

Prof. Dr. HAKAN ALTAN

Kişisel Bilgiler

E-posta: haltan@metu.edu.tr

Web: <https://users.metu.edu.tr/haltan/index.htm>

Uluslararası Araştırmacı ID'leri

ScholarID: vv3OAYEAAAAJ

ORCID: 0000-0002-2456-8827

Publons / Web Of Science ResearcherID: AAB-9726-2019

ScopusID: 7801441454

Yoksis Araştırmacı ID: 167841

Eğitim Bilgileri

Bütünleşik Doktora, New Jersey Institute of Technology, Uygulamalı Fizik, Amerika Birleşik Devletleri 2000 - 2005

Lisans Çift Anadal, State University of New York State University at Stony Brook, Fizik Ve Astronomi, Amerika Birleşik Devletleri 1994 - 1998

Yabancı Diller

İngilizce, C2 Ustalık

Araştırma Alanları

Fizik, Yoğun Madde 2:Elektronik Yapı, Elektrik, Manyetik ve Optik Özellikler, Optik özellikler, Yoğun madde spektroskopisi, Temel Bilimler

Akademik Unvanlar / Görevler

Prof. Dr., Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, 2017 - Devam Ediyor

Doç. Dr., Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, 2011 - 2017

Yrd. Doç. Dr., Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, 2009 - 2011

Öğretim Görevlisi Dr., Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, 2007 - 2009

Yönetilen Tezler

ALTAN H., Biological applications of terahertz time-domain attenuated total reflection spectroscopy, Yüksek Lisans, M.GELGEÇ(Öğrenci), 2022

Altan H., TIME DOMAIN TERAHERTZ ATTENUATED TOTAL INTERNAL REFLECTION SPECTROSCOPY, Yüksek Lisans, A.ATALAR(Öğrenci), 2021

ALTAN H., Novel methods in modulation and detection of terahertz waves for imaging applications, Doktora, T.TAKAN(Öğrenci), 2018

ALTAN H., Characterization of conductive properties of thin films in terahertz region, Yüksek Lisans,

M.AKKAYA(Öğrenci), 2017
ALTAN H., İnce filmlerin iletkenlik özelliklerinin terahertz bölgesinde karakterizasyonu., Yüksek Lisans, M.Akkaya(Öğrenci), 2017
ALTAN H., Terahertz time-domain spectroscopy and its application towards measurements in biology, Yüksek Lisans, Z.ÖZER(Öğrenci), 2016
ALTAN H., Terahertz(>0.3THz) active imaging systems, Yüksek Lisans, F.İDİKUT(Öğrenci), 2016
ALTAN H., Pulsed three dimensional THz imaging, Yüksek Lisans, B.KARAGÖZ(Öğrenci), 2016
ALTAN H., Design and characterization of metamaterials for Terahertz region, Yüksek Lisans, M.ALİ(Öğrenci), 2016
ALTAN H., Image reconstruction based on active scan techniques in the terahertz frequency range, Yüksek Lisans, V.ALİ(Öğrenci), 2014
ALTAN H., Development of a picosecond pulsed mode-locked fiber laser, Yüksek Lisans, M.EMRE(Öğrenci), 2013
ALTAN H., Fiber-integrated terahertz spectrometer driven by ultrafast ytterbium doped fiber laser, Yüksek Lisans, H.KESKİN(Öğrenci), 2013
ESENTÜRK O., ALTAN H., Dielectric properties of fuel oils and their ethanol mixtures investigated by terahertz time-domain spectroscopy, Yüksek Lisans, E.ARIK(Öğrenci), 2013
OKUTUCU ÖZYURT H. T., ALTAN H., Experimental investigation of nanofluids using terahertz time domain spectroscopy (THz TDS), Yüksek Lisans, C.KORAL(Öğrenci), 2012
ALTAN H., Development of a pulsed fiber laser for lidar system, Yüksek Lisans, E.DÜLGERGİL(Öğrenci), 2012
ALTAN H., Design and analysis of an open loop fiber-optic gyroscope, Yüksek Lisans, M.ÖZDEMİR(Öğrenci), 2012
ALTAN H., Imaging of metal surfaces using confocal laser scanning microscopy, Yüksek Lisans, B.CAN(Öğrenci), 2011
ALTAN H., Imaging solar cells using terahertz waves, Yüksek Lisans, S.KAYRA(Öğrenci), 2011
ALTAN H., Applications in broadband THz spectroscopy towards material studies, Yüksek Lisans, Z.TÜRKŞEN(Öğrenci), 2011
ALTAN H., Material characterization with terahertz time-domain spectroscopy, Doktora, D.KÖSEOĞLU(Öğrenci), 2010
ALTAN H., Investigation of DC generated plasmas using Terahertz time domain spectroscopy, Yüksek Lisans, G.KARAOĞLAN(Öğrenci), 2010
ALTAN H., Development of a compact time-domain terahertz spectrometer using photoconductive antenna detection method, Yüksek Lisans, Ü.ERÖZBEK(Öğrenci), 2009
ALTAN H., Fundamentals of a metal surface imaging system based on laser-optic principles, Yüksek Lisans, M.BEKTAŞ(Öğrenci), 2009
ALTAN H., Development of compact terahertz time-domain terahertz spectrometer using electro-optic detection method, Yüksek Lisans, M.MELİZ(Öğrenci), 2009
ALTAN H., Timing issues in a terawatt laser system, Yüksek Lisans, R.PINAR(Öğrenci), 2008

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **VO₂-Based Dynamic Coding Metamaterials for Terahertz Wavefront Engineering**
Akyurek B., Noori A., Demirhan Y., Ozyuzer L., Guven K., ALTAN H., Aygun G.
JOURNAL OF INFRARED MILLIMETER AND TERAHERTZ WAVES, cilt.46, sa.1, 2025 (SCI-Expanded)
- II. **Development of Polarization-Insensitive THz-to-IR Converters for Low-IR-Signature Target Detection and Imaging**
Aytaç B., ŞAHİN A. B., ALTAN H.
Sensors, cilt.24, sa.17, 2024 (SCI-Expanded)
- III. **Vanadyum dioksit ince filmlerinden üretilen metamalzeme THz filtrelerin rezonans özelliklerinin araştırılması**
Zeyrek S., Demirhan Y., Noori A., Tugay H., Altan H., Sabah C., Aygün Özyüzer G., Özyüzer L.
MODERN PHYSICS LETTERS B, cilt.38, sa.11, ss.2450056-2450071, 2024 (SCI-Expanded)
- IV. **Investigation of resonant properties of metamaterial THz filters fabricated from vanadium dioxide thin films**
Zeybek S., Demirhan Y., Noori A., Tugay H., Altan H., Sabah C., Aygun G., Ozyuzer L.

MODERN PHYSICS LETTERS B, cilt.38, sa.11, 2024 (SCI-Expanded)

