

Prof. Tayfun Akgül

Personal Information

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International Researcher IDs

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Education Information

Doctorate, University of Pittsburgh, Elektrik Mühendisliği, United States Of America 1989 - 1994

Dissertations

Doctorate, Multi-scale deconvolution of sensor array signals: time and sum-of-cumulants domain solutions, University Of Pittsburgh, Elektrik Mühendisliği, 1994

Research Areas

Electrical and Electronics Engineering, Engineering and Technology

Academic Titles / Tasks

Professor, Istanbul Technical University, Elektrik-Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, 2002 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Compressive beamforming for direction-of-arrival estimation of cyclostationary propeller noise**
Firat U., Akgül T.
Signal Processing, vol.214, 2024 (SCI-Expanded)
- II. **Compressive Sensing for Detecting Ships With Second-Order Cyclostationary Signatures**
FIRAT U., Akgül T.
IEEE JOURNAL OF OCEANIC ENGINEERING, vol.43, no.4, pp.1086-1098, 2018 (SCI-Expanded)
- III. **Matching caricatures to photographs**
Abaci B., Akgül T.
SIGNAL IMAGE AND VIDEO PROCESSING, vol.9, pp.295-303, 2015 (SCI-Expanded)
- IV. **Periodicity-Based Anomalies in Self-Similar Network Traffic Flow Measurements**
Akgul T., BAYKUT S., EROL-KANTARCI M., OKTUG S. F.
IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, vol.60, no.4, pp.1358-1366, 2011 (SCI-Expanded)

- V. **Can an Algorithm Recognize Montage Portraits as Human Faces?**
Akgul T.
IEEE SIGNAL PROCESSING MAGAZINE, vol.28, no.1, pp.160-158, 2011 (SCI-Expanded)
- VI. **A Campus with Sense of Humor**
Akgül T.
IEEE ANTENNAS AND PROPAGATION MAGAZINE, vol.51, no.2, pp.155-156, 2009 (SCI-Expanded)
- VII. **Experimental verification of rank 1 chaos in switch-controlled Chua circuit**
Oksasoglu A., Ozoguz S., DEMIRKOL A. S., AKGUL T., Wang Q.
CHAOS, vol.19, no.1, 2009 (SCI-Expanded)
- VIII. **Experimental Analysis of Detection and Localization of Multiple Emitters in Multipath Environments**
Sarac U., Harmanci F. K., AKGUEL T.
IEEE ANTENNAS AND PROPAGATION MAGAZINE, vol.50, no.5, pp.61-70, 2008 (SCI-Expanded)
- IX. **Geochemical monitoring in the Marmara region (NW Turkey): A search for precursors of seismic activity**
Inan S., AKGUEL T., SEYIS C., SAATCILAR R., BAYKUT S., ERGINTAV S., BAS M.
JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH, vol.113, 2008 (SCI-Expanded)
- X. **Estimation of spectral exponent parameter of 1/f process in additive white background noise**
Baykut S., Akgul T., ERGINTAV S.
EURASIP JOURNAL ON ADVANCES IN SIGNAL PROCESSING, 2007 (SCI-Expanded)
- XI. **Characterization of sleep spindles using higher order statistics and spectra**
Akgul T., SUN M., SCLABASSI R., CETIN A.
IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING, vol.47, no.8, pp.997-1009, 2000 (SCI-Expanded)
- XII. **High Frequency Ultrasound Technique for Testing Concrete**
Popovics S., Karaoğuz M., bilgutay n., Akgül T.
ACI MATERIALS JOURNAL, vol.97, no.1, pp.58-65, 2000 (SCI-Expanded)
- XIII. **Ultrasonic Testing of Concrete Using Split Spectrum Processing**
Karaoguz M., Bilgutay N., Akgül T., Popovics S.
MATERIALS EVALUATION, vol.57, no.11, pp.1183-1190, 1999 (SCI-Expanded)
- XIV. **Reconstruction of mixed-phase signals from sum-of-autotriplecorrelations using least squares**
Akgul T., EL-JAROUDI A.
IEEE TRANSACTIONS ON SIGNAL PROCESSING, vol.46, no.1, pp.250-254, 1998 (SCI-Expanded)
- XV. **Multiscale deconvolution of sensor array signals via sum-of-cumulants**
Akgul T., ELJAROUDI A., SIMAAN M.
IEEE TRANSACTIONS ON SIGNAL PROCESSING, vol.45, no.6, pp.1656-1659, 1997 (SCI-Expanded)
- XVI. **Multi-scale deconvolution of sensor array signals**
Akgul T., ELJAROUDI A., SIMAAN M.
SIGNAL PROCESSING, vol.57, no.1, pp.35-42, 1997 (SCI-Expanded)
- XVII. **A linear inverse system approach in the context of chaotic communications**
Oksasoglu A., Akgul T.
IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS I-REGULAR PAPERS, vol.44, no.1, pp.75-79, 1997 (SCI-Expanded)
- XVIII. **A Chaotic Signal Masking Scheme with a Linear Inverse System**
Okşasoğlu A., Akgül T.
PHYSICAL REVIEW LETTERS, vol.75, no.25, pp.4595-4597, 1995 (SSCI)

