

Prof. NEVZAT GÜNERİ GENÇER

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: L-6976-2016

ScopusID: 7003388562

Yoksis Researcher ID: 6080

Biography

Nevzat G. Gencer received a B.Sc. degree in Electrical and Electronics Engineering in 1985 from Boğaziçi University, Istanbul, Turkey, and the M.Sc. and Ph.D. degrees from Middle East Technical University (METU), Ankara, Turkey, in 1988 and 1993, respectively, all in electrical and electronics engineering. He was a Teaching Assistant and Instructor in the Electrical and Electronics Engineering Department, METU, from 1987 to 1994. He held a postdoctoral position in the Neuromagnetism Laboratory of the Physics Department at New York University, New York, during 1994-1995. Then he worked as a Research Assistant Professor in the same department. In 1996, he joined the Electrical and Electronics Engineering Department of METU as an Assistant Professor. His research interests are new medical imaging modalities, the mathematical and computational aspects of medical imaging, and the application of numerical electromagnetics to biomedical problems.

Education Information

Doctorate, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, Turkey 1988 - 1993

Postgraduate, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, Turkey 1986 - 1988

Undergraduate, Bogazici University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, Turkey 1981 - 1985

Foreign Languages

English, C1 Advanced

Certificates, Courses and Trainings

Entrepreneurship, Berkeley-Labsout Accelerator, UC Berkeley Executive Education, 2019

Dissertations

Doctorate, ELECTRICAL IMPEDANCE TOMOGRAPHY USING INDUCED CURRENTS, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 1993

Postgraduate, STUDY OF ALGEBRAIC RECONSTRUCTION ALGORITHMS FOR PRACTICAL APPLICATIONS OF EIT, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 1988

Research Areas

Biomedical Engineering, Electrical and Electronics Engineering, Engineering and Technology

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2003 - Continues

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 1997 - 2003

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 1996 - 1997

Lecturer PhD, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 1993 - 1996

Research Assistant, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 1987 - 1993

Academic and Administrative Experience

Research Assistant Professor, New York University, Fizik Bölümü, Physics Department/Neuromagnetism Laboratory, 1995 - 1996

Postdoctoral Researcher, New York University, Physics Department, Physics Department/Neuromagnetism Laboratory, 1994 - 1995

Courses

Introduction to Medical Imaging, Undergraduate, 2020 - 2021

Bioelectricity and Biomagnetism, Doctorate, 2019 - 2020

Biomedical Signals, Instrumentation, and Measurements, Undergraduate, 2018 - 2019

Advising Theses

GENÇER N. G., Implementation of a fast simulation tool for the analysis of contrast mechanisms in HMMDI and enhancement of the SNR in the experimental set-up, Doctorate, Ü.İRGİN(Student), 2021

Gençer N. G., Top C. B., Three dimensional finite difference time domain simulations on harmonic motion microwave Doppler imaging method using realistic tissue models, Postgraduate, F.TATAR(Student), 2019

GENÇER N. G., Experimental studies for IFFT with magnetic field measurements, Postgraduate, A.ÖNDER(Student), 2018

GENÇER N. G., Wireless power transfer with bidirectional telemetry for active implantable medical devices, Postgraduate, O.AVAN(Student), 2017

GENÇER N. G., Data acquisition system for Lorentz force electrical impedance tomography using magnetic field

measurements, Postgraduate, K.KABOUTARI(Student), 2017

GENÇER N. G., Theoretical limits and safety considerations for magneto-acousto electrical tomography, Postgraduate, E.GHALICHI(Student), 2017

GENÇER N. G., PHP applications, K-wave simulations and experimental studies for medical ultrasound, Postgraduate, U.BARAN(Student), 2017

GENÇER N. G., Design and realization of a hybrid medical imaging system: Harmonic motion microwave doppler imaging, Doctorate, A.KAMALI(Student), 2016

GENÇER N. G., A study on a low phase noise charge pump phase-locked loop at 2.8 GHz, Postgraduate, M.KEYKHALI(Student), 2016

GENÇER N. G., A Study on a low phase noise charge pump phase-locked loop at 2.8 GHZ, Postgraduate, M.Keykhali(Student), 2016

GENÇER N. G., Design And Implementation Of A Communication System For Implantable Medical Devices, Postgraduate, Y.ÜRKMEZTÜRK(Student), 2016

