

Assoc. Prof. Özgür Özdemir

Personal Information

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International Researcher IDs

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Education Information

Doctorate, New Jersey Institute of Technology, United States Of America 2000 - 2005

Postgraduate, İstanbul Technical University, Elektrik-Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, Turkey 1998 - 2000

Undergraduate, İstanbul Technical University, Elektrik-Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, Turkey 1993 - 1998

Foreign Languages

English

Dissertations

Doctorate, Variable Permittivity Dielectric Material Loaded Stepped-Horn Antenna, New Jersey Institute Of Technology, 2005

Postgraduate, Üç parçalı rejestif düzlem zemin üzerindeki atmosfere ilişkin bir boyutlu profil problemi, İstanbul Teknik Üniversitesi, Elektrik-Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, 2000

Research Areas

Electrical and Electronics Engineering, Electromagnetic, Electromagnetic in Biology and Medicine, Wave Propagation and Remote Sensing, Engineering and Technology

Academic Titles / Tasks

Associate Professor, İstanbul Technical University, Elektrik-Elektronik, Elektronik Ve Haberleşme Mühendisliği, 2014 - Continues

Assistant Professor, İstanbul Technical University, Elektrik-Elektronik, Elektronik Ve Haberleşme Mühendisliği, 2008 - 2014

Academic and Administrative Experience

İstanbul Teknik Üniversitesi, Elektrik-Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, 2008 -
Continues

Courses

NUMERICAL METHODS, Undergraduate, 2016 - 2017, 2014 - 2015

APPLIED ELECTROMAGNETICS, Postgraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015

