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Personal Information

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International Researcher IDs

ScholarID: 2TcttlQAAAAJ

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Publons / Web Of Science ResearcherID: M-5343-2014

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Education Information

Doctorate, Polytechnic University, Brooklyn Campus, Electrical Engineering, United States Of America 2001 - 2008

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, Turkey 1997 - 2001

Research Areas

Engineering and Technology

Academic Titles / Tasks

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2021 - Continues

Associate Professor, Tobb University Of Economics And Technology, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, 2015 - 2021

Assistant Professor, Tobb University Of Economics And Technology, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, 2007 - 2015

Courses

Engineering Design II, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Engineering Design I, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Circuit Theory II, Undergraduate, 2023 - 2024, 2021 - 2022

Probability and Random Variables, Undergraduate, 2022 - 2023

Electrical Circuits, Undergraduate, 2022 - 2023

Circuit Theory I, Undergraduate, 2021 - 2022

Advising Theses

Yüksel Turgut A. M., OPTIMAL POWER ALLOCATION FOR INTERFERENCE CHANNELS WITH DEEP REINFORCEMENT LEARNING, Postgraduate, O.Nuri(Student), Continues
YÜKSEL TURGUT A. M., İnsansız hava araçları için minimum gecikme koşulu altında optimum yol atama yöntemleri, Postgraduate, O.ÖĞÜTCÜ(Student), 2022
YÜKSEL TURGUT A. M., Çok kullanıcı çok antenli aşağı gönderim sistemleri, Postgraduate, Ç.YALÇINDURAN(Student), 2021

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Capacity Region of Asynchronous Multiple Access Channels With FTN**
Zhang Z., YÜKSEL TURGUT A. M., GÜVENSEN G. M., Yanikomeroglu H.
IEEE Communications Letters, vol.27, no.7, pp.1719-1723, 2023 (SCI-Expanded)
- II. **Faster-than-Nyquist Signaling for MIMO Communications**
Zhang Z., YÜKSEL TURGUT A. M., Yanikomeroglu H.
IEEE Transactions on Wireless Communications, vol.22, no.4, pp.2379-2392, 2023 (SCI-Expanded)
- III. **Max-Min Fair Precoder Design and Power Allocation for MU-MIMO NOMA**
Yalcin A. Z., Cetin M. K., Yuksel M.
IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, vol.70, no.6, pp.6217-6221, 2021 (SCI-Expanded)
- IV. **Rate Splitting for Multi-Group Multicasting With a Common Message**
Yalcin A. Z., Yuksel M., Clerckx B.
IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, vol.69, no.10, pp.12281-12285, 2020 (SCI-Expanded)
- V. **Precoder Design For Multi-Group Multicasting With a Common Message**
Yalcin A. Z., YÜKSEL TURGUT A. M.
IEEE TRANSACTIONS ON COMMUNICATIONS, vol.67, no.10, pp.7302-7315, 2019 (SCI-Expanded)
- VI. **Downlink MU-MIMO With QoS Aware Transmission: Precoder Design and Performance Analysis**
Yalcin A. Z., YÜKSEL TURGUT A. M., Bahceci I.
IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, vol.18, no.2, pp.969-982, 2019 (SCI-Expanded)
- VII. **A Low-Complexity Policy for Outage Probability Minimization With an Energy Harvesting Transmitter**
Isikman A. O., YÜKSEL TURGUT A. M., Gunduz D.
IEEE COMMUNICATIONS LETTERS, vol.21, no.4, pp.917-920, 2017 (SCI-Expanded)
- VIII. **Adaptive modulation for completion time minimization in wireless broadcast networks**
YÜKSEL TURGUT A. M., Genc Y.
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.72, pp.72-78, 2017 (SCI-Expanded)
- IX. **Information-Theoretic Feature Selection for Human Micro-Doppler Signature Classification**
Tekeli B., Gurbuz S. Z., YÜKSEL TURGUT A. M.
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.54, no.5, pp.2749-2762, 2016 (SCI-Expanded)
- X. **Maximum-weight scheduling with hierarchical modulation for lower delay**
Yalcin A. Z., YÜKSEL TURGUT A. M., Onat F. A., Aktas D., Numanoglu T., Kolagasioglu A. E.
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.70, no.9, pp.1205-1210, 2016 (SCI-Expanded)
- XI. **Transmission strategies and resource allocation for fading broadcast relay channels**
Isikman A. O., YÜKSEL TURGUT A. M.
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.69, no.4, pp.699-707, 2015 (SCI-Expanded)
- XII. **Diversity Analysis of Hierarchical Modulation in Wireless Relay Networks**
Yalcyn A. Z., YÜKSEL TURGUT A. M.
IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, vol.63, no.6, pp.2989-2994, 2014 (SCI-Expanded)
- XIII. **Capacity of All Nine Models of Channel Output Feedback for the Two-User Interference Channel**
Sahai A., Aggarwal V., YÜKSEL TURGUT A. M., Sabharwal A.

