

## Prof. UMUT ENGİN AYTEN

### Personal Information

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**Address:** Elektronik ve Haberleşme Müh. Böl. Yıldız Teknik Üniversitesi Davutpaşa Mah. Davutpaşa Cad. 34220 Esenler İstanbul

### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAI-4198-2020

ScopusID: 24066310900

Yoksis Researcher ID: 175089

### Education Information

Doctorate, Yıldız Technical University, Graduate School Of Natural And Applied Sciences, Elektronik Ve Haberleşme Mühendisliği, Turkey 2003 - 2009

Postgraduate, Yıldız Technical University, Graduate School Of Natural And Applied Sciences, Elektronik Ve Haberleşme Mühendisliği, Turkey 2000 - 2003

Undergraduate, Bursa Uludağ University, Faculty Of Engineering-Architecture, Turkey 1995 - 2000

### Dissertations

Doctorate, Yeni aktif eleman yapıları ve analog devre tasarımındaki uygulamaları, Yıldız Technical University, Graduate School of Natural and Applied Sciences, 2009

Postgraduate, Akım modlu filtre devrelerinin sentezi, Yıldız Technical University, Graduate School of Natural and Applied Sciences, 2003

### Research Areas

Logic Design, Microprogramming and Control Structure, Printed Circuits, Thin Film, Thick Film and Hybrid ICs, Circuit Theory, Electronic Circuits

### Academic Titles / Tasks

Assistant Professor, Yıldız Technical University, Faculty Of Electrical & Electronics, Electronics And Communication Engineering, 2011 - Continues

Lecturer, Yıldız Technical University, Faculty Of Electrical & Electronics, Electronics And Communication Engineering, 2009 - 2011

Research Assistant, Yıldız Technical University, Faculty Of Electrical & Electronics, Electronics And Communication Engineering, 2000 - 2009

## Academic and Administrative Experience

Vice Dean, Yildiz Technical University, Faculty Of Electrical & Electronics, Electronics And Communication Engineering, 2020 - 2022

Deputy Head of Department, Yildiz Technical University, Faculty Of Electrical & Electronics, Electronics And Communication Engineering, 2019 - 2020

Deputy Head of Department, Yildiz Technical University, Faculty Of Electrical & Electronics, Electronics And Communication Engineering, 2016 - 2019

Deputy Head of Department, Yildiz Technical University, Faculty of Electrical & Electronics, Electronics And Communication Engineering, 2012 - 2013

## Courses

Akım Modlu Devreler, Postgraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016

Bitirme Çalışması, Undergraduate, 2018 - 2019

Lojik Devre Tasarımı, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2012 - 2013

Tasarım Projesi, Undergraduate, 2018 - 2019

İş Hayatına Hazırlık, Undergraduate, 2018 - 2019

Bitirme Çalışması, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2010 - 2011, 2009 - 2010

Çok Disiplinli Tasarım Projesi, Undergraduate, 2018 - 2019

Lojik Devreler, Undergraduate, 2018 - 2019

Bilgisayar Destekli Devre Analizi, Doctorate, 2018 - 2019

Seminer, Doctorate, 2017 - 2018

Devre ve Sistem Analizi, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011

Tasarım Projesi, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2009 - 2010

Seminer, Postgraduate, 2017 - 2018, 2016 - 2017, 2012 - 2013

Algoritmalar ve Programlama, Undergraduate, 2015 - 2016, 2012 - 2013, 2011 - 2012, 2010 - 2011

Elektrik Devre Temelleri, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010

Mesleki Terminoloji, Undergraduate, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010

## Supervised Theses

Ayten U. E., Özakın A., KESİRLİ MERTEBEDEN KONTROLÖR ANALİZİ VETASARIM, Postgraduate, H.ERSOY(Student), 2025

Ayten U. E., Akım çıkışlı sensörler için geçiş empedans modlu analog devre tasarımı, Postgraduate, M.TAHA(Student), 2024

Ayten U. E., HIGH VOLTAGE BATTERY SYSTEM AND MANAGEMENT ALGORITHM, Postgraduate, F.YARAT(Student), 2024

