

## Prof. Dr. UMUT ORGUNER

### Kişisel Bilgiler

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Yoksis Araştırmacı ID: 115041

### Eğitim Bilgileri

Doktora, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği (Dr), Türkiye 2002 - 2006

Yüksek Lisans, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik Ve Elektronik Mühendisliği (YI) (Tezli), Türkiye 1999 - 2002

Lisans, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Türkiye 1994 - 1999

### Yaptığı Tezler

Doktora, Improved state estimation for jump Markov linear systems, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği (Dr), 2006

Yüksek Lisans, Evaluation of two new methodologies for maneuvering target tracking, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik Ve Elektronik Mühendisliği (YI) (Tezli), 2002

### Araştırma Alanları

Elektrik-Elektronik Mühendisliği, Mühendislik ve Teknoloji

### Akademik Unvanlar / Görevler

Prof. Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Elektrik ve Elektronik Mühendisliği Bölümü, 2019 - Devam Ediyor

Doç. Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Elektrik ve Elektronik Mühendisliği Bölümü, 2014 - 2019

Yrd. Doç. Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Elektrik ve Elektronik Mühendisliği Bölümü, 2012 - 2014

Yrd. Doç. Dr., Linköpings Universitet (Linköping University), Engineering, Department Of Electrical Engineering, 2009 - 2012

Öğretim Görevlisi Dr., Linköpings Universitet (Linköping University), Engineering, Department Of Electrical Engineering,

2007 - 2009

Araştırma Görevlisi, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Elektrik ve Elektronik Mühendisliği Bölümü,  
1999 - 2006

## Yönetilen Tezler

- Candan Ç., Orguner U., Performance prediction of implicitly defined estimators of non-random parameters, Doktora, E.MEHMETCİK(Öğrenci), 2023
- Orguner U., Expectation propagation for state estimation with discrete-valued hidden random variables, Doktora, E.SARITAŞ(Öğrenci), 2023
- Orguner U., Approximate methods for state estimation with nonlinear measurements and unknown noise covariances, Doktora, E.LAZ(Öğrenci), 2023
- ORGUNER U., Variational smoothing for extended target tracking with random matrices, Yüksek Lisans, S.ERDEM(Öğrenci), 2022
- ORGUNER U., A forward prediction based out of sequence measurement processing method for kalman and IMM filtering, Yüksek Lisans, O.EREL(Öğrenci), 2022
- ORGUNER U., Decorrelation approaches for distributed fusion with target tracking algorithms, Doktora, D.ACAR(Öğrenci), 2021
- Orguner U., Salor Durna Ö., Güç sistemlerinde optimizasyon algoritmaları ile geliştirilen yeni bir harmonik ve araharmonik kestirim yöntemi ve genlik kestirim algoritmaları için genel bir başarımlı kriteri önerisi, Doktora, Ç.ALTINTAŞI(Öğrenci), 2020
- Özkan E., ORGUNER U., Non-parametric sensor bias estimation using Gaussian process, Yüksek Lisans, M.UFUK(Öğrenci), 2019
- ORGUNER U., Interacting multiple model probabilistic data association filter using random matrices for extended target tracking, Yüksek Lisans, E.ÖZPAK(Öğrenci), 2018
- ORGUNER U., Satellite orbit estimation using kalman filters, Yüksek Lisans, M.İPEK(Öğrenci), 2017
- ORGUNER U., Parametric and posterior Cramér-Rao lower bounds for extended target tracking in a random matrix framework, Yüksek Lisans, E.SARITAŞ(Öğrenci), 2015
- ORGUNER U., Target tracking and sensor placement for doppler-only measurements, Yüksek Lisans, S.AYAZGÖK(Öğrenci), 2015
- YILMAZ A. Ö., ORGUNER U., INDOOR LOCALIZATION AND TRACKING BASED ON RSSI AND ACCELEROMETER MEASUREMENTS, Yüksek Lisans, M.DOĞAN(Öğrenci), 2015
- Orguner U., Demirekler M., Fusion of target density and intensity functions based on Chernoff fusion using sigma points, Doktora, M.GÜNAY(Öğrenci), 2015
- YILMAZ A. Ö., ORGUNER U., On localization and tracking using received signal strength measurements, Yüksek Lisans, A.YILMAZ(Öğrenci), 2015
- ORGUNER U., Dynamic quantization for track fusion under communication constraints, Yüksek Lisans, G.GÖK(Öğrenci), 2015

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Expectation Propagation with Context Adjustment for Smoothing of Jump Markov Linear Systems**  
Sartas E., ORGUNER U.  
IEEE Transactions on Aerospace and Electronic Systems, cilt.59, sa.5, ss.7098-7114, 2023 (SCI-Expanded)
- II. **Gaussian Mixture Filtering with Nonlinear Measurements Minimizing Forward Kullback-Leibler Divergence**  
Laz E., ORGUNER U.  
Signal Processing, cilt.208, 2023 (SCI-Expanded)
- III. **An Approximate MSE Expression for Maximum Likelihood and Other Implicitly Defined Estimators of**

