

## Doç. Dr. ŞAHİN İŞIK

### Kişisel Bilgiler

E-posta: sahini@ogu.edu.tr

Web: <https://avesis.ogu.edu.tr/sahini>



### Uluslararası Araştırmacı ID'leri

ScholarID: 8BZBsp0AAAAJ

ORCID: 0000-0003-1768-7104

Publons / Web Of Science ResearcherID: H-5373-2018

ScopusID: 56247318100

Yoksis Araştırmacı ID: 51318

### Eğitim Bilgileri

Doktora, Anadolu Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Bilimleri (Dr), Türkiye 2014  
- 2018

### Yaptığı Tezler

Doktora, New approaches to improve performance of background subtraction, Anadolu Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Bilimleri (Dr), 2018

Yüksek Lisans, Öznitelik tabanlı imge çakıştırma, Anadolu Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Yazılımı (Yıl) (Tezli), 2014

### Araştırma Alanları

Bilgisayarla Görme, Bilgisayarla Görme, Yapay Zeka, Bilgisayarda Öğrenme ve Örütü Tanıma, Bilgi Mühendisliği ,  
Bilgisayar Öğrenimi, İnsan Bilgisayar Etkileşimi , Metin/Doküman İşleme , Örütü Tanıma ve Görüntü İşleme , Sinirsel Ağlar , Yazılım Mühendisliği , Yazılımla Hesaplama , Biyomedikal Görüntü İşleme, Biyomedikal Görüntü İşleme, Biyosinyal İşleme, Biyosinyal İşleme

### Akademik Unvanlar / Görevler

Doç. Dr., Eskişehir Osmangazi Üniversitesi, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, BİLGİSAYAR MÜHENDİSLİĞİ BÖLÜMÜ,  
2021 - Devam Ediyor

Dr. Öğr. Üyesi, Eskişehir Osmangazi Üniversitesi, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, BİLGİSAYAR MÜHENDİSLİĞİ  
BÖLÜMÜ, 2019 - 2021

Araştırma Görevlisi, Eskişehir Osmangazi Üniversitesi, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, BİLGİSAYAR  
MÜHENDİSLİĞİ BÖLÜMÜ, 2017 - 2019

Araştırma Görevlisi, Eskişehir Osmangazi Üniversitesi, FEN BİLİMLERİ ENSTİTÜSÜ, Fen Bil. Enst. Md. Lüğü, 2012 - 2017