Ayten U. E., Design of a new cell balancing system for battery management systems, Postgraduate, D.KOÇYİĞİT(Student), 2023

Ayten U. E., MNovel methods for inverse problem solution in diffuse optical tomography systems, Doctorate, S.UYSAL(Student), 2023

Ayten U. E., Töreyn B. U., Automated myelin quantification with microscopic fluorescence imaging, Doctorate, S.ÇİMEN(Student), 2022

Ayten U. E., Modelling of the physiological control mechanisms regulating cerebral blood flow rate, Doctorate, S.BOZKURT(Student), 2022

Ayten U. E., Transresistance based active components with advantageous circuit applications, Doctorate, M.CEM(Student), 2022

Ayten U. E., Breath Tracking System Design and Integration into the Wearable System, Postgraduate, Ü.Hancılar(Student), 2022

Ayten U. E., Mahouti P., Boosting based ensemble learning approach in microwave circuits, Doctorate, H.KALAYCI(Student), 2022

Ayten U. E., Software based analysis of lightweight cryptography algorithms on microcontrollers with different architectures, Postgraduate, R.YARALI(Student), 2022

Ayten U. E., Durak Ata L., Design a novel multiple access scheme for massive machine type communication, Doctorate, F.TEKÇE(Student), 2021

Ayten U. E., Aktif Elemanlar İle Faz İlerlemeli, Gecikmeli Kompansatör ve Kontrolör Devrelerinin Tasarımı, Postgraduate, Y.BUZCU(Student), 2019

Ayten U. E., Video Sinyallerinde Hareket Tespit Uygulaması, Postgraduate, K.GENÇAY(Student), 2019

Ayten U. E., Elektrikli araçlar için batarya yönetim sistemi tasarımı, Postgraduate, H.SERHAT(Student), 2018

Ayten U. E., Genel amaçlı bir bellek arayüzü donanımının alanda programlanabilir kapı dizileri ile gerçekleştirilmesi, Postgraduate, D.DAVUTOĞLU(Student), 2018

Ayten U. E., Hareket edebilen elektronik ve genel amaçlı siberetik el ve kol sistemi, Postgraduate, E.TATLI(Student), 2018

Ayten U. E., Yapay sinir ağları kullanarak görüntü işlemeye dayalı ağırlık tahmini, Postgraduate, Ü.BURAK(Student), 2017

Ayten U. E., EEG SİNYALLERİNİN BEYİN MAKİNE ARAYÜZÜ AMAÇLI KULLANIMI, Postgraduate, S.ÇAKIR(Student), 2016

Ayten U. E., AKTİF ELEMANLAR İLE LİNEER OLMAYAN DEVRE TASARIMI VE UYGULAMALARI, Postgraduate, S.Erkan(Student), 2016

Ayten U. E., Novel multi-terminal building blocks with tuning ability and its application in analog signal processing, Postgraduate, A.KARTCI(Student), 2015

Ayten U. E., İnce tabakalı çift bant durduran frekans seçici yüzey tasarımı, Postgraduate, S.ÜNALDI(Student), 2015