### **Non-Random Parameters**

Mehmetcik E., ORGUNER U., CANDAN Ç.  
SIGNAL PROCESSING, cilt.204, 2023 (SCI-Expanded)

- IV. **Multi-Ellipsoidal Extended Target Tracking With Variational Bayes Inference**  
TUNCER B., ORGUNER U., ÖZKAN E.  
IEEE TRANSACTIONS ON SIGNAL PROCESSING, cilt.70, ss.3921-3934, 2022 (SCI-Expanded)
- V. **Decorrelation of Previously Communicated Information for an Interacting Multiple Model Filter**  
Acar D., ORGUNER U.  
IEEE TRANSACTIONS ON AEROSPACE AND ELECTRONIC SYSTEMS, cilt.57, sa.1, ss.404-422, 2021 (SCI-Expanded)
- VI. **Performance limits for the amplitude estimation of power system harmonics & interharmonics**  
Altintasi C., ORGUNER U., Salor O.  
IET GENERATION TRANSMISSION & DISTRIBUTION, cilt.14, sa.19, ss.4108-4121, 2020 (SCI-Expanded)
- VII. **Chernoff Fusion of Gaussian Mixtures Based on Sigma-Point Approximation**  
Gunay M., ORGUNER U., DEMİREKLER M.  
IEEE TRANSACTIONS ON AEROSPACE AND ELECTRONIC SYSTEMS, cilt.52, sa.6, ss.2731-2746, 2016 (SCI-Expanded)
- VIII. **Approximate Bayesian Smoothing with Unknown Process and Measurement Noise Covariances**  
Ardehshiri T., Ozkan E., ORGUNER U., Gustafsson F.  
IEEE SIGNAL PROCESSING LETTERS, cilt.22, sa.12, ss.2450-2454, 2015 (SCI-Expanded)
- IX. **Greedy Reduction Algorithms for Mixtures of Exponential Family**  
Ardehshiri T., Granstrom K., Ozkan E., ORGUNER U.  
IEEE SIGNAL PROCESSING LETTERS, cilt.22, sa.6, ss.676-680, 2015 (SCI-Expanded)
- X. **A fine-resolution frequency estimator using an arbitrary number of DFT coefficients**  
ORGUNER U., CANDAN Ç.  
SIGNAL PROCESSING, cilt.105, ss.17-21, 2014 (SCI-Expanded)
- XI. **Random Set Methods Estimation of Multiple Extended Objects**  
Granstrom K., Lundquist C., Gustafsson F., Orguner U.  
IEEE ROBOTICS & AUTOMATION MAGAZINE, cilt.21, sa.2, ss.73-82, 2014 (SCI-Expanded)
- XII. **Multi-target tracking with PHD filter using Doppler-only measurements**  
Guldogan M. B., Lindgren D., Gustafsson F., Habberstad H., ORGUNER U.  
DIGITAL SIGNAL PROCESSING, cilt.27, ss.1-11, 2014 (SCI-Expanded)
- XIII. **New Prediction for Extended Targets With Random Matrices**  
Granstrom K., ORGUNER U.  
IEEE TRANSACTIONS ON AEROSPACE AND ELECTRONIC SYSTEMS, cilt.50, sa.2, ss.1577-1589, 2014 (SCI-Expanded)
- XIV. **The Marginal Enumeration Bayesian Cramer-Rao Bound for Jump Markov Systems**  
FRITSCHKE C., ORGUNER U., Svensson L., Gustafsson F.  
IEEE SIGNAL PROCESSING LETTERS, cilt.21, sa.4, ss.464-468, 2014 (SCI-Expanded)
- XV. **The moment function for the ratio of correlated generalized gamma variables**  
CANDAN Ç., Orguner U.  
STATISTICS & PROBABILITY LETTERS, cilt.83, sa.10, ss.2353-2356, 2013 (SCI-Expanded)
- XVI. **An Extended Target CPHD Filter and a Gamma Gaussian Inverse Wishart Implementation**  
Lundquist C., Granstrom K., ORGUNER U.  
IEEE JOURNAL OF SELECTED TOPICS IN SIGNAL PROCESSING, cilt.7, sa.3, ss.472-483, 2013 (SCI-Expanded)
- XVII. **On Spawning and Combination of Extended/Group Targets Modeled With Random Matrices**  
Granstrom K., ORGUNER U.  
IEEE TRANSACTIONS ON SIGNAL PROCESSING, cilt.61, sa.3, 2013 (SCI-Expanded)
- XVIII. **A PHD Filter for Tracking Multiple Extended Targets Using Random Matrices**  
Granstrom K., Orguner U.  
IEEE TRANSACTIONS ON SIGNAL PROCESSING, cilt.60, sa.11, ss.5657-5671, 2012 (SCI-Expanded)
- XIX. **Extended Target Tracking using a Gaussian-Mixture PHD Filter**