- V. **Terahertz wavefront engineering using a hard-coded metasurface**
Noori A., Akyurek B., Demirhan Y., Ozyuzer L., Guven K., Altan H., Aygun G.
Optical and Quantum Electronics, cilt.55, sa.8, 2023 (SCI-Expanded)
- VI. **Performance of an Active THz Imaging System for Recognition of Concealed Faces**
Yıldırım İ. O., Altan H., Şahin A. B.
Journal of Infrared, Millimeter, and Terahertz Waves, cilt.44, sa.5-6, ss.365-378, 2023 (SCI-Expanded)
- VII. **The sub-terahertz region absorption of sputter deposited nanoscale TiAlV thin films**
Öksüzöğlü R. M., ALTAN H., Abdüsselamoğlu M. S., Özkan Ö. B., Bayram Y., Chakar E. S.
Optical Materials, cilt.135, 2023 (SCI-Expanded)
- VIII. **Response of a Glow Discharge Detector to Far Infrared Radiation**
Kusoglu-Sarikaya C., Akbar D., ALTAN H.
IEEE TRANSACTIONS ON PLASMA SCIENCE, cilt.50, sa.12, ss.5023-5030, 2022 (SCI-Expanded)
- IX. **1030 nm All-Fiber Closed-Loop Fiber Optic Gyroscope with High Sensitivity**
Keskin H., Vural H. A., Altinoz B., Bektik U., Altan H.
JOURNAL OF SENSORS, cilt.2022, 2022 (SCI-Expanded)
- X. **Tuning structural, electrical, and THz optical properties of VxOy films with W-doping**
Atik B., Dirican E., Demirors O., Altan H., Esenturk O., Yildirim M., Akin T.
JOURNAL OF ALLOYS AND COMPOUNDS, cilt.903, 2022 (SCI-Expanded)
- XI. **Time-Domain Characterization of the Radiation Pattern of the Terahertz Photoconductive Antennas**
Elmabruk K., Demir K., ALTAN H., Sahin A. B., ÜNLÜ M.
JOURNAL OF INFRARED MILLIMETER AND TERAHERTZ WAVES, cilt.40, sa.6, ss.595-605, 2019 (SCI-Expanded)
- XII. **Robust, Sensitive, and Inexpensive 2D Focal Plane Array Upconverting MMW Imaging Into the Visible**
Rozban D., Aharon A., Kahana L., Abramovich A., Yitzhaky Y., ALTAN H., Kopeika N. S.
IEEE PHOTONICS TECHNOLOGY LETTERS, cilt.31, sa.10, ss.747-750, 2019 (SCI-Expanded)
- XIII. **An ex vivo comparative study of occlusal and proximal caries using terahertz and X-ray imaging**
Kamburoglu K., KARAGÖZ B., ALTAN H., Ozen D.
DENTOMAXILLOFACIAL RADIOLOGY, cilt.48, sa.2, 2019 (SCI-Expanded)
- XIV. **Cross-like terahertz metamaterial absorber for sensing applications**
SABAH C., MULLA B., ALTAN H., Ozyuzer L.
PRAMANA-JOURNAL OF PHYSICS, cilt.91, sa.2, 2018 (SCI-Expanded)
- XV. **Stand-Off Through-the-Wall W-Band Millimeter-Wave Imaging Using Compressive Sensing**
ALKUS U., Sahin A. B., ALTAN H.
IEEE GEOSCIENCE AND REMOTE SENSING LETTERS, cilt.15, sa.7, ss.1025-1029, 2018 (SCI-Expanded)
- XVI. **Multilayer Graphene Broadband Terahertz Modulators with Flexible Substrate**
KAYA E., Kakenov N., ALTAN H., Kocabas C., ESENTÜRK O.
JOURNAL OF INFRARED MILLIMETER AND TERAHERTZ WAVES, cilt.39, sa.5, ss.483-491, 2018 (SCI-Expanded)
- XVII. **Enhancing the image resolution in a single-pixel sub-THz imaging system based on compressed sensing**
ALKUS U., ERMEYDAN E. S., Şahin A. B., CANKAYA I., ALTAN H.
OPTICAL ENGINEERING, cilt.57, sa.4, 2018 (SCI-Expanded)
- XVIII. **Thermally and optically tunable sub-terahertz superconducting fishnet metamaterial**
SABAH C., MULLA B., ALTAN H., Ozyuzer L.
PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, cilt.544, ss.46-53, 2018 (SCI-Expanded)
- XIX. **Terahertz Bandpass Frequency Selective Surfaces on Glass Substrates Using a Wet Micromachining Process**
Ramzan M., Khan T. M., Bolat S., NEBİOĞLU M. A., ALTAN H., Okyay A. K., Topalli K.
JOURNAL OF INFRARED MILLIMETER AND TERAHERTZ WAVES, cilt.38, sa.8, ss.945-957, 2017 (SCI-Expanded)
- XX. **Fourcross shaped metamaterial filters fabricated from high temperature superconducting YBCO and Au thin films for terahertz waves**
Demirhan Y., Alaboz H., Nebioglu M. A., Mulla B., AKKAYA M., ALTAN H., SABAH C., Ozyuzer L.

- SUPERCONDUCTOR SCIENCE & TECHNOLOGY, cilt.30, sa.7, 2017 (SCI-Expanded)
- XXI. **Single- and double-sided sensor applications of metamaterials based on square-ring and diamond resonators for terahertz region**
SHAWKY N., Taha S. A. A., ALTAN H., SABAH C.
MODERN PHYSICS LETTERS B, cilt.31, sa.8, 2017 (SCI-Expanded)
- XXII. **An indium tin oxide metasurface filter for terahertz applications: Design, fabrication, and characterization**
NEBİOĞLU M. A., Takan T., ALTAN H., Demirhan Y., Alaboz H., Ozyuzer L., SABAH C.
MODERN PHYSICS LETTERS B, cilt.31, sa.8, 2017 (SCI-Expanded)
- XXIII. **Terahertz Propagation in Tissues and Its Thickness Limitation**
KARAGÖZ B., ALTAN H.
DEEP IMAGING IN TISSUE AND BIOMEDICAL MATERIALS: USING LINEAR AND NONLINEAR OPTICAL METHODS, ss.377-411, 2017 (SCI-Expanded)
- XXIV. **Observation of Gate-Tunable Coherent Perfect Absorption of Terahertz Radiation in Graphene**
Kakenov N., Balci O., Takan T., ÖZKAN V. A., Akan H., KOCABAŞ C.
ACS PHOTONICS, cilt.3, sa.9, ss.1531-1535, 2016 (SCI-Expanded)
- XXV. **Characterization of a terahertz wave scanned imaging system for threat detection at standoff distances**
YILDIRIM İ. S., ÖZKAN V. A., Idikut F., Takan T., ŞAHİN A. B., ALTAN H.
OPTICAL AND QUANTUM ELECTRONICS, cilt.48, sa.7, 2016 (SCI-Expanded)
- XXVI. **Terahertz Time-Domain Study of Silver Nanoparticles Synthesized by Laser Ablation in Organic Liquid**
Koral C., ORTAÇ B., ALTAN H.
IEEE TRANSACTIONS ON TERAHERTZ SCIENCE AND TECHNOLOGY, cilt.6, sa.4, ss.525-531, 2016 (SCI-Expanded)
- XXVII. **Detection of far-infrared radiation using glow discharge detectors**
Takan T., ALASGARZADE N., Uzun-Kaymak I. U., Sahin A. B., ALTAN H.
OPTICAL AND QUANTUM ELECTRONICS, cilt.48, sa.5, 2016 (SCI-Expanded)
- XXVIII. **Metal mesh filters based on Ti, ITO and Cu thin films for terahertz waves**
Demirhan Y., Alaboz H., ÖZYÜZER L., Nebioglu M. A., Takan T., ALTAN H., Sabah C.
OPTICAL AND QUANTUM ELECTRONICS, cilt.48, sa.2, 2016 (SCI-Expanded)
- XXIX. **Broadband terahertz modulators using self-gated graphene capacitors**
Kakenov N., Balci O., Polat E. O., ALTAN H., KOCABAŞ C.
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, cilt.32, sa.9, ss.1861-1866, 2015 (SCI-Expanded)
- XXX. **Graphene-enabled electrically controlled terahertz spatial light modulators**
Kakenov N., Takan T., ÖZKAN V. A., Balci O., Polat E. O., ALTAN H., KOCABAŞ C.
OPTICS LETTERS, cilt.40, sa.9, ss.1984-1987, 2015 (SCI-Expanded)
- XXXI. **Low-cost bandpass filter for terahertz applications**
Takan T., Keskin H., ALTAN H.
OPTICAL AND QUANTUM ELECTRONICS, cilt.47, sa.4, ss.953-960, 2015 (SCI-Expanded)
- XXXII. **Dielectric Properties of Diesel and Gasoline by Terahertz Spectroscopy**
ARIK E., ALTAN H., ESENTÜRK O.
JOURNAL OF INFRARED MILLIMETER AND TERAHERTZ WAVES, cilt.35, sa.9, ss.759-769, 2014 (SCI-Expanded)
- XXXIII. **Characterization of primary and permanent teeth using terahertz spectroscopy**
KAMBUROĞLU K., Yetimoglu N. O., ALTAN H.
DENTOMAXILLOFACIAL RADIOLOGY, cilt.43, sa.6, 2014 (SCI-Expanded)
- XXXIV. **Dielectric Properties of Ethanol and Gasoline Mixtures by Terahertz Spectroscopy and an Effective Method for Determination of Ethanol Content of Gasoline**
ARIK E., ALTAN H., ESENTÜRK O.
JOURNAL OF PHYSICAL CHEMISTRY A, cilt.118, sa.17, ss.3081-3089, 2014 (SCI-Expanded)
- XXXV. **A simple single-mode fiber loss measurement scheme in the C-band based on fiber loop-cavity**

ringdown spectroscopy

Berberoglu H., ALTAN H.

OPTICS COMMUNICATIONS, cilt.317, ss.29-33, 2014 (SCI-Expanded)

XXXVI. Development of a rapid-scan fiber-integrated terahertz spectrometer

Keskin H., ALTAN H., Yavas S., İLDAY F. Ö., Eken K., ŞAHİN A. B.

OPTICAL AND QUANTUM ELECTRONICS, cilt.46, sa.4, ss.495-503, 2014 (SCI-Expanded)

XXXVII. Concentration-Based Measurement Studies of L-Tryptophan Using Terahertz Time-Domain Spectroscopy (THz-TDS)

Ozer Z., Gok S., ALTAN H., Severcan F.

APPLIED SPECTROSCOPY, cilt.68, sa.1, ss.95-100, 2014 (SCI-Expanded)

XXXVIII. Characterization of polypropylene treated under dual-RF plasma using terahertz time-domain spectroscopy

Akbar D., ALTAN H.

JOURNAL OF MATERIALS SCIENCE, cilt.48, sa.23, ss.8209-8214, 2013 (SCI-Expanded)

XXXIX. Characterization of a Glow Discharge Detector With Terahertz Time Domain Spectroscopy

Cinar K., Bozaci H. M., ALTAN H.

