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Personal Information

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Education Information

Doctorate, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Elektronik Ve Haberleşme Mühendisliği, Turkey 2001 - 2005

Post Graduate, İstanbul Üniversitesi, Fen Bilimleri Enstitüsü, Elektronik Mühendisliği, Turkey 1997 - 2000

Under Graduate, İstanbul Üniversitesi, Mühendislik Fakültesi, Elektronik Mühendisliği (İng.), Turkey 1992 - 1997

Research Areas

Communication System Theory, Wireless Communication, Telecommunication Applications, Signal Processing for Sensor Sequences, Signal Processing for Communication

Academic Titles / Tasks

Professor, İstanbul Medeniyet Üniversitesi, Faculty of Engineering and Natural Sciences , Department of Electrical and Electronic Engineering, 2018 - Continues

Associate Professor, İstanbul Medeniyet Üniversitesi, Faculty of Engineering and Natural Sciences , Department of Electrical and Electronic Engineering, 2015 - 2018

Associate Professor, Maltepe Üniversitesi, Faculty Of Engineering And Natural Sciences, Department Of Electrical And Electronics Engineering, 2012 - 2015

Assistant Professor, Maltepe Üniversitesi, Faculty Of Engineering And Natural Sciences, Department Of Electrical And Electronics Engineering, 2006 - 2012

Lecturer, Kadir Has Üniversitesi, Teknik Bilimler Meslek Yüksek Okulu, Haberleşme, 2003 - 2006

Research Assistant, İstanbul Üniversitesi, Mühendislik Fakültesi, Elektronik Mühendisliği, 1998 - 2002

Professional Experience

Head of Department, İstanbul Medeniyet Üniversitesi, Faculty of Engineering and Natural Sciences , Elektrik-Elektronik Mühendisliği, 2016 - Continues

Head of Department, İstanbul Medeniyet Üniversitesi, Mühendislik Ve Mimarlık Fakültesi, Elektrik Ve Elektronik Mühendisliği, 2015 - 2016

Head of Department, Maltepe Üniversitesi, Mühendislik Ve Doğa Bilimleri Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2012 - 2015

Vice Dean, Maltepe Üniversitesi, Mühendislik Ve Doğa Bilimleri Fakültesi, Elektrik-Elektronik Mühendisliği, 2007 - 2011

Courses

Enformasyon Teorisi, Post Graduate, 2014 - 2015
Sayısal Haberleşme Teorisi, Post Graduate, 2014 - 2015
İletişim Kuramı II, Under Graduate, 2013 - 2014, 2014 - 2015
Signals and Systems, Under Graduate, 2014 - 2015
Enformasyon Teorisi, Post Graduate, 2014 - 2015
Sinyaller ve Sistemler, Under Graduate, 2013 - 2014
Sayısal Haberleşme Teorisi, Post Graduate, 2013 - 2014
İletişim Kuramı I, Under Graduate, 2013 - 2014
Digital Signal Processing, Under Graduate, 2012 - 2013
Image Processing, Post Graduate, 2006 - 2007
Digital Communication, Under Graduate, 2006 - 2007

Advising Theses

Kabaoğlu N., PERFORMANCE ANALYSIS OF COGNITIVE RADIO COMMUNICATION IN FIFTH GENERATION NETWORKS, Post Graduate, E.Diril(Student), 2019