- Granstrom K, Lundquist C, Orguner O.  
IEEE TRANSACTIONS ON AEROSPACE AND ELECTRONIC SYSTEMS, cilt.48, ss.3268-3286, 2012 (SCI-Expanded)
- XX. **Road Target Search and Tracking with Gimballed Vision Sensor on an Unmanned Aerial Vehicle**  
Skoglar P, Orguner U, Tornqvist D., Gustafsson F.  
REMOTE SENSING, cilt.4, sa.7, ss.2076-2111, 2012 (SCI-Expanded)
- XXI. **A Variational Measurement Update for Extended Target Tracking With Random Matrices**  
Orguner U.  
IEEE TRANSACTIONS ON SIGNAL PROCESSING, cilt.60, sa.7, ss.3827-3834, 2012 (SCI-Expanded)
- XXII. **Pedestrian tracking with an infrared sensor using road network information**  
Skoglar P, Orguner U, Tornqvist D., Gustafsson F.  
EURASIP JOURNAL ON ADVANCES IN SIGNAL PROCESSING, 2012 (SCI-Expanded)
- XXIII. **Target Tracking With Particle Filters Under Signal Propagation Delays**  
Orguner U, Gustafsson F.  
IEEE TRANSACTIONS ON SIGNAL PROCESSING, cilt.59, sa.6, ss.2485-2495, 2011 (SCI-Expanded)
- XXIV. **A Simple Real-Time Fault Signature Monitoring Tool for Motor-Drive-Embedded Fault Diagnosis Systems**  
Akin B, Choi S, Orguner U, Toliyat H. A.  
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, cilt.58, sa.5, ss.1990-2001, 2011 (SCI-Expanded)
- XXV. **Robust Tracking in Cellular Networks Using HMM Filters and Cell-ID Measurements**  
Bshara M, Orguner U, Gustafsson F., Van Biesen L.  
IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, cilt.60, sa.3, ss.1016-1024, 2011 (SCI-Expanded)
- XXVI. **Extended Target Tracking Using Polynomials With Applications to Road-Map Estimation**  
Lundquist C, Orguner U, Gustafsson F.  
IEEE TRANSACTIONS ON SIGNAL PROCESSING, cilt.59, sa.1, ss.15-26, 2011 (SCI-Expanded)
- XXVII. **Fingerprinting Localization in Wireless Networks Based on Received-Signal-Strength Measurements: A Case Study on WiMAX Networks**  
Bshara M, Orguner U, Gustafsson F., Van Biesen L.  
IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, cilt.59, sa.1, ss.283-294, 2010 (SCI-Expanded)
- XXVIII. **Maximum likelihood estimation of transition probabilities of jump Markov linear systems**  
Orguner U, Demirekler M.  
IEEE TRANSACTIONS ON SIGNAL PROCESSING, cilt.56, sa.10, ss.5093-5108, 2008 (SCI-Expanded)
- XXIX. **Risk-sensitive particle filters for mitigating sample impoverishment**  
Orguner U, Gustafsson F.  
IEEE TRANSACTIONS ON SIGNAL PROCESSING, cilt.56, sa.10, ss.5001-5012, 2008 (SCI-Expanded)
- XXX. **Phase-sensitive detection of motor fault signatures in the presence of noise**  
Akin B, Orguner U, Toliyat H. A., Rayner M.  
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, cilt.55, sa.6, ss.2539-2550, 2008 (SCI-Expanded)
- XXXI. **Low order PWM inverter harmonics contributions to the inverter-fed induction machine fault diagnosis**  
Akin B, Orguner U, Toliyat H. A., Rayner M.  
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, cilt.55, sa.2, ss.610-619, 2008 (SCI-Expanded)
- XXXII. **Risk-sensitive filtering for jump Markov linear systems**  
Orguner U, Demirekler M.  
AUTOMATICA, cilt.44, sa.1, ss.109-118, 2008 (SCI-Expanded)
- XXXIII. **Analysis of single Gaussian approximation of Gaussian mixtures in Bayesian filtering applied to mixed multiple-model estimation**  
Orguner U, Demirekler M.  
INTERNATIONAL JOURNAL OF CONTROL, cilt.80, sa.6, ss.952-967, 2007 (SCI-Expanded)
- XXXIV. **An online sequential algorithm for the estimation of transition probabilities for jump Markov linear systems**  
Orguner U, Demirekler M.

AUTOMATICA, cilt.42, sa.10, ss.1735-1744, 2006 (SCI-Expanded)

XXXV. **Simple derivative-free nonlinear state observer for sensorless AC drives**

Akin B., Orguner U., Ersak A., Ehsani M.

