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Education Information

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

Undergraduate Double Major, State University of New York State University at Stony Brook, Fizik Ve Astronomi, United States Of America 1994 - 1998

Foreign Languages

English, C2 Mastery

Research Areas

Physics, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Optical Properties, Spectroscopy of Matter, Natural Sciences

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Physics, 2017 - Continues

Associate Professor, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Physics, 2011 - 2017

Assistant Professor, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Physics, 2009 - 2011

Lecturer PhD, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Physics, 2007 - 2009

Advising Theses

Altan H., TIME DOMAIN TERAHERTZ ATTENUATED TOTAL INTERNAL REFLECTION SPECTROSCOPY, Postgraduate, A.ATALAR(Student), 2021

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

ALTAN H., Characterization of conductive properties of thin films in terahertz region, Postgraduate, M.AKKAYA(Student), 2017

ALTAN H., Characterization of conductive properties of thin films in terahertz region, Postgraduate, M.Akkaya(Student),

2017

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

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **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, vol.2022, 2022 (SCI-Expanded)
- II. **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, vol.903, 2022 (SCI-Expanded)
- III. **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, vol.40, no.6, pp.595-605, 2019 (SCI-Expanded)
- IV. **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, vol.31, no.10, pp.747-750, 2019 (SCI-Expanded)
- V. **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, vol.48, no.2, 2019 (SCI-Expanded)
- VI. **Cross-like terahertz metamaterial absorber for sensing applications**

- SABAH C., MULLA B., ALTAN H., Ozyuzer L.
PRAMANA-JOURNAL OF PHYSICS, vol.91, no.2, 2018 (SCI-Expanded)
- VII. **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, vol.15, no.7, pp.1025-1029, 2018 (SCI-Expanded)
- VIII. **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, vol.39, no.5, pp.483-491, 2018 (SCI-Expanded)
- IX. **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, vol.57, no.4, 2018 (SCI-Expanded)
- X. **Thermally and optically tunable sub-terahertz superconducting fishnet metamaterial**
SABAH C., MULLA B., ALTAN H., Ozyuzer L.
PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.544, pp.46-53, 2018 (SCI-Expanded)
- XI. **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, vol.38, no.8, pp.945-957, 2017 (SCI-Expanded)
- XII. **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, vol.30, no.7, 2017 (SCI-Expanded)
- XIII. **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, vol.31, no.8, 2017 (SCI-Expanded)
- XIV. **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, vol.31, no.8, 2017 (SCI-Expanded)
- XV. **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, pp.377-411, 2017 (SCI-Expanded)
- XVI. **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, vol.3, no.9, pp.1531-1535, 2016 (SCI-Expanded)
- XVII. **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, vol.6, no.4, pp.525-531, 2016 (SCI-Expanded)
- XVIII. **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, vol.48, no.7, 2016 (SCI-Expanded)
- XIX. **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, vol.48, no.5, 2016 (SCI-Expanded)
- XX. **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, vol.48, no.2, 2016 (SCI-Expanded)

