

Prof. OLCAY AKAY

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: Q-1562-2019

ScopusID: 35612081100

Yoksis Researcher ID: 143193

Education Information

Doctorate, University of Rhode Island, United States Of America 1994 - 2000

Undergraduate, Dokuz Eylul University, Mühendislik Fakültesi, Elektrik - Elektronik Mühendisliği Bölümü, Turkey 1986 - 1990

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Unitary and Hermitian Operators and Their Extensions: Fractional Mellin Transform, Joint Fractional Representations, and Fractional Correlations, University of Rhode Island, 2000

Research Areas

Electrical and Electronics Engineering

Academic Titles / Tasks

Professor, Dokuz Eylul University, Mühendislik Fakültesi, Elektrik - Elektronik Mühendisliği Bölümü, 2020 - Continues

Academic and Administrative Experience

Head of Department, Dokuz Eylul University, Mühendislik Fakültesi, Elektrik - Elektronik Mühendisliği Bölümü, 2024 - Continues

Deputy Head of Department, Dokuz Eylul University, 2020 - 2021

Dokuz Eylul University, 2016 - 2018

Courses

Introduction to Signals, Undergraduate, 2023 - 2024, 2022 - 2023
Signals and Systems, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Final Year Project, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Random Variables and Stochastic Processes, Postgraduate, 2023 - 2024, 2022 - 2023, 2020 - 2021
M.Sc. Thesis, Postgraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Ph.D. Research, Doctorate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Digital Signal Processing, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Research Project, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
M.Sc. Research, Postgraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
MSc Seminar, Postgraduate, 2023 - 2024
Development of Reading & Writing Skills, Undergraduate, 2023 - 2024, 2022 - 2023
Ph.D. Thesis, Doctorate, 2022 - 2023, 2021 - 2022
Adaptive Filter Theory, Postgraduate, 2021 - 2022

Advising Theses

Akay O., Digital image watermarking using fractional Fourier transform, Postgraduate, O.DUMAN(Student), 2024
AKAY O., Mimo radarlar için spektrum boyutunda sinyal tasarımı, Postgraduate, O.KOZAKÇIOĞLU(Student), 2018
AKAY O., Spektral ve zamansal kısıtları sağlayan gönderim dalgalarının sentezlenmesi, Doctorate, O.TAYFUN(Student), 2018
AKAY O., Bilişsel radyoda dinamik spektrum yönetimi için spektrum algılama yöntemlerinin geliştirilmesi, Doctorate, T.DÜZENLİ(Student), 2016
AKAY O., DSP kartı kullanarak Türkçe metinden konuşma sentezleme, Postgraduate, U.AYAZ(Student), 2016
AKAY O., Rassal modelleme analiz ve filtrelemenin görüntü bölütlemeye uygulanması, Postgraduate, M.ÖZDEMİR(Student), 2015
AKAY O., Histopatolojik görüntülerin analizi ve işlenmesi, Postgraduate, S.BARDAKÇI(Student), 2012
AKAY O., Doğal taşların nicel ve nitel özelliklerinin sinyal ve görüntü işleme teknikleri kullanılarak belirlenmesi, Postgraduate, O.TAYFUN(Student), 2011
AKAY O., Konuşma seslerinin iyileştirilmesi için gerçek zamanlı olarak ses sinyallerinin işlenmesi, Postgraduate, F.ALİM(Student), 2011
AKAY O., Kalman süzgeci kullanarak imge onarımı, Postgraduate, M.ALİ(Student), 2008
AKAY O., Doğal mermer kayaç örneklerinin yapay sinir ağları ve görüntü işleme yöntemleri ile sınıflandırılması, Postgraduate, E.ARDALI(Student), 2008
AKAY O., İnternet protokolü üzerinden veri transferi, Postgraduate, B.NASUH(Student), 2008
AKAY O., Çok fazlı darbe sıkıştırma dalga şekillerini kullanarak kesirli otokorelasyon ve çapraz korelasyon işlemlerinin hedef tesbiti ve mesafe kestiriminde uygulanması, Postgraduate, E.ERÖZDEN(Student), 2006
AKAY O., Kesirli Mellin dönüşümünün dijital olarak hesaplanması ve uygulamaları, Postgraduate, E.BİNER(Student), 2004