GENÇER N. G., Design and implementation of magnetic field sensors for biomedical applications / , Postgraduate, U.Can(Student), 2015

GENÇER N. G., ALATAN L., Dual band microstrip implantable antenna design for biomedical applications, Postgraduate, D.ALPT EKİN(Student), 2015

GENÇER N. G., Application of image enhancement algorithms to improve the visibility and classification of microcalcifications in mammograms, Postgraduate, C.AKBAY(Student), 2015

GENÇER N. G., 2D simulation studies and initial experimental results for hall effect imaging / , Postgraduate, M.Soner(Student), 2014

GENÇER N. G., 2D simulation studies and initial experimental results for Hall effect imaging, Postgraduate, M.SONER(Student), 2014

GENÇER N. G., AKAR G., A mass detection algorithm for mammogram images / , Postgraduate, M.YEŞİL KAYA(Student), 2014

GENÇER N. G., 2D simulations based on the general time dependent reciprocal relation and initial experiments for LFEIT / , Postgraduate, M.KARADAŞ(Student), 2014

GENÇER N. G., Investigating the multi-frequency performance of electro-thermal imaging: An experimental study, Postgraduate, G.ÖZDEMİR(Student), 2013

GENÇER N. G., Harmonic motion microwave doppler imaging method, Doctorate, C.BARIŞ(Student), 2013

GENÇER N. G., 3D MULTI-FREQUENCY CONDUCTIVITY IMAGING VIA CONTACTLESS MEASUREMENTS, Doctorate, K.ÖZDAL(Student), 2013

GENÇER N. G., Electrical impedance tomography using Lorentz fields, Doctorate, R.ZENGİN(Student), 2012

GENÇER N. G., Medical electro-thermal imaging, Doctorate, H.Feza(Student), 2012

GENÇER N. G., Electrical impedance tomography using lorentz fields, Doctorate, R.ZENGİN(Student), 2012

GENÇER N. G., Classification of motor imagery tasks in EEG signal and its application to a brain-computer interface for controlling assistive environmental devices, Postgraduate, E.ACAR(Student), 2011

GENÇER N. G., Realization of a cue based motor imagery brain computer interface with its potential application to a wheelchair, Postgraduate, B.Akinci(Student), 2010

GENÇER N. G., A design and implementation of P300 based brain-computer interface, Postgraduate, H.BALKAR(Student), 2009

GENÇER N. G., Imaging electrical conductivity distribution of the human head using evoked fields and potentials, Postgraduate, M.Yurtkölesi(Student), 2008

GENÇER N. G., Java applets for simulation of magnetic resonance imaging, Postgraduate, Ç.Altın(Student), 2008

GENÇER N. G., Solving the forward problem of electrical source imaging by applying the reciprocal approach and the finite difference method, Postgraduate, S.TAHA(Student), 2007

GENÇER N. G., Multi-frequency contactless electrical impedance imaging using realistic head models: Single coil simulations, Postgraduate, D.GÜRSOY(Student), 2007

GENÇER N. G., Multi-frequency electrical conductivity imaging, Postgraduate, K.ÖZDAL(Student), 2006

GENÇER N. G., Multi-frequency electrical conductivity imaging via contactless measurements, Postgraduate, K.Öz dal(Student), 2006

GENÇER N. G., Real time image processing for medical infrared imaging, Postgraduate, C.KIZILÖZ(Student), 2005

GENÇER N. G., BAYKAL B., Extraction of auditory evoked potentials from ongoing EEG, Doctorate, S.AYDIN(Student), 2005

GENÇER N. G., An improved data acquisition system for contactless conductivity imaging, Postgraduate, İ.EVRİM(Student), 2005

GENÇER N. G., Parallel implementation of the boundary element method for electromagnetic source imaging of the human brain, Postgraduate, Y.Ataseven(Student), 2005

GENÇER N. G., Electro-magnetic source imaging using realistic head models, Doctorate, Z.Akalın(Student), 2005

GENÇER N. G., Real time image processing for medical infrared inaging, Postgraduate, C.Kızılöz(Student), 2005

GENÇER N. G., X-ray physics and computerized tomography simulation using Java and Flash, Postgraduate, A.SERKAN(Student), 2003

GENÇER N. G., Parallelization of the forward and inverse problems of electro-magnetic source imaging of the human brain, Doctorate, C.ERKİN(Student), 2003