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

- I. **In-silico Evaluation of the effects of blood flow rate change in ductus arteriosus on cardiac function and cerebral blood flow rate in term and preterm infants**  
Bozkurt S., Bal R., Engin Ayten U. E.  
Biomedical Signal Processing and Control, vol.97, 2024 (SCI-Expanded)
- II. **CC-CBTA-Based Floating Inductance Simulator with CM/VM PID Controllers**  
Sagbas M., ÇAM TAŞKIRAN Z. G., AYTEN U. E.  
Journal of Circuits, Systems and Computers, vol.33, no.8, 2024 (SCI-Expanded)
- III. **Current-mode PID controllers employing commercially available active components**  
Yurdem B., Sagbas M., AYTEN U. E.  
AEU - International Journal of Electronics and Communications, vol.175, 2024 (SCI-Expanded)
- IV. **COMPUTATIONAL SIMULATION OF THE INTERACTION AMONG AUTOREGULATION MECHANISMS REGULATING CEREBRAL BLOOD FLOW RATE IN SYSTOLIC HEART FAILURE**  
Bozkurt S., Ayten U. E.  
Journal of Biological Systems, vol.31, no.1, pp.69-91, 2023 (SCI-Expanded)
- V. **Short range electromagnetic interface using 0.35 μm CMOS blocks for temperature monitoring in isolated areas**  
Sotner R., Jerabek J., Polak L., Prokop R., Ayten U. E., Jaikla W.  
Journal of Advanced Research, vol.41, pp.49-62, 2022 (SCI-Expanded)
- VI. **Novel regularization method for diffuse optical tomography inverse problem**  
Uysal S., Uysal H., Ayten U. E.  
Optik, vol.261, 2022 (SCI-Expanded)
- VII. **In silico simulation of the interaction among autoregulatory mechanisms regulating cerebral blood flow rate in the healthy and systolic heart failure conditions during exercise**  
Bozkurt S., Ayten U. E.

MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, vol.60, no.7, pp.1863-1879, 2022 (SCI-Expanded)

- VIII. **Ensemble-based surrogate modeling of microwave antennas using XGBoost algorithm**  
Kalayci H., Ayten U. E., Mahouti P.  
INTERNATIONAL JOURNAL OF NUMERICAL MODELLING-ELECTRONIC NETWORKS DEVICES AND FIELDS, vol.35, no.2, 2022 (SCI-Expanded)
- IX. **A New Simulated Grounded Inductor Based on Two NICs, Two Resistors and a Grounded Capacitor**  
Yuce E., Alpaslan H., Minaei S., Ayten U. E.  
CIRCUITS SYSTEMS AND SIGNAL PROCESSING, vol.40, no.12, pp.5847-5863, 2021 (SCI-Expanded)
- X. **SCMA System Design with Index Modulation via Codebook Assignment**  
Tekçe F., Ayten U. E., Durak Ata L.  
IEEE Transactions On Vehicular Technology, vol.70, no.2, pp.1699-1708, 2021 (SCI-Expanded)
- XI. **Myelin detection in fluorescence microscopy images using machine learning**  
Çimen Yetiş S., Çapar A., Ekinci D. A., Ayten U. E., Kerman B. E., Töreyn B. U.  
JOURNAL OF NEUROSCIENCE METHODS, vol.346, 2020 (SCI-Expanded)
- XII. **A novel lead and lag compensator circuit employing a single current feedback operational amplifier**  
Buzcu Y., Topaloglu S., Ayten U. E., Sağbaş M.  
MICROELECTRONICS JOURNAL, vol.105, 2020 (SCI-Expanded)
- XIII. **A new universal mutator circuit for memcapacitor and meminductor elements**  
Çam Taşkıran Z. G., Sağbaş M., Ayten U. E., Sedef H.  
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.119, 2020 (SCI-Expanded)
- XIV. **Design of Wide Bandwidth, High-CMRR Voltage and Transadmittance-Mode Instrumentation Amplifier Using a Single CBTA**  
Sağbaş M., Ayten U. E.  
JOURNAL OF CIRCUITS SYSTEMS AND COMPUTERS, vol.29, 2020 (SCI-Expanded)
- XV. **Dual-Output Operational Transconductance Amplifier-Based Electronically Controllable Memristance Simulator Circuit**  
Taskiran Z. G., Ayten U. E., Sedef H.  
CIRCUITS SYSTEMS AND SIGNAL PROCESSING, vol.38, pp.26-40, 2019 (SCI-Expanded)
- XVI. **A voltage-mode PID controller using a single CFOA and only grounded capacitors**  
Ayten U. E., Yuce E., Minaei S.  
MICROELECTRONICS JOURNAL, vol.81, pp.84-93, 2018 (SCI-Expanded)
- XVII. **Resistorless Current-Mode First-Order All-Pass Filter with Electronic Tuning Employing Low-Voltage CBTA and Grounded Capacitor**  
Herencsar N., Koton J., Lahiri A., Ayten U. E., Sagbas M.  
JOURNAL OF CIRCUITS SYSTEMS AND COMPUTERS, vol.27, 2018 (SCI-Expanded)
- XVIII. **Current and transimpedance mode instrumentation amplifier using a single new active component named CDTRA**  
Dikbaş M. C., Ayten U. E.  
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.91, pp.24-36, 2018 (SCI-Expanded)
- XIX. **Voltage difference transresistance amplifier and its application: floating FDNR simulator circuit**  
Dikbaş M. C., Ayten U. E.  
INTERNATIONAL JOURNAL OF ELECTRONICS, vol.105, pp.1716-1727, 2018 (SCI-Expanded)
- XX. **Memristor emulator circuits using single CBTA**  
Ayten U. E., Minaei S., Sagbas M.  
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.82, pp.109-118, 2017 (SCI-Expanded)
- XXI. **Modified Gorski-Popiel Technique and Synthetic Floating Transformer Circuit Using Minimum Components**  
Sagbas M., Ayten U. E., Sedef H., Minaei S.  
JOURNAL OF CIRCUITS SYSTEMS AND COMPUTERS, vol.26, 2017 (SCI-Expanded)