IEEE-ASME TRANSACTIONS ON MECHATRONICS, cilt.11, sa.5, ss.634-643, 2006 (SCI-Expanded)

## **Kitap & Kitap Bölümleri**

I. **Navigation and Tracking of Road-Bound Vehicles Using Map Support**

Orguner U.

Handbook of Intelligent Vehicles, Azim Eskandarian, Editör, Springer-Verlag , London, ss.397-434, 2012

## **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

I. **Adaptive mixture approximation for target tracking in clutter**

D'Ortenzio A., Manes C., ORGUNER U.

22nd World Congress of the International Federation of Automatic Control (IFAC), Yokohama, Japonya, 9 - 14 Temmuz 2023, ss.8889-8895

II. **Adaptive Mixture Model Reduction based on the Composite Transportation Dissimilarity**

D'Ortenzio A., Manes C., Iuliis V. D., ORGUNER U.

26th International Conference on Information Fusion, FUSION 2023, South Carolina, Amerika Birleşik Devletleri, 27 - 30 Haziran 2023

III. **Bayesian Filtering and Smoothing with Unknown Measurement Noise Covariance**

Laz E., ORGUNER U.

2023 IEEE International Radar Conference, RADAR 2023, Sydney, Avustralya, 6 - 10 Kasım 2023

IV. **A Model Selection criterion for the Mixture Reduction problem based on the Kullback-Leibler Divergence**

D'Ortenzio A., Manes C., ORGUNER U.

25th International Conference of Information Fusion (FUSION), Linköping, İsveç, 4 - 07 Temmuz 2022

V. **Fixed-point iterative computation of Gaussian barycenters for some dissimilarity measures**

D'ortenzio A., Manes C., Orguner U.

2022 International Conference on Computational Science and Computational Intelligence, CSCI 2022, Nevada, Amerika Birleşik Devletleri, 14 - 16 Aralık 2022, ss.1422-1428

VI. **Association and Fusion of Range-Azimuth Tracks**

Balci A. E., ŞAHİN K. K., Kumru F., Pektas F., ÖZKAN E., ORGUNER U.

25th International Conference of Information Fusion (FUSION), Linköping, İsveç, 4 - 07 Temmuz 2022

VII. **An Optimal Transport Perspective on Gamma Gaussian Inverse-Wishart Mixture Reduction**

D'Ortenzio A., Manes C., ORGUNER U.

25th International Conference of Information Fusion (FUSION), Linköping, İsveç, 4 - 07 Temmuz 2022

VIII. **Slow moving target detection for airborne radar systems by dynamic programming on SAR images**

Gurer G., Koc S., Candan Ç., Orguner U.

2019 IEEE Radar Conference, RadarConf 2019, Massachusetts, Amerika Birleşik Devletleri, 22 - 26 Nisan 2019

IX. **A TIGHTER BAYESIAN CRAMER-RAO BOUND**

Bacharach L., Fritsche C., Orguner U., Chaumette E.

44th IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Brighton, Birleşik Krallık, 12 - 17 Mayıs 2019, ss.5277-5281

X. **Some Inequalities Between Pairs of Marginal and Joint Bayesian Lower Bounds**

Bacharach L., Chaumette E., Fritsche C., ORGUNER U.

22nd International Conference on Information Fusion (FUSION), Ottawa, Kanada, 2 - 05 Temmuz 2019

XI. **Nonlinear Decentralized Data Fusion with Generalized Inverse Covariance Intersection**

Noack B., ORGUNER U., Hanebeck U. D.

22nd International Conference on Information Fusion (FUSION), Ottawa, Kanada, 2 - 05 Temmuz 2019

**XII. Bobrovsky-Zakai Bound for Filtering, Prediction and Smoothing of Nonlinear Dynamic Systems**

Fritsche C., ORGUNER U., Gustafsson F.

21st International Conference on Information Fusion, FUSION 2018, Cambridge, Birleşik Krallık, 10 - 13 Temmuz 2018, ss.171-178

**XIII. Information Decorrelation for an Interacting Multiple Model Filter**

Acar D., ORGUNER U.

21st International Conference on Information Fusion, FUSION 2018, Cambridge, Birleşik Krallık, 10 - 13 Temmuz 2018, ss.1527-1534

**XIV. A Random Matrix Measurement Update Using Taylor-Series Approximations**

SARITAŞ E., ORGUNER U.

21st International Conference on Information Fusion, FUSION 2018, Cambridge, Birleşik Krallık, 10 - 13 Temmuz 2018, ss.1756-1763

**XV. MARGINAL BAYESIAN BHATTACHARYYA BOUNDS FOR DISCRETE-TIME FILTERING**

Fritsche C., ORGUNER U., ÖZKAN E., Gustafsson F.

IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Calgary, Kanada, 15 - 20 Nisan 2018, ss.4289-4293

**XVI. Approximate Analytical Solutions for the Weight Optimization Problems of CI and ICI**

ORGUNER U.

Symposium on Sensor Data Fusion - Trends, Solutions, Applications (SDF), Bonn, Almanya, 10 - 12 Ekim 2017

**XVII. Posterior Cramér-Rao Lower Bounds for Extended Target Tracking with Random Matrices**

SARITAŞ E., ORGUNER U.

2016 19TH INTERNATIONAL CONFERENCE ON INFORMATION FUSION (FUSION), Heidelberg, Almanya, 5 - 08 Temmuz 2016, ss.1485-1492

**XVIII. Optimal sensor placement for Doppler-only target tracking: 1D target motion case**

Ayazgok S., ORGUNER U.

19th International Conference on Information Fusion, FUSION 2016, Heidelberg, Almanya, 5 - 08 Temmuz 2016, ss.2283-2288

**XIX. Posterior Cramér-Rao lower bounds for extended target tracking with random matrices**

SARITAŞ E., ORGUNER U.

19th International Conference on Information Fusion, FUSION 2016, Heidelberg, Almanya, 5 - 08 Temmuz 2016, ss.1485-1492

**XX. Recent results on Bayesian Cramér-Rao bounds for jump Markov systems**

Fritsche C., ORGUNER U., Svensson L., Gustafsson F.

19th International Conference on Information Fusion, FUSION 2016, Heidelberg, Almanya, 5 - 08 Temmuz 2016, ss.512-520

**XXI. Optimal Sensor Placement for Doppler-Only Target Tracking: 1D Target Motion Case**

Ayazgok S., ORGUNER U.

19th International Conference on Information Fusion (FUSION), Heidelberg, Almanya, 5 - 08 Temmuz 2016, ss.2283-2288

**XXII. On the Solution of Data Association Problem Using Rollout Algorithms**

Ozgen S., DEMİREKLER M., ORGUNER U.

19th International Conference on Information Fusion (FUSION), Heidelberg, Almanya, 5 - 08 Temmuz 2016, ss.695-702

**XXIII. Posterior Cramér-Rao Lower Bounds for Extended Target Tracking with Random Matrices**

SARITAŞ E., ORGUNER U.

19th International Conference on Information Fusion (FUSION), Heidelberg, Almanya, 5 - 08 Temmuz 2016, ss.1485-1492

**XXIV. ON PARAMETRIC LOWER BOUNDS FOR DISCRETE-TIME FILTERING**

Fritsche C., ORGUNER U., Gustafsson F.

IEEE International Conference on Acoustics, Speech, and Signal Processing, Shanghai, Çin, 20 - 25 Mart 2016, ss.4338-4342

- XXV. **Chernoff Fusion of Gaussian Mixtures for Distributed Maneuvering Target Tracking**  
GUNAY M., ORGUNER U., DEMİREKLER M.  
18th International Conference on Information Fusion (Fusion), Washington, Kiribati, 6 - 09 Temmuz 2015, ss.870-877
- XXVI. **Dynamic Quantization for Track Fusion Under Communication Constraints**  
Gok G., ORGUNER U.  
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Türkiye, 16 - 19 Mayıs 2015, ss.962-965
- XXVII. **On Generalized Eigenvector Space For Target Detection in Reduced Dimensions**  
GÜVENSEN G. M., CANDAN Ç., Koc S., ORGUNER U.  
IEEE International Radar Conference (RadarCon), Virginia, Amerika Birleşik Devletleri, 10 - 15 Mayıs 2015, ss.1316-1321
- XXVIII. **MARGINAL WEISS-WEINSTEIN BOUNDS FOR DISCRETE-TIME FILTERING**  
Fritsche C., Ozkan E., ORGUNER U., Gustafsson F.  
40th IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), Brisbane, Avustralya, 19 - 24 Nisan 2015, ss.3487-3491
- XXIX. **Approximate Chernoff Fusion of Gaussian Mixtures Using Sigma-Points**  
Gunay M., ORGUNER U., DEMİREKLER M.  
17th International Conference on Information Fusion (FUSION), Salamanca, Meksika, 7 - 10 Temmuz 2014
- XXX. **DELAY ESTIMATION BASED ON KINEMATIC TRACK INFORMATION WITHOUT TIME STAMPS**  
Ozgen S., SARITAŞ E., ORGUNER U., Acar D.  
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Türkiye, 23 - 25 Nisan 2014, ss.1454-1458
- XXXI. **3D TRACKING OF PEOPLE WITH RAO-BLACKWELLIZED PARTICLE FILTERS**  
Topcu O., ORGUNER U., Alatan A., ERCAN A. Ö.  
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Türkiye, 23 - 25 Nisan 2014, ss.670-673
- XXXII. **On the Cramér-Rao lower bound under model mismatch**  
Fritsche C., ORGUNER U., Ozkan E., Gustafsson F.  
40th IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2015, Brisbane, Avustralya, 19 - 24 Nisan 2014, ss.3986-3990
- XXXIII. **Centralized Target Tracking with Propagation Delayed Measurements**  
MEHMETCIK E., ORGUNER U.  
16th International Conference on Information Fusion (FUSION), İstanbul, Türkiye, 9 - 12 Temmuz 2013, ss.820-826
- XXXIV. **MULTI-TARGET TRACKING USING PASSIVE DOPPLER MEASUREMENTS**  
Guldogan M. B., ORGUNER U., Gustafsson F.  
21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 Nisan 2013
- XXXV. **Enhancing GPS positioning accuracy from the generation of ground-truth reference points for on-road urban navigation**  
Bshara M., Orguner U., Gustafsson F., Van Biesen L.  
20th IMEKO World Congress 2012, Busan, Güney Kore, 9 - 14 Eylül 2012, cilt.2, ss.799-804
- XXXVI. **On the reduction of Gaussian inverse Wishart mixtures**  
Granström K., ORGUNER U.  
15th International Conference on Information Fusion, FUSION 2012, Singapore, Singapur, 7 - 12 Eylül 2012, ss.2162-2169
- XXXVII. **Estimation and maintenance of measurement rates for multiple extended target tracking**  
Granström K., ORGUNER U.  
15th International Conference on Information Fusion, FUSION 2012, Singapore, Singapur, 7 - 12 Eylül 2012,