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Generalized Code Index Modulation and Spatial Modulation for High Rate and Energy Efficient MIMO Systems on Rayleigh Block-Fading Channel**
Çögen F., Aydın E., Kabaoğlu N., Başar E., İlhan H.
IEEE Systems Journal, vol.1, no.1, pp.1-9, 2020 (Journal Indexed in SCI)
- II. **C-MRC Based Cooperative Spatial Modulation with Antenna Selection**
Aydın E., Başar E., İlhan H., Kabaoğlu N.
International Journal Of Communication Systems, vol.33, no.17, pp.1-15, 2020 (Journal Indexed in SCI)
- III. **On the Error Probability of Cognitive RF-FSO Relay Networks Over Rayleigh/EW Fading Channels With Primary-Secondary Interference**
Erdogan E., KABAOĞLU N., Altunbaş İ., Yanikomeroğlu H.
IEEE PHOTONICS JOURNAL, vol.12, 2020 (Journal Indexed in SCI)
- IV. **On the performance of cognitive two-way relay networks with multi-user scheduling and shadowing**
Erdogan E., Kabaoglu N., AFANA A., IKKI S.
Physical Communication, vol.35, 2019 (Journal Indexed in SCI)
- V. **A practical power allocation method for multi-user and multi-carrier networks**
Kabaoğlu N.
WIRELESS NETWORKS, vol.25, pp.2997-3003, 2019 (Journal Indexed in SCI)
- VI. **Iterative Receiver with Low Complexity for Downlink Multicarrier Communications over Rapidly Time-Varying Channels**
KABAOĞLU N., ERDOĞAN E., AYDIN E.
WIRELESS COMMUNICATIONS & MOBILE COMPUTING, 2018 (Journal Indexed in SCI)
- VII. **Expectation-maximization-based joint data detection and channel estimation for a cellular multi-carrier code division multiple access network using single-hop relaying**
Kabaoglu N.
INTERNATIONAL JOURNAL OF COMMUNICATION SYSTEMS, vol.26, pp.449-464, 2013 (Journal Indexed in SCI)
- VIII. **EM Based Data Detection Algorithm for Downlink of a Single Hop Relaying Network**
Kabaoglu N.
WIRELESS PERSONAL COMMUNICATIONS, vol.69, pp.107-120, 2013 (Journal Indexed in SCI)
- IX. **SAGE Based Suboptimal Receiver for Downlink MC-CDMA Systems**
Kabaoglu N.

- IEEE COMMUNICATIONS LETTERS, vol.15, pp.1381-1383, 2011 (Journal Indexed in SCI)
- X. **Target Tracking Using Particle Filters With Support Vector Regression**
Kabaoglu N.
IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, vol.58, pp.2569-2573, 2009 (Journal Indexed in SCI)
- XI. **Wideband target tracking by using SVR-based sequential Monte Carlo method**
Kabaoglu N., Çirpan H. A.
SIGNAL PROCESSING, vol.88, pp.2804-2816, 2008 (Journal Indexed in SCI)
- XII. **Support vector regression for surveillance purposes**
Özer S., CIRPAN H. A. , Kabaoglu N.
MULTIMEDIA CONTENT REPRESENTATION, CLASSIFICATION AND SECURITY, vol.4105, pp.442-449, 2006 (Journal Indexed in SCI)
- XIII. **EM based Stochastic maximum likelihood approach for localization of near-field sources in 3-D**
Kabaoglu N., CIRPAN H., PAKER S.
FREQUENZ, vol.58, pp.178-184, 2004 (Journal Indexed in SCI)
- XIV. **Deterministic maximum likelihood approach for 3-D near field source localization**
Kabaoglu N., CIRPAN H., CEKLI E., PAKER S.
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.57, pp.345-350, 2003 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Suboptimal Frequency-Selective Transceiver Design for Multicarrier Millimeter Wave MIMO Systems**
KABAOĞLU N.
ELECTRICA, vol.18, pp.83-89, 2018 (Journal Indexed in ESCI)
- II. **An Analysis of the Effects of SVM Parameters on the Dead-Time System Modeling**
KABAOĞLU N., Kabaoglu R. O.
ELECTRICA, vol.18, pp.1-5, 2018 (Journal Indexed in ESCI)
- III. **A COMPUTATIONAL EFFICIENT DATA DETECTION METHOD FOR DOWNLINK OF AN MC-CDMA SYSTEM**
KABAOĞLU N., Ortaç Kabaoglu R.
IU-JEEE, no.2, pp.3497-3501, 2017 (International Refereed University Journal)
- IV. **Near Field Localization of Moving Sources with REM Algorithms**
Çekli S., Çekli E., KABAOĞLU N.
ISTANBUL UNIVERSITY-JOURNAL OF ELECTRICAL AND ELECTRONICS ENGINEERING, vol.9, pp.769-779, 2009 (International Refereed University Journal)
- V. **3 boyutlu uzayda kaynak konumlandırması için en büyük olabilirlik yaklaşımı**
KABAOĞLU N., Çirpan H. A. , Parker S.
itüdergisi/d - Mühendislik Serisi, vol.5, pp.35-46, 2006 (National Refreed University Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Code Index Modulation and Spatial Modulation: A New High Rate and Energy Efficient Scheme for MIMO Systems**
Çögen F., Aydın E., Kabaoglu N., Başar E., İLHAN H.
41st International Conference on Telecommunications and Signal Processing, TSP 2018, Athens, Greece, 4 - 06 July 2018
- II. **A novel MIMO scheme based on code-index modulation and spatial modulation Kod-inds modülasyonu ve uzaysal modülasyon tabanlı yeni bir MIMO sistem**
Çögen F., AYDIN E., KABAOĞLU N., Başar E., İLHAN H.