Jury Memberships

Doctoral Examination, Doctoral Examination, Dokuz Eylül Üniversitesi, July, 2024
Doctoral Examination, Doctoral Examination, Dokuz Eylül Üniversitesi, April, 2024
Doctoral Examination, Doctoral Examination, Dokuz Eylül Üniversitesi, March, 2024
Post Graduate, Post Graduate, Dokuz Eylül Üniversitesi, February, 2024

Doctorate, Doctorate, Dokuz Eylül Üniversitesi, February, 2024
Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Dokuz Eylül Üniversitesi, January, 2024
Academic Staff Examination, Academic Staff Examination, Dokuz Eylül Üniversitesi, January, 2024
Doctoral Examination, Doctoral Examination, Dokuz Eylül Üniversitesi, January, 2024
Doctoral Examination, Doctoral Examination, Dokuz Eylül Üniversitesi, January, 2024
Associate Professor Exam, Associate Professor Exam, Dokuz Eylül Üniversitesi, December, 2023
Post Graduate, Post Graduate, Dokuz Eylül Üniversitesi, September, 2023
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Dokuz Eylül Üniversitesi, June, 2023
Doctoral Examination, Doctoral Examination, İzmir Ekonomi Üniversitesi, June, 2023
Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Dokuz Eylül Üniversitesi, February, 2023
Associate Professor Exam, Associate Professor Exam, Dokuz Eylül Üniversitesi, January, 2023
Associate Professor Exam, Associate Professor Exam, Dokuz Eylül Üniversitesi, January, 2023
Doctorate, Doctorate, Dokuz Eylül Üniversitesi, September, 2022
Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Dokuz Eylül Üniversitesi, August, 2022
Associate Professor Exam, Associate Professor Exam, Dokuz Eylül Üniversitesi, July, 2022
Associate Professor Exam, Associate Professor Exam, Dokuz Eylül Üniversitesi, July, 2022
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Dokuz Eylül Üniversitesi, June, 2022
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Dokuz Eylül Üniversitesi, June, 2022
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Dokuz Eylül Üniversitesi, January, 2022
Associate Professor Exam, Associate Professor Exam, Dokuz Eylül Üniversitesi, January, 2022
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Dokuz Eylül Üniversitesi, January, 2022

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Designing radar transmit sequences satisfying simultaneous temporal integrated sidelobe level and spectral stopband constraints**
Biskin O. T., AKAY O.
DIGITAL SIGNAL PROCESSING, vol.107, 2020 (SCI-Expanded)
- II. **A New Method of Spectrum Sensing in Cognitive Radio for Dynamic and Randomly Modelled Primary Users**
Duzenli T., AKAY O.
IETE JOURNAL OF RESEARCH, 2019 (SCI-Expanded)
- III. **Frequency domain sequence design algorithm minimising weighted integrated sidelobe level**
Biskin O. T., AKAY O.
IET RADAR SONAR AND NAVIGATION, vol.13, no.3, pp.464-472, 2019 (SCI-Expanded)
- IV. **SIMPLE AND EFFICIENT PREDICTION OF NEAR FUTURE STATE OF TRAFFIC USING ONLY PAST SPEED INFORMATION**
Kababulut F. Y., GÜRKAN KUNTALP D., AKAY O., Duzenli T.
PROMET-TRAFFIC & TRANSPORTATION, vol.30, no.5, pp.589-599, 2018 (SCI-Expanded)
- V. **Static state estimation and detection of data injection attacks for smart grid security under symmetric alpha -stable noise**
Yavuz A., ÇEK M. E., AKAY O.