IEEE SENSORS JOURNAL, cilt.13, sa.7, ss.2643-2647, 2013 (SCI-Expanded)

XL. Characteristics of HfO₂ and SiO₂ on p-type silicon wafers using terahertz spectroscopy

Altan H., Sengupta A., Pham D., Grebel H., Federici J. F.

SEMICONDUCTOR SCIENCE AND TECHNOLOGY, cilt.22, sa.5, ss.457-463, 2007 (SCI-Expanded)

XLI. Terahertz absorption spectrum of para and ortho water vapors at different humidities at room temperature

Xin X., Altan H., Saint A., Matten D., Alfano R. R.

JOURNAL OF APPLIED PHYSICS, cilt.100, sa.9, 2006 (SCI-Expanded)

XLII. Terahertz (THz) spectroscopy of Freon-11 (CCl₃F, CFC-11) at room temperature

Altan H., Yu B. L., Alfano S. A., Alfano R. R.

CHEMICAL PHYSICS LETTERS, cilt.427, ss.241-245, 2006 (SCI-Expanded)

XLIII. Direct observation of the strength of plasmon-longitudinal optical phonon interaction in n-type GaAs

Altan H., Xin X., Matten D., Alfano R. R.

APPLIED PHYSICS LETTERS, cilt.89, sa.5, 2006 (SCI-Expanded)

XLIV. Terahertz study of 1,3,5-trinitro-s-triazine by time-domain and Fourier transform infrared spectroscopy

Huang F., Schulkin B., Altan H., Federici J., Gary D., Barat R., Zimdars D., Chen M., Tanner D.

APPLIED PHYSICS LETTERS, cilt.85, sa.23, ss.5535-5537, 2004 (SCI-Expanded)

XLV. Optical and electronic characteristics of single walled carbon nanotubes and silicon nanoclusters by terahertz spectroscopy

Altan H., Huang F., Federici J., Lan A., Grebel H.

JOURNAL OF APPLIED PHYSICS, cilt.96, sa.11, ss.6685-6689, 2004 (SCI-Expanded)

XLVI. Terahertz imaging using an interferometric array

Federici J., Gary D., Schulkin B., Huang F., Altan H., Barat R., Zimdars D.

APPLIED PHYSICS LETTERS, cilt.83, sa.12, ss.2477-2479, 2003 (SCI-Expanded)

XLVII. Damped Ly α absorption associated with an early-type galaxy at redshift $z=0.16377$

Lanzetta K., Wolfe A., Altan H., Barcons X., Chen H., FernandezSoto A., Meyer D., OrtizGil A., Savaglio S., Webb J., et al.

ASTRONOMICAL JOURNAL, cilt.114, sa.4, ss.1337-1344, 1997 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

I. Elektriksel Ölçüm ve Terahertz Teknolojileri

KAYRA GÜLLÜ S., Akbar D., ALTAN H.

ODTÜLÜDERGİSİ, ss.68-69, 2012 (Hakemsiz Dergi)

Kitap & Kitap Bölümleri

- I. **Tryptophan as a biomarker using terahertz spectroscopy**
Altan H., Gürel O.
Biophotonics, Tryptophan and Disease, Laura A. Sordillo, Peter P. Sordillo, Editör, AP, London , Cambridge, ss.41-51, 2022
- II. **THz Sources and Detectors Fabricated from High Temperature Superconductors**
Altan H., Demirhan Y., Özyüzer L., Aygün Özyüzer G., Türkoğlu F.
Terahertz (THz), Mid Infrared (MIR) and Near Infrared (NIR) Technologies for Protection of Critical Infrastructures Against Explosives and CBRN, Pereira M.F., Apostolakis A., Editör, Springer-Verlag , Dordrecht, ss.153-164, 2021
- III. **Development of Stand-Off Imaging Systems Using Low Cost Plasma Detectors That Work in the GHz to THz Range**
Altan H., Akbar D., Pavia J. P., Ribeiro M., Şahin A. B., Kuşoğlu-Sarıkaya C.
Terahertz (THz), Mid Infrared (MIR) and Near Infrared (NIR) Technologies for Protection of Critical Infrastructures Against Explosives and CBRN, Apostolakis A., Pereira M.F., Editör, Springer-Verlag , Dordrecht, ss.275-285, 2021
- IV. **Development of Stand-Off Imaging Systems Using Low Cost Plasma Detectors That Work in the GHz to THz Range**
AKBAR D., ALTAN H., Ribeiro M., ŞAHİN A. B., Kuşoğlu Sarıkaya C., Pavia J. P.
Terahertz (THz), Mid Infrared (MIR) and Near Infrared (NIR) Technologies for Protection of Critical Infrastructures Against Explosives and CBRN. NATO Science for Peace and Security Series B: Physics and Biophysics, Pereira M.F., Apostolakis A., Editör, Springer, Dordrecht, ss.275-285, 2021
- V. **THz Sources and Detectors Fabricated from High Temperature Superconductors**
DEMİRHAN Y., Türkoğlu F., ALTAN H., SABAH C., ÖZYÜZER L.
Terahertz (THz), Mid Infrared (MIR) and Near Infrared (NIR) Technologies for Protection of Critical Infrastructures Against Explosives and CBRN. NATO Science for Peace and Security Series B: Physics and Biophysics, Pereira M.F., Apostolakis A., Editör, Springer, Dordrecht, ss.153-164, 2021
- VI. **Numerical Simulation of the Plasma Inside a Glow Discharge Millimeter Wave Detector**
Kuşoğlu Sarıkaya C., Akbar D., Altan H.
Optics, Photonics and Laser Technology 2018, Paulo Ribeiro Maria Raposo, Editör, Springer-Verlag , Zürich, ss.221-238, 2019
- VII. **Compressive Sensing Imaging at Sub-THz Frequency in Transmission Mode**
ÖZKAN V. A., Menteşe Y., TAKAN T., ŞAHİN A. B., ALTAN H.
THz for CBRN and Explosives Detection and Diagnosis, Mauro Pereira, Oleksiy Shulika, Editör, Springer Netherlands, Dordrecht, ss.49-55, 2017
- VIII. **Investigating Glow Discharge Detectors as a Millimeter-Wave/Terahertz Radiation Detection Tool**
ALASGARZADE N., NEBİOĞLU M. A., TAKAN T., UZUN KAYMAK İ. Ü., ŞAHİN A. B., ALTAN H.
THz for CBRN and Explosives Detection and Diagnosis, Mauro Pereira, Oleksiy Shulika, Editör, Springer Netherlands, Dordrecht, ss.179-187, 2017
- IX. **Terahertz Propagation in Tissues and Its Thickness Limitation**
KARAGÖZ B., ALTAN H.
Deep Imaging in Tissue and Biomedical Materials: Using Linear and Nonlinear Optical Methods, Lingyan Shi, Robert R. Alfano, Editör, Pan Stanford, ss.377-411, 2017
- X. **Plasma Sensing using THz Waves**
ALTAN H.
NATO Science for Peace and Security Series B Physics and Biophysics Terahertz and Mid Infrared Radiation, Mauro F. Pereira, Oleksiy Shulika , Editör, Springer Netherlands, ss.1-8, 2011
- XI. **Characterization of Air-Nitrogen-Argon DC Glow Discharge Plasma with THz Time Domain Spectroscopy**
Karaoğlu G., TOSUN Z., Demiral A., ALTAN H.

NATO Science for Peace and Security Series B Physics and Biophysics Terahertz and Mid Infrared Radiation, Mauro F. Pereira, Oleksiy Shulika , Editör, Springer Netherlands, ss.73-77, 2011

XII. Influence of the Spot Size of the Probe Beam on the Detected THz Power Using Electro-Optic Detection Method

Metbulut M., GÜLLÜ H. H., ALTAN H.

NATO Science for Peace and Security Series B Physics and Biophysics Terahertz and Mid Infrared Radiation, Mauro F. Pereira, Oleksiy Shulika , Editör, Springer Netherlands, ss.107-111, 2011

XIII. Numerical Improvement of Terahertz Time-Domain Spectroscopic Measurements

Köseoğlu D., BERBEROĞLU H., ALTAN H.