26th IEEE Signal Processing and Communications Applications Conference, SIU 2018, İzmir, Turkey, 2 - 05 May 2018, pp.1-4

- III. **Kod İndis Modülasyonu ve Uzaysal Modülasyon Tabanlı Yeni bir MIMO Sistem**
Çöğen F., AYDIN E., KABAOĞLU N., Başar E., ILLIAN H.
26. IEEE Sinyal İşleme ve Uygulamaları Kurultayı (SIU-2018), İzmir, Turkey, 02 May 2018, pp.1-4
- IV. **Antenna Selection in Cognitive AF systems in the presence of Mutual Primary-Secondary Interference, Limited Feedback and Imperfect Channel Estimations**
ERDOĞAN E., Birol A., KABAOĞLU N., Güçlüoğlu T.
IEEE BlackSeaCom, İstanbul, Turkey, 05 June 2017, pp.1
- V. **Medikal Uygulamalarda Telsiz İletişim Teknolojilerinin Kullanımı**
KABAOĞLU N.
Ulusal Biyomedikal Cihaz Tasarımı Ve Üretimi Sempozyumu, İstanbul, Turkey, 14 May 2016, pp.2-5
- VI. **An Expectation-Maximization Type Receiver for Uplink of a Hopping System with Time Sharing**
Cam G., Aydın E., Kabaoglu N.
IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009, pp.447-450
- VII. **MC-CDMA Sistemlerde Zaman Paylaşımli Atlamalı İletişim**
Aydın E., Çam G., KABAOĞLU N.
ELECO 2008, Bursa, Turkey, 26 November 2008
- VIII. **Recursive Tracking of Moving Near-Field Sources**
çekli s., çekli e., KABAOĞLU N., çırpan h. a.
International Symposium on Innovations in Intelligent Systems and Applications, İstanbul, Turkey, 20 June 2007
- IX. **EM-Based recursive tracking algorithm for near-field moving sources**
Cekli S., CEKLI E., Kabaoglu N., Çırpan H. A.
IEEE Intelligent Vehicles Symposium, İstanbul, Turkey, 13 - 15 June 2007, pp.182-183
- X. **Application of Support Vector Regression on Target Tracking**
Özer S., Çırpan H. A. , KABAOĞLU N.
Telecommunication and Signal Processing, Brno, Czech Republic, 01 September 2006, pp.1-8
- XI. **Tracking of Moving Sources with Recursive Expectatin Maximization Algorithm**
Çekli S., Çekli E., KABAOĞLU N., Çırpan H. A.
29th international conference "Telecommunication and Signal Processing, Brno, Czech Republic, 01 September 2006, no.2006, pp.1-5
- XII. **Near field parameter estimation of moving sources with recursive expectation maximization algorithm**
CEKLI S., CEKLI E., Kabaoglu N., CIRPAN H. A.
IEEE 14th Signal Processing and Communications Applications, Antalya, Turkey, 16 - 19 April 2006, pp.385-386
- XIII. **Support vector machines based target tracking techniques**
Özer S., CIRPAN H. A. , Kabaoglu N.
IEEE 14th Signal Processing and Communications Applications, Antalya, Turkey, 16 - 19 April 2006, pp.369-371
- XIV. **3-Boyutlu Uzayda Kaynak Konum Kestirimi İçin Koşulsuz En Büyük Olabilirlik Kestirimcisi**
KABAOĞLU N., Çırpan H. A. , Paker S.
ELECO 2004, Bursa, Turkey, 08 December 2004
- XV. **Unconditional maximum likelihood approach for localization of near-field sources in 3-D space**
Kabaoglu N., CURPAN H., PAKER S.
4th IEEE International Symposium on Signal Processing and Information Technology, Rome, Italy, 8 - 21 December 2004, pp.233-237
- XVI. **Performance Analysis of Maximum Likelihood 3-D Source Localization**
KABAOĞLU N., Çırpan H. A. , Çekli E., Paker S.
International Conference on Electrical and Electronics Engineering, Bursa, Turkey, 03 December 2003
- XVII. **3 - Boyutlu Yakın Alan Kaynak Konum Kestirimcisi İçin Cramer-Rao Sınır İfadeleri**
KABAOĞLU N., Çırpan H. A. , Çekli E., Paker S.

