

## Assoc. Prof. Özgür Özdemir

### Personal Information

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### International Researcher IDs

ScholarID: JnSE96AAAAAJ

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### Education Information

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

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

Undergraduate, Istanbul 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 rejistif 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, Istanbul Technical University, Elektrik-Elektronik, Elektronik Ve Haberleşme Mühendisliği, 2014 - Continues

Assistant Professor, Istanbul 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**  
Zöğ İ. S., Gürcüoğlu O., Özdemir Ö., Yelten M. B., Ferhanoglu 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., Ferhanoglu 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-Zöğ 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**  
Taşkın 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., Ferhanoglu O., ÜNLÜ M. B., KOKU AKSU A. E., Yücel H., TUBITAK Project, Deri Kanseri Teşhisi İçin Fotoakustik Tomografik Görüntüleme Yöntemi Geliştirilmesi , 2020 - 2023
- Ferhanoglu 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 kaplamaların 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