Linear Algebra and Appl., Undergraduate, 2016 - 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A 3D-printed spiral actuator for focus adjustment in circumferential scanning endomicroscopy**
Zög İ. S., Gürcüoğlu O., Özdemir Ö., Yelten M. B., Ferhanoğlu O.
Journal of Micromechanics and Microengineering, vol.33, no.1, 2023 (SCI-Expanded)
- II. **Green's functions for a layered high-contrast acoustic media**
Özdemir Ö., Yucel H., Ucar Y. E., Erbas B., Ege N.
JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA, vol.151, no.6, pp.3676-3684, 2022 (SCI-Expanded)
- III. **A meandered dual loop antenna for wireless capsule endoscopy**
Gures E., Yelten M. B., Özdemir Ö., Ferhanoğlu O.
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.137, 2021 (SCI-Expanded)
- IV. **Reconfigurable Intelligent Surfaces for the Connectivity of Autonomous Vehicles**
Özcan O. Y., Özdemir Ö., Karabulut Kurt G. Z.
IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, vol.70, no.3, pp.2508-2513, 2021 (SCI-Expanded)
- V. **Sparsity Regularized Nonlinear Inversion for Microwave Imaging**
Taskin U., Özdemir Ö.
IEEE GEOSCIENCE AND REMOTE SENSING LETTERS, vol.14, no.12, pp.2220-2224, 2017 (SCI-Expanded)
- VI. **Electromagnetic Imaging of Closely Spaced Objects Using Matching Pursuit Based Approaches**
Senyuva R. V., OZDEMIR Ö., KURT G. K., Anarim E.
IEEE ANTENNAS AND WIRELESS PROPAGATION LETTERS, vol.15, pp.1179-1182, 2016 (SCI-Expanded)
- VII. **Cauchy Data Contrast Source Inversion Method**
Ozdemir O.
IEEE GEOSCIENCE AND REMOTE SENSING LETTERS, vol.11, no.4, pp.858-862, 2014 (SCI-Expanded)
- VIII. **Linearized Cauchy Data Inversion Method for Two-Dimensional Buried Target Imaging**
Özdemir Ö., HADDAR H.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.61, no.6, pp.3244-3251, 2013 (SCI-Expanded)
- IX. **Reconstruction of the Electromagnetic Field in Layered Media Using the Concept of Approximate Transmission Conditions**
Özdemir Ö., HADDAR H., YAKA A.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.59, no.8, pp.2964-2972, 2011 (SCI-Expanded)
- X. **Preprocessing the Reciprocity Gap Sampling Method in Buried-Object Imaging Experiments**
Özdemir Ö., HADDAR H.
IEEE GEOSCIENCE AND REMOTE SENSING LETTERS, vol.7, no.4, pp.756-760, 2010 (SCI-Expanded)
- XI. **3-D Imaging of Inhomogeneous Materials Loaded in a Rectangular Waveguide**
Kilic E., AKLEMAN F., Esen B., OZALTIN D. M., OZDEMIR Ö., Yapar A.
IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol.58, no.5, pp.1290-1296, 2010 (SCI-Expanded)
- XII. **Higher order inhomogeneous impedance boundary conditions for perfectly conducting objects**
Ozdemir O., Akduman I., YAPAR A., CROCCO L.
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.45, no.5, pp.1291-1297, 2007 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **A 3D-Printed Archimedean Actuator for Focus adjustment in Endoscopes**
Salaheldin-Zög İ., Gürcüoğlu O., ÖZDEMİR Ö., YELTEN M. B., FERHANOĞLU O.
European Conferences on Biomedical Optics 2021 (ECBO), Germany, 21 - 24 June 2021, pp.1-3
- II. **Experimental Verification of In-door Ground Based SAR Using Beam Space MUSIC Algorithm**
OMUZ B., Öz F., ÖZDEMİR Ö., ÖNCÜ A.
2018 International Conference on Electromagnetics in Advanced Applications (ICEAA), Cartagena des Indias, Colombia, 10 - 14 September 2018
- III. **A Joint Inversion Method for Breast Imaging using Electromagnetic and Acoustics waves**
ÖZDEMİR Ö., ÖNCÜ A., van Dongen K. W.
ICEAA 2019, 9 - 13 September 2018
- IV. **Sparsity based Regularization for Microwave Imaging with NESTA Algorithm**
Yalcin E., Özdemir Ö., Taskin U.
IEEE Conference on Antenna Measurements and Applications (CAMA), Tsukuba, Japan, 4 - 06 December 2017, pp.282-283
- V. **A Sparsity Based Technique In Wavelet Domain For Inverse Source Problem**
Taskin U., Özdemir Ö.
IEEE Conference on Antenna Measurements and Applications (CAMA), Syracuse, Italy, 23 - 27 October 2016
- VI. **An Experimental Investigation of F-K Migration and SAR Algorithm using Beam Space MUSIC for UWB Through-the-Wall Imaging**
Bektaş H. Ö., Özdemir Ö., Orhan M., TÜRK A. S.
3rd IEEE Radar Methods and Systems Workshop (RMSW), Kyiv, Ukraine, 27 - 28 September 2016, pp.70-75
- VII. **Termoakustik Tomografi İçin Seyreklik Tabanlı Yöntemlerin Kullanılması**
Taşkin U., ÖZDEMİR Ö.
URSI-Türkiye, Turkey, 1 - 03 September 2016
- VIII. **Direct Sampling Method for Monostatic Radar Imaging**
Bektaş H. Ö., Özdemir Ö.
URSI International Symposium on Electromagnetic Theory (EMTS), Espoo, Finland, 14 - 18 August 2016, pp.152-154
- IX. **Hard Thresholding Based Compressed Sensing Approach for Thermoacoustic Tomography**
Taskin U., Yalcin E., Özdemir Ö.
URSI International Symposium on Electromagnetic Theory (EMTS), Espoo, Finland, 14 - 18 August 2016, pp.815-817
- X. **A Modified LSM Method For Buried Objects In A Layered Medium**
Özdemir Ö., Bektaş H. Ö.
IEEE Conference on Antenna Measurements (CAMA), Chiang-Mai, Thailand, 30 November - 02 December 2015
- XI. **Numerical computation of the Green's function of a layered media with rough interfaces**
Altuncu Y., Akduman İ., Özdemir Ö., Yapar A.
7th International Symposium on Antennas, Propagation and EM Theory, Guilin, China, 26 - 29 October 2006, pp.1024-1027
- XII. **On the relation between surface impedance and shape of the perfectly conducting objects**
Özdemir Ö., Altuncu Y.
11th International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory, Tbilisi, Georgia, 11 - 13 October 2006, pp.59-60
- XIII. **Imaging of dielectric objects buried under an arbitrary rough surface**
Altuncu Y., Özdemir Ö., Akduman İ., Yapar A.
IEEE International Geoscience and Remote Sensing Symposium (IGARSS), Colorado, United States Of America, 31 July - 04 August 2006, pp.2969-2972

