

Assoc. Prof. Mehmet Nuri Akıncı

Personal Information

Office Phone: [+90 506 380 3146](tel:+905063803146)

Email: akincime@itu.edu.tr

Web: <http://web.itu.edu.tr/akincime/>

Address: İstanbul Teknik Üniversitesi Ayazağa Kampüsü Kamu Konutları Loj. F3 blok Nu:44, 24467 Maslak İSTANBUL

International Researcher IDs

ORCID: 0000-0003-0550-5799

ScopusID: 56247048100

Yoksis Researcher ID: 197799

Education Information

Doctorate, İstanbul Technical University, Fen Bilimleri Enstitüsü, Telekomunikasyon Müh., Turkey 2013 - 2017

Undergraduate, İstanbul Technical University, Elektrik Elektronik Fakültesi, Elektronik Ve Haberleşme Müh., Turkey 2010 - 2013

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Qualitative Methods in Microwave Imaging, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Telekomunikasyon Müh., 2017

Research Areas

Technical Sciences, Electrical and Electronics Engineering, Electromagnetic, Wave Propagation and Remote Sensing, Electromagnetic Waves, Antennas and Propagation

Academic Titles / Tasks

Assistant Professor, İstanbul Technical University, Elektrik Elektronik Fakültesi, Elektronik Ve Haberleşme Müh., 2018 - Continues

Assistant Professor, İstanbul Technical University, Elektrik Elektronik Fakültesi, Elektronik Ve Haberleşme Müh., 2017 - 2018

Courses

Elektromagnetik Alanlara Giriş, Undergraduate, 2017 - 2018

Introduction to Electronics and Communication Engineering, Undergraduate, 2017 - 2018

Theory of Complex Functions, Undergraduate, 2017 - 2018

Electromagnetic Waveguides, Doctorate, 2017 - 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Improving the Accuracy of Range Migration in 3-D Near-Field Microwave Imaging**
Doğu S., Tajik D., Akıncı M. N., Nikolova N. K.
IEEE Transactions on Microwave Theory and Techniques, vol.71, no.8, pp.3540-3551, 2023 (SCI-Expanded)
- II. **A BIM-Based Algorithm for Quantitative Monitoring of Temperature Distribution during Breast Hyperthermia Treatments**
Önal H., Yilmaz Abdolsaheb T., Akıncı M. N.
IEEE Access, vol.11, pp.38680-38695, 2023 (SCI-Expanded)
- III. **Maximum Likelihood Estimation of Debye Relaxation Parameters with Open-Ended Coaxial Probes**
Dilman I., Çayıroren M., Akıncı M. N.
IEEE Transactions on Instrumentation and Measurement, vol.72, 2023 (SCI-Expanded)
- IV. **Monitoring of intracerebral hemorrhage with a linear microwave imaging algorithm**
Dilman İ., Bilgin E., Akıncı M. N., Cosgun S., Doğu S., Çayıroren M., Akduman İ.
MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, vol.61, no.1, pp.33-43, 2023 (SCI-Expanded)
- V. **Continuous Monitoring of Hyperthermia Treatment of Breast Tumors With Singular Sources Method**
Doğu S., Önal H., Yilmaz Abdolsaheb T., Akduman İ., Akıncı M. N.
IEEE Access, vol.11, pp.6584-6593, 2023 (SCI-Expanded)
- VI. **A Guideline for Complex Permittivity Retrieval of TissueMimicking Phantoms From OpenEnded Coaxial Probe Response With Deep Learning**
Joof S., Aydinalp C., Dilman İ., Akıncı M. N., Yilmaz T., Çayıroren M., Akduman İ.
IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol.70, no.11, pp.5105-5115, 2022 (SCI-Expanded)
- VII. **Antenna Excitation Optimization with Deep Learning for Microwave Breast Cancer Hyperthermia**
Yıldız G., Yasar H., Uslu I. E., Demirel Y., Akıncı M. N., Yilmaz T., Akduman İ.
Sensors, vol.22, no.17, 2022 (SCI-Expanded)
- VIII. **A Method to Measure Complex Dielectric Permittivity With Open-Ended Coaxial Probes**
Dilman İ., Akıncı M. N., Yilmaz T., Çayıroren M., Akduman İ.
IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, vol.71, 2022 (SCI-Expanded)
- IX. **Microwave Dielectric Property Retrieval From Open-Ended Coaxial Probe Response With Deep Learning**
Aydinalp C., Joof S., Akıncı M. N., Akduman İ., Yilmaz T.
IEEE ACCESS, vol.10, pp.1216-1227, 2022 (SCI-Expanded)
- X. **Experimental Moving Target Imaging in a Nonanechoic Environment With Linear Sampling Method**
Doğu S., Akıncı M. N., Gose E.
IEEE GEOSCIENCE AND REMOTE SENSING LETTERS, vol.18, no.3, pp.441-445, 2021 (SCI-Expanded)
- XI. **Physical Insight Unveils New Imaging Capabilities of Orthogonality Sampling Method**
Bevacqua M. T., Isernia T., Palmeri R., Akıncı M. N., Crocco L.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.68, no.5, pp.4014-4021, 2020 (SCI-Expanded)
- XII. **Truncated singular value decomposition for through-the-wall microwave imaging application**
Doğu S., Akıncı M. N., Çayıroren M., Akduman İ.
IET MICROWAVES ANTENNAS & PROPAGATION, vol.14, no.4, pp.260-267, 2020 (SCI-Expanded)
- XIII. **Estimation of the Effective Electrical Parameters in Two-Dimensional Transverse Electric Case**
Akıncı M. N., Gose E., Akduman İ., Crocco L.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.68, no.1, pp.468-481, 2020 (SCI-Expanded)
- XIV. **Estimation of the electrical parameters and dimensions of an impedance cylinder with**