GENÇER N. G., Electrical conductivity imaging via contactless measurements: An experimental study, Postgraduate, B.ÜLKER(Student), 2001

GENÇER N. G., Development of a compression algorithm suitable for exercise ECG data, Postgraduate, K.UYAR(Student), 2001

GENÇER N. G., Noise cancellation techniques applied to EEG using single or more sweeps, Postgraduate, B.Yenigün(Student), 2000

GENÇER N. G., Noise concellation techniques applied to EEG using single or mare sweeps, Postgraduate, B.YENİGÜN(Student), 2000

GENÇER N. G., Forward problem solution of EMSI of the human brain using a new FEM formulation with realistic head model, Postgraduate, M.KEMAL(Student), 1998

GENÇER N. G., Forward problem solution of electro-magnetic source imaging of the human brain using a new boundary element method formulation with realistic head model., Postgraduate, İ.OĞUZ(Student), 1998

GENÇER N. G., Electrical conductivity imaging via contactless measurements: Forward and inverse problem simulations., Postgraduate, M.Nejat(Student), 1998

GENÇER N. G., Electical conductivity imaging via contactless measurement : Forward and inverse problem simülations, Postgraduate, M.NEJAT(Student), 1998

Jury Memberships

Award, Serhat Özyar Young Scientist of the Year, Orta Doğu Teknik Üniversitesi, April, 2021

Award, 18. Serhat Özyar Yılın Genç Bilim İnsanı Ödülü, Orta Doğu Teknik Üniversitesi, April, 2020

Award, Serhat Özyar Young Scientist of the Year Award, ODTÜ Öğretim Elemanları Derneği, April, 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **On the utilization of the adjoint method in microwave tomography**
Soydan D. A., Top C. B., GENÇER N. G.
International Journal for Numerical Methods in Biomedical Engineering, vol.40, no.6, 2024 (SCI-Expanded)
- II. **Induced Current Electro-Thermal Imaging for Breast Tumor Detection: A Numerical and Experimental Study**
Tanrıverdi V., GENÇER N. G.
Annals of Biomedical Engineering, vol.52, no.4, pp.1078-1090, 2024 (SCI-Expanded)
- III. **Data acquisition system for MAET with magnetic field measurements**
Kaboutari K., Tetik A. O., Ghalichi E., Gozu M. S., Zengin R., GENÇER N. G.
PHYSICS IN MEDICINE AND BIOLOGY, vol.64, no.11, 2019 (SCI-Expanded)
- IV. **Numerical implementation of magneto-acousto-electrical tomography (MAET) using a linear phased**

array transducer

GÖZÜ M. S., ZENGİN R., GENÇER N. G.

PHYSICS IN MEDICINE AND BIOLOGY, vol.63, no.3, 2018 (SCI-Expanded)