Articles Published in Other Journals

- I. **Et Cetera**
AKGÜL T.
URSI Radio Science Bulletin, vol.2018, pp.37, 2018 (Peer-Reviewed Journal)

II. Gemi Akustik İz Analizi

FIRAT U., AKGÜL T.

EMO Bilimsel Dergi, 2017 (Peer-Reviewed Journal)

III. $1/f^{\alpha}$ Gürültülerin Frekans Ölçekleme ile Üretimi

Türkcan M. K., Akgül T.

Elektrik, Elektronik, Bilgisayar, Biyomedikal Mühendisliği Bilimsel Dergi, vol.4, no.8, pp.41-45, 2014 (Peer-Reviewed Journal)

Supported Projects

Akgül T., Project Supported by Higher Education Institutions, Sualtı Akustik Sinyalleri için İzgesel Sıkıştırılmış Algılama, 2016 - 2018

Akgül T., Project Supported by Higher Education Institutions, Yüzey Tanımaya Yönelik Otomatik Karikatür Tanıma, 2012 - 2018

Akgül T., Project Supported by Higher Education Institutions, Türkiye deki Binaların Gerçek Deprem Verileri Kullanarak Sismik Davranışlarının Analizi, 2011 - 2018

Akgül T., Project Supported by Higher Education Institutions, Jeo-Bihşayyeni 1/F Gürültü Karakteristiklerinin Analizleri, 2009 - 2018

Akgül T., Project Supported by Higher Education Institutions, Estimation of the Spectral Exponent of $1/f$ Process Corrupted by White Noise, 2006 - 2018

Akgül T., Project Supported by Higher Education Institutions, Fotoğraftan Karikatür ve Karikatürden Fotoğraf Tanıma, 2013 - 2016

Activities in Scientific Journals

URSI Radio Science Bulletin, Assistant Editor/Section Editor, 2015 - Continues

2. Journal of Korea Institute of Information and Communication Engineering (JKIICE), Publication Committee Member, 2015 - Continues

Scientific Refereeing

Signal, Image and Video Processing, SCI Journal, December 2018

Signal, Image and Video Processing, SCI Journal, November 2018

Signal, Image and Video Processing, SCI Journal, July 2018

Signal, Image and Video Processing, SCI Journal, April 2018

Signal, Image and Video Processing, SCI Journal, March 2018

Signal, Image and Video Processing, SCI Journal, February 2018

Scientific Consultations

SEGER, Scientific Consultancy, İstanbul Technical University, Elektrik-Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, Turkey, 2018 - Continues

Metrics

Publication: 58

Citation (WoS): 177

Citation (Scopus): 267

H-Index (WoS): 7

H-Index (Scopus): 8

Non Academic Experience

Artge Teknoloji A.Ş.

TÜBİTAK

Drexel University

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