### Akademik İdari Deneyim

## Verdiği Dersler

PATTERN RECOGNITION, Lisans, 2022 - 2023, 2021 - 2022

INTRODUCTION TO DEEP LEARNING, Lisans, 2017 - 2018

NUMERICAL METHODS, Lisans, 2017 - 2018

WEB BASED TECHNOLOGIES, Lisans, 2017 - 2018

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Ultra-high dilutions analysis: Exploring the effects of potentization by electron microscopy, Raman spectroscopy and deep learning**  
Berghian-Grosan C., IŞIK Ş., Porav A. S., DAĞ İ., Ay K. O., Vithoulkas G.  
Journal of Molecular Liquids, cilt.401, 2024 (SCI-Expanded)
- II. **Fabric defects identification for textile industry with a deep learning approach**  
Guder O., Işık Ş., Anagün Y.  
Journal of the Textile Institute, 2024 (SCI-Expanded)
- III. **Predicting compressor mass flow rate using various machine learning approaches**  
Yazar I., Anagün Y., Işık Ş.  
International Journal of Turbo and Jet Engines, 2024 (SCI-Expanded)
- IV. **Predicting Soil Quality Index with a Deep Regression Approach**  
Işık Ş., Turgut B., Anagün Y., Olgun M.  
COMMUNICATIONS IN SOIL SCIENCE AND PLANT ANALYSIS, cilt.55, ss.1313-1323, 2024 (SCI-Expanded)
- V. **Predicting soil EC using spectroscopy and smartphone-based digital images**  
GÖZÜKARA G., ANAGÜN Y., IŞIK Ş., Zhang Y., Hartemink A. E.  
CATENA, cilt.231, 2023 (SCI-Expanded)
- VI. **Surface roughness classification of electro discharge machined surfaces with deep ensemble learning**  
ANAGÜN Y., IŞIK Ş., Hayati Çakir F. H.  
Measurement: Journal of the International Measurement Confederation, cilt.215, 2023 (SCI-Expanded)
- VII. **Evaluation of EfficientNet models for COVID-19 detection using lung parenchyma**  
Kurt Z., IŞIK Ş., KAYA Z., ANAGÜN Y., Koca N., Çiçek S.  
Neural Computing and Applications, cilt.35, sa.16, ss.12121-12132, 2023 (SCI-Expanded)
- VIII. **The classification of wheat species based on deep convolutional neural networks using scanning electron microscope (SEM) imaging**  
Anagün Y., Işık Ş., Olgun M., Sezer O., Basciftci Z., Arpacıoglu N. G. A.  
EUROPEAN FOOD RESEARCH AND TECHNOLOGY, cilt.249, sa.4, ss.1023-1034, 2023 (SCI-Expanded)
- IX. **DEEP LEARNING-BASED CUSTOMER COMPLAINT MANAGEMENT**  
Anagün Y., Bolel N. S., Işık Ş., Ozkan S. E.  
JOURNAL OF ORGANIZATIONAL COMPUTING AND ELECTRONIC COMMERCE, cilt.32, sa.3-4, ss.217-231, 2022 (SCI-Expanded)
- X. **Consensus rule for wheat cultivar classification on VL, VNIR and SWIR imaging**  
IŞIK Ş., ÖZKAN K., Demirez D. Z., SEKE E.  
IET Image Processing, cilt.16, sa.11, ss.2834-2844, 2022 (SCI-Expanded)
- XI. **Overview of handcrafted features and deep learning models for leaf recognition**

- IŞIK Ş., ÖZKAN K.  
JOURNAL OF ENGINEERING RESEARCH, cilt.9, sa.1, 2021 (SCI-Expanded)