NATO Science for Peace and Security Series B Physics and Biophysics Terahertz and Mid Infrared Radiation, Mauro F. Pereira, Oleksiy Shulika , Editör, Springer Netherlands, ss.85-90, 2011

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **2D Malzemelere Dayalı Terahertz Plazmonik Yükselteçlerin Nano Ölçekte Geliştirilmesi**
Altan H.
Workshop on Terahertz Technology and Applications 2024, Karlsruhe, Almanya, 12 - 13 Mart 2024, ss.1
- II. **THz to IR Converter for Incoherent Detection of Radiation**
Aytac B., Şahin A. B., Altan H.
Sensors and Communication Technologies in the 1 GHz to 10 THz Band 2024, Edinburgh, İngiltere, 18 - 19 Eylül 2024, cilt.13203
- III. **Antipodal Vivaldi antenna with frequency selective surface for ultrawideband radar systems**
Köseni E., Altan H., Özdemir Ö.
Sensors and Communication Technologies in the 1 GHz to 10 THz Band 2024, Edinburgh, İngiltere, 18 - 19 Eylül 2024, cilt.13203
- IV. **Propagation of Laguerre-Gaussian Modes at Millimeter-wave through Scattering Media**
Dogru S., Altan H., Şahin A. B.
Emerging Imaging and Sensing Technologies for Security and Defence VIII 2023, Amsterdam, Hollanda, 5 - 06 Eylül 2023, cilt.12740
- V. **Evaluation of performance of an active terahertz imaging system for concealed face recognition**
Yıldırım İ. O., Doğru Ş., Şahin A. B., Altan H.
Artificial Intelligence for Security and Defence Applications 2023, Amsterdam, Hollanda, 4 - 05 Eylül 2023, cilt.12742
- VI. **Fast and sensitive MMW imaging system with up-conversion readout working in the NIR Zone**
Kurup A. R., Rozban D., Kopeika N. S., Yitzhaky Y., Altan H., Abramovich A.
Radar Sensor Technology XXVII 2023, Florida, Amerika Birleşik Devletleri, 1 - 03 Mayıs 2023, cilt.12535
- VII. **Detection and recognition of concealed faces using a 340 GHz imaging system**
Yıldırım İ. O., Şahin A. B., Altan H.
SPIE Security + Defence, 2022, Berlin, Almanya, 5 - 07 Eylül 2022
- VIII. **Broadband THz Absorber Layers for Microbolometer Applications**
Atik B., Demirörs O., Yıldırım M., ALTAN H., ESENTÜRK O.
International Conference on Infrared, Millimeter, and Terahertz Waves, IRMMW-THz, 28 Ağustos 2022
- IX. **Comparison of terahertz and ultrasound imaging in the assessment of oral soft tissue lesions**
KAMBUROĞLU K., Sönmez G., ÇAKMAK E. E., Eratam N., ALTAN H.
INTERNATIONAL CAPITAL CONFERENCE ON MULTIDISCIPLINARY SCIENTIFIC RESEARCH, Portekiz, 13 - 14 Temmuz 2022
- X. **Case presentation of oral soft tissue lesions by using ultrasound, terahertz and histopathology**
KAMBUROĞLU K., Sönmez G., ÇAKMAK E. E., BARIŞ E., ALTAN H.
INTERNATIONAL CAPITAL CONFERENCE ON MULTIDISCIPLINARY SCIENTIFIC RESEARCH, Portekiz, 13 - 14 Temmuz 2022

- XI. **Investigation of In-Gap Field Enhancement at Terahertz Frequencies for a Metasurface Enhanced Sensor**
Tugay H., ALTAN H., DEMİRHAN Y., ÖZYÜZER L., SABAH C.
2021 Conference on Lasers and Electro-Optics Europe & European Quantum Electronics Conference (CLEO/Europe-EQEC), Munich, Almanya, 21 - 25 Haziran 2021
- XII. **Non-linear Detection of THz radiation using a Metasurface Enhanced Sensor**
ALTAN H.
Photonica 2021, Belgrade, Sırbistan, 25 Ağustos 2021, ss.22
- XIII. **The evaluation of various designs for Ytterbium doped fiber based superfluorescent source at 1 μ m wavelength**
KESKİN H., Vural H., Alaçakır E., ALTAN H.
Optical Sensors 2021, Virtual, Online, Çek Cumhuriyeti, 19 - 23 Nisan 2021, cilt.11772
- XIV. **Investigation of doped and undoped VOxfilms for terahertz microbolometer applications**
Atik B., Dirican E., Demirörs O., ALTAN H., ESENTÜRK O., Yıldırım M., AKIN T.
Terahertz Emitters, Receivers, and Applications XII 2021, California, Amerika Birleşik Devletleri, 1 - 05 Ağustos 2021, cilt.11827
- XV. **Assessment of the Diagnostic Effectiveness of Terahertz Radiation in Oral Soft Tissue Lesions**
Atalar A., Gelgeç M., ALTAN H., BARIŞ E., Cakmak E. E., Eratam N., KAMBUROĞLU K.
Conference on Lasers and Electro-Optics Europe / European Quantum Electronics Conference (CLEO/Europe-EQEC), ELECTR NETWORK, 21 - 25 Haziran 2021
- XVI. **Optimization of a microbolometer pixel for operation in the sub-1 THz region**
Demirörs O., Atik B., Dirican E., ALTAN H., ESENTÜRK O., Yıldırım M., AKIN T.
Terahertz Emitters, Receivers, and Applications XII 2021, California, Amerika Birleşik Devletleri, 1 - 05 Ağustos 2021, cilt.11827
- XVII. **Analysis of the Interaction between THz Waves and Low Cost Plasma Detectors for the Development of Stand-Off Imaging Systems**
Pavia J. P., Ribeiro M., Kuşoğlu Sarıkaya C., ALTAN H., AKBAR D., Souto N.
2019 IEEE MTT-S International Microwave and RF Conference (IMARC), Mumbai, India, 13 - 15 Aralık 2019
- XVIII. **Design and simulation of a Metasurface Enhanced THz Sensor**
Tugay H., ALTAN H., DEMİRHAN Y., ÖZYÜZER L., Mulla B., SABAH C.
9th International Workshop on Terahertz Technology and Applications, 3 - 04 Mart 2020
- XIX. **Modulation Behaviors, Conductivities, and Carrier Dynamics of Single and Multilayer Graphenes**
KAYA E., Kakenov N., KOCABAŞ C., ALTAN H., ESENTÜRK O.
2019 44th International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz), Paris, France, 1 - 06 Eylül 2019
- XX. **The Effect of Phosphor Coating on THz/mm wave-Plasma Interaction in Glow Discharge Detector**
Kuşoğlu Sarıkaya C., AKBAR D., ALTAN H.
2019 44th International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz), Paris, France, 1 - 06 Eylül 2019
- XXI. **Applications of various sensors for detecting THz waves in adverse conditions**
Aytac B., Sahin A. B., Altan H.
Millimetre Wave and Terahertz Sensors and Technology XII 2019, Strasbourg, Fransa, 9 - 10 Eylül 2019, cilt.11164
- XXII. **Design of a Novel THz Sensor for Structural Health Monitoring Applications**
Pavia J. P., Ribeiro M. A., Sarıkaya C. K., Akbar D., Altan H., Souto N.
IEEE 20th Wireless and Microwave Technology Conference (WAMICON), Florida, Amerika Birleşik Devletleri, 8 - 09 Nisan 2019
- XXIII. **Understanding the Effect of THz/mm wave - Plasma Interaction on the Brightness of Glow Discharge Detectors**
Kusoglu-Sarikaya C., Akbar D., ALTAN H.
Conference on Millimetre Wave and Terahertz Sensors and Technology XII, Strasbourg, Fransa, 9 - 10 Eylül 2019, cilt.11164

- XXIV. **Development of Stand-off Imaging Systems Using Low Cost Plasma Detectors**
ALTAN H.
Advanced Research Workshop: THz MIR and NIR Technologies for Protection of Critical Infrastructures against Explosives and CBRN, 5 - 09 Kasım 2018
- XXV. **TRay: active THz imaging autonomous biometric secured access control and tracking gate system**
YILDIRIM İ. S., Telli A., Colak T., Guray C., Demirsoy B., Osmanoglu T., Unal I., Beltekin G., ŞAHİN A. B., ALTAN H.
Conference on Millimetre Wave and Terahertz Sensors and Technology XI, Berlin, Almanya, 10 - 11 Eylül 2018, cilt.10800
- XXVI. **Understanding the detection mechanism of mm-wave radiation in glow discharge detectors**
Sarıkaya C. K., Akbar D., Ribeiro M. A., ALTAN H.
Conference on Millimetre Wave and Terahertz Sensors and Technology XI, Berlin, Almanya, 10 - 11 Eylül 2018, cilt.10800
- XXVII. **Radiation Pattern Characterization of Terahertz Photoconductive Antennas Using Time-Domain Spectroscopy System**
Elmabruk K., Demir K., ŞAHİN A. B., ALTAN H., ÜNLÜ M.
IEEE-Antennas-and-Propagation-Society International Symposium on Antennas and Propagation / USNC/URSI National Radio Science Meeting, Massachusetts, Amerika Birleşik Devletleri, 8 - 13 Temmuz 2018, ss.813-814
- XXVIII. **Sıkıştırılmış Algılama ile Milimetredalga Görüntüleme: Modülasyon Frekansı ve Veri Tipi Etkileri**
ŞENGÜN ERMEYDAN E., Mete M., ŞAHİN A. B., ALTAN H., ÇANKAYA İ.
26. IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı, İzmir, Türkiye, 2 - 05 Mayıs 2018
- XXIX. **Understanding the Mechanisms Behind MM-Wave Detection using Gas Discharge Lamps**
ALTAN H.
8th International Workshop on Terahertz Technology and Applications, 20 - 21 Mart 2018
- XXX. **Electrically Tunable Devices For MM-Wave / Terahertz Applications: Design, Fabrication And Characterization**
ALTAN H.
10TH ASIAN SYMPOSIUM ON INTENSE LASER SCIENCE, 10 - 13 Mart 2018
- XXXI. **Parallel 1d3v Particle in Cell/Monte Carlo Collision (PIC/MCC) Simulation of a Glow Discharge Millimeter Wave Detector**
Kuşoğlu Sarıkaya C., Akbar D., ALTAN H.
Proceedings of the 6th International Conference on Photonics, Optics and Laser Technology, Funchal, Madeira, Portugal, 25 - 27 Ocak 2018
- XXXII. **Modification of Tunable THz Filters Fabricated from Vanadium Dioxide Thin Films**
DEMİRHAN Y., yuce h., Akkaya M., ALTAN H., ÖZYÜZER L., AYGÜN ÖZYÜZER G.
2017 ICG Annual Meeting 32nd Şişecam Glass Symposium, 22 - 25 Ekim 2017
- XXXIII. **A study on neon indicator lamps for the purpose of THz-mm wave detection**
Alasgarzage N., ALTAN H., MANSUROĞLU D., ŞAHİN A. B., UZUN KAYMAK İ. Ü.
19. Ulusal Optik, Elektro-Optik ve Fotonik Çalıştayı, Türkiye, 29 Eylül 2017
- XXXIV. **Super-Resolution Image Reconstruction Applied to an Active Millimeter Wave Imaging System based on Compressive Sensing**
Alkus U., Ermeýdan E. S., ŞAHİN A. B., ÇANKAYA İ., ALTAN H.
Conference on Millimetre Wave and Terahertz Sensors and Technology X, Warszawa, Polonya, 11 Eylül 2017, cilt.10439
- XXXV. **Investigation of Radiant Millimeter Wave/Terahertz Radiation from Low Infrared Signature Targets**
Aytac B., Alkus U., Sivasligil M., Sahin A. B., ALTAN H.
Conference on Millimetre Wave and Terahertz Sensors and Technology X, Warszawa, Polonya, 11 Eylül 2017, cilt.10439
- XXXVI. **Terahertz pulsed imaging for the monitoring of dental caries: a comparison with X-ray imaging**
KARAGÖZ B., KAMBUROĞLU K., ALTAN H.
Conference on Medical Laser Applications and Laser-Tissue Interactions VIII, Munich, Almanya, 25 - 29 Haziran 2017, cilt.10417