- IEEE TRANSACTIONS ON INFORMATION THEORY, vol.59, no.11, pp.6957-6979, 2013 (SCI-Expanded)
- XIV. **Minimum Outage Probability for the Relay Channel under Individual Power Constraints**
YÜKSEL TURGUT A. M., YÜKSEKKAYA B.
IEEE COMMUNICATIONS LETTERS, vol.16, no.7, pp.982-985, 2012 (SCI-Expanded)
- XV. **A Secure Communication Game With a Relay Helping the Eavesdropper**
YÜKSEL TURGUT A. M., Liu X., Erkip E.
IEEE TRANSACTIONS ON INFORMATION FORENSICS AND SECURITY, vol.6, no.3, pp.818-830, 2011 (SCI-Expanded)
- XVI. **Diversity-Multiplexing Tradeoff for the Multiple-Antenna Wire-tap Channel**
YÜKSEL TURGUT A. M., Erkip E.
IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, vol.10, no.3, pp.762-771, 2011 (SCI-Expanded)
- XVII. **Diversity-Multiplexing Tradeoff for the MIMO Static Half-Duplex Relay**
Leveque O., Vignat C., YÜKSEL TURGUT A. M.
IEEE TRANSACTIONS ON INFORMATION THEORY, vol.56, no.7, pp.3356-3368, 2010 (SCI-Expanded)
- XVIII. **Multiple-antenna cooperative wireless systems: A diversity-multiplexin tradeoff perspective**
YÜKSEL TURGUT A. M., Erkip E.
IEEE TRANSACTIONS ON INFORMATION THEORY, vol.53, no.10, pp.3371-3393, 2007 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **MIMO asynchronous MAC with faster-than-Nyquist (FTN) signaling**
Zhang Z., Yüksel Turgut A. M., Yanıkömeroğlu H., Ng B. K., Lam C.
IEEE GLOBAL COMMUNICATIONS CONFERENCE , Kuala-Lumpur, Malaysia, 4 - 08 December 2023, pp.1
- II. **Deep reinforcement learning aided Rate-Splitting for Interference Channels**
Irkiçatal O. N., Yüksel Turgut A. M., Ceran Arslan E. T.
IEEE Global Communications Conference, Kuala-Lumpur, Malaysia, 4 - 08 December 2023, pp.1
- III. **Multiple Access Communications for Age Minimization in UAV Aided Data Collection**
Ogutcu O., YÜKSEL TURGUT A. M.
95th IEEE Vehicular Technology Conference - Spring, VTC 2022-Spring, Helsinki, Finland, 19 - 22 June 2022, vol.2022-June
- IV. **Channel Characterization for Aircraft Integrated Antennas via Machine Learning**
Aksan Y., Yuksel M., Ozbayoglu A.
IEEE Wireless Communications and Networking Conference (WCNC), Nanjing, China, 29 March - 01 April 2021
- V. **Delay Analysis for Wireless Communication Systems with Caching**
Atak K., YÜKSEL TURGUT A. M.
27th Signal Processing and Communications Applications Conference (SIU), Sivas, Turkey, 24 - 26 April 2019
- VI. **Device-to-Device Caching for Video Streaming Content**
Aytac K. N., Girici T., YÜKSEL TURGUT A. M., Telli A., Koksall M. I.
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017
- VII. **Deep Learning of Micro-Doppler Features for Aided and Unaided Gait Recognition**
Seyfioglu M. S., Gurbuz S. Z., Ozbayoglu A. M., YÜKSEL TURGUT A. M.
IEEE Radar Conference (RadarConf), Washington, United States Of America, 8 - 12 May 2017, pp.1125-1130
- VIII. **Device-to-Device Caching for Video Content Delivery**
Aytac K. N., Girici T., YÜKSEL TURGUT A. M., Telli A., Koksall I.
5th IEEE International Black Sea Conference on Communications and Networking (IEEE BlackSeaCom), İstanbul, Turkey, 5 - 08 June 2017, pp.309-310
- IX. **Efficient and Reliable Multicast of Data in APCO P25 Systems**
Cigirkan G., Girici T., YÜKSEL TURGUT A. M.
81st IEEE Vehicular Technology Conference (VTC Spring), Glasgow, United Kingdom, 11 - 14 May 2015
- X. **Maximal Ratio Combining with Energy Harvesting Multi-Antenna Receivers**
Uctu G., YÜKSEL TURGUT A. M.