- XXII. **A Novel Dual-Band Ultrathin FSS With Closely Settled Frequency Response**  
Unaldi S., Çimen S., Çakır G., Ayten U. E.  
IEEE ANTENNAS AND WIRELESS PROPAGATION LETTERS, vol.16, pp.1381-1384, 2017 (SCI-Expanded)
- XXIII. **Component reduced current-mode full-wave rectifier circuits using single active component**  
Sagbas M., Minaei S., Ayten U. E.  
IET CIRCUITS DEVICES & SYSTEMS, vol.10, pp.1-11, 2016 (SCI-Expanded)
- XXIV. **Realization of Low-Voltage Modified CBTA and Design of Cascadable Current-Mode All-Pass Filter**  
Ayten U. E., Sagbas M., Minaei S.  
RADIOENGINEERING, vol.23, pp.523-531, 2014 (SCI-Expanded)
- XXV. **Current and Voltage Mode Multiphase Sinusoidal Oscillators Using CBTAs**  
Sagbas M., Ayten U. E., Herencsar N., Minaei S.  
RADIOENGINEERING, vol.22, pp.24-33, 2013 (SCI-Expanded)
- XXVI. **Realization of New Mutually Coupled Circuit Using CC-CBTAs**  
Koksal M., Ayten U. E., Sağbaş M.  
CIRCUITS SYSTEMS AND SIGNAL PROCESSING, vol.31, pp.435-446, 2012 (SCI-Expanded)
- XXVII. **Novel Floating General Element Simulators Using CBTA**  
Ayten U. E., Sagbas M., Herencsar N., Koton J.  
RADIOENGINEERING, vol.21, pp.11-19, 2012 (SCI-Expanded)
- XXVIII. **Reply to comment on "Electronically tunable floating inductance simulator"**  
Sagbas M., Ayten U. E., Sedef H., Koksal M.  
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.66, pp.86-88, 2012 (SCI-Expanded)
- XXIX. **Electronically tunable sinusoidal oscillator circuit with current and voltage outputs**  
Ayten U. E., Sagbas M., Sedef H.  
INTERNATIONAL JOURNAL OF ELECTRONICS, vol.99, pp.1133-1144, 2012 (SCI-Expanded)
- XXX. **Current mode leapfrog ladder filters using a new active block**  
Ayten U. E., Sagbas M., Sedef H.  
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.64, pp.503-511, 2010 (SCI-Expanded)
- XXXI. **Current and voltage transfer function filters using a single active device**  
Sagbas M., Ayten U. E., Sedef H.  
IET CIRCUITS DEVICES & SYSTEMS, vol.4, pp.78-86, 2010 (SCI-Expanded)
- XXXII. **Floating Immittance Function Simulator and Its Applications**  
Sagbas M., Ayten U. E., Sedef H., Koksal M.  
CIRCUITS SYSTEMS AND SIGNAL PROCESSING, vol.28, pp.55-63, 2009 (SCI-Expanded)
- XXXIII. **Electronically tunable floating inductance simulator**  
Sagbas M., Ayten U. E., Sedef H., Koksal M.  
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.63, pp.423-427, 2009 (SCI-Expanded)