- XXI. **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, vol.32, no.9, pp.1861-1866, 2015 (SCI-Expanded)
- XXII. **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, vol.40, no.9, pp.1984-1987, 2015 (SCI-Expanded)
- XXIII. **Low-cost bandpass filter for terahertz applications**
Takan T., Keskin H., ALTAN H.
OPTICAL AND QUANTUM ELECTRONICS, vol.47, no.4, pp.953-960, 2015 (SCI-Expanded)
- XXIV. **Dielectric Properties of Diesel and Gasoline by Terahertz Spectroscopy**
ARIK E., ALTAN H., ESENTÜRK O.
JOURNAL OF INFRARED MILLIMETER AND TERAHERTZ WAVES, vol.35, no.9, pp.759-769, 2014 (SCI-Expanded)
- XXV. **Characterization of primary and permanent teeth using terahertz spectroscopy**
KAMBUROĞLU K., Yetimoglu N. O. , ALTAN H.
DENTOMAXILLOFACIAL RADIOLOGY, vol.43, no.6, 2014 (SCI-Expanded)
- XXVI. **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, vol.118, no.17, pp.3081-3089, 2014 (SCI-Expanded)
- XXVII. **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, vol.317, pp.29-33, 2014 (SCI-Expanded)
- XXVIII. **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, vol.46, no.4, pp.495-503, 2014 (SCI-Expanded)
- XXIX. **Concentration-Based Measurement Studies of L-Tryptophan Using Terahertz Time-Domain Spectroscopy (THz-TDS)**
Ozer Z., Gok S., ALTAN H., Severcan F.
APPLIED SPECTROSCOPY, vol.68, no.1, pp.95-100, 2014 (SCI-Expanded)
- XXX. **Characterization of polypropylene treated under dual-RF plasma using terahertz time-domain spectroscopy**
Akbar D., ALTAN H.
JOURNAL OF MATERIALS SCIENCE, vol.48, no.23, pp.8209-8214, 2013 (SCI-Expanded)
- XXXI. **Characterization of a Glow Discharge Detector With Terahertz Time Domain Spectroscopy**
Cinar K., Bozaci H. M. , ALTAN H.
IEEE SENSORS JOURNAL, vol.13, no.7, pp.2643-2647, 2013 (SCI-Expanded)
- XXXII. **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, vol.22, no.5, pp.457-463, 2007 (SCI-Expanded)
- XXXIII. **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, vol.100, no.9, 2006 (SCI-Expanded)
- XXXIV. **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, vol.427, pp.241-245, 2006 (SCI-Expanded)
- XXXV. **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, vol.89, no.5, 2006 (SCI-Expanded)
- XXXVI. **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, vol.85, no.23, pp.5535-5537, 2004 (SCI-Expanded)
- XXXVII. **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, vol.96, no.11, pp.6685-6689, 2004 (SCI-Expanded)
- XXXVIII. **Terahertz imaging using an interferometric array**
Federici J., Gary D., Schulkin B., Huang F., Altan H., Barat R., Zimdars D.
APPLIED PHYSICS LETTERS, vol.83, no.12, pp.2477-2479, 2003 (SCI-Expanded)
- XXXIX. **Damped Ly alpha 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, vol.114, no.4, pp.1337-1344, 1997 (SCI-Expanded)

Articles Published in Other Journals

- I. **Elektriksel Ölçüm ve Terahertz Teknolojileri**
KAYRA GÜLLÜ S., Akbar D., ALTAN H.
ODTÜLÜDERGİSİ, pp.68-69, 2012 (Non Peer-Reviewed Journal)

Books & Book Chapters

- I. **THz Sources and Detectors Fabricated from High Temperature Superconductors**
Altan H., Demirhan Y., Özyüzer L., Aygün Özyüzer G., Türkoğlu F.
in: Terahertz (THz), Mid Infrared (MIR) and Near Infrared (NIR) Technologies for Protection of Critical Infrastructures Against Explosives and CBRN, Pereira M.F., Apostolakis A., Editor, Springer-Verlag, Dordrecht, pp.153-164, 2021
- II. **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.
in: Terahertz (THz), Mid Infrared (MIR) and Near Infrared (NIR) Technologies for Protection of Critical Infrastructures Against Explosives and CBRN, Apostolakis A., Pereira M.F., Editor, Springer-Verlag, Dordrecht, pp.275-285, 2021
- III. **Tryptophan as a biomarker using terahertz spectroscopy**
ALTAN H., Gürel O.
in: Biophotonics, Tryptophan and Disease, Laura A. Sordillo, Peter P. Sordillo, Editor, Elsevier, Cambridge, pp.41-51, 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.
in: 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., Editor, Springer, Dordrecht, pp.275-285, 2021
- V. **THz Sources and Detectors Fabricated from High Temperature Superconductors**
DEMİRHAN Y., Türkoğlu F., ALTAN H., SABAH C., ÖZYÜZER L.
in: 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., Editor, Springer, Dordrecht, pp.153-164, 2021