- V. **Theoretical limits to sensitivity and resolution in magneto-acousto-electrical tomography**
GHALICHI E., GENÇER N. G.
PHYSICS IN MEDICINE AND BIOLOGY, vol.62, no.20, pp.8025-8040, 2017 (SCI-Expanded)
- VI. **Two-dimensional multi-frequency imaging of a tumor inclusion in a homogeneous breast phantom using the harmonic motion Doppler imaging method**
TAFRESHI A. K., TOP C. B., GENÇER N. G.
PHYSICS IN MEDICINE AND BIOLOGY, vol.62, no.12, pp.4852-4869, 2017 (SCI-Expanded)
- VII. **Microwave Sensing of Acoustically Induced Local Harmonic Motion: Experimental and Simulation Studies on Breast Tumor Detection**
top C. B., TAFRESHI A. K., GENÇER N. G.
IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol.64, no.11, pp.3974-3986, 2016 (SCI-Expanded)
- VIII. **Lorentz force electrical impedance tomography using magnetic field measurements**
ZENGİN R., GENÇER N. G.
PHYSICS IN MEDICINE AND BIOLOGY, vol.61, no.16, pp.5887-5905, 2016 (SCI-Expanded)
- IX. **Theoretical assessment of electro-thermal imaging: A new technique for medical diagnosis**
Carlak H. F., GENÇER N. G., BEŞİKCİ C.
INFRARED PHYSICS & TECHNOLOGY, vol.76, pp.227-234, 2016 (SCI-Expanded)
- X. **Harmonic Motion Microwave Doppler Imaging: A Simulation Study Using a Simple Breast Model**
Top C. B., GENÇER N. G.
IEEE TRANSACTIONS ON MEDICAL IMAGING, vol.33, no.2, pp.290-300, 2014 (SCI-Expanded)
- XI. **Simulation of the Scattered Field From a Vibrating Tumor Inside the Tissue Using 3D-FDTD Method**
Top C. B., GENÇER N. G.
IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS, vol.23, no.6, pp.273-275, 2013 (SCI-Expanded)
- XII. **EEG/MEG source imaging: Methods, challenges, and open issues**
WENDEL K., VÄISÄNEN O., MALMÍVUO J., GENÇER N. G., VANRUMSTE B., DURKA P., MAGJAREVIĆ R., SUPEK S., PASCU M. L., FONTENELLE H., et al.
Computational Intelligence and Neuroscience, vol.2009, 2009 (SCI-Expanded)
- XIII. **Low-Frequency Magnetic Subsurface Imaging: Reconstructing Conductivity Images of Biological Tissues via Magnetic Measurements**
Oezkan K. O., GENÇER N. G.
IEEE TRANSACTIONS ON MEDICAL IMAGING, vol.28, no.4, pp.564-570, 2009 (SCI-Expanded)
- XIV. **Parallel implementation of the accelerated BEM approach for EMSI of the human brain**
ATASEVEN Y., Akalin-Acar Z., Acar C. E., GENÇER N. G.
MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, vol.46, no.7, pp.671-679, 2008 (SCI-Expanded)
- XV. **USB-based 256-channel electroencephalographic data acquisition system for electrical source imaging of the human brain**
Usakli A. B., Gencer N. G.
INSTRUMENTATION SCIENCE & TECHNOLOGY, vol.35, no.3, pp.255-273, 2007 (SCI-Expanded)
- XVI. **Use of the isolated problem approach for multi-compartment BEM models of electro-magnetic source imaging**
Gencer N. G., Akalin-Acar Z.
PHYSICS IN MEDICINE AND BIOLOGY, vol.50, no.13, pp.3007-3022, 2005 (SCI-Expanded)
- XVII. **An advanced boundary element method (BEM) implementation for the forward problem of electromagnetic source imaging**
Akahn-Acar Z., Gencer N. G.
PHYSICS IN MEDICINE AND BIOLOGY, vol.49, no.21, pp.5011-5028, 2004 (SCI-Expanded)
- XVIII. **Sensitivity of EEG and MEG measurements to tissue conductivity**