- XXXVII. **Effects of THz Transmission on the Narrow Gap DC Glow Discharge Plasmas**
ALASGARZAGE N., ALTAN H., MANSUROĞLU D., ŞAHİN A. B., UZUN KAYMAK İ. Ü.
44th International Conference on Plasma Science, ICOPS 2017, 21 - 25 Mayıs 2017
- XXXVIII. **Observation of Gate-Tunable Coherent Perfect Absorption of Terahertz Waves in Graphene**
KOCABAŞ C., Kakenov N., Balcı O., TAKAN T., ÖZKAN V. A., ALTAN H.
APS March Meeting 2017, 13 - 17 Mart 2017
- XXXIX. **Terahertz Transmission Through Patterened Vanadium Oxide Thin Films on Dielectric Substrates**
AKKAYA M., Demirhan Y., Yuce H., Aygun G., Ozyuzer L., SABAH C., ALTAN H.
5th International Conference on Photonics, Optics and Laser Technology (PHOTOPTICS), Porto, Portekiz, 27 Şubat - 01 Mart 2017, ss.334-339
- XL. **Tunable Metamaterial Filters Fabricated from High Temperature Superconductors**
DEMİRHAN Y., ALABOZ H., Nebioğlu M. A., Mulla B., ALTAN H., SABAH C., ÖZYÜZER L.
FRONTIERS IN THEORETICAL AND APPLIED PHYSICS, 22 - 25 Şubat 2017
- XLI. **340 GHz imaging system for detection of concealed threat objects at 5 meters stand-off distance (Conference Presentation)**
YILDIRIM İ. O., ÖZKAN V. A., TAKAN T., ŞAHİN A. B., ALTAN H.
SPIE Security Defence, Edinburgh, United Kingdom, 26 - 29 Eylül 2016
- XLII. **Transmission and detection of terahertz radiation in a weakly ionized plasma (Conference Presentation)**
TAKAN T., Alasgarzade N., YILDIRIM İ. O., UZUN KAYMAK İ. Ü., ŞAHİN A. B., ALTAN H.
SPIE Security Defence, Edinburgh, United Kingdom, 26 - 29 Eylül 2016
- XLIII. **Broadband THz Modulators Based on Multilayer Graphene on PVC**
KAYA E., Kakenov N., Kocabas C., ALTAN H., ESENTÜRK O.
41st International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz), Copenhagen, Danimarka, 25 - 30 Eylül 2016
- XLIV. **Interaction of a Narrow Gap Glow Discharge Plasma with Far Infrared Radiation**
Alasgarzade N., Takan T., Mansuroğlu D., ŞAHİN A. B., Uzun-Kaymak I. U., ALTAN H.
41st International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz), Copenhagen, Danimarka, 25 - 30 Eylül 2016
- XLV. **Compressive Sensing Imaging with a Graphene Modulator at THz Frequency in Transmission Mode**
ÖZKAN V. A., Takan T., Kakenov N., KOCABAŞ C., ALTAN H.
41st International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz), Copenhagen, Danimarka, 25 - 30 Eylül 2016
- XLVI. **Metasurface Filters for Terahertz Applications Design Fabrication and Characterization**
ALTAN H., nebioğlu m. a., akkaya m., DEMİRHAN Y., ALABOZ H., ÖZYÜZER L., SABAH C.
Science and Applications of Thin Films, 19 - 23 Eylül 2016
- XLVII. **Stand off MM Wave Imaging using Arrays Based on Glow Discharge Lamps**
ALTAN H., ŞAHİN A. B., Kopeika N., Abramovich A., Ytzhaky Y.
11TH FUTURE SECURITY SECURITY RESEARCH CONFERENCE, 13 - 14 Eylül 2016
- XLVIII. **Exploiting Novel Media for Terahertz Wave Photonics**
ALTAN H.
Turkish Physical Society 32nd International Physics Congress, 6 - 09 Eylül 2016
- XLIX. **Assessment of incipient dental caries by terahertz pulsed imaging a comparative study**
KAMBUROĞLU K., KARAGÖZ B., ALTAN H.
15th European Academy of Dentomaxillofacial Radiology Congress, Cardiff, Birleşik Krallık, 15 - 18 Haziran 2016
- L. **Electrically controlled terahertz spatial light modulators with graphene arrays**
Kakenov N., Takan T., ÖZKAN V. A., Balcı O., Polat E. O., ALTAN H., KOCABAŞ C.
IEEE MTT-S International Microwave Symposium (IMS), San-Francisco, Kostarika, 22 - 27 Mayıs 2016
- LI. **Terahertz Pulsed Imaging of Dental Structures**
KARAGÖZ B., KAMBUROĞLU K., ALTAN H.
4th Annual Conference of COST Action MP1204 and the International Conference on Semiconductor Mid-IR and

