

# **Prof. UĞUR BAYSAL**

## **Personal Information**

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## **International Researcher IDs**

ORCID: 0000-0002-2846-6780

Yoksis Researcher ID: 169878

## **Education Information**

Doctorate, Hacettepe University, Elektrik-Elektronik, Turkey 1993 - 1999

## **Foreign Languages**

English, C1 Advanced

## **Research Areas**

Biomedical Engineering, Clinical Engineering, Engineering and Technology

## **Academic Titles / Tasks**

Professor, Hacettepe University, Mühendislik Fakültesi, 2013 - Continues

Professor, Hacettepe University, Mühendislik Fakültesi, 2011 - Continues

## **Academic and Administrative Experience**

Hacettepe Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2014 - Continues

Hacettepe Üniversitesi, Hacettepe Ankara Sanayi Odası 1. Osb Meslek Yüksekokulu (Silinecek), 2002 - 2012

## **Courses**

ELE 361 ELECTRICAL MACHINERY, Undergraduate, 2017 - 2018, 2016 - 2017

ELE 107 COMPUTERS AND PROGRAMMING, Undergraduate, 2017 - 2018, 2016 - 2017

ELE 452 MEDICAL IMAGING, Undergraduate, 2016 - 2017

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

- I. Incorporating support vector machine to the classification of respiratory sounds by Convolutional Neural Network  
 Cinyol F., BAYSAL U., KÖKSAL D., Babaoğlu E., Ulaşlı S. S.  
 Biomedical Signal Processing and Control, vol.79, 2023 (SCI-Expanded)
- II. The Effects of Pulsed Electromagnetic Field (PEMF) on Osteoblast-Like Cells Cultured on Titanium and Titanium-Zirconium Surfaces  
 Atalay B., Aybar B., Erguven M., Emes Y., Bultan O., AKÇA K., Yalcin S., BAYSAL U., Issever H., Cehreli M. C., et al.  
 JOURNAL OF CRANIOFACIAL SURGERY, vol.24, no.6, pp.2127-2134, 2013 (SCI-Expanded)
- III. Low-level laser therapy vs. pulsed electromagnetic field on neonatal rat calvarial osteoblast-like cells  
 Emes Y., AKÇA K., Aybar B., Yalcin S., CAVUSOGLU Y., BAYSAL U., Issever H., Atalay B., Vural P., Erguven M., et al.  
 LASERS IN MEDICAL SCIENCE, vol.28, no.3, pp.901-909, 2013 (SCI-Expanded)
- IV. Determination of measurement noise, conductivity errors and electrode mislocalization effects to somatosensory dipole localization.  
 Sengul G., BAYSAL U.  
 BIOMEDICAL RESEARCH-INDIA, vol.23, no.4, pp.581-588, 2012 (SCI-Expanded)
- V. An extended Kalman filtering approach for the estimation of human head tissue conductivities by using EEG data: a simulation study  
 Sengul G., BAYSAL U.  
 PHYSIOLOGICAL MEASUREMENT, vol.33, no.4, pp.571-586, 2012 (SCI-Expanded)
- VI. The Effect of Statistically Constrained Minimum Mean Square Estimation Algorithm Which is Used For Human Head Tissue Conductivity Estimation to Source Localization  
 ŞENGÜL G., BAYSAL U.  
 JOURNAL OF NEUROLOGICAL SCIENCES-TURKISH, vol.29, no.2, pp.266-279, 2012 (SCI-Expanded)
- VII. Single Camera Photogrammetry System for EEG Electrode Identification and Localization  
 BAYSAL U., SENGUL G.  
 ANNALS OF BIOMEDICAL ENGINEERING, vol.38, no.4, pp.1539-1547, 2010 (SCI-Expanded)
- VIII. An experimental study on the effect of the anisotropic regions in a realistically shaped torso phantom  
 Sengul G., Liehr M., Haueisen J., BAYSAL U.  
 ANNALS OF BIOMEDICAL ENGINEERING, vol.36, no.11, pp.1836-1843, 2008 (SCI-Expanded)
- IX. Simulating the propagation of spreading cortical depression (SCD) wavefront on human brain surface  
 Baysal U., HAUEISEN J., DURGUT K., DEMIRCI M.  
 COMPUTERS IN BIOLOGY AND MEDICINE, vol.37, no.10, pp.1446-1454, 2007 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. H Ankışhan, U Baysal , Max-Min Space Approach for Acoustic Signal Analysis  
 ANKİŞHAN H., BAYSAL U.  
 21st National Biomedical Engineering Meeting (BIYOMUT), 2017, 15 - 20 November 2017
- II. A New Approach for Estimation of Heart Beat Rates from Speech Recordings, 21st National Biomedical Engineering Meeting (BIYOMUT), 2017  
 ANKİŞHAN H., BAYSAL U.  
 (BIYOMUT), 2017, Turkey, 15 - 20 November 2017
- III. Classification of lung sounds with convolutional neural network  
 CİNYOL F., MUTLU H. E., BAYSAL U.  
 21st National Biomedical Engineering Meeting (BIYOMUT), 2017, 15 - 20 November 2017
- IV. A proposed micro inverter performance test set-up under real-time operation, pp314-316, 2017.  
 GÖK G., BAYSAL U.

