### **Prof. TEMEL ENGIN TUNCER**

#### **Personal Information**

Office Phone: <u>+90 312 210 2348</u>

Fax Phone: <u>+90 312 210 2304</u>

Email: etuncer@metu.edu.tr

Web: https://avesis.metu.edu.tr/etuncer

#### International Researcher IDs

ScholarID: KCDj9skAAAAJ ORCID: 0000-0003-1098-8828

Publons / Web Of Science ResearcherID: AAZ-9216-2020

ScopusID: 6603914250

Yoksis Researcher ID: 110585

#### **Education Information**

Doctorate, Boston University, Mühendislik Fakültesi, Electrical and Computer Engineering Department, United States Of America 1989 - 1993

Postgraduate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1987 - 1989

Undergraduate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1983 - 1987

## **Dissertations**

Doctorate, Two-band QMF Banks, Butterworth Wavelets, Time-Varying Filter Banks and Adaptive Echo Cancellation., Boston University, Ecs, 1993

Postgraduate, A Medical imaging system for the estimation of vessel diameter and left ventricular volume, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 1989

## **Research Areas**

**Electrical and Electronics Engineering** 

## **Academic Titles / Tasks**

Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2007 - Continues

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2001 - 2007

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 1998 - 2001

Assistant Professor, Ankara University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1993 - 1998

## **Advising Theses**

TUNCER T. E., Direction of arrival estimation by using alternating direction method of multipliers in distributed sensor array networks, Postgraduate, E.NURBAŞ(Student), 2022

TUNCER T. E., Phased-COSTAS coding of MIMO radar waveforms for transmit beamforming using generalized ambiguity functions, Postgraduate, O.ONUR(Student), 2021

TUNCER T. E., Direction of arrival estimation in sensor arrays with faulty elements, Postgraduate, T.Külbay(Student), 2020

TUNCER T. E., Interference alignment on multigroup multi way relay channels, Postgraduate, M.Akif(Student), 2019

TUNCER T. E., Beamforming for energy harvesting and multi-user communications, Doctorate, Ö.TUĞFE(Student), 2018

TUNCER T. E., Path planning and localization for mobile anchor based wireless sensor networks, Postgraduate,

E.ERDEMİR(Student), 2017

TUNCER T. E., Direction finding in the presence of array imperfections, model mismatches and multipath, Doctorate, A.MUSAB(Student), 2016

TUNCER T. E., Performance of a non-linear adaptive beamformer algorithm for signal-of-interest extraction /, Postgraduate, Ö.OĞUZ(Student), 2015

TUNCER T. E., Performance analysis of direction-of-arrival estimation algorithms in the presence of array imperfections and multipath for different antenna array geometries /, Postgraduate, M.ÇALIŞKAN(Student), 2014

TUNCER T. E., Positioning performances of single frequency GPS, GLONASS and carrier based algorithms in a software platform /, Postgraduate, C.SAVAŞ(Student), 2014

TUNCER T. E., Optimization techniques for nonconvex problems and optimum discrete transmit beamformer design /, Postgraduate, Ö.TUĞFE(Student), 2014

TUNCER T. E., Sparse sensor array design via constrained optimization, Postgraduate, G.GÖK(Student), 2013

TUNCER T. E., Polarization diversity in channel modeling for MIMO systems, Postgraduate, B.SÖKER(Student), 2013

TUNCER T. E., Aerial acoustic data communication, Postgraduate, K.Önder(Student), 2012

TUNCER T. E., Real time implementation of an acoustic radar on field programmable gate arrays, Postgraduate, M.ARSLAN(Student), 2012

TUNCER T. E., Comparison of emitter localization methods with a moving platform in three dimensions, Postgraduate, B.TUFAN(Student), 2012

TUNCER T. E., Online calibration of sensor arrays using higher order statistics, Doctorate, M.AKTAŞ(Student), 2012

TUNCER T. E., Mutual coupling calibration of antenna arrays for direction-of-arrival estimation, Postgraduate,

T.Aksoy(Student), 2012

B.Etiler(Student), 2007

TUNCER T. E., Direction finding performance of antenna arrays on complex platforms using numerical electromagnetic simulation tools, Postgraduate, M.ONUR(Student), 2011