THz Materials and Optics SMMO2016, lizbon, Portekiz, 21 - 24 Mart 2016

- LII. **Monitoring of Tryptophan as a Biomarker for Cancerous Cells in Terahertz (THz) Sensing**
ALTAN H., Ozek N. S., Gok S., Ozyurt I., Severcan F.
Conference on Optical Biopsy XIV - Toward Real-Time Spectroscopic Imaging and Diagnosis, San-Francisco, Kostarika, 15 - 17 Şubat 2016, cilt.9703
- LIII. **SUPERCONDUCTING METAMATERIAL BASED DEVICES FOR THz SENSING AND DETECTION**
Nebioğlu M. A., Papari G., Andreone A., ALTAN H.
NATO Advanced Research Workshop on THz Diagnostics of CBRN effects and Detection of Explosives & CBRN, 3 - 06 Kasım 2015
- LIV. **Compressive Sensing for Detection of Concealed Objects**
ALTAN H.
NATO Advanced Research Workshop on THz Diagnostics of CBRN effects and Detection of Explosives & CBRN, 3 - 06 Kasım 2015
- LV. **Development of a 100m Stand Off mm Wave 3D Imaging System Based on a GDD Array**
ALTAN H., ŞAHİN A. B., Abramovich A., Ytzhaky Y., Kopeika N.
NATO Advanced Research Workshop on THz Diagnostics of CBRN effects and Detection of Explosives & CBRN, 3 - 06 Kasım 2015
- LVI. **INVESTIGATING GLOW DISCHARGE DETECTORS AS A MM THz RADIATION DETECTION TOOL**
UZUN KAYMAK İ. Ü., TAKAN T., ALASGARZADE N., ŞAHİN A. B., ALTAN H.
NATO Advanced research Workshop on THz Diagnostics of CBRN effects and detection of explosives & CBRN, İzmir, Türkiye, 3 - 06 Kasım 2015
- LVII. **Investigating Glow Discharge Detectors GDDs as a mm wave THz radiation detection tool**
UZUN KAYMAK İ. Ü., TAKAN T., Alasgarzade N., ŞAHİN A. B., ALTAN H.
NATO Advanced Research Workshop on THz Diagnostics of CBRN effects and Detection of Explosives & CBRN, 3 - 06 Kasım 2015
- LVIII. **Fabrication of Bi2212 High Temperature Thin Films for Tunable Terahertz Wave Metamaterial Filters**
DEMİRHAN Y., ALABOZ H., SEMERÇİ T., ÖZYÜZER L., Nebioğlu M. A., TAKAN T., ALTAN H., SABAH C.
NATO Advanced Research Workshop on THz Diagnostics of CBRN effects and Detection of Explosives & CBRN, 3 - 06 Kasım 2015
- LIX. **Compressive Sensing Imaging and Image Fusion at sub THz frequency in Transmission Mode**
Menteşe Y., ÖZKAN V. A., TAKAN T., ŞAHİN A. B., ALTAN H.
NATO Advanced Research Workshop on THz Diagnostics of CBRN effects and Detection of Explosives & CBRN, 3 - 06 Kasım 2015
- LX. **Compressive Sensing Imaging at Sub-THz Frequency in Transmission Mode**
ÖZKAN V. A., Mentese Y., Takan T., ŞAHİN A. B., ALTAN H.
NATO Advanced Research Workshop on THz for CBRN and Explosives' Detection and Diagnostics, Cesme, Türkiye, 3 - 05 Kasım 2015, ss.49-55
- LXI. **Investigating Glow Discharge Detectors as a Millimeter-Wave/Terahertz Radiation Detection Tool**
Alasgarzade N., Nebioglu M. A., Takan T., Uzun-Kaymak I. U., ŞAHİN A. B., ALTAN H.
NATO Advanced Research Workshop on THz for CBRN and Explosives' Detection and Diagnostics, Cesme, Türkiye, 3 - 05 Kasım 2015, ss.179-187
- LXII. **Spatial Modulation of THz Beams for Imaging Applications**
ALTAN H.
International Symposium of Light and Life, 14 - 16 Ekim 2015
- LXIII. **Detection of the mm-wave radiation using a low-cost LWIR microbolometer camera from a multiplied Schottky diode based source**
Kebapci B., Tankut F., ALTAN H., AKIN T.
Conference on Millimetre Wave and Terahertz Sensors and Technology VIII, Toulouse, Fransa, 22 Eylül 2015, cilt.9651
- LXIV. **Modulation and frequency response of GDDs in the millimeter wave/THz region**
Alasgarzade N., Takan T., Uzun-Kaymak I. U., ŞAHİN A. B., ALTAN H.

- Conference on Millimetre Wave and Terahertz Sensors and Technology VIII, Toulouse, Fransa, 22 Eylül 2015, cilt.9651
- LXV. **Terahertz modulation using a bandpass filter combined with a Graphene Supercapacitor**
Takan T., Nebioğlu M. A., Kakenov N., Balci O., KOCABAŞ C., ALTAN H.
Conference on Millimetre Wave and Terahertz Sensors and Technology VIII, Toulouse, Fransa, 22 Eylül 2015, cilt.9651
- LXVI. **Extraction of dielectric and magnetic material properties for a periodic hole array THz filter**
Özkarşılığ Z. T., Nebioğlu M. A., TAKAN T., ALTAN H.
PHOTONICA 2015, 24 - 28 Ağustos 2015
- LXVII. **Terahertz wave scanned imaging system for threat detection at standoff distances**
YILDIRIM İ. O., ÖZKAN V. A., İdikut F., TAKAN T., ŞAHİN A. B., ALTAN H.
PHOTONICA 2015, 24 - 28 Ağustos 2015
- LXVIII. **Terahertz Wave Metamaterial Filters Based on Superconducting Bi2212 Thin Films**
DEMİRHAN Y., ALABOZ H., SEMERCİ T., ÖZYÜZER L., Nebioğlu M. A., TAKAN T., ALTAN H., SABAH C.
PHOTONICA 2015, 24 - 28 Ağustos 2015
- LXIX. **THz imaging of dental structures and implants Preliminary Findings**
KAMBUROĞLU K., KARAGÖZ B., ALTAN H.
The 20th International Congress of Dento-Maxillo-Facial Radiology, Santiago, Chile, 26 - 28 Ağustos 2015
- LXX. **An Indium Tin Oxide Metamaterial Filter for the Terahertz regime Design Fabrication and Characterization**
TAKAN T., Nebioğlu M. A., Kurt M., DEMİRHAN Y., ÖZYÜZER L., SABAH C., ALTAN H.
CLEO/Europe - EQEC 2015, 21 - 25 Haziran 2015
- LXXI. **Terahertz pulsed imaging study of dental caries**
KARAGÖZ B., ALTAN H., KAMBUROĞLU K.
Conference on Medical Laser Applications and Laser-Tissue Interactions VII, Munich, Almanya, 21 - 23 Haziran 2015, cilt.9542
- LXXII. **A comparative study of ITO Ti and Cu metal mesh resonant filters for THz applications**
DEMİRHAN Y., Kurt M., ALABOZ H., SEMERCİ T., ÖZYÜZER L., Nebioğlu M. A., TAKAN T., ALTAN H., SABAH C.
6 International Conference on Semiconductor Mid-IR Materials and Optics SMMO2015, 8 - 11 Nisan 2015
- LXXIII. **Rapid Scan Fiber Integrated Terahertz Spectrometer for Time Resolved Measurements**
Keskin H., İLDAY F. Ö., Eken S. K., ŞAHİN A. B., ALTAN H.
6 International Conference on Semiconductor Mid-IR Materials and Optics SMMO2015, 8 - 11 Nisan 2015
- LXXIV. **Detection of Far Infrared Radiation using Glow Discharge Detectors GDDs**
Küçükkeskin E., Alasgarzade N., UZUN KAYMAK İ. Ü., ALTAN H.
6 International Conference on Semiconductor Mid-IR Materials and Optics SMMO2015, 8 - 11 Nisan 2015
- LXXV. **Varying Temperature Surface Reflection and its Effect on the Indoor Terahertz Wireless Communications**
ŞAHİN A. B., ALTAN H.
6 International Conference on Semiconductor Mid-IR Materials and Optics SMMO2015, 8 - 11 Nisan 2015
- LXXVI. **Graphene enabled Electrically Controlled Terahertz Light Modulators**
Kakenov N., TAKAN T., ÖZKAN V. A., Balci O., Polat E., ALTAN H., KOCABAŞ C.
6 International Conference on Semiconductor Mid-IR Materials and Optics SMMO2015, 8 - 11 Nisan 2015
- LXXVII. **Controlling Terahertz Waves using Graphene Supercapacitors**
Kakenov N., Balci O., Polat E., ALTAN H., KOCABAŞ C.
APS March Meeting 2015, 2 - 06 Mart 2015
- LXXVIII. **THz Imaging Based on THz Spatial Light Modulation**
ALTAN H.
IUSL Seminar, New York-ABD, 05 Şubat 2015
- LXXIX. **Compressive sensing imaging through a drywall barrier at sub-THz and THz frequencies in transmission and reflection modes**
Takan T., ÖZKAN V. A., İdikut F., Yildirim I. O., ŞAHİN A. B., ALTAN H.

Conference on Image and Signal Processing for Remote Sensing XX, Amsterdam, Hollanda, 22 - 24 Eylül 2014, cilt.9244