## Articles Published in Other Journals

- I. **A multi-spectral myelin annotation tool for machine learning based myelin quantification [version 1; peer review: 1 not approved]**  
Çapar A., Yetiş S. Ç., Aladağ Z., Ekinci D. A., AYTEN U. E., Kerman B. E., Töreyn B. U.  
F1000Research, vol.9, pp.1-10, 2021 (Scopus)
- II. **A multi-spectral myelin annotation tool for machine learning based myelin quantification**  
Çapar A., Çimen S., Aladağ Z., Ekinci D. A., Ayten U. E., Kerman B. E., Töreyn B. U.  
F1000Research, vol.9, pp.1492, 2020 (Scopus)
- III. **Yapay sinir ağları ile görüntü işlemeye dayalı uzaklıktan bağımsız ağırlık tahmin sistemi: yumurta ve**

### **portakal örnekleri**

Şalvarcı Ü. B., AYTEN U. E.

Journal of Geodesy and Geoinformation, vol.6, no.1, pp.26-46, 2019 (Peer-Reviewed Journal)

#### **IV. MCBTA Aktif Elemanı Kullanılarak Akım Modlu Dikgen Sinüsoidal Osilatör Devresi Tasarımı**

Ayten U. E.

Mühendislik Bilimleri ve Tasarım Dergisi, vol.6, no.1, pp.130-138, 2018 (Peer-Reviewed Journal)

#### **V. Çevrimiçi Çalışabilen Çoklu Ortama Uygun Hasta İzleme Sistemi**

Demirtaş M., Tulum G., Sağbaş M., Ayten U. E.

Sakarya University Journal Of Science, vol.22, no.1, pp.1-7, 2018 (Peer-Reviewed Journal)

## **Books**

### **I. Boosting - Based modelling of frequency selective surfaces**

MAHOUTİ P., AYTEN U. E., BELEN M. A., KALAYCI H.

in: Research & reviews in engineering - II, banu nergis, selahattin bardak, mahmut kayar, arif furkan mendi, Editor, gece kitaplığı, pp.105-129, 2021

### **II. Chapter 7- Boosting Based Modelling of Frequency Selective Surfaces**

Kalaycı H., MAHOUTİ P., BELEN M. A., AYTEN U. E.

in: RESEARCH & REVIEWS IN ENGINEERING - II, Prof. Dr. Banu NERGİS, Assoc. Prof. Dr. Selahattin BARDAK, Assoc. Prof. Dr. Mahmut KAYAR, Dr. Arif Furkan MENDİ, Editor, Gece Kitaplığı / Gece Publishing, Ankara, pp.105-129, 2021

### **III. Lojik Devreler Laboratuvarı Deney Kitabı**

Uzun T., Ayten U. E., Alpay M., Yıldız N.

Yıldız Teknik Üniversitesi Basım-Yayın Merkezi, İstanbul, 2008

## **Refereed Congress / Symposium Publications in Proceedings**

### **I. PI $\lambda$ D $\mu$ Approach for High-Efficiency BLDC Motor Control**

ERSOY H., AKGÜL B., AKPINAR E., ÖZAKIN A., AYTEN U. E.

2024 15th National Conference on Electrical and Electronics Engineering (ELECO), Turkey, 28 - 30 November 2024

### **II. Digital Realization of PI $\lambda$ D $\mu$ Controllers: Performance Evaluation on MCUs and FPGAs**

AKGÜL B., ERSOY H., AKPINAR E., ÖZAKIN A., AYTEN U. E.