TUNCER T. E., Comparison and evaluation of three dimensional passive source localization techniques, Postgraduate, E.BATUMAN(Student), 2010

TUNCER T. E., Code aided frame synchronization for frequency selective channels, Postgraduate, U.UTKU(Student), 2010 TUNCER T. E., Planar array structures for two-dimensional direction-of-arrival estimation, Doctorate, T.FİLİK(Student), 2010

 $TUNCER\ T.\ E.,\ Blind\ and\ semi-blind\ channel\ order\ estimation\ in\ simo\ systems,\ Doctorate,\ S.Karak\"ut\"uk(Student),\ 2009$ 

TUNCER T. E., Implementation and performance evaluation of a three antenna direction finding system, Postgraduate, Ö.ÇAĞRI(Student), 2009

TUNCER T. E., Blind and semi-bnlind channel order estimation in SIMO systems, Doctorate, S.KARAKÜTÜK(Student), 2009

TUNCER T. E., Application of sar techniques in an ultrasound testbed, Postgraduate, G.Solak(Student), 2008

TUNCER T. E., Feature set evaluation for a generic missile detection system, Postgraduate, K.SELÇUK(Student), 2007

 $TUNCER\ T.\ E.,\ Comparison\ of\ the\ intercarrier\ interference\ cancellation\ methods\ in\ OFDM\ systems,\ Postgraduate,$ 

TUNCER T. E., Direction of arrival estimation by array interpolation in randomly distributed sensor arrays, Postgraduate, I.Akyıldız(Student), 2006

TUNCER T. E., Implementation of nortfinding techniques, Postgraduate, P.Oğuz(Student), 2006

TUNCER T. E., Improvements in doa estimation by array interpolation in non-uniform linear arrays, Postgraduate, T.KAYA(Student), 2006

TUNCER T. E., Signal reconstruction from nonuniform samples, Postgraduate, B.SERDAROĞLU(Student), 2005

TUNCER T. E., Implementation and performance analysis of the DVB-T standard system, Postgraduate,

M.YÜKSEKKAYA(Student), 2005

TUNCER T. E., Frame synchronization in OFDM systems, Postgraduate, H.Yesari(Student), 2005

TUNCER T. E., Implementation of software GPS receiver, Postgraduate, E.Günaydın(Student), 2005

TUNCER T. E., LSE and MSE optimum deconvolution, Postgraduate, M.Aktaş(Student), 2004

BEŞİKCİ C., TUNCER T. E., A Digital signal processor based development platform for thermal imagers, Postgraduate, M.Özkan(Student), 2003

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

I. Transmit beampattern design for FDA-MIMO radar using complex manifold optimization Özen B., TUNCER T. E.

Digital Signal Processing: A Review Journal, vol.154, 2024 (SCI-Expanded)

II. MIMO radar beampattern design by using Phased-Costas waveforms with PAR constraints employing a generalized ambiguity function

Celik O. O., TUNCER T. E.

Digital Signal Processing: A Review Journal, vol.135, 2023 (SCI-Expanded)

III. Collaborative Direction of Arrival estimation by using Alternating Direction Method of Multipliers in distributed sensor array networks employing Sparse Bayesian Learning framework

Nurbas E., Onat E., TUNCER T. E.

DIGITAL SIGNAL PROCESSING, vol.130, 2022 (SCI-Expanded)

IV. Metric scale and angle estimation in monocular visual odometry with multiple distance sensors Ölmez B., TUNCER T. E.

Digital Signal Processing: A Review Journal, vol.117, 2021 (SCI-Expanded)

V. Estimation of partially occluded 2D human joints with a Bayesian approach

Dursun A. A., TUNCER T. E.

Digital Signal Processing: A Review Journal, vol.114, 2021 (SCI-Expanded)

VI. Improved ADMM-based algorithms for multi-group multicasting in large-scale antenna systems with extension to hybrid beamforming

Demir Ö. T., TUNCER T. E.

Digital Signal Processing: A Review Journal, vol.93, pp.43-57, 2019 (SCI-Expanded)

VII. Robust Optimum and Near-Optimum Beamformers for Decode-and-Forward Full-Duplex Multi-Antenna Relay With Self-Energy Recycling

Demir O. T., TUNCER T. E.

IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, vol.18, no.3, pp.1566-1580, 2019 (SCI-Expanded)

VIII. Path planning for mobile-anchor based wireless sensor network localization: Static and dynamic schemes

Erdemir E., TUNCER T. E.

AD HOC NETWORKS, vol.77, pp.1-10, 2018 (SCI-Expanded)

IX. Optimum QoS-Aware Beamformer Design for Full-Duplex Relay With Self-Energy Recycling DEMİR Ö. T., TUNCER T. E.

IEEE WIRELESS COMMUNICATIONS LETTERS, vol.7, no.1, pp.122-125, 2018 (SCI-Expanded)

X. Max-Min Fair Resource Allocation for SWIPT in Multi-Group Multicast OFDM Systems DEMİR Ö. T., TUNCER T. E.

IEEE COMMUNICATIONS LETTERS, vol.21, no.11, pp.2508-2511, 2017 (SCI-Expanded)

XI. Antenna Selection and Hybrid Beamforming for Simultaneous Wireless Information and Power Transfer in Multi-Group Multicasting Systems

DEMİR Ö. T., TUNCER T. E.

IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, vol.15, no.10, pp.6948-6962, 2016 (SCI-Expanded)

XII. 2-D DOA and mutual coupling coefficient estimation for arbitrary array structures with single and multiple snapshots

Elbir A. M., TUNCER T. E.

DIGITAL SIGNAL PROCESSING, vol.54, pp.75-86, 2016 (SCI-Expanded)

XIII. 2-D DOA estimation in case of unknown mutual coupling for multipath signals

Filik T., TUNCER T. E.

MULTIDIMENSIONAL SYSTEMS AND SIGNAL PROCESSING, vol.27, no.1, pp.69-86, 2016 (SCI-Expanded)

XIV. Optimum discrete phase-only multicast beamforming with joint antenna and user selection in cognitive radio networks

DEMİR Ö. T., TUNCER T. E.

DIGITAL SIGNAL PROCESSING, vol.46, pp.81-96, 2015 (SCI-Expanded)

XV. Optimum discrete transmit beamformer design

DEMİR Ö. T., TUNCER T. E.

DIGITAL SIGNAL PROCESSING, vol.36, pp.57-68, 2015 (SCI-Expanded)

XVI. Far-field DOA estimation and near-field localization for multipath signals

Elbir A. M., TUNCER T. E.

RADIO SCIENCE, vol.49, no.9, pp.765-776, 2014 (SCI-Expanded)

XVII. Calibration of antenna arrays for aeronautical vehicles on ground

Elbir A. M., TUNCER T. E.

AEROSPACE SCIENCE AND TECHNOLOGY, vol.30, no.1, pp.18-25, 2013 (SCI-Expanded)

XVIII. Sectorized approach and measurement reduction for mutual coupling calibration of nonomnidirectional antenna arrays

Aksoy T., TUNCER T. E.

RADIO SCIENCE, vol.48, no.2, pp.102-110, 2013 (SCI-Expanded)

XIX. Measurement reduction for mutual coupling calibration in DOA estimation

Aksoy T., TUNCER T. E.

RADIO SCIENCE, vol.47, 2012 (SCI-Expanded)

XX. 2-D PAIRED DIRECTION-OF-ARRIVAL ANGLE ESTIMATION WITH TWO PARALLEL UNIFORM LINEAR ARRAYS

Filik T., TUNCER T. E.

INTERNATIONAL JOURNAL OF INNOVATIVE COMPUTING INFORMATION AND CONTROL, vol.7, no.6, pp.3269-3279, 2011 (SCI-Expanded)

XXI. Channel Matrix Recursion for Blind Effective Channel Order Estimation

Karakutuk S., TUNCER T. E.

IEEE TRANSACTIONS ON SIGNAL PROCESSING, vol.59, no.4, pp.1642-1653, 2011 (SCI-Expanded)

XXII. Iterative HOS-SOS (IHOSS) Algorithm for Direction-of-Arrival Estimation and Sensor Localization Aktas M., TUNCER T. E.