- LXXX. **Image Reconstruction and Optimization Using a Terahertz Scanned Imaging System**
Yildirim I. O., ÖZKAN V. A., Idikut F., Takan T., ŞAHİN A. B., ALTAN H.
Conference on Electro-Optical Remote Sensing, Photonic Technologies, and Applications VIII and Military Applications in Hyperspectral Imaging and High Spatial Resolution Sensing II, Amsterdam, Hollanda, 22 - 23 Eylül 2014, cilt.9250
- LXXXI. **Hybrid metamaterial based structures for the development of a THz spatial light modulator**
Chikhi N., Casini R., Papari G. P., Lisitskiy M., Tkachenko V., ALTAN H., Andreone A.
16th Fotonica AEIT Italian Conference on Photonics Technologies, Naples, İtalya, 12 - 14 Mayıs 2014
- LXXXII. **THz characterization of a metamaterial-based Spatial Light Modulator**
Chikhi N., Lisitskiy M., Casini R., Papari G. P., Tkachenko V., ALTAN H., Andreone A.
3rd Mediterranean Photonics Conference, Trani, İtalya, 7 - 09 Mayıs 2014
- LXXXIII. **Comparison of terahertz technologies for detection and identification of explosives**
Beigang R., Biedron S. G., Dyjak S., Ellrich F., Haakestad M. W., Huebsch D., Kartaloglu T., Ozbay E., Ospald F., Palka N., et al.
Conference on Terahertz Physics, Devices, and Systems VIII - Advanced Applications in Industry and Defense, Massachusetts, Amerika Birleşik Devletleri, 5 - 06 Mayıs 2014, cilt.9102
- LXXXIV. **Characterization of a Glow Discharge Detector with Terahertz Time Domain Spectroscopy**
Cinar K., ALTAN H., ŞAHİN A. B.
38th International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz), Mainz, Almanya, 1 - 06 Eylül 2013
- LXXXV. **A new method for alcohol content determination of fuel oils by terahertz spectroscopy**
Arik E., KORAL C., ALTAN H., ESENTÜRK O.
2013 38th International Conference on Infrared, Millimeter, and Terahertz Waves, IRMMW-THz 2013, Mainz, Almanya, 1 - 06 Eylül 2013
- LXXXVI. **Repetition Rate Tuning of an Ultrafast Ytterbium Doped Fiber Laser for Terahertz Time-Domain Spectroscopy**
Keskin H., ALTAN H., Yavas S., İLDAY F. Ö., Yagci M. E., Aydin O., Eken K., Sahin B.
38th International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz), Mainz, Almanya, 1 - 06 Eylül 2013
- LXXXVII. **THz transmission and detection through glow discharge detectors**
Cinar K., ALTAN H., Sahin A. B.
Conference on Terahertz Physics, Devices, and Systems VII - Advanced Applications in Industry and Defense, Maryland, Amerika Birleşik Devletleri, 29 - 30 Nisan 2013, cilt.8716
- LXXXVIII. **Influence of the Spot Size of the Probe Beam on the Detected THz Power Using Electro-Optic Detection Method**
Metbulut M. M., Gullu H. H., ALTAN H.
NATO Advanced Research Workshop on Terahertz and Mid Infrared Radiation - Basic Research and Practical Applications, Marmaris, Türkiye, 3 - 06 Kasım 2009, ss.107-111
- LXXXIX. **Characterization of Air-Nitrogen-Argon DC Glow Discharge Plasma with THz Time Domain Spectroscopy**
Cinar K., Karaoglan G., Tosun Z., Akbar D., ALTAN H.
Workshop on Terahertz and Mid Infrared Radiation (TERA-MIR 2009), Turunc Marmaris, Türkiye, 3 - 06 Kasım 2009, ss.37-38
- XC. **Numerical Improvement of Terahertz Time-Domain Spectroscopic Measurements**
Koseoglu D., Berberoglu H., ALTAN H.
NATO Advanced Research Workshop on Terahertz and Mid Infrared Radiation - Basic Research and Practical Applications, Marmaris, Türkiye, 3 - 06 Kasım 2009, ss.85-90
- XCI. **Plasma Sensing Using Terahertz Waves**
ALTAN H.

NATO Advanced Research Workshop on Terahertz and Mid Infrared Radiation - Basic Research and Practical Applications, Marmaris, Türkiye, 3 - 06 Kasım 2009, ss.1-8

- XCII. The interaction of terahertz pulses with dc glow discharge plasma**
Tosun Z., Akbar D., ALTAN H.
34th International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz 2009), Busan, Güney Kore, 21 - 25 Eylül 2009, ss.334-335
- XCIII. THz Probe Studies of MBE Grown Epitaxial GaAs**
Koseoglu D., Gullu H. H., ALTAN H.
16th International Conference on Electron Dynamics in Semiconductors, Optoelectronics and Nanostructures (EDISON 16), Montpellier, Fransa, 24 - 28 Ağustos 2009, cilt.193
- XCIV. Mine detection using time domain THz spectroscopy**
ALTAN H.
Proc. SPIE 7303, Detection and Sensing of Mines, Explosive Objects, and Obscured Targets XIV, Orlando, FL, 13 Nisan 2009
- XCV. Terahertz Resonances in the Dielectric Response Due to Second Order Phonons in a GaSe Crystal**
Yu B. L., ALTAN H., Zeng F., Kartazayev V., Alfano R. R., Mandal K. C.
2006 MRS Spring Meeting, 17 - 21 Nisan 2006, cilt.935
- XCVI. Characteristics of nano scale composites by THz spectroscopy**
ALTAN H., Huang F., Federici J. F., Lan A., Grebel H.
Lasers and Electro-Optics, 2004. (CLEO), 16 - 21 Mayıs 2004
- XCVII. Characteristics of nanoscale composites by THz spectroscopy**
ALTAN H., Feng H., Federici J. F., Lan A., Grebel H.
Proc. SPIE 5268, Chemical and Biological Standoff Detection, Providence, RI, 27 Ekim 2004
- XCVIII. Characteristics of nanoscale composites by terahertz spectroscopy**
ALTAN H., Huang F., Federici J. F., Lan A., Grebel H.
Proc. SPIE 5070, Terahertz for Military and Security Applications, Orlando, FL, 29 Temmuz 2003

Desteklenen Projeler

- ALTAN H., Diğer Özel Kurumlarca Desteklenen Proje, 25metre Mesafeden Bariyer Arkası Tespit, 2016 - Devam Ediyor
- SEVERCAN F., ESENTÜRK O., ALTAN H., ÖZER Z., ŞİMŞEK ÖZEK N., Yükseköğretim Kurumları Destekli Proje, İnsan Kolon Adenokarsinoma Hücrelerinde Sodyum Bütirat Konsantrasyonuna Bağlı Oluşan Yapısal ve İçeriksel Farklılaşmaların Raman, FTIR ve Terahertz Spektroskopisi Yöntemleriyle Araştırılması, 2013 - Devam Ediyor
- ALTAN H., Diğer Özel Kurumlarca Desteklenen Proje, TOPRAK ALTI PLASTİK VEYA METAL CİSİMLERİN UZAK MESAFELERDEN THz DALGABOYLARI İLE TESPİTİ PROJESİ, 2009 - Devam Ediyor
- ALTAN H., Esentürk O., UFUK 2020 Projesi, PLASNANO (Nano-scale Development of Terahertz Plasmonic Amplifiers Based on 2D Materials), 2023 - 2026
- Altan H., Özyüzer L., TÜBİTAK Projesi, Çok Spektrumlu Terahertz Plazmonik Metamalzeme Detektörler, 2021 - 2024
- Altan H., Özyüzer L., TÜBİTAK Uluslararası İkili İşbirliği Projesi, Terahertz Dalgası Polarizasyon Modülasyonu İçin Frekansı Ayarlanabilir Grafen Tabanlı Kiral Metamalzemeler, 2021 - 2024
- Altan H., TÜBİTAK - AB COST Projesi , PLASMA APPLICATIONS FOR SMART AND SUSTAINABLE AGRICULTURE, 2020 - 2024
- TUGAY H., ALTAN H., TÜBİTAK Projesi, Terahertz Bölgesinde Yenilikçi 2B Malzemeler Kullanan Plazmon Etkileşimli Sensörlerin Biyomolekül Tespiti Etkinliğinin Araştırılması, 2021 - 2023
- Esentürk O., Altan H., Gürpınar A., Diğer Özel Kurumlarca Desteklenen Proje, Karbon-Epoksi Kompozit Malzeme Üzerinde Yapışık Halde olan Kauçuk Malzemesinin Yansıtıcı Terahertz Altyapısında İncelenerek Cihaz Tasarımı İçin Gerekli Verilerin Türetilmesi, 2021 - 2023
- Altan H., Ünlü M., TÜBİTAK Projesi, Yonga Üstü Optik Faz Kontrolü İle Terahertz Zaman-Alanı Hüzme Yönlendirmeli Fotoiletken Anten Dizisi Geliştirilmesi, 2020 - 2023
- Altan H., Aygün Özyüzer G., TÜBİTAK Projesi, Frekansı Ayarlanabilir THz Modülasyonu için VO2 Tabanlı Dijital