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.32, no.2, pp.459-468, 2017 (SCI-Expanded)

- VI. **A New Spectrum Sensing Strategy for Dynamic Primary Users in Cognitive Radio**
Duezenli T., AKAY O.
IEEE COMMUNICATIONS LETTERS, vol.20, no.4, pp.752-755, 2016 (SCI-Expanded)
- VII. **An automated industrial conveyor belt system using image processing and hierarchical clustering for classifying marble slabs**
SELVER M. A., AKAY O., Alim F., Bardakci S., ÖLMEZ M.
ROBOTICS AND COMPUTER-INTEGRATED MANUFACTURING, vol.27, no.1, pp.164-176, 2011 (SCI-Expanded)
- VIII. **Using AdaBoost classifiers in a hierarchical framework for classifying surface images of marble slabs**
DOĞAN H., AKAY O.
EXPERT SYSTEMS WITH APPLICATIONS, vol.37, no.12, pp.8814-8821, 2010 (SCI-Expanded)
- IX. **Employing fractional autocorrelation for fast detection and sweep rate estimation of pulse compression radar waveforms**
AKAY O., Erozdin E.
SIGNAL PROCESSING, vol.89, no.12, pp.2479-2489, 2009 (SCI-Expanded)
- X. **Cascaded and Hierarchical Neural Networks for Classifying Surface Images of Marble Slabs**
SELVER M. A., AKAY O., Ardali E., YAVUZ A. B., ÖNAL O., Oezden G.
IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS PART C-APPLICATIONS AND REVIEWS, vol.39, no.4, pp.426-439, 2009 (SCI-Expanded)
- XI. **Fractional convolution and correlation via operator methods and an application to detection of linear FM signals**
Akay O., Boudreaux-Bartels G.
IEEE TRANSACTIONS ON SIGNAL PROCESSING, vol.49, no.5, pp.979-993, 2001 (SCI-Expanded)
- XII. **Joint fractional signal representations**
Akay O., Boudreaux-Bartels G. F.
Journal of the Franklin Institute, vol.337, no.4, pp.365-378, 2000 (SCI-Expanded)
- XIII. **Unitary and Hermitian fractional operators and their relation to the fractional Fourier transform**
Akay O., Boudreaux-Bartels G.
IEEE SIGNAL PROCESSING LETTERS, vol.5, no.12, pp.312-314, 1998 (SCI-Expanded)

Articles Published in Other Journals

- I. **The Effect of Primary User Traffic on the Performance of Robust and Conventional Goodness of Fit (GOF) Test based Spectrum Sensing Methods in Cognitive Radio**
DÜZENLİ T., AKAY O.
Uluslararası Mühendislik Arastırma ve Geliştirme Dergisi, vol.9, no.3, pp.89-99, 2017 (Peer-Reviewed Journal)
- II. **KESİRLİ FOURIER DÖNÜŞÜMÜNÜN SİMETRİ ÖZELLİKLERİ**
AKAY O.
DEÜ MÜHENDİSLİK FAKÜLTESİ MÜHENDİSLİK BİLİMLERİ DERGİSİ, vol.13, no.3, pp.53-61, 2011 (Peer-Reviewed Journal)
- III. **Teaching digital signal processing through modular based project oriented learning in electrical engineering**
GÜRKAN KUNTALP D., KALAYCI DEMİR G., AKAY O.
International Journal of Teaching and Case Studies, vol.3, no.2/3/4, pp.196-208, 2011 (Peer-Reviewed Journal)

Books & Book Chapters

I. Fractional Autocorrelation for Detection in Communications

AKAY O., BoudreauxBartels F.

in: Time Frequency Signal Analysis and Processing, Boualem Boashash, Editor, Elsevier Academic Press, London, pp.770-777, 2016

Refereed Congress / Symposium Publications in Proceedings

I. Employment and Investigation of Various CNN Models and Datasets for Facial Expression Recognition and Classification

Avcı S. O., Akay O.