IEEE TRANSACTIONS ON SIGNAL PROCESSING, vol.58, no.12, pp.6181-6194, 2010 (SCI-Expanded)

XXIII. A fast and automatically paired 2-D direction-of-arrival estimation with and without estimating the mutual coupling coefficients

Filik T., TUNCER T. E.

RADIO SCIENCE, vol.45, 2010 (SCI-Expanded)

XXIV. No-search algorithm for direction of arrival estimation

TUNCER T. E., ÖZGEN M. T.

RADIO SCIENCE, vol.44, 2009 (SCI-Expanded)

XXV. Uniform and nonuniform V-shaped planar arrays for 2-D direction-of-arrival estimation Filik T., TUNCER T. E.

RADIO SCIENCE, vol.44, 2009 (SCI-Expanded)

XXVI. Direction of arrival estimation for nonuniform linear arrays by using array interpolation

Tuncer T. E., Yasar T. K., Friedlander B.

RADIO SCIENCE, vol.42, no.4, 2007 (SCI-Expanded)

XXVII. Block-based methods for the reconstruction of finite-length signals from nonuniform samples Tuncer T. E.

IEEE TRANSACTIONS ON SIGNAL PROCESSING, vol.55, no.2, pp.530-541, 2007 (SCI-Expanded)

XXVIII. LSE and MSE optimum partition-based FIR-IIR deconvolution filters with best delay Tuncer T., Aktas M.

IEEE TRANSACTIONS ON SIGNAL PROCESSING, vol.53, no.10, pp.3780-3790, 2005 (SCI-Expanded)

XXIX. Optimum and suboptimum blind channel and symbol estimation for SISO channels TUNCER T. E.

Turkish Journal of Electrical Engineering and Computer Sciences, vol.12, no.3, pp.181-201, 2004 (SCI-Expanded)

XXX. Deconvolution and preequalization with best delay LS inverse filters

Tuncer T.

SIGNAL PROCESSING, vol.84, no.11, pp.2207-2219, 2004 (SCI-Expanded)

XXXI. Object reconstruction from in-line Fresnel holograms without explicit depth focusing Ozgen M., Tuncer T.

OPTICAL ENGINEERING, vol.43, no.6, pp.1300-1310, 2004 (SCI-Expanded)

XXXII. Optimum Nyquist filters with controlled time and frequency characteristics

Tuncer T.

ELECTRONICS LETTERS, vol.38, no.21, pp.1292-1293, 2002 (SCI-Expanded)

XXXIII. A new method for D-dimensional exact deconvolution

Tuncer T.

IEEE TRANSACTIONS ON SIGNAL PROCESSING, vol.47, no.5, pp.1324-1334, 1999 (SCI-Expanded)

XXXIV. Signal injection with perceptual criteria

TUNCER T. E.

Turkish Journal of Electrical Engineering and Computer Sciences, vol.6, no.2, pp.89-106, 1998 (SCI-Expanded)

XXXV. INTERPOLATED IIR MTH-BAND FILTER DESIGN WITH ALLPASS SUBFILTERS

TUNCER T. E., NGUYEN T.

IEEE TRANSACTIONS ON SIGNAL PROCESSING, vol.43, no.8, pp.1986-1990, 1995 (SCI-Expanded)

XXXVI. GENERAL-ANALYSIS OF 2-BAND QMF BANKS

TUNCER T. E., NGUYEN T.

IEEE TRANSACTIONS ON SIGNAL PROCESSING, vol.43, no.2, pp.544-548, 1995 (SCI-Expanded)

## **Books & Book Chapters**

I. Classical And Modern Direction-Of-Arrival Estimation

Tuncer T. E. (Editor)

AP, London, London, 2009

II. Narrowband and Wideband Direction-of-Arrival Estimation For Uniform And Nonuniform Linear Arrays

Tuncer T. E.

in: Classical And Modern Direction-Of-Arrival Estimation, Temel Engin Tuncer, Benjamin Friedlander, Editor, Elsevier Science, Oxford/Amsterdam , London, pp.1-15, 2009

## Refereed Congress / Symposium Publications in Proceedings

I. Improved ADMM-Based Algorithm for Multi-Group Multicast Beamforming in Large-Scale Antenna Systems

DEMİR Ö. T., TUNCER T. E.