- Gencer N. G., Acar C.
PHYSICS IN MEDICINE AND BIOLOGY, vol.49, no.5, pp.701-717, 2004 (SCI-Expanded)
- XIX. **Electrical conductivity Imaging via contactless measurements: An experimental study**
KARBEYAZ B. Ü., Gencer N. G.
IEEE TRANSACTIONS ON MEDICAL IMAGING, vol.22, no.5, pp.627-635, 2003 (SCI-Expanded)
- XX. **Implementation of a data acquisition system for contactless conductivity imaging**
Ulker B., Gencer N.
IEEE ENGINEERING IN MEDICINE AND BIOLOGY MAGAZINE, vol.21, no.5, pp.152-155, 2002 (SCI-Expanded)
- XXI. **Forward problem solution of electromagnetic source imaging using a new BEM formulation with high-order elements**
Gencer N. G., TANZER I. O.
PHYSICS IN MEDICINE AND BIOLOGY, vol.44, no.9, pp.2275-2287, 1999 (SCI-Expanded)
- XXII. **Electrical conductivity imaging via contactless measurements**
Gencer N. G., TEK M.
IEEE TRANSACTIONS ON MEDICAL IMAGING, vol.18, no.7, pp.617-627, 1999 (SCI-Expanded)
- XXIII. **Forward problem solution for electrical conductivity imaging via contactless measurements**
Gencer N. G., TEK M. N.
PHYSICS IN MEDICINE AND BIOLOGY, vol.44, no.4, pp.927-940, 1999 (SCI-Expanded)
- XXIV. **Differential characterization of neural sources with the bimodal truncated SVD pseudo-inverse for EEG and MEG measurements**
Gencer N. G., WILLIAMSON S. J.
IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING, vol.45, no.7, pp.827-838, 1998 (SCI-Expanded)
- XXV. **Magnetic source images of human brain functions**
GENÇER N. G., Williamson S.
BEHAVIOR RESEARCH METHODS INSTRUMENTS & COMPUTERS, vol.29, no.1, pp.78-83, 1997 (SSCI)
- XXVI. **Electrical impedance tomography: Induced-current imaging achieved with a multiple coil system**
Gencer N. G., İDER Y. Z., Williamson S.
IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING, vol.43, no.2, pp.139-149, 1996 (SCI-Expanded)
- XXVII. **ELECTRICAL-IMPEDANCE TOMOGRAPHY USING INDUCED CURRENTS**
GENCER N. G., KUZUOĞLU M., İDER Y.
IEEE TRANSACTIONS ON MEDICAL IMAGING, vol.13, no.2, pp.338-350, 1994 (SCI-Expanded)
- XXVIII. **A COMPARATIVE-STUDY OF SEVERAL EXCITING MAGNETIC-FIELDS FOR INDUCED CURRENT EIT**
GENCER N., İDER Y.
PHYSIOLOGICAL MEASUREMENT, vol.15, 1994 (SCI-Expanded)
- XXIX. **ELECTRICAL-IMPEDANCE TOMOGRAPHY USING INDUCED AND INJECTED CURRENTS**
GENCER N., İDER Y., KUZUOĞLU M.
CLINICAL PHYSICS AND PHYSIOLOGICAL MEASUREMENT, vol.13, pp.95-99, 1992 (SCI-Expanded)
- XXX. **DETERMINATION OF THE BOUNDARY OF AN OBJECT INSERTED INTO A WATER-FILLED CYLINDER**
İDER Y., NAKİBOĞLU B., KUZUOĞLU M., GENCER N.
CLINICAL PHYSICS AND PHYSIOLOGICAL MEASUREMENT, vol.13, pp.151-154, 1992 (SCI-Expanded)
- XXXI. **ELECTRICAL-IMPEDANCE TOMOGRAPHY OF TRANSLATIONALLY UNIFORM CYLINDRICAL OBJECTS WITH GENERAL CROSS-SECTIONAL BOUNDARIES**
İDER Y., GENCER N., ATALAR E., TOSUN H.
IEEE TRANSACTIONS ON MEDICAL IMAGING, vol.9, no.1, pp.49-59, 1990 (SCI-Expanded)

Articles Published in Other Journals

- I. **The Effect of Contrasts in Electrical and Mechanical Properties between Breast Tissues on Harmonic Motion Microwave Doppler Imaging Signal**
İrgin U., Top C. B., GENÇER N. G.

IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, vol.5, pp.362-370, 2021 (ESCI)

II. Optimal reference electrode selection for electric source imaging

Gençer N. G., Williamson S., GUEZIEC A., HUMMEL R.

Electroencephalography and Clinical Neurophysiology, vol.99, no.2, pp.163-173, 1996 (Scopus)

Books & Book Chapters

I. Forward Problem Solution of Magnetic Source Imaging

GENÇER N. G., ACAR C. E., TANZER İ. O.

in: Magnetic Source Imaging of the Human Brain, Zhong-Lin Lu, Lloyd Kaufman, Editor, Psychology Press, 2003

Refereed Congress / Symposium Publications in Proceedings

I. Induced Current Thermal Imaging in Breast Cancer Detection

Tanriverdi V., GENÇER N. G.

29th IEEE Conference on Signal Processing and Communications Applications (SIU), ELECTR NETWORK, 9 - 11 June 2021

II. Phantom and Solenoid Coil Development for Induced Current Electro-Thermal Imaging Akim Induklemeli Electro-Termal Görüntüleme İçin Fantom ve Solenoid Bobin Yapımı

Tanriverdi V., GENÇER N. G.

2021 Medical Technologies Congress, TIPTEKNO 2021, Antalya, Turkey, 4 - 06 November 2021

III. An Improved Receiver for Harmonic Motion Microwave Doppler Imaging

Soydan D. A., Irgin U., Top C. B., Gençer N. G.

14th European Conference on Antennas and Propagation, EuCAP 2020, Copenhagen, Denmark, 15 - 20 March 2020

IV. Enhancing the sensitivity of harmonic motion microwave doppler imaging using main signal cancellation circuit

Irgin Ü., Top C. B., Soydan D. A., GENÇER N. G.

12th European Conference on Antennas and Propagation, EuCAP 2018, London, United Kingdom, 9 - 13 April 2018, vol.2018

V. Heat Analysis in Magneto-Acousto Electrical Impedance Tomography

Ghalichi E., ZENGİN R., GENÇER N. G.