14th INTERNATIONAL CONFERENCE on ELECTRICAL and ELECTRONICS ENGINEERING (ELECO 2023), 30 November - 02 December 2023, pp.1-5

II. Definition of a Graph Cepstrum for Homomorphic Processing of Graph Signals

Canlı Usta Ö., Akay O.

31. IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı, İstanbul, Turkey, 5 - 08 July 2023, pp.1-4

III. Effect of Non-Gaussian Noise on Detection Performance of Multi-Stage Detectors

DÜZENLİ T., AKAY O.

4th International Symposium on Innovative Approaches in Engineering and Natural Sciences, 22 - 24 November 2019

IV. Effect of Non-Gaussian Noise and Primary User Traffic on Detection Performance in Cognitive Radio

Duzenli T., AKAY O.

26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018

V. A New Algorithm for Designing Sequences using Stopband and Correlation Constraints

Biskin O. T., AKAY O.

26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018

VI. The Effect of Primary User Traffic on the Performance of Goodness of Fit Test based Spectrum Sensing Methods in Cognitive Radio

DÜZENLİ T., AKAY O.

I. ULUSLARARASI BİLİMSEL VE MESLEKİ ÇALIŞMALAR SEMPOZYUMU (BILMES 2017), Nevşehir, Turkey, 05 October 2017 - 08 April 2018, pp.796-801

VII. Design of Sequences with Low Autocorrelation Sidelobes using Genetic Algorithms

Biskin O. T., AKAY O.

10th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 30 November - 02 December 2017, pp.1146-1150

VIII. Extending SCAN and SHAPE Algorithms for Designing MIMO Radar Sequence Sets

Kozakciglu O., AKAY O.

10th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 30 November - 02 December 2017, pp.1141-1145

IX. User Aligned Histogram Stacks for Visualization of Abdominal Organs via MRI

Ozdemir M., Akay O., Guzelis C., Dicle O., SELVER M. A.

5th International Conference on Mathematical Modeling in Physical Sciences (IC-MSquare), Athens, Greece, 23 - 26 May 2016, vol.738

X. Channel State Prediction for Cognitive Radios with Stochastically Varying Primary User Traffic Density

Duzenli T., AKAY O.

23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.1232-1235

XI. A Method for Robustifying Classical Nonparametric Spectral Estimation Techniques

Biskin O. T., AKAY O.