- VI. **Numerical Simulation of the Plasma Inside a Glow Discharge Millimeter Wave Detector**
Kuşoğlu Sarıkaya C., Akbar D., Altan H.
in: Optics, Photonics and Laser Technology 2018, Paulo Ribeiro Maria Raposo, Editor, Springer-Verlag, Zürich, pp.221-238, 2019
- VII. **Terahertz Propagation in Tissues and Its Thickness Limitation**
KARAGÖZ B., ALTAN H.
in: Deep Imaging in Tissue and Biomedical Materials: Using Linear and Nonlinear Optical Methods, Lingyan Shi, Robert R. Alfano, Editor, Pan Stanford, pp.377-411, 2017
- VIII. **Compressive Sensing Imaging at Sub-THz Frequency in Transmission Mode**
ÖZKAN V. A., Menteşe Y., TAKAN T., ŞAHİN A. B., ALTAN H.
in: THz for CBRN and Explosives Detection and Diagnosis, Mauro Pereira, Oleksiy Shulika, Editor, Springer Netherlands, Dordrecht, pp.49-55, 2017
- IX. **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.
in: THz for CBRN and Explosives Detection and Diagnosis, Mauro Pereira, Oleksiy Shulika, Editor, Springer Netherlands, Dordrecht, pp.179-187, 2017
- X. **Plasma Sensing using THz Waves**
ALTAN H.
in: NATO Science for Peace and Security Series B Physics and Biophysics Terahertz and Mid Infrared Radiation, Mauro F. Pereira, Oleksiy Shulika, Editor, Springer Netherlands, pp.1-8, 2011
- XI. **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.
in: NATO Science for Peace and Security Series B Physics and Biophysics Terahertz and Mid Infrared Radiation, Mauro F. Pereira, Oleksiy Shulika, Editor, Springer Netherlands, pp.107-111, 2011
- XII. **Characterization of Air-Nitrogen-Argon DC Glow Discharge Plasma with THz Time Domain Spectroscopy**
Karaoğlan G., TOSUN Z., Demiral A., ALTAN H.
in: NATO Science for Peace and Security Series B Physics and Biophysics Terahertz and Mid Infrared Radiation, Mauro F. Pereira, Oleksiy Shulika, Editor, Springer Netherlands, pp.73-77, 2011
- XIII. **Numerical Improvement of Terahertz Time-Domain Spectroscopic Measurements**
Köseoğlu D., BERBEROĞLU H., ALTAN H.
in: NATO Science for Peace and Security Series B Physics and Biophysics Terahertz and Mid Infrared Radiation, Mauro F. Pereira, Oleksiy Shulika, Editor, Springer Netherlands, pp.85-90, 2011

Refereed Congress / Symposium Publications in Proceedings

- I. **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 August 2022
- II. **Assessment of the Diagnostic Effectiveness of Terahertz Radiation in Oral Soft Tissue Lesions**
Altan H.
2021 Conference on Lasers and Electro-Optics Europe & European Quantum Electronics Conference (CLEO/Europe-EQEC), Munich, Germany, 01 August 2021, pp.1-2
- III. **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, Germany, 21 - 25 June 2021

- IV. **Non-linear Detection of THz radiation using a Metasurface Enhanced Sensor**
ALTAN H.
Photonica 2021, Belgrade, Serbia, 25 August 2021, pp.22
- V. **Optimization of a microbolometer pixel for operation in the sub-1 THz region**
Demirörs O., Atik B., Dirican E., ALTAN H., ESENTÜRK O., Yıldırlm M., AKIN T.
Terahertz Emitters, Receivers, and Applications XII 2021, California, United States Of America, 1 - 05 August 2021, vol.11827
- VI. **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, Czech Republic, 19 - 23 April 2021, vol.11772
- VII. **Investigation of doped and undoped VOx films for terahertz microbolometer applications**
Atik B., Dirican E., Demirörs O., ALTAN H., ESENTÜRK O., Yıldırlm M., AKIN T.
Terahertz Emitters, Receivers, and Applications XII 2021, California, United States Of America, 1 - 05 August 2021, vol.11827
- VIII. **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 December 2019
- IX. **Design and simulation of a Metasurface Enhanced THz Sensor**
Altan H.
9th International Workshop on Terahertz Technology and Applications, Frankfurt, Germany, 3 - 04 March 2020, pp.1
- X. **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 September 2019
- XI. **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 September 2019
- XII. **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, France, 9 - 10 September 2019, vol.11164
- XIII. **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, United States Of America, 8 - 09 April 2019
- XIV. **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, France, 9 - 10 September 2019, vol.11164
- XV. **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 November 2018
- XVI. **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, Germany, 10 - 11 September

2018, vol.10800

- XVII. **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, Germany, 10 - 11 September
2018, vol.10800
- XVIII. **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, United States Of America, 8 - 13 July 2018, pp.813-814
- XIX. **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, Turkey, 2 - 05 May 2018
- XX. **Understanding the Mechanisms Behind MM-Wave Detection using Gas Discharge Lamps**
ALTAN H.
8th International Workshop on Terahertz Technology and Applications, 20 - 21 March 2018
- XXI. **Electrically Tunable Devices For MM-Wave / Terahertz Applications: Design, Fabrication And Characterization**
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Tasks In Event Organizations

Altan H., SPIE Security and Defence, Millimetre Wave and Terahertz Sensors and Technology XII, Scientific Congress, Strasbourg, France, Eylül 2019

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Scientific Research / Working Group Memberships

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Public Research Center, ODTÜ MEMS MERKEZİ, ODTÜ MEMS MERKEZİ