Metayüzeyler, 2020 - 2023

- ALTAN H., ESENTÜRK O., TÜBİTAK Projesi, Meta-Malzeme Destekli Birleşik Etkin Ortam Katman Yapıların Soğurucu Olarak Terahertz Mikrobolometre Teknolojisi İçin Geliştirilmesi, 2020 - 2022
- ALTAN H., TÜBİTAK Projesi, Yalıtkan Metal Geçiş Özellikli Vanadyum Dioksit Metamalzemelerini Kullanan Terahertz Modülator ve Sensör Yapıların Araştırılması, 2018 - 2022
- ALTAN H., Kamburoğlu K., TÜBİTAK Projesi, TÜBİTAK 1001 Projesi No: 119S623. Oral Yumuşak Doku Lezyonlarında Terahertz Işıklarının Diagnostik Etkinliğinin Ultrasonografi ile Karşılaştırılmalı Olarak Değerlendirilmesi. TÜBİTAK 119S623. Comparative Assessment Of Terahertz Imaging With Ultrasonography In Oral Soft Tissue Lesions., 2019 - 2021
- ALTAN H., KUŞOĞLU SARIKAYA C., Yükseköğretim Kurumları Destekli Proje, Uzak Kızılötesi Elektromanyetik Dalgaların Deşarj Plazma Ortamı ile Etkileşimlerinin İki Boyutta İncelenmesi, 2019 - 2021
- ALTAN H., TÜBİTAK Uluslararası İkili İşbirliği Projesi, Soğuk Plazmalar İle Terahertz (Thz) Dalgaların Etkileşimlerinin İncelenmesi: Parıltılı Deşarj Detektör Uygulamaları, 2017 - 2020
- ALTAN H., TÜBİTAK Uluslararası İkili İşbirliği Projesi, Soğuk Plazmalar İle Terahertz (Thz) Dalgaların Etkileşimlerinin İncelenmesi: Parıltılı Deşarj Detektör Uygulamaları, 2017 - 2020
- ALTAN H., KESKİN H., NEBİOĞLU M. A., Yükseköğretim Kurumları Destekli Proje, Fiber Lazerle Bütünleşik Terahertz Spektrometre, 2016 - 2019
- ALTAN H., YILDIRIM İ. O., TAKAN T., ÖZKAN V. A., Yükseköğretim Kurumları Destekli Proje, Bariyer Arkası Terahertz Görüntüleme Sistemi, 2016 - 2019
- ALTAN H., KESKİN H., Yükseköğretim Kurumları Destekli Proje, Çok Kipli Lazer Diyotun Işın Kaynağı Olarak Kullanıldığı Terahertz (THz) Spektroskopi Sistemleri için Hızlı Taramanın Geliştirilmesi, 2016 - 2019
- ALTAN H., TAKAN T., ALKUŞ Ü., AKKAYA M., NEBİOĞLU M. A., YILDIRIM İ. O., Yükseköğretim Kurumları Destekli Proje, Sensör Uygulamaları İçin THz Metamalzeme Yapıların Geliştirilmesi, 2016 - 2019
- ALTAN H., NATO Destekli Araştırma Projesi, Development of a 100m Stand off MM Wave 3D Imaging System based on a GDD Array, 2015 - 2019
- ALTAN H., Şahin A. B., TÜBİTAK Projesi, Terahertz Frekans Bandı Yüksek Veri Hızı Komünikasyon Sistemi Deneysel Alıcı Verici Yapılarının Kurulması Ve Geliştirilmesi, 2013 - 2019
- ALTAN H., Diğer Özel Kurumlarca Desteklenen Proje, Poliüretan Köpük Numunelerin Zamana Dayalı Terahertz Spektroskopi Yöntemi Kullanarak İncelenmesi, 2017 - 2018
- ALTAN H., Yükseköğretim Kurumları Destekli Proje, Çok Kipli Lazer Diyotun Işın Kaynağı Olarak Kullanıldığı Terahertz THz Spektroskopi Sistemleri için Hızlı Taramanın Geliştirilmesi, 2016 - 2018
- ALTAN H., TÜBİTAK Projesi, Grafen Tabanlı Terahertz Optoelektronik Aygıtlar, 2015 - 2017
- ALTAN H., Özyüzer L., TÜBİTAK Projesi, Süperiletken Metamalzeme Temelli Terahertz Bant-Geçirgen Filtreler, 2014 - 2016
- ALTAN H., TÜBİTAK Projesi, Terahertz Thz Algılama Uygulamaları İçin Oda Sıcaklığında Çalışan Deşarj Lambaların Karakterizasyonu, 2014 - 2016
- ALTAN H., TÜBİTAK Projesi, Terahertz (Thz) Algılama Uygulamaları İçin Oda Sıcaklığında Çalışan Deşarj Lambaların Karakterizasyonu, 2014 - 2016
- ALTAN H., Sanayi Tezleri Projesi, Milimetre ve Milimetre Altı Dalga Boylarında Görüntüleme Sistemi, 2012 - 2016
- ALTAN H., TÜBİTAK Projesi, Yakın Gerçek Zamanlı Terahertz Spektrometre Sistemi Geliştirilmesi, 2014 - 2015
- ALTAN H., TAKAN T., KARAGÖZ B., Midilli Y., Yükseköğretim Kurumları Destekli Proje, Biyolojik Malzemelerin T-Işıkları İle Karakterizasyonu, 2014 - 2015
- ALTAN H., TAKAN T., Midilli Y., Karagöz B., Yükseköğretim Kurumları Destekli Proje, Zamana Dayalı Terahertz Ölçüm Sistemi ile Deri Dokuların İncelenmesi, 2013 - 2015
- ALTAN H., Sanayi Tezleri Projesi, Milimetre Terahertz Dalga Boylarında Çalışan Aktif Görüntüleme Sistemi, 2012 - 2015
- ALTAN H., TÜBİTAK Projesi, Yakın Gerçek Zaman İşlemleri, Fiberde Tümlleşik Atmalı Terahertz Spektrometre, 2012 - 2015
- ALTAN H., TÜBİTAK Projesi, Zamana Dayalı Terahertz Ölçüm ve Görüntüleme Tekniklerinin Geliştirilmesi, 2011 - 2014
- ALTAN H., Yükseköğretim Kurumları Destekli Proje, Zaman Çözümlü Terahertz Spektrometre Geliştirilmesi (pompa/sonda Tekniği), 2012 - 2013
- ESENTÜRK O., Arık E., ALTAN H., Yükseköğretim Kurumları Destekli Proje, Petrol Ürünü Yakıtların Terahertz Spektroskopiyle Analizi, 2012 - 2013
- ALTAN H., Sanayi Tezleri Projesi, Çeşitli Çaptaki Namluların Ölçümünde Kullanılacak Master/Lazer/Optik Sistemlerinin Tasarımı, 2008 - 2012

ALTAN H., Sanayi Tezleri Projesi, Çeşitli Çaptaki Namluların Ölçümünde Kullanılacak Master Lazer Optik Sistemlerinin Tasarımı, 2008 - 2012

ALTAN H., TÜBİTAK Projesi, Kompakt Atılımlı Terahertz Spektrometre Geliştirilmesi, 2008 - 2011

ALTAN H., TÜBİTAK Projesi, Kompakt Akıllımlı Terahertz Spektrometre Geliştirilmesi, 2008 - 2011

ALTAN H., Yükseköğretim Kurumları Destekli Proje, Yoğun Plazmaların Terahertz Dalgaboyları İle İncelenmesi, 2009 - 2009

Patent

Altan H., PLAZMA DEŞARJ LAMBA KULLANILAN MİKRODALGA/MİLİMETRE DALGABOYLARI GÖRÜNTÜLEME TERTİBATI, Patent, BÖLÜM H Elektrik, Buluşun Tescil No: 2017 02831 , Standart Tescil, 2020

Altan H., Şahin A. B., Kaya M., Sayer G., Özdemir B., KOMPOZİT YAPIDAKİ YALITIM PANELİNİN TAHRİBATSIZ OLARAK İNCELENMESİNİ SAĞLAYAN CİHAZ, Patent, BÖLÜM G Fizik, Buluşun Tescil No: WO2019201564A1 , Standart Tescil, 2019

Altan H., NON-LINEAR TERAHERTZ SPECTROSCOPY FOR DEFECT DENSITY IDENTIFICATION IN HIGH K DIELECTRIC FILMS, Patent, BÖLÜM G Fizik, Buluşun Tescil No: US 7,459, 687 B2 , Standart Tescil, 2008

Bilimsel Hakemlikler

TÜBİTAK Projesi, 1002 - Hızlı Destek Programı, Orta Doğu Teknik Üniversitesi, Türkiye, Şubat 2019

Bilimsel Danışmanlıklar

ODTÜ MEMS MERKEZİ, Kurum veya Organizasyonlar İçin Yapılan Danışmanlık, Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Fizik Bölümü, Türkiye, 2018 - Devam Ediyor

Etkinlik Organizasyonlarındaki Görevler

Altan H., SPIE Security and Defence, Millimetre Wave and Terahertz Sensors and Technology XII, Bilimsel Kongre / Sempozyum Organizasyonu, Strasbourg, Fransa, Eylül 2019

Altan H., PHOTOPTICS 2019, Bilimsel Kongre / Sempozyum Organizasyonu, Praha, Çek Cumhuriyeti, Şubat 2019

Bilimsel Araştırma / Çalışma Grubu Üyelikleri

Odtü Mems Merkezi, Orta Doğu Teknik Üniversitesi, Turkey, <http://mems.metu.edu.tr/tr/akademisyenler>, 2018 - Devam Ediyor

Metrikler

Yayın: 159

Atıf (WoS): 724

Atıf (Scopus): 917

H-İndeks (WoS): 14

H-İndeks (Scopus): 14

Ödüller

Altan H., TÜBA GEBİP FİZİK ALANI, Tüba, Ocak 2016

Altan H., BAGEP FİZİK ALANI, Bagep, Ocak 2016

Altan H., TÜBİTAK TEŞVİK ÖDÜLÜ - FEN BİLİMLERİ, Tübitak, Aralık 2015

Altan H., Baki Komsuoğlu Bilim Teşvik Ödülü, Kocaeli Üniversitesi, Eylül 2014

Akademi Dışı Deneyim

Kamuya Bağlı Araştırma Merkezi, ODTÜ MEMS MERKEZİ, ODTÜ MEMS MERKEZİ
OPEDEV LTD. ŞTİ.

City University of New York at City College

New Jersey Institute of Technology

New Jersey City University

New Jersey Institute of Technology

Johns Hopkins University

SUNY at Stony Brook, ABD