- XII. **Face Recognition by Using 2D Orthogonal Subspace Projections**  
ERGİN S., IŞIK Ş., GÜLMEZOĞLU M. B.  
TRAITEMENT DU SIGNAL, cilt.38, sa.1, ss.51-60, 2021 (SCI-Expanded)
- XIII. **Dominant point detection based on suboptimal feature selection methods**  
IŞIK Ş.  
EXPERT SYSTEMS WITH APPLICATIONS, cilt.161, 2020 (SCI-Expanded)
- XIV. **CVABS: moving object segmentation with common vector approach for videos**  
IŞIK Ş., ÖZKAN K., Gerek O. N.  
IET COMPUTER VISION, cilt.13, sa.8, ss.719-729, 2019 (SCI-Expanded)
- XV. **A heating value estimation of refuse derived fuel using the genetic programming model**  
ÖZKAN K., IŞIK Ş., Gunkaya Z., Ozkan A., Banar M.  
WASTE MANAGEMENT, cilt.100, ss.327-335, 2019 (SCI-Expanded)
- XVI. **Identification of wheat kernels by fusion of RGB, SWIR, and VNIR samples**  
ÖZKAN K., IŞIK Ş., Yavuz B. T.  
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- XVII. **SRLibrary: Comparing different loss functions for super-resolution over various convolutional architectures**  
ANAGÜN Y., IŞIK Ş., SEKE E.  
JOURNAL OF VISUAL COMMUNICATION AND IMAGE REPRESENTATION, cilt.61, ss.178-187, 2019 (SCI-Expanded)
- XVIII. **Common matrix approach-based multispectral image fusion and its application to edge detection**  
IŞIK Ş., ÖZKAN K.  
JOURNAL OF APPLIED REMOTE SENSING, cilt.13, sa.1, 2019 (SCI-Expanded)
- XIX. **Biometric person authentication framework using polynomial curve fitting-based ECG feature extraction**  
Isik Ş., Ozkan K., ERGİN S.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, cilt.27, sa.5, ss.3682-3698, 2019 (SCI-Expanded)
- XX. **SWCD: a sliding window and self-regulated learning-based background updating method for change detection in videos**  
IŞIK Ş., ÖZKAN K., GÜNAL S., GEREK Ö. N.  
JOURNAL OF ELECTRONIC IMAGING, cilt.27, sa.2, 2018 (SCI-Expanded)
- XXI. **Wheat grain classification by using dense SIFT features with SVM classifier**  
OLGUN M., Onarcan A. O., Ozkan K., Isik Ş., SEZER O., ÖZGİŞİ K., AYTER ARPACIOĞLU N. G., BUDAK BAŞÇİFTÇİ Z., ARDIÇ M., KOYUNCU O.  
COMPUTERS AND ELECTRONICS IN AGRICULTURE, ss.185-190, 2016 (SCI-Expanded)
- XXII. **A new approach for edge detection in noisy images based on the LPGPCA technique**  
IŞIK Ş., ÖZKAN K.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, cilt.24, sa.4, ss.2789-2805, 2016 (SCI-Expanded)
- XXIII. **A novel multi-scale and multi-expert edge detector based on common vector approach**  
ÖZKAN K., IŞIK Ş.  
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, cilt.69, sa.9, ss.1272-1281, 2015 (SCI-Expanded)
- XXIV. **A new classification scheme of plastic wastes based upon recycling labels**  
ÖZKAN K., ERGİN S., IŞIK Ş., Isikli I.  
WASTE MANAGEMENT, cilt.35, ss.29-35, 2015 (SCI-Expanded)

