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Address: Hacettepe Üniversitesi Beytepe Kampüsü Elektrik ve Elektronik Mühendisliği Bölümü

Education Information

Doctorate, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik Ve Elektronik Mühendisliği Bölümü, Turkey 2009 - 2016

Post Graduate, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik Ve Elektronik Mühendisliği Bölümü, Turkey 2006 - 2009

Under Graduate, Hacettepe Üniversitesi, Mühendislik Fakültesi, Elektrik Ve Elektronik Mühendisliği Bölümü, Turkey 2002 - 2006

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, GELECEK NESİL HABERLEŞME SİSTEMLERİ İÇİN VERİ HIZI ARTTIRICI YÖNTEMLER VE KAYNAK TAHSİSİ, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik Ve Elektronik Mühendisliği, 2016

Post Graduate, ÇOK KULLANICILI MIMO KANAL KISALTMA DENKLEŞTİRME İÇİN GENEL BİR ALTYAPI, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik Ve Elektronik Mühendisliği, 2009

Research Areas

Information Systems, Communication and Control Engineering, Communication Engineering, Information Theory, Communication Networks, Communication System Theory, Wireless Communication, Optical Communication, Telecommunication Applications, Signal Processing, Signal Processing for Communication, Electrical and Electronics Engineering, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Elektrik ve Elektronik Bölümü, 2019 - Continues
Research Assistant, Hacettepe University, Mühendislik Fakültesi, Elektrik Ve Elektronik Mühendisliği, 2006 - 2019

Courses

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

- I. **Interference-aware resource allocation for multi-tier uplink NOMA under feedback constraints**
YÜKSEKKAYA B., TOKER C.
PHYSICAL COMMUNICATION, vol.35, 2019 (Journal Indexed in SCI)
- II. **Power and Interference Regulated Water-Filling for Multi-Tier Multi-Carrier Interference Aware Uplink**
YÜKSEKKAYA B., TOKER C.
IEEE WIRELESS COMMUNICATIONS LETTERS, vol.7, no.4, pp.494-497, 2018 (Journal Indexed in SCI)
- III. **Indoor Channel Modelling for SISO and Massive SIMO in the 60 GHz mm-Wave Band**
Yuksekkaya B.
ELEKTRONIKA IR ELEKTROTEHNIKA, vol.23, pp.39-44, 2017 (Journal Indexed in SCI)
- IV. **Joint transceiver FIR filter design for multiuser MIMO channel shortening equalization and full equalization using channel duality**
YÜKSEKKAYA B., TOKER C.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.25, no.5, pp.4077-4090, 2017 (Journal Indexed in SCI)
- V. **Minimum Outage Probability for the Relay Channel under Individual Power Constraints**
Yuksel M., YÜKSEKKAYA B.
IEEE COMMUNICATIONS LETTERS, vol.16, no.7, pp.982-985, 2012 (Journal Indexed in SCI)
- VI. **A GSM, Internet and speech controlled wireless interactive home automation system**
Yuksekkaya B., KAYALAR A. A. , TOSUN M. B. , OZCAN M. K. , Alkar A. Z.
IEEE TRANSACTIONS ON CONSUMER ELECTRONICS, vol.52, no.3, pp.837-843, 2006 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **60 GHz mm-Dalga Bandı için Üç Boyutlu Bina İçi Büyükölçek ÇGÇÇ Kanal Modelleme**
Yüksekkaya B.
Firat Üniversitesi Mühendislik Bilimleri Dergisi, vol.30, no.2, pp.175-184, 2018 (National Refreed University Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Interference Aware Optimal Resource Allocation on V2X Networks**
DEMİR U., YÜKSEKKAYA B., TOKER C.
27th Signal Processing and Communications Applications Conference (SIU), Sivas, Turkey, 24 - 26 April 2019
- II. **Energy Efficient Power Control and Radio Resource Management in Multi-Connectivity Framework**
HALILOĞLU Ö., TOKER C., BULU G., YÜKSEKKAYA B., Yanikomeroglu H.
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.1101-1104
- III. **Power Control for Two-Tier Multi-Carrier MAC Under Interference Constraints**
YÜKSEKKAYA B., Inaltekin H., TOKER C.
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.1549-1552
- IV. **Power Control for Two-Tier Uplink Under Feedback and Interference Constraints**
YÜKSEKKAYA B., DEMİR U., Inaltekin H., TOKER C.

