız Kontrol Sistemini geliştirmeye, 2018 - 2018

Patent

TAĞLUK M. E., Uyku Apnesini Teşhis Eden Cihaz, Patent, CHAPTER A Human Needs, Standard Registration, 2018

Metrics

Publication: 63

Citation (WoS): 265

Citation (Scopus): 323

H-Index (WoS): 9

H-Index (Scopus): 10