## **Düzenlenen Dergilerde Yayınlanan Makaleler**

- I. **Diagnosing Diseases from Fingernail Images**  
CAN Z., İŞIK \$.  
Eskişehir Osmangazi Üniversitesi mühendislik ve mimarlık fakültesi dergisi (online), cilt.30, sa.3, ss.464-470, 2022 (Hakemli Dergi)
- II. **Using deep learning approaches for coloring silicone maxillofacial prostheses: A comparison of two approaches**  
KURT M., KURT Z., İŞIK \$.  
JOURNAL OF INDIAN PROSTHODONTIST SOCIETY, cilt.23, sa.1, ss.84-89, 2022 (ESCI)
- III. **Nesnelerin İnterneti Güvenliği: Ev Ağrı Güvenlik İncelemesi Ve Değerlendirmesi**  
Kandır M. O., Yolaçan E. N., İşık \$.  
Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, cilt.27, sa.2, ss.803-816, 2022 (Hakemli Dergi)
- IV. **A Deep Learning Based Sleepness And Wakefulness Detection for Drivers**  
İŞIK \$., ANAGÜN Y.  
Eskişehir Osmangazi Üniversitesi Mühendislik ve Mimarlık Fakültesi Dergisi, cilt.29, sa.3, ss.311-315, 2021 (Hakemli Dergi)
- V. **Contribution Analysis of Optimization Methods on Super-Resolution**  
ANAGÜN Y., İŞIK \$.  
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, cilt.21, sa.6, ss.1343-1352, 2021 (Hakemli Dergi)
- VI. **Comparison of Different Modeling Methods For Prediction Of Palladium Adsorption onto Waste Orange Pee**  
ÖZKAN A., İŞIK \$., GÜNKAYA Z., ÖZKAN K., BANAR M.  
Mühendislik Bilimleri ve Tasarım Dergisi, cilt.9, sa.3, ss.758-767, 2021 (Hakemli Dergi)
- VII. **Güvenlik Sistemleri için Silah ve Bıçak Tanıma**  
İŞIK \$., ÖZKAN \$. E., KURT Z.  
Afyon Kocatepe University Journal of Sciences and Engineering, cilt.21, ss.565-569, 2021 (Hakemli Dergi)
- VIII. **Wheat kernels classification using visible-near infrared camera based on deep learning**  
ÖZKAN K., SEKE E., İŞIK \$.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BİLİMLERİ DERGİSİ, cilt.27, sa.5, ss.618-626, 2021 (ESCI)
- IX. **EVALUATION OF DIFFERENT CURVE FITTING MODELS FOR PREDICTION OF MUNICIPAL SOLID WASTE COMPOSITION**  
ÖZKAN A., ÖZKAN K., İŞIK \$., BANAR M.  
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, cilt.27, ss.385-393, 2021 (ESCI)
- X. **Spam E-mail Classification Recurrent Neural Networks for Spam E-mail Classification on an Agglutinative Language**  
İŞIK \$., KURT Z., ANAGÜN Y., ÖZKAN K.  
International Journal of Intelligent Systems and Applications in Engineering, cilt.8, sa.4, ss.221-227, 2020 (Scopus)
- XI. **REAL TIME PEDESTRIAN ALERT SYSTEM FOR VEHICLES**  
İŞIK \$., VATANSEVER G., ANAGÜN Y., ÇELİKHAN M., ÖZKAN K.  
Eskişehir Technical University Journal of Science and Technology A - Applied Sciences and Engineering, cilt.21, sa.3, ss.446-453, 2020 (Hakemli Dergi)
- XII. **Common Vector Approach Based Image Gradients Computation for Edge Detection**  
İŞIK \$., ÖZKAN K.  
Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), cilt.11989, ss.408, 2020 (Hakemli Dergi)
- XIII. **A new subspace based solution to background modelling and change detection**  
İŞIK \$., ÖZKAN K., GEREK Ö. N., DOĞAN M.  
International Journal of Intelligent Systems and Applications in Engineering, cilt.2016, sa.4, ss.82-86, 2016 (Hakemli Dergi)