24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.1545-1548

- V. **Near-optimum power control for two-Tier SIMO uplink under power and interference constraints**
YÜKSEKKAYA B., Inaltekin H., TOKER C., YANIKOMEROGLU H.
16th IEEE International Workshop on Signal Processing Advances in Wireless Communications, SPAWC 2015, Stockholm, Sweden, 28 June - 01 July 2015, pp.645-649
- VI. **Power control for two-tier SIMO-MIMO uplink under interference constraints İki Katmanlı TGÇÇ-ÇGÇÇ Çoklu Erişim Kanalları için Girişim Kısıtları Altında Güç Kontrolü**
YÜKSEKKAYA B., Inaltekin H., TOKER C., YANIKÖMEROGLU H.
2015 23rd Signal Processing and Communications Applications Conference, SIU 2015, Malatya, Turkey, 16 - 19 May 2015, pp.931-934
- VII. **Country of origin estimation from composite faces using kernel principal component analysis Çekirdek temel bileşenler analizi ile birleşik yüzlerden köken ülke kestirimi**
CATALBAS M. C. , YÜKSEKKAYA B.
2014 22nd Signal Processing and Communications Applications Conference, SIU 2014, Trabzon, Turkey, 23 - 25 April 2014, pp.1207-1210
- VIII. **Optimum Uplink Power Control Under Power and Interference Constraints**
YÜKSEKKAYA B., INALTEKIN H., TOKER C.
IEEE 78th Vehicular Technology Conference (VTC Fall), Nevada, United States Of America, 2 - 05 September 2013
- IX. **Joint transceiver design for multiuser MIMO channel equalization Çok kullanıcı MIMO kanal denkleştirme için ortak verici-alici tasarımı**
YÜKSEKKAYA B., TOKER C.
18th IEEE Signal Processing and Communications Applications Conference, SIU 2010, Diyarbakır, Turkey, 22 - 24 April 2010, pp.316-319
- X. **A General Joint Transceiver Design for Multiuser MIMO Channel Equalization**
YÜKSEKKAYA B., TOKER C.
IEEE 72nd Vehicular Technology Conference Fall 2010, Ottawa, Canada, 6 - 09 September 2010
- XI. **A general framework for joint transceiver design for multiuser MIMO channel shortening equalization**
YÜKSEKKAYA B., TOKER C.
2009 IEEE/SP 15th Workshop on Statistical Signal Processing, SSP '09, Cardiff, United Kingdom, 31 August - 03 September 2009, pp.105-108

Supported Projects

YÜKSEKKAYA B., Project Supported by Higher Education Institutions, 60 GHz milimetre dalga bandı için TGÇÇ ve büyükölçek TGÇÇ kapalı ortam kanal modelleme, 2017 - 2017

YÜKSEKKAYA B., Project Supported by Higher Education Institutions, Gelecek Nesil 5G Milimetre Dalga İletişim Sistemlerinde Anten Dizilimi ve Dizilim İşleme Teknikleri, 2016 - 2017

YÜKSEKKAYA B., Project Supported by Higher Education Institutions, İki Katmanlı Çok-Taşıyıcılı Çoklu Erişim Kanalları için Girişim Kısıtları Altında Güç Kontrolü, 2016 - 2016

TUBITAK Project, Dynamic Radio Resource Management and Allocation for Next Generation Wireless Communications Systems, 2012 - 2015

YÜKSEKKAYA B., TUBITAK Project, Otomatik Sperm Analizörü (OSA), 2011 - 2012

TUBITAK Project, OFDM-Based Resource Allocation in Cooperative Wireless Communications, 2009 - 2011

TUBITAK Project, Channel Shortening Equaliser Design and Resource Allocation Algorithm Development for MCM Based Communication Systems, 2007 - 2010

Scientific Refereeing

Physical Communication, SCI Journal, October 2017

Physical Communication, SCI Journal, August 2017

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, July 2017

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, July 2016

Invited Congress and Symposium Activities

IEEE 24. Signal Processing and Communications Applications Conference, Attendee, Zonguldak, Turkey, 2016

IEEE 16. International Workshop on Signal Processing Advances in Wireless Communications, Attendee, Stockholm, Sweden, 2015

IEEE 22. Signal Processing and Communications Applications Conference, Attendee, Trabzon, Turkey, 2014

IEEE 78nd Vehicular Technology Conference Fall, Attendee, Nevada, United States Of America, 2013

2011 IEEE International Symposium on Information Theory, Attendee, Sankt Peterburg, Russia, 2011

IEEE 72nd Vehicular Technology Conference Fall, Attendee, Ottawa, Canada, 2010

IEEE 18. Signal Processing and Communications Applications Conference, Attendee, Diyarbakır, Turkey, 2010

IEEE/SP 15th Workshop on Statistical Signal Processing, Attendee, Cardiff, United Kingdom, 2009

Citations

Total Citations (WOS):66

h-index (WOS):2