ss.2170-2176

- XXXVIII. **On mixture reduction for multiple target tracking**  
Ardeşiri T., ORGUNER U., Lundquist C., Schön T. B.  
15th International Conference on Information Fusion, FUSION 2012, Singapore, Singapur, 7 - 12 Eylül 2012, ss.692-699
- XXXIX. **On-road trajectory generation from GPS data: A particle filtering/smoothing application**  
Roth M., Gustafsson F., ORGUNER U.  
15th International Conference on Information Fusion, FUSION 2012, Singapore, Singapur, 7 - 12 Eylül 2012, ss.779-786
- XL. **Multiple target tracking with Gaussian mixture PHD filter using passive acoustic Doppler-only measurements**  
Guldogan M. B., Lindgren D., Gustafsson F., Habberstad H., Orguner U.  
15th International Conference on Information Fusion, FUSION 2012, Singapore, Singapur, 7 - 12 Eylül 2012, ss.2600-2607
- XLI. **Gaussian mixture PHD filter for multi-target tracking using passive doppler-only measurements**  
Guldogan M. B., Orguner U., Gustafsson F.  
9th IET Data Fusion and Target Tracking Conference: Algorithms and Applications, DF and TT 2012, London, Birleşik Krallık, 16 - 17 Mayıs 2012, cilt.2012, ss.2
- XLII. **Olasilik hipotez yoğunluğu süzgeci kullanarak akustik sensörlerle kara araçları takibi**  
Özkan E., Guldoğan B., ORGUNER U., Gustafsson F.  
2012 20th Signal Processing and Communications Applications Conference, SIU 2012, Fethiye, Muğla, Türkiye, 18 - 20 Nisan 2012
- XLIII. **Non-Linear Filtering based on Observations from Student's t Processes**  
Saha S., Orguner U., Gustafsson F.  
IEEE Aerospace Conference, Montana, Amerika Birleşik Devletleri, 3 - 10 Mart 2012
- XLIV. **ML Estimation of Process Noise Variance in Dynamic Systems**  
Axelsson P., Orguner U., Gustafsson F., Norrlöf M.  
Proceedings of 18th IFAC World Congress, Milan, İtalya, 28 Ağustos - 02 Eylül 2011, cilt.44, ss.5609-5614
- XLV. **The benefits of down-sampling in the particle filter**  
Gustafsson F., Saha S., Orguner U.  
14th International Conference on Information Fusion, Fusion 2011, Chicago, IL, Amerika Birleşik Devletleri, 5 - 08 Temmuz 2011
- XLVI. **Extended target tracking with a cardinalized probability hypothesis density filter**  
Orguner U., Lundquist C., Granström K.  
14th International Conference on Information Fusion, Fusion 2011, Chicago, IL, Amerika Birleşik Devletleri, 5 - 08 Temmuz 2011
- XLVII. **Ground multiple target tracking with a network of acoustic sensor arrays using PHD and CPHD filters**  
Özkan E., Guldogan M. B., Orguner U., Gustafsson F.  
14th International Conference on Information Fusion, Fusion 2011, Chicago, IL, Amerika Birleşik Devletleri, 5 - 08 Temmuz 2011
- XLVIII. **Tracking rectangular and elliptical extended targets using laser measurements**  
Granström K., Lundquist C., Orguner U.  
14th International Conference on Information Fusion, Fusion 2011, Chicago, IL, Amerika Birleşik Devletleri, 5 - 08 Temmuz 2011
- XLIX. **Estimating the shape of targets with a PHD filter**  
Lundquist C., Granström K., Orguner U.  
14th International Conference on Information Fusion, Fusion 2011, Chicago, IL, Amerika Birleşik Devletleri, 5 - 08 Temmuz 2011
- L. **GPS positioning and ground-truth reference points generation**  
Bshara M., Orguner U., Gustafsson F., Van Biesen L.