- XIV. **A Note on Background Subtraction by Utilizing a New Tensor Approach**  
İŞIK Ş., ÖZKAN K., GEREK Ö. N.  
International Journal of Intelligent Systems and Applications in Engineering, cilt.2016, sa.4, ss.87-91, 2016 (Hakemli Dergi)
- XV. **The Principal Component Analysis Method Based Descriptor for Visual Object Classification**  
KURT Z., ÖZKAN K., İŞIK Ş.  
International Journal of Intelligent Systems and Applications in Engineering, cilt.3, sa.3, ss.97, 2015 (Hakemli Dergi)
- XVI. **A Comparative Evaluation of Well known Feature Detectors and Descriptors**  
İŞIK Ş., ÖZKAN K.  
International Journal of Applied Mathematics, Electronics and Computers, cilt.3, sa.1, ss.1, 2015 (Hakemli Dergi)

### **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **Computer-Aided Embryo Quality Determination In Vitro Fertilization (IVF) Treatment**  
ANAGÜN Y., İŞIK Ş.  
16th International Congress on Quality in Healthcare, Accreditation and Patient Safety, Antalya, Türkiye, 22 Mayıs 2022, ss.74
- II. **Hafif Evrimsel Sinir Ağı ile Tırnak Hastalığı Sınıflandırması**  
İŞIK Ş., CAN Z., ANAGÜN Y., GÜDER O.  
16. Uluslararası Sağlıkta Kalite, Akreditasyon Ve Hasta Güvenliği Kongresi, Antalya, Türkiye, 22 - 25 Mayıs 2022
- III. **Artificial Intelligence Based Brain Tumor Diagnosis System**  
ANAGÜN Y., İŞIK Ş.  
Mediterranean International Conference on Research in Applied Sciences, Antalya, Türkiye, 22 Nisan 2022, ss.5-6
- IV. **Deep Neural Network Framework for Automatic Brain Tumor Segmentation Using Magnetic Resonance Images**  
ANAGÜN Y., İŞIK Ş.  
Mediterranean International Conference on Research in Applied Sciences, Antalya, Türkiye, 22 Nisan 2022, ss.3-4
- V. **Deep Learning-Based COVID-19 Detection Using Lung Parenchyma CT Scans**  
Kaya Z., Kurt Z., İŞIK Ş., Koca N., Çiçek S.  
International Conference on Computing and Communication Networks, ICCCN 2021, Virtual, Online, 19 - 20 Kasım 2021, cilt.394, ss.261-275
- VI. **Common Vector Approach Based Image Gradients Computation for Edge Detection**  
İŞIK Ş., ÖZKAN K.  
Mathematical Aspects of computer and Information Sciences, İstanbul, Türkiye, 13 - 15 Kasım 2019, cilt.1
- VII. **Shallow and Deep Convolutional NeuralNetwork Models for Classification of VNIRWheat Samples**  
ÖZKAN K., İŞIK Ş., YAVUZ B.  
5th INTERNATIONAL CONFERENCE ON ENGINEERING AND NATURAL SCIENCES, Prague, Çek Cumhuriyeti, 12 - 16 Haziran 2019, ss.363-368
- VIII. **Atık Portakal Kabuklarıyla Altın Adsorpsiyonunun Regresyon Analizi**  
ÖZKAN K., İŞIK Ş., ÖZKAN A., GÜNKAYA Z., BANAR M.  
UKSAY, 25 - 27 Ekim 2018
- IX. **Regression Analysis of the Gold Adsorption by Waste Orange Peels**  
ÖZKAN K., İŞIK Ş., ÖZKAN A., GÜNKAYA Z., BANAR M.  
International Symposium on Urban Water and Wastewater Management, 25 - 27 Ekim 2018
- X. **Use of image analysis methods to determine the chlorine content of refuse derived fuel**  
ÖZKAN A., ÖZKAN K., İŞIK Ş., GÜNKAYA Z., BANAR M.  
29th European Conference on Operational Research (EURO2018), Valencia, İspanya, 11 Temmuz 2018, ss.150
- XI. **Evaluation of Convolutional Neural Network Features for Malware Detection**  
ÖZKAN K., İŞIK Ş., Kartal Y.  
6th International Symposium on Digital Forensic and Security (ISDFS), Antalya, Türkiye, 22 - 25 Mart 2018, ss.404-