European Signal Processing Conference (EUSIPCO), Rome, Italy, 3 - 07 August 2018, pp.652-656

II. A New Beamformer Design Method for Multi-Group Multicasting by Enforcing Constructive Interference

DEMİR Ö. T., TUNCER T. E.

European Signal Processing Conference (EUSIPCO), Rome, Italy, 3 - 07 August 2018, pp.632-636

III. Path Planning and Localization for Mobile Anchor Based Wireless Sensor Networks Erdemir E., TUNCER T. E.

25th European Signal Processing Conference (EUSIPCO), Greece, 28 August - 02 September 2017, pp.131-135

IV. SWIPT for Max-Min Fair Multi-Group Multicast Beamforming Through Power Splitting DEMİR Ö, T., TUNCER T, E.

IEEE Wireless Communications and Networking Conference (WCNC), San-Francisco, Costa Rica, 19 - 22 March 2017

V. An Adaptive Path Planning Algorithm for Mobile-Anchor Based Wireless Sensor Networks Erdemir E. N., TUNCER T. E.

25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

VI. Single Snapshot DOA Estimation in the Presence of Mutual Coupling for Arbitrary Array structures ELBİR A. M., TUNCER T. E.

IEEE 9th Sensor Array and Multichannel Signal Processing Workshop (SAM 2016), 10 - 16 July 2016

VII. Compressed Sensing For Single Snapshot Direction Finding In The Presence of Mutual Coupling Elbir A. M., TUNCER T. E.

24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.1109-1112

VIII. Two-Bit Hybrid Beamforming for Broadcasting

DEMİR Ö. T., TUNCER T. E.

24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.1733-1736

IX. Cooperative Localization In One-Hop And Multi-Hop Wireless Sensor Networks Using Alternating Minimization Algorithm

Erdemir E. N., TUNCER T. E.

24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.1357-1360

X. Direction-of-Arrival and Mutual Coupling Coefficient Estimation With A Single Observation For Arbitrary Array Structures

Elbir A. M., TUNCER T. E.

24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.1105-1108

XI. Relay-Assisted Beamforming for Multicast Systems with Energy Harvesting Capability DEMİR Ö. T., TUNCER T. E.

24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.1865-1868

XII. HYBRID BEAMFORMING WITH TWO BIT RF PHASE SHIFTERS IN SINGLE GROUP MULTICASTING DEMİR Ö. T., TUNCER T. E.

IEEE International Conference on Acoustics, Speech, and Signal Processing, Shanghai, China, 20 - 25 March 2016, pp.3271-3275

XIII. DISTRIBUTED BEAMFORMING IN RELAY NETWORKS FOR ENERGY HARVESTING MULTI-GROUP MULTICAST SYSTEMS

DEMİR Ö. T., TUNCER T. E.

IEEE International Conference on Acoustics, Speech, and Signal Processing, Shanghai, China, 20 - 25 March 2016, pp.3296-3300

XIV. JOINT OPTIMIZATION OF TRANSMIT AND RELAY BEAMFORMER FOR SINGLE GROUP MULTICAST TRANSMISSION

DEMİR Ö. T., TUNCER T. E.

23rd European Signal Processing Conference (EUSIPCO), Nice, France, 31 August - 04 September 2015, pp.1361-

# XV. SPARSE SUPPORT RECOVERY FOR DOA ESTIMATION IN THE PRESENCE OF MUTUAL COUPLING Elbir A. M., TUNCER T. E.

23rd European Signal Processing Conference (EUSIPCO), Nice, France, 31 August - 04 September 2015, pp.1366-1370

## XVI. MULTI-GROUP MULTICAST BEAMFORMING FOR SIMULTANEOUS WIRELESS INFORMATION AND POWER TRANSFER

DEMİR Ö. T., TUNCER T. E.