18TH INTERNATIONAL CONFERENCE ON BIOMEDICAL APPLICATIONS OF ELECTRICAL IMPEDANCE TOMOGRAPHY, 21 - 24 June 2017

VI. An Experimental Study for Magneto-Acousto Electrical Impedance Tomography using Magnetic Field Measurement

KABOUTORİ K., TETİK A. Ö., Ghalichi E., GÖZÜ M. S., ZENGİN R., GENÇER N. G.

18TH INTERNATIONAL CONFERENCE ON BIOMEDICAL APPLICATIONS OF ELECTRICAL IMPEDANCE TOMOGRAPHY, 21 - 24 June 2017

VII. An Analytical Solution for Forward Problem of Magneto Acousto Electrical Tomography

GHALICHI E., GENÇER N. G.

BIOEM2016, Ghent, Belgium, 07 June 2016 - 10 June 2017

VIII. A Numerical Analysis of Magneto-Acousto Electrical Tomography with a Simplified Breast Model

ZENGİN R., GENÇER N. G.

The 13th IASTED International Conference on Biomedical Engineering, 20 - 21 February 2017

IX. Received Signal in Harmonic Motion Microwave Doppler Imaging as a Function of Tumor Position in a 3D Scheme

IRGIN U., TOP C. B., TAFRESHI A. K., GENÇER N. G.

11th International Symposium on Medical Information and Communication Technology (ISMICT), Lisbon, Portugal,

6 - 08 February 2017, pp.86-90

- X. **A numerical study on the resolution limit of Magneto Acousto Electrical Tomography using Magnetic Field Measurements**
ZENGİN R., GENÇER N. G.
BIOEM2016, Ghent, Belgium, 7 - 10 June 2016
- XI. **Realization of Harmonic Motion Microwave Doppler Imaging Method**
KHAMALI TAFRESHI A., GENÇER N. G.
BIOEM2016, Ghent, Belgium, 7 - 10 June 2016
- XII. **Dual Band PIFA Design For Biomedical Applications**
ALPTEKİN D., ALATAN L., GENÇER N. G.
EUCAP 2016, DAVOS, Switzerland, 10 - 15 April 2016, pp.3987-3990
- XIII. **Design and Assembly of a Static Magnetic Field Generator for Lorentz Field Electrical Impedance Tomography**
Tetik A. O., Ghalichi E., Kaboutari K., GENÇER N. G.
20th National Biomedical Engineering Meeting (BIYOMUT), İzmir, Turkey, 3 - 05 November 2016
- XIV. **Application of High Resolution Magnetic Resonance Imaging Methods for Spinal Cord Tissue Segmentation**
Durlu C., Erdogan H. B., Kucukdeveci O. F., GENÇER N. G.
20th National Biomedical Engineering Meeting (BIYOMUT), İzmir, Turkey, 3 - 05 November 2016
- XV. **Numerical analysis of spinal cord stimulation with triple leads with guarded cathode**
DURLU C., ZENGİN R., GENÇER N. G., Kucukdeveci F.
2015 19th National Biomedical Engineering Meeting (BIYOMUT), Istanbul, Turkey, Turkey, 5 - 06 November 2015
- XVI. **Low phase noise phase locked loop frequency synthesizer design for breast cancer detection**
KEYKHALI M., GENÇER N. G.
2015 19th National Biomedical Engineering Meeting (BIYOMUT), Istanbul, Turkey, Turkey, 5 - 06 November 2015
- XVII. **2D Simulations Based on General Time-Dependent Reciprocal Relation for LFEIT**
KARADAŞ M., GENÇER N. G.
37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Milan, Italy, 25 - 29 August 2015, pp.1556-1559
- XVIII. **CAD for detection of microcalcification and classification in mammograms**
AKBAY C., GENÇER N. G., GENÇER G.
2014 18th National Biomedical Engineering Meeting, Istanbul, Turkey, Turkey, 16 - 17 October 2014
- XIX. **A dual band antenna design for implantable medical devices**
ALPTEKİN D., GENÇER N. G., KUCUKDEVECİ F.
2014 18th National Biomedical Engineering Meeting, Istanbul, Turkey, Turkey, 16 - 17 October 2014
- XX. **Numerical studies for Hall Effect Imaging using linear phased array transducer**
Gözü M. S., ZENGİN R., GENÇER N. G.
2014 18th National Biomedical Engineering Meeting, Istanbul, Turkey, Turkey, 16 - 17 October 2014
- XXI. **Harmonic Motion Microwave Doppler Imaging method for breast tumor detection**
Top C. B., Tafreshi A. K., GENÇER N. G.
2014 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Chicago, IL, 26 - 30 August 2014
- XXII. **Data Acquisition System for Harmonic Motion Microwave Doppler Imaging**
Tafreshi A. K., Karadas M., Top C. B., GENÇER N. G.
36th Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society (EMBC), Illinois, United States Of America, 26 - 30 August 2014, pp.2873-2876
- XXIII. **Medical Thermal Imaging of Electrically Stimulated Woman Breast: a simulation study**
Carlak H. F., Gençer N. G., Beşikci C.
33rd Annual International Conference of the IEEE Engineering-in-Medicine-and-Biology-Society (EMBS), Massachusetts, United States Of America, 30 August - 03 September 2011, pp.4905-4908
- XXIV. **Thermal images of electrically stimulated breast: A simulation study**