11. IEEE Sinyal Isleme ve Uygulamaları Kurultayı, SIU-2003, İstanbul, Turkey, 18 June 2003
- XVIII. **Maximum likelihood 3-d near-field source localization using the EM algorithm**
Kabaoglu N., CIRPAN H., CEKLI E., PAKER S.
8th IEEE International Symposium on Computers and Communication (ISCC 2003), Antalya, Turkey, 30 June - 03 July 2003, pp.492-497
- XIX. **3-Boyutlu Uzayda Kaynak Konum Kestirimi**
KABAOĞLU N., Çırpan H. A. , Çekli E., Paker S.
10. IEEE Sinyal Isleme ve Uygulamaları Kurultayı, SIU-2002, Denizli, Turkey, 12 June 2002
- XX. **Ortodontik Tedavi Sırasında Oluşan TME Seslerinin İncelenmesi.**
KABAOĞLU N., Akan A., Yıldırım M., Üner O., Öztaş E., Dönmez H.
9. IEEE Sinyal Isleme ve Uygulamaları Kurultayı, SIU-2001, Gazimagusa, Cyprus (Kkct), 25 April 2001
- XXI. **Evolutionary Spectral Based Classification of Machine Vibrations**
KABAOĞLU N., Akan A.
EUSIPCO-2000, European Signal Processing Conference, Tampere, Finland, 05 September 2000
- XXII. **Makina Titreşimlerinin Evrimsel İzge Tabanlı Sınıflandırılması**
KABAOĞLU N., Akan A., Şeker S.
8. IEEE Sinyal Isleme ve Uygulamaları Kurultayı, SIU-2000, Antalya, Turkey, 12 June 2000
- XXIII. **Detection of Machinery Failure by Using Time-Frequency Analysis**
KABAOĞLU N., Akan A., Çekiç Y.
IEEE Balkan Conference on Signal Processing, Communications, Circuits, and Systems, Antalya, Turkey, 01 June 2000
- XXIV. **Yaygın Spektrum İletişim Sistemlerinde Gabor Açılımı Kullanarak Bozucu Giriş Yok Etme**
SAATCI E., KABAOĞLU N., Akan A.
7. IEEE Sinyal Isleme ve Uygulamaları Kurultayı, SIU'99, Ankara, Turkey, 17 June 1999
- XXV. **n-Adet Fonksiyonun Trigonometrik Fourier Serileri Katsayılarının Paralel Hesabı İçin Doğrusal Çağrışımlı Bellek (LAM) Yapısı**
Tander B., Özmen A., KABAOĞLU N.
7. IEEE Sinyal Isleme ve Uygulamaları Kurultayı, SIU'99, Ankara, Turkey, 17 June 1999, pp.407-410
- XXVI. **Broadband jammer excision in spread spectrum communication systems using time-frequency masking**
SAATCI E., AKAN A., Kabaoglu N.
IEEE Signal Processing Workshop on Higher-Order Statistics, CAESAREA, Israel, 14 - 16 June 1999, pp.48-51

Supported Projects

- AYDIN E., KABAOĞLU N., Çögen F., Project Supported by Higher Education Institutions, Uzaysal Modülasyon Tabanlı Kod İndeks Modülasyonlu Yüksek Hızlı Enerji Verimli Yeni Bir MIMO Sistem, 2018 - 2019
- AYDIN E., KABAOĞLU N., BAŞAR E., İLHAN H., Çögen F., Project Supported by Higher Education Institutions, Kod İndeks Modülasyonu ve Uzaysal Modülasyon: MIMO Sistemler İçin Yeni Yüksek Hızlı Enerji Verimli Yöntem, 2018 - 2018
- ERDOĞAN E., KABAOĞLU N., Project Supported by Higher Education Institutions, İşbirlikli bilişsel haberleşme sistemlerinin modellenmesi tasarımı ve hata başarımları analizleri, 2017 - 2018
- ERDOĞAN E., KABAOĞLU N., BİROL A., GÜÇLÜOĞLU T., Project Supported by Higher Education Institutions, Anten Seçimli İşbirlikli Bilişsel Ağlarda Kanal Kestirim Hatası ve Ortak Kanal Girişimi, 2017 - 2017
- KABAOĞLU N., TÜBİTAK Project, Kablosuz Algılayıcı Ağlarında Geniş Bant Kaynak Konumlandırması, 2005 - 2007

Citations

Total Citations (WOS):88

h-index (WOS):5