23rd European Signal Processing Conference (EUSIPCO), Nice, France, 31 August - 04 September 2015, pp.1356-

# XVII. SOURCE LOCALIZATION WITH SPARSE RECOVERY FOR COHERENT FAR- AND NEAR-FIELD SIGNALS Elbir A. M., TUNCER T. E.

2015 IEEE Signal Processing and Signal Processing Education Workshop (SP/SPE), Utah, United States Of America, 9 - 12 August 2015, pp.124-129

## XVIII. DIRECTION FINDING AND LOCALIZATION FOR FAR-FIELD SOURCES WITH NEAR-FIELD MULTIPATH REFLECTIONS

Elbir A. M., TUNCER T. E.

IEEE Signal Processing and Signal Processing Education Workshop (SP/SPE), Utah, United States Of America, 9 - 12 August 2015, pp.130-135

#### XIX. Discrete Broadcast Beamforming with Antenna and User Selection

DEMİR Ö. T., TUNCER T. E.

23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.1461-1464

### XX. Discrete Relay Beamforming for Broadcasting with Relay Selection

DEMİR Ö. T., TUNCER T. E.

23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.2138-2141

## XXI. Wireless Sensor Network Localization Using Alternating Minimization Algorithm

Erdemir E. N., TUNCER T. E.

23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.2191-2194

## XXII. Multicast Beamforming with Antenna Selection Using Alternating Maximization

DEMİR Ö. T., TUNCER T. E.

23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.1457-1460

## XXIII. Performance of a Non-Linear Adaptive Beamforming Algorithm for Signal-of-Interest Extraction Oguz O., TUNCER T. E.

23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.827-830

## XXIV. Sparse Signal Recovery for Localization of Coherent Far- and Near-Field Signals

Elbir A. M., TUNCER T. E.

23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.899-902

## XXV. Evre uyumlu uzak ve yakın alan kaynakların konum kestirimi için seyrek işaret geri oluşturma TUNCER T. E., ELBİR A. M.

SİU-2015, Turkey, 16 - 19 May 2015

## XXVI. Hedef sinyal çıkarımı için doğrusal olmayan uyarlamalı bir hüzme şekillendirme algoritmasının başarımı

oğuz ö., TUNCER T. E.

SİU-2015, Turkey, 16 - 19 May 2015

### XXVII. Almaşık enküçültme algoritması kullanarak kablosuz sensor ağlarında konumlandırma

TUNCER T. E., ERDEMİR E.

SIU-2015, Turkey, 16 - 19 May 2015

#### XXVIII. Almaşık enbüyütme kullanarak anten seçimi ile çoğa gönderim hüzme şekillendirme

TUNCER T. E., DEMİR Ö. T.

SİU-2015, Turkey, 16 - 19 May 2015

#### XXIX. Anten ve kullanıcı seçimi ile ayrık tüme gönderim hüzme tasarımı

TUNCER T. E., DEMİR Ö. T.

SİU-2015, Turkey, 16 - 19 May 2015

#### XXX. Röle seçimi ile tüme gönderim için ayrık röle hüzme şekillendirme

TUNCER T. E., DEMİR Ö. T.

SİU-2015, Turkey, 16 - 19 May 2015

## XXXI. OPTIMUM PHASE-ONLY DISCRETE BROADCAST BEAMFORMING WITH ANTENNA AND USER

SELECTION IN INTERFERENCE LIMITED COGNITIVE RADIO NETWORKS

DEMİR Ö. T., TUNCER T. E.

40th IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), Brisbane, Australia, 19 - 24 April 2015, pp.2724-2728

#### XXXII. MULTICAST BEAMFORMING WITH ANTENNA SELECTION USING EXACT PENALTY APPROACH

DEMİR Ö. T., TUNCER T. E.

40th IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), Brisbane, Australia, 19 - 24 April 2015, pp.2489-2493

## XXXIII. OPTIMUM DISCRETE DISTRIBUTED BEAMFORMING FOR SINGLE GROUP MULTICASTING RELAY NETWORKS WITH RELAY SELECTION

DEMİR Ö. T., TUNCER T. E.

40th IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), Brisbane, Australia, 19 - 24 April 2015, pp.2524-2528

## XXXIV. OPTIMUM DISCRETE PHASE-ONLY TRANSMIT BEAMFORMING WITH ANTENNA SELECTION

DEMİR Ö. T., TUNCER T. E.