Electrical and Electronics Engineering (ELECO), Turkey, 15 - 20 October 2017

V. A Proposed Micro inverter Performance Test Set-up under Real-Time Operation

Gok G., BAYSAL U.

10th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 30 November - 02 December 2017, pp.314-316

VI. Max-Min Space Approach for Acoustic Signal Analysis

Ankishan H., BAYSAL U.

21st National Biomedical Engineering Meeting (BIYOMUT), İstanbul, Turkey, 24 November - 26 December 2017

VII. A New Approach for Estimation of Heart Beat Rates from Speech Recordings

Ankishan H., BAYSAL U.

21st National Biomedical Engineering Meeting (BIYOMUT), İstanbul, Turkey, 24 November - 26 December 2017

VIII. Effects of anisotropy in a physical torso phantom on source reconstructions from a current dipole

Liehr M., Sengul G., BAYSAL U., Haueisen J.

Joint Meeting of the 6th Symposium on Noninvasive Functional Source Imaging of the Brain and Heart/International Conference on Functional Biomedical Imaging, Hangzhou, China, 12 - 14 October 2007, pp.100-102

IX. MESLEKİ TEKNİK EĞİTİMDE RESİMHANELERİN ERGONOMİSİ

UZEL M., BAŞTÜRK N., BAYSAL U.

3. ULUSAL MESLEK YÜKSEKOKULLARI SEMPOZYUMU, Burdur, Turkey, 28 - 30 September 2005, pp.567-572

## Supported Projects

BAYSAL U., SARINÇ ULAŞLI S., GELİR E., BABAOĞLU E., CİNYOL F., KÖKSAL D., Project Supported by Higher Education Institutions, Normal Solunum Sesleri Ral ve Ronkübü Ayırt Edebilen Akıllı Karar Destek Sisteminin Geliştirilmesi, 2018 - 2021

BAYSAL U., Yıldırım İ. K., Project Supported by Higher Education Institutions, PERİYODİK GERİLİM VE AKIM ÖLÇÜM YAPAN SİSTEM İÇİN EN YÜKSEK GÜC İZLEMELİ (MPPT) FOTOVOLTAİK GÜC ÜNİTESİ GELİŞTİRİLMESİ, 2018 - 2019

BAYSAL U., GELİR E., BABAOĞLU E., Project Supported by Higher Education Institutions, Patolojik solunum seslerinin kayıt edilmesi için elektronik ve bilişimsel altyapı hazırlığı, 2018 - 2019

BAYSAL U., Ataman Sadık D., Project Supported by Higher Education Institutions, TROMBİN DETEKSİYONU İÇİN ALTIN YÜZEYLER ÜZERİNDE 33 DITHIODIPROPIONIC ACID DIHYDROXYSUCCINIMIDE ESTER DSP 6MERCAPTO1HEXANOL MCH KARIŞIK TABAKALAR OLUŞTURULARAK YÜZEY PLAZMON REZONANS YPR SENSÖRÜNÜN GELİŞTİRİLMESİ, 2016 - 2017

## Metrics

Publication: 22

Citation (WoS): 42

Citation (Scopus): 51

H-Index (WoS): 4

H-Index (Scopus): 5

## Non Academic Experience

TÜBİTAK

KALKINMA BAKANLIĞI

HACETTEPE ÜNİVERSİTESİ