23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.1697-1700

- XI. **Maximum-Weight Scheduling with Hierarchical Modulation**
Yalcin A. Z., YÜKSEL TURGUT A. M., Onat F. A., Aktas D., Numanoglu T., Kolagasioglu A. E.
Iran Workshop on Communication and Information Theory (IWCIT), Tehran, Iran, 7 - 08 May 2014
- XII. **CONSTELLATION REARRANGEMENT FOR 4-PAM REPETITION CODING**
Cankaya S., YÜKSEL TURGUT A. M.
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.899-902
- XIII. **Diversity Analysis of Hierarchical Modulation in Cooperative Communication**
Yalcin A. Z., YÜKSEL TURGUT A. M.
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.1335-1338
- XIV. **Cooperative Broadcasting with Successive Refinement based Compression**
Yildirim S. A., YÜKSEL TURGUT A. M.
IEEE International Symposium on Information Theory (ISIT), İstanbul, Turkey, 7 - 12 July 2013, pp.2980-2984
- XV. **Feature Selection for Classification of Human Micro-Doppler**
Gurbuz S. Z., Tekeli B., Karabacak C., YÜKSEL TURGUT A. M.
IEEE International Conference on Microwaves, Communications, Antennas and Electronic Systems (COMCAS), Tel-Aviv-Yafo, Israel, 21 - 23 October 2013
- XVI. **Mutual Information of Features Extracted from Human Micro-Doppler**
Tekeli B., Gurbuz S. Z., YÜKSEL TURGUT A. M.
21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013
- XVII. **Importance Ranking of Features for Human Micro-Doppler Classification with a Radar Network**
Gurbuz S. Z., Tekeli B., YÜKSEL TURGUT A. M., Karabacak C., Gurbuz A. C., Guldogan M. B.
16th International Conference on Information Fusion (FUSION), İstanbul, Turkey, 9 - 12 July 2013, pp.610-616
- XVIII. **Classification of Human Micro-Doppler in a Radar Network**
Tekeli B., Gurbuz S. Z., YÜKSEL TURGUT A. M., Gurbuz A. C., Guldogan M. B.
IEEE Radar Conference (RADAR), Ottawa, Canada, 29 April - 03 May 2013
- XIX. **Multiple Description Coding Based Compress-and-Forward for the Broadcast Relay Channel**
Yildirim S. A., YÜKSEL TURGUT A. M.
IEEE International Symposium on Information Theory, Cambridge, Canada, 1 - 06 July 2012, pp.194-198
- XX. **Minimum Common Outage Probability for the Broadcast Relay Channel**
Isikman A. O., YÜKSEL TURGUT A. M.
7th IEEE International Wireless Communications and Mobile Computing Conference (IWCMC), İstanbul, Turkey, 4 - 08 July 2011, pp.894-899
- XXI. **Outage analysis for half-duplex interference relay channels Yari çift yönlü röleli girişim kanallarında kesinti olasılığı**
Ünal A. S., Özçelik F. M., YÜKSEL TURGUT A. M.
18th IEEE Signal Processing and Communications Applications Conference, SIU 2010, Diyarbakır, Turkey, 22 - 24 April 2010, pp.423-426
- XXII. **Diversity-multiplexing tradeoff for MIMO wire-tap channels with CSIT**
YÜKSEL TURGUT A. M., Erkip E.
2010 European Wireless Conference, EW 2010, Lucca, Italy, 12 - 15 April 2010, pp.796-801
- XXIII. **A Secrecy Game with an Informed Jammer Relay**
YÜKSEL TURGUT A. M., Liu X., Erkip E.
21st Annual IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), İstanbul, Turkey, 26 - 30 September 2010, pp.2687-2691
- XXIV. **Sum Capacity of General Deterministic Interference Channel with Channel Output Feedback**
Sahai A., Aggarwal V., YÜKSEL TURGUT A. M., Sabharwal A.
2010 IEEE International Symposium on Information Theory, Texas, United States Of America, 13 July 2010, pp.335-