- monoview/monostatic measurement system**
Doğu S., Akıncı M. N., Gose E.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.35, no.2, pp.743-752, 2020 (SCI-Expanded)
- XV. **Qualitative microwave imaging of breast cancer with contrast agents**
Akıncı M. N., Çayören M., Gose E.
PHYSICS IN MEDICINE AND BIOLOGY, vol.64, no.11, 2019 (SCI-Expanded)
- XVI. **An Efficient Sampling Method for Cross-Borehole GPR Imaging**
Akıncı M. N.
IEEE GEOSCIENCE AND REMOTE SENSING LETTERS, vol.15, no.12, pp.1857-1861, 2018 (SCI-Expanded)
- XVII. **Improving Near-Field Orthogonality Sampling Method for Qualitative Microwave Imaging**
Akıncı M. N.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.66, no.10, pp.5475-5484, 2018 (SCI-Expanded)
- XVIII. **A fast hybrid method for the bandgap analysis of 2D photonic crystals based on EMT and AFGSM methods**
ERKAN O., Akıncı M. N., Şimşek S.
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.89, pp.1-6, 2018 (SCI-Expanded)
- XIX. **A Simple Approach for Estimating the Effective Electric Parameters of 2-D Targets**
Akıncı M. N., Çayören M., Akduman İ., Crocco L.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.66, no.4, pp.2026-2034, 2018 (SCI-Expanded)
- XX. **Bandgap analysis of 2D photonic crystals with Auxiliary Functions of Generalized Scattering Matrix (AFGSM) method**
Erkan O., Akıncı M. N., Şimşek S.
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.95, pp.287-296, 2018 (SCI-Expanded)
- XXI. **Experimental Microwave Imaging With a Novel Corrugated Vivaldi Antenna**
ABBAK M., Akıncı M. N., Çayören M., Akduman İ.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.65, no.6, pp.3302-3307, 2017 (SCI-Expanded)
- XXII. **Wideband compact dipole antenna for microwave imaging applications**
Abbak M., AKINCI M. N., ERTAY A. O., OZGUR S., ISIK C., Akduman İ.
IET MICROWAVES ANTENNAS & PROPAGATION, vol.11, no.2, pp.265-270, 2017 (SCI-Expanded)
- XXIII. **Near-Field Orthogonality Sampling Method for Microwave Imaging: Theory and Experimental Verification**
Akıncı M. N., CAYOREN M., Akduman İ.
IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol.64, no.8, pp.2489-2501, 2016 (SCI-Expanded)
- XXIV. **Qualitative Microwave Imaging With Scattering Parameters Measurements**
Akıncı M. N., CAGLAYAN T., OZGUR S., ALKASI U., AHMADZAY H., ABBAK M., CAYOREN M., Akduman İ.
IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol.63, no.9, pp.2730-2740, 2015 (SCI-Expanded)
- XXV. **Experimental Assessment of Linear Sampling and Factorization Methods for Microwave Imaging of Concealed Targets**
Akıncı M. N., CAGLAYAN T., Özgür S., ALKASI U., ABBAK M., Çayören M.
INTERNATIONAL JOURNAL OF ANTENNAS AND PROPAGATION, 2015 (SCI-Expanded)
- XXVI. **Microwave subsurface imaging of buried objects under a rough air-soil interface**
Akıncı M. N., Çayören M.
REMOTE SENSING LETTERS, vol.5, no.8, pp.703-712, 2014 (SCI-Expanded)