22nd European Signal Processing Conference (EUSIPCO), Lisbon, Portugal, 1 - 05 September 2014, pp.1282-1286

#### XXXV. ALTERNATING MAXIMIZATION ALGORITHM FOR THE BROADCAST BEAMFORMING

DEMİR Ö. T., TUNCER T. E.

22nd European Signal Processing Conference (EUSIPCO), Lisbon, Portugal, 1 - 05 September 2014, pp.1915-1919

#### XXXVI. OPTIMUM DISCRETE SINGLE GROUP MULTICAST BEAMFORMING

DEMİR Ö. T., TUNCER T. E.

IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Florence, Italy, 4 - 09 May 2014

## XXXVII. Optimum Discrete Max-Min Style Broadcast Beamforming Design

DEMİR Ö. T., TUNCER T. E.

22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.1118-1121

## XXXVIII. Iterative Rank Minimization For Broadcast Beamforming

DEMİR Ö. T., TUNCER T. E.

22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.1114-1117

#### XXXIX. Angle and Position Estimation for Far-Field and Near-Field Multipath Signals

Elbir A. M., TUNCER T. E.

22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.1379-1382

## XL. Joint Discrete Phase-Only Broadcast Beamforming With Antenna Selection

DEMİR Ö. T., TUNCER T. E.

22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.1126-1129

### XLI. Two Dimensional DOA Estimation using Uniform Rectangular Array with Mutual Coupling

Caliskan M., TUNCER T. E.

22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.465-468

#### XLII. Ground Calibration of Antenna Arrays For Complex Platforms

Elbir A. M., TUNCER T. E.

5th IEEE International Symposium on Phased Array Systems and Technology, Massachusetts, United States Of America, 15 - 18 October 2013, pp.714-718

#### XLIII. OPTIMUM DESIGN OF DISCRETE TRANSMIT PHASE ONLY BEAMFORMER

DEMİR Ö. T., TUNCER T. E.

21st European Signal Processing Conference (EUSIPCO), Marrakush, Morocco, 9 - 13 September 2013

## XLIV. Performance Comparison of Single and Dual Polarized MIMO Systems

Soker B., TUNCER T. E.

21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013

#### XLV. HOS BASED ONLINE CALIBRATION

Aktas M., TUNCER T. E.

19th European Signal Processing Conference (EUSIPCO), Barcelona, Spain, 29 August - 02 September 2011, pp.604-608

### XLVI. ARRAY CALIBRATION WITH MODIFIED ITERATIVE HOS-SOS (MIHOSS) ALGORITHM

Aktas M., TUNCER T. E.

19th European Signal Processing Conference (EUSIPCO), Barcelona, Spain, 29 August - 02 September 2011, pp.614-618

## XLVII. ITERATIVE HOS-SOS (IHOSS) BASED SENSOR LOCALIZATION AND DIRECTION-OF-ARRIVAL ESTIMATION

Aktas M., TUNCER T. E.

2010 IEEE International Conference on Acoustics, Speech, and Signal Processing, Texas, United States Of America, 10 - 19 March 2010, pp.2602-2605

## XLVIII. A NEW CHANNEL ORDER ESTIMATION ALGORITHM FOR FIR SIMO CHANNELS

Karakutuk S., TUNCER T. E.

17th European Signal Processing Conference (EUSIPCO 2009), 4 - 06 August 2009

## XLIX. Channel Output Error (COE) for Channel Order Estimation

Karakutuk S., TUNCER T. E.

IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009, pp.331-334

# L. A Fast and Automatically Paired 2-Dimensional Direction-of-Arrival Estimation Using Arbitrary Array Geometry

Filik T., TUNCER T. E.

IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009, pp.782-785

## LI. WIDEBAND DOA ESTIMATION FOR NONUNIFORM LINEAR ARRAYS WITH WIENER ARRAY INTERPOLATION

Yasar T. K., TUNCER T. E.

IEEE Sensor Array and Multichannel Signal Processing Workshop, Darmstadt, Germany, 21 - 23 July 2008, pp.207-211

## LII. UNIFORM AND NONUNIFORM V-SHAPED ISOTROPIC PLANAR ARRAYS

Filik T., TUNCER T. E.