- XXV. **On Channel Output Feedback in Deterministic Interference Channels**
Sahai A., Aggarwal V., YÜKSEL TURGUT A. M., Sabharwal A.
IEEE Information Theory Workshop (ITW), Taormina, Italy, 11 - 16 October 2009, pp.298-302
- XXVI. **A Secure Communication Game with a Relay Helping the Eavesdropper**
YÜKSEL TURGUT A. M., Liu X., Erkip E.
IEEE Information Theory Workshop (ITW), Taormina, Italy, 11 - 16 October 2009, pp.110-114
- XXVII. **Diversity-Multiplexing Tradeoff for the MIMO Static Half-Duplex Relay**
Leveque O., Vignat C., YÜKSEL TURGUT A. M.
IEEE International Symposium on Information Theory (ISIT 2009), Seoul, South Korea, 28 June - 03 July 2009, pp.1428-1429
- XXVIII. **Diversity-multiplexing tradeoff for the multiple-antenna wire-tap channel**
YÜKSEL TURGUT A. M., Erkip E.
42nd Annual Conference on Information Sciences and Systems, Princes Town, Trinidad And Tobago, 19 - 21 March 2008, pp.618-619
- XXIX. **Secure communication with a relay helping the wire-tapper**
YÜKSEL TURGUT A. M., Erkip E.
IEEE Information Theory Workshop, California, United States Of America, 2 - 06 September 2007, pp.595-600
- XXX. **Diversity-multiplexing tradeoff in half-duplex relay systems**
YÜKSEL TURGUT A. M., Erkip E.
IEEE International Conference on Communications (ICC 2007), Glasgow, United Kingdom, 24 - 28 June 2007, pp.689-694
- XXXI. **The relay channel with a wire-tapper**
YÜKSEL TURGUT A. M., Erkip E.
41st Annual Conference on Information Sciences and Systems (CISS 2007), Maryland, United States Of America, 14 - 16 March 2007, pp.13-14
- XXXII. **Diversity-multiplexing tradeoff in multiple-antenna relay systems**
YÜKSEL TURGUT A. M., Erkip E.
IEEE International Symposium on Information Theory, Washington, United States Of America, 9 - 14 July 2006, pp.1154-1155
- XXXIII. **Diversity-multiplexing tradeoff in cooperative wireless systems**
YÜKSEL TURGUT A. M., Erkip E.
40th Annual Conference on Information Sciences and Systems (CISS), Princes Town, Trinidad And Tobago, 22 - 24 March 2006, pp.1062-1067
- XXXIV. **Diversity gains and clustering in wireless relaying**
YÜKSEL TURGUT A. M., Erkip E.
IEEE International Symposium on Information Theory, Illinois, United States Of America, 27 June - 02 July 2004, pp.400
- XXXV. **Broadcast strategies for the fading relay channel**
YÜKSEL TURGUT A. M., Erkip E.
IEEE Military Communications Conference (MILCOM 2004), Monterrey, Mexico, 31 October - 03 November 2004, pp.1060-1065
- XXXVI. **Diversity in relaying protocols with amplify and forward**
YÜKSEL TURGUT A. M., Erkip E.
IEEE Global Telecommunications Conference (GLOBECOM 03), San-Francisco, Costa Rica, 1 - 05 December 2003, pp.2025-2029

Supported Projects

YÜKSEL TURGUT A. M., Project Supported by Higher Education Institutions, Çoklu Erişim Kanallarında Nyquist'ten Hızlı

İletim, 2022 - 2024

Yüksel Turgut A. M., Girici T., Project Supported by Other Private Institutions, Uçtan Uca Yerli ve Milli 5G Şebekesi Tasarımı, 2020 - 2021

Yüksel Turgut A. M., Project Supported by Other Private Institutions, Uçtan Uca Yerli ve Milli 5G Şebekesi Tasarımı, 2019 - 2021

Yüksel Turgut A. M., Project Supported by Other Private Institutions, 5G Kablosuz Ağlarda Önbellekleme Tekniklerinin Geliştirilmesi, 2017 - 2018

Yüksel Turgut A. M., TUBITAK Project, Gelecek Nesil Aşağı Gönderim Sistemleri İçin Temel Yöntemler, 2012 - 2016

Yüksel Turgut A. M., Industrial Thesis Project, Yüksek Hızlı Askeri Haberleşme için Çok Katmanlı İletim, 2012 - 2014

Yüksel Turgut A. M., Girici T., Industrial Thesis Project, APCO Telsiz Sistemlerinde Oransız Kodların Kullanımı, 2012 - 2014

Yüksel Turgut A. M., Project Supported by Other Private Institutions, Yüksek Hızlı Dalga Şekli Tasarımı, 2012 - 2012

Yüksel Turgut A. M., Girici T., Kaya O., TUBITAK Project, İşbirlikli Kablosuz Haberleşmede Dik Frekans Bölmeli Çoklama (OFDM)-Tabanlı Özkaynak Tahsisi, 2009 - 2011

Activities in Scientific Journals

IEEE TRANSACTIONS ON COMMUNICATIONS, Article Editor, 2023 - Continues

Frontiers in Communications and Networks, Committee Member, 2020 - Continues

PHYSICAL COMMUNICATION, Assistant Editor/Section Editor, 2016 - Continues

Metrics

Publication: 54

Citation (WoS): 672

Citation (Scopus): 857

H-Index (WoS): 13

H-Index (Scopus): 13