Supported Projects

Özdemir Ö., TUBITAK Project, Meme Kanserinin Tanısı ve İzlenmesi İçin Mikrodalga Uyarımlı Termoakustik Görüntüleme, 2014 - Continues

Özdemir Ö., Yalçın E., Project Supported by Higher Education Institutions, Seyreklik algoritmaları ile Mikrodalga Görüntüleme Yöntemlerinin İyileştirilmesi, 2017 - 2024

Özdemir Ö., ERBAŞ B., Ferhanoğlu O., ÜNLÜ M. B., KOKU AKSU A. E., Yücel H., TUBITAK Project, Deri Kanseri Teşhisini İçin Fotoakustik Tomografik Görüntüleme Yöntemi Geliştirilmesi , 2020 - 2023

Ferhanoğlu O., Yelten M. B., Özdemir Ö., TUBITAK Project, Lazer Taramalı Kablosuz Kapsül Endoskopi Cihazının Geliştirilmesi , 2020 - 2023

Özdemir Ö., DURMUŞ B. C., KARABAĞ Ş., ÇELEBİ B. A., ÖZÇELİK K. E., CAN F., Project Supported by Higher Education Institutions, Drone tabanlı Sentetik Açıklıklı Radar ile Çevre Görüntülenmesi, 2020 - 2021

Özdemir Ö., VAN DONGEN K. W., Project Supported by Higher Education Institutions, Katmanlı Ortamlar için Cauchy Data Modeli ile Mikrodalga Görüntüleme Tekniğinin Geliştirilmesi, 2017 - 2018

Özdemir Ö., Project Supported by Higher Education Institutions, Ters kaynak problemleri için dalgacık uzayında seyreklik tabanlı yöntem, 2016 - 2018

Özdemir Ö., Project Supported by Higher Education Institutions, Homojen olmayan ortamlardaki yayılım mekanizmalarının ters kaynak yöntemlerine etkilerinin incelenmesi, 2016 - 2018

Özdemir Ö., Project Supported by Higher Education Institutions, KATMANLI ORTAMLARA GÖMÜLÜCİSİMLERİN GÖRÜNTÜLENMESİ İÇİN MODİFİYELSM YÖNTEMİ, 2015 - 2018

Özdemir Ö., Project Supported by Higher Education Institutions, Engebeli Yüzey Altına Gömülü Dielektrik Cisimlerin Görüntülenmesi, 2014 - 2018

Özdemir Ö., Project Supported by Higher Education Institutions, Biyomedikal Uygulamalar İçin Sensor Geliştirme, 2014 - 2018

Özdemir Ö., Project Supported by Higher Education Institutions, Engebeli Sınırlara Sahip Katmalı Ortamlara Gömülü Cisimlerin Görüntülenmesi, 2012 - 2018

Özdemir Ö., Project Supported by Higher Education Institutions, İnce Dielektrik Kaplamaların Belirlenmesinde Asimptotik Modelin Kullanılması, 2011 - 2018

Özdemir Ö., Project Supported by Higher Education Institutions, Dielektrik kaplamalıların Kalınlıklarının Belirlenebilmesi için Yüksek Dereceden Empedans Koşularının Kullanılması, 2010 - 2018

Özdemir Ö., Project Supported by Higher Education Institutions, Altuzay yöntemleri ile Duvar Arkası Görüntüleme, 2015 - 2016

Özdemir Ö., Project Supported by Higher Education Institutions, TERMOAKUSTİK GÖRÜNTÜLEMEDE İNCE TABAKA KOŞULLARININ UYGULANMASI, 2015 - 2016

Özdemir Ö., Project Supported by Higher Education Institutions, Meme Kanseri Teşhisinde Termoakustik Görüntüleme Yöntemlerinin Uygulanması, 2015 - 2016

Özdemir Ö., TUBITAK Project, Düzgün Olmayan Sınırlara Sahip Homojen Olmayan Dielektrik Tabakalar için Genelleştirilmiş İnce Tabaka Koşullarının Belirlenmesi ve Ters Problemlere Uygulanması, 2009 - 2011

Metrics

Publication: 43

Citation (WoS): 209

Citation (Scopus): 231

H-Index (WoS): 7

H-Index (Scopus): 7