Joint IMEKO TC11-TC19-TC20 International Symposium Metrological Infrastructure, Environmental and Energy Measurement and International Symposium of Energy Agencies of Mediterranean Countries, IMEKO-MI 2011, Cavtat, Hırvatistan, 15 - 17 Haziran 2011, ss.111-116

- LI. HUMAN GAIT PARAMETER ESTIMATION BASED ON MICRO-DOPPLER SIGNATURES USING PARTICLE FILTERS**  
Guldogan M. B., Gustafsson F., Orguner U., Bjorklund S., Petersson H., Nezirovic A.  
IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), Prague, Çek Cumhuriyeti, 22 - 27 Mayıs 2011, ss.5940-5943
- LII. Radar micro-doppler parameter estimation of human motion using particle filters Parcacik suzgeci kullanilarak insan yürüyüş ü radar mikro-doppler parametrelerinin kesti rilmesi**  
Guldogan M., Gustafsson F., Orguner U., Björklund S., Petersson H., Nezirovic A.  
2011 IEEE 19th Signal Processing and Communications Applications Conference, SIU 2011, Antalya, Türkiye, 20 - 22 Nisan 2011, ss.395-398
- LIII. Non-linear filtering based on observations from Gaussian processes**  
Gustafsson F., Saha S., Orguner U.  
2011 IEEE Aerospace Conference, AERO 2011, Big Sky, MT, Amerika Birleşik Devletleri, 5 - 12 Mart 2011
- LIV. Estimating polynomial structures from radar data**  
Lundquist C., Orguner U., Gustafsson F.  
13th Conference on Information Fusion, Fusion 2010, Edinburgh, Birleşik Krallık, 26 - 29 Temmuz 2010
- LV. Multi target tracking with acoustic power measurements using emitted power density**  
Orguner U., Gustafsson F.  
13th Conference on Information Fusion, Fusion 2010, Edinburgh, Birleşik Krallık, 26 - 29 Temmuz 2010
- LVI. A Gaussian mixture PHD filter for extended target tracking**  
Granström K., Lundquist C., Orguner U.  
13th Conference on Information Fusion, Fusion 2010, Edinburgh, Birleşik Krallık, 26 - 29 Temmuz 2010
- LVII. Particle Filtering with Propagation Delayed Measurements**  
Orguner U., Gustafsson F.  
IEEE/AIAA Aerospace Conference, Montana, Amerika Birleşik Devletleri, 6 - 13 Mart 2010
- LVIII. Combined Point-Mass and Particle Filter for Target Tracking**  
Orguner U., Skoglar P., Tornqvist D., Gustafsson F.  
IEEE/AIAA Aerospace Conference, Montana, Amerika Birleşik Devletleri, 6 - 13 Mart 2010
- LIX. Tracking in WiMAX Networks Using Cell-IDs**  
Bshara M., Orguner U., Van Biesen L.  
IEEE Mobile WiMAX Symposium 2009, California, Amerika Birleşik Devletleri, 9 - 10 Temmuz 2009, ss.102-103
- LX. Road Target Tracking with an Approximative Rao-Blackwellized Particle Filter**  
Skoglar P., Orguner U., Tornqvist D., Gustafsson F.  
12th International Conference on Information Fusion, Washington, Amerika Birleşik Devletleri, 6 - 09 Temmuz 2009, ss.17-24
- LXI. Distributed Target Tracking with Propagation Delayed Measurements**  
Orguner U., Gustafsson F.  
12th International Conference on Information Fusion, Washington, Amerika Birleşik Devletleri, 6 - 09 Temmuz 2009, ss.802-809
- LXII. Tracking Stationary Extended Objects for Road Mapping using Radar Measurements**  
Lundquist C., Orguner U., Schon T. B.  
IEEE Intelligent Vehicles Symposium, Xian, Çin, 3 - 05 Haziran 2009, ss.405-410
- LXIII. Entropy Calculation in Particle Filters**  
Orguner U.  
IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Türkiye, 9 - 11 Nisan 2009, ss.850-853
- LXIV. Tracking in WiMAX Networks depending on SCORE measurements**  
Bshara M., Orguner U., Gustafsson F., Van Biesen L.