23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015,

pp.2274-2277

- XII. **Birincil Kullanıcı Trafiki İçeren Bilişsel Radyolarda Kanal Durumunun Tahmini için Yeni Bir Yöntem**
DÜZENLİ T., AKAY O.
Eleco 2014 Elektrik – Elektronik – Bilgisayar ve Biyomedikal Mühendisliği Sempozyumu ELECO 2014, Bursa, Turkey, 27 - 29 November 2014
- XIII. **Akıllı Şebeke Güvenliği için Veri Enjeksiyon Saldırılarının Tespiti**
Yavuz A. R., ÇEK M. E., AKAY O.
Akıllı Sistemlerde Yenilikler ve Uygulamaları (ASYU), Turkey, 9 - 10 October 2014, pp.92-96
- XIV. **BİLİŞSEL RADYOLAR İÇİN BİRİNCİL KULLANICI TRAFİĞİ İÇEREN KANALLARDA DİNAMİK PROGRAMLAMA VE ORTALAMA KÜMÜLATİF TOPLAMA DAYALI YENİ BİR TEST İSTATİSTİĞİNİN ÖNERİLMESİ**
DÜZENLİ T., AKAY O.
V. İletişim Teknolojileri Ulusal Sempozyumu, İzmir, Turkey, 16 - 17 May 2013
- XV. **A new method of wavelet domain watermark embedding and extraction using fractional Fourier transform**
Duman O., AKAY O.
7th International Conference on Electrical and Electronics Engineering, ELECO 2011, Bursa, Turkey, 1 - 04 December 2011
- XVI. **A Case Study of Modular-Based Project Oriented Learning in Electrical Engineering**
GÜRKAN KUNTALP D., KALAYCI DEMİR G., AKAY O.
1st International Conference on Reforming Education, Quality of Teaching and Technology-Enhanced Learning: Learning Technologies, Quality of Education, Educational Systems, Evaluation, Pedagogies, Athens, Greece, 19 - 21 May 2010, vol.73, pp.164-169
- XVII. **Evaluating clustering methods for classification of marble slabs in an automated industrial marble inspection system**
SELVER M. A., AKAY O.
6th International Conference on Electrical and Electronics Engineering, ELECO 2009, Bursa, Turkey, 5 - 08 November 2009
- XVIII. **Predicting Uniaxial Compressive Strengths of Brecciated Rock Specimens using Neural Networks and Different Learning Models**
SELVER M. A., Ardali E., Onal O., Akay O.
23rd International Symposium on Computer and Information Sciences, İstanbul, Turkey, 27 - 29 October 2008, pp.437-440
- XIX. **Noise reduction in chaotic signals by using Wiener and Kalman filtering methods**
ÇEK M. E., Oral O., AKAY O.
IEEE 15th Signal Processing and Communications Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007, pp.865-866
- XX. **Feature extraction for quantitative classification of marbles**
Selver A., Ardali E., AKAY O.
IEEE 15th Signal Processing and Communications Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007, pp.680-683
- XXI. **Digital Computation of the Fractional Mellin Transform**
Biner E., AKAY O.
13th European Signal Processing Conference (EUSIPCO 2005), Antalya, Turkey, 4 - 08 September 2005
- XXII. **Kesirli Otokorelasyonun Çok Fazlı Kodlamalı Radar Sinyallerinin Algılanması ve Parametre Kestiriminde Kullanımı**
Erözden E., AKAY O.
Sinyal İşleme ve İletişim Uygulamaları Kurultayı SIU 2004, Kuşadası, Turkey, 15 - 17 April 2004
- XXIII. **Use of fractional autocorrelation in efficient detection of pulse compression radar signals**
AKAY O., Erözden E.
First International Symposium on Control, Communications and Signal Processing, 2004., Hammamet, Tunisia,

Tunisia, 21 - 24 March 2004

XXIV. Linear Fractional Shift Invariant (LFSI) Systems

AKAY O.

ISSPA 2003, Paris, France, 2 - 05 July 2003

XXV. Kesirli Çapraz Korelasyonun Radar Sinyal İşlemede Kullanılması

AKAY O.

Sinyal İşleme ve İletişim Uygulamaları Kurultayı SİU 2003, İstanbul, Turkey, 18 - 20 June 2003

XXVI. Fractional Convolution and Correlation: Simulation Examples and an Application to Radar Signal Detection

AKAY O.

NORSIG 2002, Tromso, Norway, 16 - 19 October 2002

XXVII. Broadband interference excision in spread spectrum communication systems via fractional Fourier transform

AKAY O., BoudreauxBartels G. F.

Conference Record of Thirty-Second Asilomar Conference on Signals, Systems and Computers (Cat. No.98CH36284), Pacific Grove, CA, USA, United States Of America, 1 - 04 November 1998

XXVIII. Joint Fractional Representations

AKAY O., BoudreauxBartels G. F.

IEEE-SP TFTS 1998, Pittsburgh, United States Of America, 1 - 03 October 1998

XXIX. Fractional autocorrelation and its application to detection and estimation of linear FM signals

AKAY O., BoudreauxBartels G. F.

IEEE-SP International Symposium on Time-Frequency and Time-Scale Analysis, Pittsburgh, United States Of America, 6 - 09 September 1998

XXX. Fractional Mellin Transform: An Extension of Fractional Frequency Concept for Scale

AKAY O., BoudreauxBartels G. F.