- XII. **Using Movie Posters for Prediction of Box-Office Revenue with Deep Learning Approach**  
 ÖZKAN K., Atak O. N., IŞIK Ş.  
 26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Türkiye, 2 - 05 Mayıs 2018
- XIII. **MULTISPECTRAL IMAGE FUSION USING A NEW TENSOR APPROACH**  
 IŞIK Ş., ÖZKAN K., DORDINEJAD G.  
 International Confererence on Advanced Technology Sciences, 9 - 12 Mayıs 2017
- XIV. **Prediction of Heating Values of Refuse Derived Fuel from Proximate Analysis Data**  
 ÖZKAN K., IŞIK Ş., ÖZKAN A., GÜNKAYA Z., BANAR M.  
 5th International Conference on Advanced Technology Sciences, 9 - 12 Mayıs 2017, ss.212-216
- XV. **ImageHawk Search Engine: Content Based Image Retrieval System**  
 ÇEVİKALP H., IŞIK Ş.  
 25th Signal Processing and Communications Applications Conference (SIU), Antalya, Türkiye, 15 - 18 Mayıs 2017
- XVI. **Quality Measurement of Fruits and Vegetables with Near Infrared Camera**  
 Turker D., Sezer R., IŞIK Ş., ÖZKAN K.  
 25th Signal Processing and Communications Applications Conference (SIU), Antalya, Türkiye, 15 - 18 Mayıs 2017
- XVII. **A note on background subtraction by utilizing a newtensor approach**  
 IŞIK Ş., ÖZKAN K., DOĞAN M., GEREK Ö. N.  
 3rd International Conference on Advanced Technology & Sciences (ICAT'16), 1 - 03 Eylül 2016, ss.1497-1502
- XVIII. **A NEW SUBSPACE BASED SOLUTION TO BACKGROUND MODELLING ANDCHANGE DETECTION**  
 IŞIK Ş., ÖZKAN K., DOĞAN M., GEREK Ö. N.  
 3rd International Conference on Advanced Technology & Sciences, 1 - 03 Eylül 2016
- XIX. **curve fitting modelling for the estimation of silver absorption into biosorbent**  
 ÖZKAN K., ÖZKAN A., IŞIK Ş., ÇOKAYGİL Z., BANAR M.  
 SYMPOSIUM ON EUROASIAN BIODIVERSITY, 23 - 27 Mayıs 2016
- XX. **Multispectral Image Fusion Based on the Common Vector Approach**  
 ÖZKAN K., IŞIK Ş., Dordinejad G.  
 International Symposium on Innovations in Intelligent Systems and Applications (INISTA), Sinaia, Romanya, 2 - 05 Ağustos 2016
- XXI. **A new Approach for Speech Denoising**  
 ÖZKAN K., SEKE E., IŞIK Ş.  
 24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Türkiye, 16 - 19 Mayıs 2016, ss.2109-2112
- XXII. **Comparison of Different Modeling Methods of Copper Adsorption by Modified Orange Peels**  
 Ozkan A., Ozkan K., Isik Ş., Gunkaya Z., Banar M.  
 16th International Symposium on Environmental Issues and Waste Management in Energy and Mineral Production (SWEMP) / International Symposium on Computer Applications (CAMI), İstanbul, Türkiye, 5 - 07 Ekim 2016
- XXIII. **Spam e mail classification using a new term weighting approach for an agglutinative language**  
 IŞIK Ş., ÖZKAN K., KURT Z.  
 INTERNATIONAL CONFERENCE ON TECHNOLOGY AND SCIENCES (ICAT'15), Antalya, Türkiye, 4 - 07 Ağustos 2015, ss.34-39
- XXIV. **Prediction for the Solid Waste Composition by use of Different Curve Fitting Models: A Case Study**  
 ÖZKAN K., IŞIK Ş., ÖZKAN A., BANAR M.  
 International Symposium on Innovations in Intelligent SysTems and Applications (INISTA 2015), Madrid, İspanya, 2 - 04 Eylül 2015, ss.173-178
- XXV. **Weighted Principal Component Analysis Based Edge Linking**  
 ÖZKAN K., IŞIK Ş.  
 International Symposium on Innovations in Intelligent SysTems and Applications (INISTA 2015), Madrid, İspanya, 2 - 04 Eylül 2015, ss.70-76
- XXVI. **Edge Linking Using Angle Information**  
 IŞIK Ş., ÖZKAN K.

- 23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Türkiye, 16 - 19 Mayıs 2015,  
ss.423-426
- XXVII. **The Principal Component Analysis Method Based Descriptor for Visual Object Classification**  
KURT Z., ÖZKAN K., IŞIK Ş.  
International Conference on Advanced Technology & Sciences (ICAT' 14), Antalya, Türkiye, 12 - 15 Ağustos 2014,  
ss.33-37
- XXVIII. **A Comparative Evaluation of Well known Feature Detectors and Descriptors**  
IŞIK Ş., ÖZKAN K.  
INTERNATIONAL CONFERENCE ON ADVANCED TECHNOLOGY AND SCIENCES (ICAT'xx14), 12 - 15 Ağustos 2014,  
ss.26-32
- XXIX. **The Assessment of Feature Selection Methods on Agglutinative Language for Spam Email Detection:  
A Special Case for Turkish**  
ERGİN S., IŞIK Ş.  
IEEE International Symposium on Innovations in Intelligent Systems and Applications (INISTA), Alberobello, İtalya,  
23 - 25 Haziran 2014, ss.122-125
- XXX. **The Investigation on the Effect of Feature Vector Dimension for Spam Email Detection with a New  
Framework**  
ERGİN S., IŞIK Ş.  
9th Iberian Conference on Information Systems and Technologies (CISTI), Barcelona, İspanya, 18 - 21 Haziran  
2014
- XXXI. **A NOVEL MULTI-SCALE AND MULTI-EXPERT EDGE DETECTION METHOD BASED ON COMMON VECTOR  
APPROACH**  
IŞIK Ş., ÖZKAN K.  
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Türkiye, 23 - 25 Nisan  
2014, ss.1630-1633

## Metrikler

Yayın: 72  
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H-İndeks (Scopus): 10