- 6th Workshop on Positioning, Navigation and Communication, Hannover, Almanya, 19 Mart 2009, ss.229-230
- LXV. **On Information Measures based on Particle Mixture for Optimal Bearings-only Tracking**  
Skoglar P., Orguner U., Gustafsson F.  
2009 IEEE Aerospace Conference, Montana, Amerika Birleşik Devletleri, 7 - 14 Mart 2009, ss.1801-1804
- LXVI. **Improved Target Tracking with Road Network Information**  
Orguner U., Schon T. B., Gustafsson F.  
2009 IEEE Aerospace Conference, Montana, Amerika Birleşik Devletleri, 7 - 14 Mart 2009, ss.1827-1837
- LXVII. **Storage efficient particle filters for the out of sequence measurement problem**  
Orguner U., Gustafsson F.  
11th International Conference on Information Fusion, FUSION 2008, Cologne, Almanya, 30 Haziran - 03 Temmuz 2008
- LXVIII. **Target tracking using delayed measurements with implicit constraints**  
Orguner U., Gustafsson F.  
11th International Conference on Information Fusion, FUSION 2008, Cologne, Almanya, 30 Haziran - 03 Temmuz 2008
- LXIX. **Simple real-time condition monitoring tools for low-cost motor drives**  
AKIN B., TOLİYAT H. A., ORGUNER U., RAYNER M.  
International Conference on Electrical Machines and Systems, Seoul, Güney Kore, 8 - 11 Ekim 2007, ss.41-42
- LXX. **Risk sensitive particle filters for mitigating sample impoverishment**  
Orguner U., Gustafsson F.  
14th IEEE/SP Workshop on Statistical Signal Processing, Wisconsin, Amerika Birleşik Devletleri, 26 - 29 Ağustos 2007, ss.259-263
- LXXI. **Statistical characteristics of Harris corner detector**  
Orguner U., Gustafsson F.  
14th IEEE/SP Workshop on Statistical Signal Processing, Wisconsin, Amerika Birleşik Devletleri, 26 - 29 Ağustos 2007, ss.571-575
- LXXII. **Phase sensitive detection of motor fault signatures in the presence of noise**  
Akin B., Toliyat H., ORGUNER U., Rayner M.  
IEEE International Electric Machines and Drives Conference (IEMDC 2007), Antalya, Türkiye, 3 - 05 Mayıs 2007, ss.1420-1421
- LXXIII. **Low-cost motor drive-embedded fault diagnosis a simple harmonic analyzer**  
AKIN B., TOLİYAT H. A., ORGUNER U., RAYNER M.  
22nd Annual IEEE Applied Power Electronics Conference (APEC 2007), California, Amerika Birleşik Devletleri, 25 Şubat - 01 Mart 2007, ss.243-244
- LXXIV. **PWM inverter harmonics contributions to the inverter-fed induction machine bearing fault diagnosis**  
Akin B., Toliyat H. A., ORGUNER U., Rayner M.  
22nd Annual IEEE Applied Power Electronics Conference (APEC 2007), California, Amerika Birleşik Devletleri, 25 Şubat - 01 Mart 2007, ss.1393-1394
- LXXV. **An efficient algorithm for pitch determination of speech signals-Kalman filter approach**  
Salor O., DEMİREKLER M., ORGUNER U.  
IEEE 14th Signal Processing and Communications Applications, Antalya, Türkiye, 16 - 19 Nisan 2006, ss.309-310
- LXXVI. **A Comparative Study on Non-Linear State Estimators Applied to Sensorless AC Drives: MRAS and Kalman Filter**  
Akin B., Orguner U., Ersak A., Ehsani M.  
30th Annual Conference of the IEEE-Industrial-Electronics-Society (IECON), Busan, Güney Kore, 2 - 06 Kasım 2004, ss.2148-2153
- LXXVII. **A comparative study on Kalman filtering techniques designed for state estimation of industrial AC drive systems**  
Akin B., Orguner U., Ersak A.  
IEEE International Conference on Mechatronics (ICM 2004), İstanbul, Türkiye, 3 - 05 Haziran 2004, ss.439-445
- LXXVIII. **An experimental performance test of a derivative-free non-linear state observer designed for**

### **sensorless AC drives**

AKIN B., Orguner U., Ersak A.

IEEE International Conference on Mechatronics (ICM 2004), İstanbul, Türkiye, 3 - 05 Haziran 2004, ss.432-438

### **LXXIX. State estimation of induction motor using unscented Kalman filter**

Akin B., Orguner U., Ersak A.

IEEE Conference on Control Applications, İstanbul, Türkiye, 23 - 25 Haziran 2003, ss.915-919

## **Metrikler**

Yayın: 115

Atf (WoS): 1981

Atf (Scopus): 3266

H-İndeks (WoS): 22

H-İndeks (Scopus): 29