8th IEEE DSP Workshop, Bryce Canyon, United States Of America, 5 - 08 August 1998

XXXI. Linear fractionally invariant systems: fractional filtering and correlation via fractional operators

AKAY O., BoudreauxBartels G. F.

Thirty-First Asilomar Conference on Signals, Systems Computers, Pacific Grove, United States Of America, 31 October - 02 November 1997

XXXII. New Fractional Operators and Their Properties: A Generalization of Time and frequency Operators

AKAY O., BoudreauxBartels G. F.

IEEE UK Symposium on Applications of Time-Frequency and Time-Scale Methods , Coventry, United Kingdom, 1 - 03 August 1997

Supported Projects

Akay O., Özden G., Yavuz A. B., Önal O., Selver M. A., TUBITAK Project, Dane İçeren Kohezyonlu Malzemelerin Sayısal Görüntü İşleme ve Yapay Sinir Ağları Yöntemleri Kullanılarak Niceliksel Sınıflandırılması, 2005 - 2008

Memberships / Tasks in Scientific Organizations

The Institute of Electrical and Electronics Engineers, Member, 1994 - Continues, United States Of America

Scientific Refereeing

CIRCUITS, SYSTEMS, AND SIGNAL PROCESSING, SCI Journal, May 2024

TUBITAK Project, 1501 - Industry R & D Projects Support Program, Dokuz Eylul University, Turkey, April 2024

32. IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SİU 2024), Conference Paper (Full Text), March 2024
TUBITAK Project, 1501 - Industry R & D Projects Support Program, Dokuz Eylul University, Turkey, January 2024
TUBITAK Project, 1501 - Industry R & D Projects Support Program, Dokuz Eylul University, Turkey, January 2024
TUBITAK Project, 3501 - National Young Researcher Career Development Program, Dokuz Eylul University, Turkey, December 2023
2024 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2024), Conference Paper (Full Text), November 2023
14th INTERNATIONAL CONFERENCE on ELECTRICAL and ELECTRONICS ENGINEERING (ELECO 2023), Conference Paper (Full Text), October 2023
TUBITAK Project, 1501 - Industry R & D Projects Support Program, Dokuz Eylul University, Turkey, October 2023
DIGITAL SIGNAL PROCESSING: A REVIEW JOURNAL, SCI Journal, September 2023
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Dokuz Eylul University, Turkey, June 2023
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Dokuz Eylul University, Turkey, June 2023
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Dokuz Eylul University, Turkey, June 2023
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Dokuz Eylul University, Turkey, June 2023
TUBITAK Project, 1501 - Industry R & D Projects Support Program, SEGER Ses ve Elektrikli gereçler Sanayi Anonim Şti., Turkey, March 2023
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Dokuz Eylul University, Turkey, January 2023
2023 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2023), Conference Paper (Full Text), December 2022
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Dokuz Eylul University, Turkey, December 2022
TUBITAK Project, 1501 - Industry R & D Projects Support Program, Dokuz Eylul University, Turkey, November 2022
TUBITAK Project, 1501 - Industry R & D Projects Support Program, Dokuz Eylul University, Turkey, October 2022
Medical Technologies Congress-TİPTEKNO 2022, Conference Paper (Full Text), August 2022
ELEKTRİK-ELEKTRONİK Ve BİYOMEDİKAL MÜHENDİSLİĞİ KONFERANSI (ELECO 2022), Conference Paper (Full Text), August 2022
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Dokuz Eylul University, Turkey, June 2022
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Dokuz Eylul University, Turkey, June 2022
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Dokuz Eylul University, Turkey, June 2022
TUBITAK Project, 1501 - Industry R & D Projects Support Program, Dokuz Eylul University, Turkey, April 2022

Metrics

Publication: 49

Citation (WoS): 251

Citation (Scopus): 337

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