IEEE International Conference on Electronics Circuits & Systems (ICECS), Nancy, France, 18 - 20 November 2024

### **III. A Robust Speed Controller Design for PMSM Using PI $\lambda$ D $\mu$ Controllers**

ERSOY H., AKGÜL B., AKPINAR E., ÖZAKIN A., AYTEN U. E.

47th International Conference on Telecommunications and Signal Processing, TSP 2024, Virtual, Online, Czech Republic, 10 - 12 July 2024, pp.289-293

### **IV. Elektrikli Araçlar için DC/DC Dönüştürücü Tabanlı Aktif Dengeleme Sistemi Tasarımı**

Yarat F., Ayten U. E.

18th International Scientific Research Congress (UBAK), Ankara, Turkey, 16 - 17 December 2023, pp.1

### **V. Transimpedance Amplifier Design and Performance Comparison for Photoelectric Cells**

Kavlak M. T., Ayten U. E.

2023 14th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 30 November - 02 December 2023, pp.1-5

### **VI. Numerical Assessment of the Effects of Ductus Arteriosus Closure on Cerebral Blood Flow Rate in Newborn Infants**

Bozkurt S., Ayten U. E.

- 2023 Medical Technologies Congress (TIPTEKNO), Gazimagusa, Cyprus (Kktc), 10 - 12 November 2023, pp.1-4
- VII. **Performance Analysis of Fractional Order Band Pass Filter Kesir Dereceli Bant Geçiren Filtrenin Performans Analizi**  
Yokuş Y. E., Özakin A., AYTEN U. E.  
31st IEEE Conference on Signal Processing and Communications Applications, SIU 2023, İstanbul, Turkey, 5 - 08 July 2023
- VIII. **Hybrid Battery Balancing System for Electric Drive Vehicles**  
Koçyiğit D., Ayten U. E.  
2nd International Conference on Technology (IconTech), Antalya, Turkey, 16 - 19 November 2022, pp.47-54
- IX. **Breath Tracking System Design with Velostat**  
Hancılar U., AYTEN U. E.  
2021 Medical Technologies Congress (TIPTEKNO), Antalya, Turkey, 04 November 2021
- X. **Breath Tracking System Design with Velostat - Velostat ile Nefes Takip Sistemi Tasarımı**  
Hancılar Ü., Ayten U. E.  
2021 Medical Technologies Congress, TIPTEKNO'21, Antalya, Turkey, 4 - 06 November 2021, pp.1-4
- XI. **Regional Resistance Value Optimization of Cerebral Blood Circulation**  
Bozkurt S., Ayten U. E.  
8th International Conference on Electrical and Electronics Engineering, ICEEE 2021, Antalya, Turkey, 9 - 11 April 2021, pp.234-237
- XII. **Telemetry system for electronic systems Elektronik Sistemler İçin Telemetri Sistemi**  
Arslan C., Elaydın Y. E., Sağış Z. C., Ayten U. E.  
12th International Conference on Electrical and Electronics Engineering, ELECO 2020, Bursa, Turkey, 26 - 28 November 2020, pp.97-102
- XIII. **Myelin segmentation in fluorescence microscopy images Floresan mikroskop görüntülerinde miyelin segmentasyonu**  
Yetis S., Ekinci D. A., Cakir E., Ekşioğlu E. M., AYTEN U. E., Çapar A., Töreyn B. U., Kerman B. E.  
2019 Medical Technologies Congress, TIPTEKNO 2019, İzmir, Turkey, 3 - 05 October 2019
- XIV. **Smart Sensor for Home Appliances**  
HAYDAR E., AYTEN U. E., KAHRAMAN N.  
2018 6th International Conference on Control Engineering Information Technology (CEIT), 25 - 27 October 2018
- XV. **Diffuz Optik Tomografide Ters Problem ve Genetik Algoritma İle Regülerizasyon Parametresi Seçimi**  
UYSAL S., UYSAL H., AYTEN U. E.  
4. Uluslararası Bilimsel Araştırmalar Kongresi, Yalova, Turkey, 14 - 17 February 2019, pp.307-318
- XVI. **DİFFÜZ OPTİK TOMOGRAFİDE TERS PROBLEM VE GENETİK ALGORİTMA İLE REGÜLARİZASYON PARAMETRESİ SEÇİMİ**  
Uysal S., Uysal H., Ayten U. E.  
4. Uluslararası Bilimsel Araştırmalar Kongresi, Yalova, Turkey, 14 - 17 February 2019, pp.1-4
- XVII. **Machine Learning Based Myelin Detection on Fluorescence Images**  
Çimen Yetiş S., Çapar A., Ekinci D. A., Ayten U. E., Kerman B. E., Töreyn B. U.  
The 3rd NEUBIAS Conference,, Luxembourg, Luxembourg, 2 - 08 February 2019, pp.118
- XVIII. **Modular Electrical Control System for Small Scale Underwater Vehicles**  
Eren R. K., Alan M. E., Tufan B., Erbil E., Ayten U. E.  
CEIT 2018, the 6th International Conference on Control Engineering Information Technology, İstanbul, Turkey, 25 October 2018, pp.1
- XIX. **Smart Sensor for Home Appliances**  
Haydar E., Ayten U. E., Kahraman N.  
CEIT 2018 6th International Conference on Control Engineering Information Technology, İstanbul, Turkey, 25 October 2018, pp.1
- XX. **Demo: Real-Time Video Frame Differentiator Based on External Memory Interface**  
Davutoğlu D., Yıldız N., Tavşanoğlu A. V., Ayten U. E.  
CNNA 2018 The 16th International Workshop on Cellular Nanoscale Networks and their Applications, Budapest,