IEEE Sensor Array and Multichannel Signal Processing Workshop, Darmstadt, Germany, 21 - 23 July 2008, pp.99-103

#### LIII. Blind Communications Sytem Structures For SIMO Channels

Karakuetuek S., TUNCER T. E.

IEEE 16th Signal Processing and Communications Applications Conference, Aydın, Turkey, 20 - 22 April 2008, pp.737-740

### LIV. Uniform and Non-Uniform V-shaped Arrays for 2-D DOA Estimation

Filik T., TUNCER T. E., Yasar T. K.

IEEE 16th Signal Processing and Communications Applications Conference, Aydın, Turkey, 20 - 22 April 2008, pp.408-411

### LV. Design and evaluation of V-shaped arrays for 2-D DOA estimation

Filik T., TUNCER T. E.

33rd IEEE International Conference on Acoustics, Speech and Signal Processing, Nevada, United States Of America, 30 March - 04 April 2008, pp.2477-2480

#### LVI. Design of V-shaped array geometry

Filik T., TUNCER T. E., Yasar T. K.

IEEE 15th Signal Processing and Communications Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007, pp.735-738

## LVII. Effects of modulation type on blind SIMO commmunications systems

Karakutuk S., TUNCER T. E.

IEEE 15th Signal Processing and Communications Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007, pp.1107-1110

## LVIII. Partly-filled nonuniform linear arrays for DOA estimation in multipath signals

TUNCER T. E., Yasar T. K., Friedlander B.

32nd IEEE International Conference on Acoustics, Speech and Signal Processing, Hawaii, United States Of America, 15 - 20 April 2007, pp.1053-1055

#### LIX. A new method for signal interpolation

Tuncer T. E.

IEEE 14th Signal Processing and Communications Applications, Antalya, Turkey, 16 - 19 April 2006, pp.746-749

#### LX. Blind channel identification methods and channel order estimation

Tuncer T. E.

IEEE 14th Signal Processing and Communications Applications, Antalya, Turkey, 16 - 19 April 2006, pp.429-432

## LXI. Ring based FIR-IIR best delay LS inverse filters

Aktas M., Tuncer T.

IEEE 12th Signal Processing and Communications Applications Conference, Kusadasi, Turkey, 28 - 30 April 2004, pp.208-211

## LXII. Causal and stable FIR-IIR Wiener filters

Tuncer T.

 $12 th\ IEEE\ Workshop\ on\ Statistical\ Signal\ Processing,\ Missouri,\ United\ States\ Of\ America,\ 28\ September\ -\ 01\ October\ 2003,\ pp.118-121$ 

## LXIII. ISI-free pulse shaping filters for receivers with or without a matched filter

Tuncer T.

IEEE International Conference on Acoustics, Speech, and Signal Processing, Florida, United States Of America, 13 - 17 May 2002, pp.2269-2272

## LXIV. A new time-domain deconvolution algorithm and its applications

Tuncer T

IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 99), Arizona, United States Of America, 15 - 19 March 1999, pp.1433-1436

## Patent

TUNCER T. E., Nonsymmetric Wideband Dipole Antenna, Patent, CHAPTER H Electricity, Standard Registration, 2013
Tuncer T. E., A system and a method for simultaneous position, mutual coupling and gain/phase calibration of antenna

arrays Classifications H01Q3/267 Phased-array testing or checking devices View 1 more classifications W02011093805A1, Patent, CHAPTER H Electricity, The Invention Registration Number: TR2012 086632B, Standard Registration, 2011

## Activities in Scientific Journals

Digital Signal Processing, Committee Member, 2020 - Continues

## **Scientific Refereeing**

DIGITAL SIGNAL PROCESSING, Journal Indexed in SCI-E, September 2020 DIGITAL SIGNAL PROCESSING, Journal Indexed in SCI-E, May 2020

#### **Metrics**

Publication: 102 Citation (WoS): 493 Citation (Scopus): 487 H-Index (WoS): 12 H-Index (Scopus): 14

## **Invited Talks**

Artificial Intelligence, Seminar, Middle East Technical University, Turkey, March 2021

## Non Academic Experience

METU

**METU**