Carlak H. F., GENÇER N. G., BEŞİKCİ C.

12th Mediterranean Conference on Medical and Biological Engineering and Computing, MEDICON 2010, Chalkidiki, Greece, 27 - 30 May 2010, vol.29, pp.244-247

- XXV. **Sensitivity matrix analysis for contactless electrical conductivity imaging Dokunmasiz yolla elektriksel iletkenlik görüntülemesi için duyarlılık matrisi analizi**
Zengin R., GENÇER N. G.
2010 15th National Biomedical Engineering Meeting, BIYOMUT2010, Antalya, Turkey, 21 - 24 April 2010
- XXVI. **Analytical solution for contactless electrical impedance measurement Dokunmasiz yolla elektriksel iletkenlik ölçümleri için analitik formülasyon**
Top C. B., GENÇER N. G.
2010 15th National Biomedical Engineering Meeting, BIYOMUT2010, Antalya, Turkey, 21 - 24 April 2010
- XXVII. **Online cue-based discrimination of left / right hand movement imagination Çevrimiçi ipucu-bazlı sol / sağ el hareket düşüncesinin ayrıştırılması**
Akinci B., GENÇER N. G.
2010 15th National Biomedical Engineering Meeting, BIYOMUT2010, Antalya, Turkey, 21 - 24 April 2010
- XXVIII. **Simulations of electrically stimulated thermal imaging using a 3D breast model Akim uygulamalı termal görüntüleme yöntemi için üç boyutlu meme modeli ile benzetimler**
Carlak H. F., GENÇER N. G., BEŞİKCİ C.
2010 15th National Biomedical Engineering Meeting, BIYOMUT2010, Antalya, Turkey, 21 - 24 April 2010
- XXIX. **A realization of a P300 based brain-computer interface system P300 tabanlı bir beyin-bilgisayar arayüzü sisteminin oluşturulması**
Erdoğan B., GENÇER N. G.
2010 15th National Biomedical Engineering Meeting, BIYOMUT2010, Antalya, Turkey, 21 - 24 April 2010
- XXX. **Contactless Electrical Conductivity Imaging Simulations Using FDFD Method**
GENÇER N. G., Gencer N. G.
14th National Biomedical Engineering Meeting, İzmir, Turkey, 20 - 22 May 2009, pp.435-438
- XXXI. **Electrical Conductivity Imaging via Contactless Measurements: Data Acquisition Systems Developed in METU Brain Research Laboratories**
Ozkan K. O., GENÇER N. G.
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Scientific Research / Working Group Memberships

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Invited Talks

Lorentz Field Electrical Impedance Tomography with Magnetic Field Measurements, Seminar, İhsan Doğramacı Bilkent Üniversitesi, Turkey, November 2020

Meme kanseri tanısında alternatif tıbbi görüntüleme teknikleri , Conference, Uluslararası katılımlı Radyoloji Kongresi TURKRAD 2019, Turkey, November 2019

NUMERICAL ANALYSIS AND COMPUTATIONAL FLUID DYNAMICS WORKSHOP IN HONOR OF MÜNEVVER TEZER-SEZGİN'S 67TH BIRTHDAY, Workshop, Orta Doğu Teknik Üniversitesi, Turkey, April 2019

Non Academic Experience

New York University Physics De

New York University Physics De