Articles Published in Other Journals

I. Analysis of the Performance of the NOSM for High Contrast Targets

AKINCI M. N.

Sakarya University Journal of Science, vol.23, pp.1, 2019 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. Estimation of Electrical Properties of Infinite Slab with Newton'xxs Method

AKINCI M. N.

2018 18th Mediterranean Microwave Symposium (MMS), İstanbul, Turkey, 31 October - 02 November 2018

II. Assessment of Linear Sampling Method and Factorization Method for Through the Wall Imaging

Doğu S., Akinci M. N.

26th Telecommunications Forum (TELFOR), Belgrade, Serbia And Montenegro, 20 - 21 November 2018, pp.513-516

III. Detection of the Cavities Inside a Target with Near Field Orthogonality Sampling Method

Akinci M. N.

18th Mediterranean Microwave Symposium (MMS), İstanbul, Turkey, 31 October - 02 November 2018, pp.391-393

IV. Estimation of Electrical Properties of Infinite Slab With Newton's Method

Akinci M. N.

18th Mediterranean Microwave Symposium (MMS), İstanbul, Turkey, 31 October - 02 November 2018, pp.262-263

V. Differential Microwave Imaging of the Stroke-affected Brain via Diffraction Tomography

Dilman İ., Akinci M. N., Çayören M., Akduman İ.

25th Telecommunication Forum (TELFOR), Belgrade, Serbia And Montenegro, 21 - 22 November 2017, pp.444-447

VI. Explicit Discretization Schemes for Linear Sampling and Factorization Methods

AKINCI M. N., ÇAYÖREN M.

36th Progress In Electromagnetics Research Symposium, 6 - 09 July 2015

VII. Schur Complement Based Method of Moments Solution for 2D Scattering Problem from Mixed Dielectric conductor Targets

AKINCI M. N., ÇAYÖREN M.

36th Progress In Electromagnetics Research Symposium, 6 - 09 July 2015

VIII. On the Accuracy of Method of Moments for Solution of Full 3D Vectorial Electromagnetic Forward Scattering Problem

GÜREN O., AKINCI M. N., ÇAYÖREN M.

36th Progress In Electromagnetics Research Symposium, 6 - 09 July 2015

IX. Experimental Comparison of Qualitative Inverse Scattering Methods

Akinci M. N., Abbak M., Özgür S., Çayören M., Akduman İ.

IEEE Conference on Antenna Measurements and Applications (CAMA), Antibes, France, 16 - 19 November 2014

X. Modelling of User Behaviour in Cellular Networks

Dalman E., Akinci M. N., Karabulut Kurt G. Z.

22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.2019-2022

Metrics

Publication: 51

Citation (WoS): 187

Citation (Scopus): 286

H-Index (WoS): 6

H-Index (Scopus): 8

Non Academic Experience

MİLLÎ SAVUNMA ÜNİVERSİTESİ
MİTOS MEDİKAL TEKNOLOJİLER SAN. TİC. A.Ş.