Hungary, 28 - 30 August 2018, pp.1

- XXI. **Akım-Modlu Faz İlerlemeli ve Gecikmeli Kompansatör Devresi Tasarımı** Design of Current-Mode Lead and Lag Compensator Circuit  
Buzcu Y., Sağbaş M., Ayten U. E.  
TOK2018 Otomatik Kontrol Ulusal Toplantısı, Kayseri, Turkey, 12 September 2018, pp.172-176
- XXII. **Real-Time Video Frame Differentiator Based on DDR3 SDRAM Memory Interface**  
Davutoğlu D., Yıldız N., Tavşanoğlu A. V., Ayten U. E.  
CNNA 2018 The 16th International workshop on cellular nanoscale networks and their applications, Budapest, Hungary, 28 August 2018, pp.1-3
- XXIII. **The effect of codebook design on the BER performance of MTC systems employing SCMA** kullanılan MTC sistemlerde kod kitabı tasarımının bit hata oranı performansına etkileri  
Tekçe F., Çatak E., Ayten U. E., Durak-Ata L.  
26th IEEE Signal Processing and Communications Applications Conference, SIU 2018, İzmir, Turkey, 2 - 05 May 2018, pp.1-4
- XXIV. **Elektrikli Araçlar İçin Batarya Yönetim Sistemi Tasarımı**  
Gül H. S., Ayten U. E.  
9th International Automotive Technologies Congress, Bursa, Turkey, 07 May 2018, pp.1
- XXV. **Automated Myelin Quantification From Cem to DeepMQ**  
ÇİMEN S., ÇAPAR A., Ekinci D. A., AYTEN U. E., TÖREYİN B. U., KERMAN B. E.  
Neubias The Bioimage Analysis Community Conference, Szeged, Hungary, 31 January - 02 February 2018, pp.121
- XXVI. **DeepMQ: A Deep Learning Approach Based Myelin Quantification in Microscopic Fluorescence Images**  
Cimen S., Çapar A., Ekinci D. A., Ayten U. E., Kerman B. E., Töreyn B. U.  
European Signal Processing Conference (EUSIPCO), Rome, Italy, 3 - 07 August 2018, pp.61-65
- XXVII. **Real-time frame buffer implementation based on external memory using FPGA**  
Davutoglu D., Yıldız N., Ayten U. E., Tavsanoglu V.  
8th International Congress of Information and Communication Technology, ICICT 2018, Xiamen, China, 27 - 28 January 2018, vol.131, pp.641-646
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