

## Personal Information

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## International Researcher IDs

ScholarID: toapEWAAAAAJ

ORCID: 0000-0001-7051-4945

Publons / Web Of Science ResearcherID: B-8577-2012

ScopusID: 7006702503

Yoksis Researcher ID: 25992

## Education Information

Doctorate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik

Mühendisliği Bölümü, Turkey 1993 - 1998

Postgraduate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1991 - 1993

Undergraduate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1987 - 1991

## Foreign Languages

English, C1 Advanced

## Dissertations

Doctorate, Noise analysis and low noise design of feed structures for active and passive antenna arrays, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 1998

Postgraduate, Wideband mmic amplifier design, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 1993

## Research Areas

Printed Circuits, Thin Film, Thick Film and Hybrid ICs, Electronic Circuits, Microwave Circuits, Passive Circuit Components, Cables, Switches and Connectors, Electromagnetic, Modified Earth Planar Structures, Electromagnetic Band Spacing Structures, Electromagnetic Environment and Interaction, Electromagnetic Waves, Antennas and Propagation, Photonic Band Spacing Structures, Passive Microwave Circuits, Planar Buildings, Slow Wavy Structures, Semiconducting Materials and Devices

## **Academic Titles / Tasks**

Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2013 - Continues  
Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2006 - 2013  
Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2000 - 2006  
Lecturer, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 1996 - 2000  
Medical Doctor, Technische Universiteit Delft, International Research Center for Telecommunication Transmission and Radar, 1998 - 1999  
Research Assistant, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 1991 - 1996  
Researcher, University of Massachusetts Amherst, Faculty of Engineering, ECE, 1995 - 1995

## **Academic and Administrative Experience**

Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 2011 - 2013

## **Advising Theses**

DEMİR Ş., Analysis of a calibration method for airborne receive-only phased array antennas with self-alignment, Postgraduate, F.BAHADIR(Student), 2022  
DEMİR Ş., Design and implementation of L1 C/A GPS transmitter for spoofing applications, Postgraduate, Y.EMRE(Student), 2022  
DEMİR Ş., Broadband high efficiency rf power amplifier designbased on modified class-j approach with applicationsusing GaN hemt technology, Postgraduate, M.KOÇ(Student), 2021  
DEMİR Ş., Design and performance evaluation of 2D LFMCW FDA, Doctorate, S.KARADAĞ(Student), 2021  
Akin T., Demir Ş., PACKAGING OF RF MEMS SWITCHES AND PERFORMANCE IMPROVEMENT, Doctorate, İ.COMART(Student), 2019  
DEMİR Ş., GAN-HEMT based KU-band RF power amplifier design for SATCOM applications, Postgraduate, A.Mert(Student), 2019  
DEMİR Ş., Analysis and design of slow wave structure for backward wave oscillators, Postgraduate, D.ESER(Student), 2019  
DEMİR Ş., Detection of electro-explosive detonators by RF signature, Doctorate, Ö.Kılıç(Student), 2019  
DEMİR Ş., High power magnetron design and electron emission haracteristics, Postgraduate, M.CEMAL(Student), 2018  
DEMİR Ş., Beam modulation in double gap virtual cathode oscillator, Postgraduate, İ.SEMİH(Student), 2018  
DEMİR Ş., An axially extracted virtual cathode oscillator designand characterization, Postgraduate, B.TİMUR(Student), 2018  
DEMİR Ş., High power magnetron design and electron emission characteristics, Postgraduate, M.Cemal(Student), 2018  
DEMİR Ş., Design of miniaturized Ku band narrowband cavity filter, Doctorate, Y.SEVİNÇ(Student), 2018  
DEMİR Ş., Frequency and phase locking of oscillators and magnetrons, Postgraduate, I.SALUR(Student), 2018  
DEMİR Ş., Development of a tuner topology for multiharmonic matching and implementation on tunable dual band power amplifier design, Doctorate, H.HÜSEYİN(Student), 2018  
DEMİR Ş., Implementation of direction finding with frequency diverse array, Postgraduate, A.TURHANER(Student), 2017  
YERCİ S., DEMİR Ş., Optical system design of direct detection short-pulsed laser proximity sensor, Postgraduate, E.Korkmaz(Student), 2017  
DEMİR Ş., Comparative design of millimeter wave RF-MEMS phase shifters, Postgraduate, E.KOBAL(Student), 2016

DEMİR Ş., AKIN T., Design of an x-band 3-bit rf mems constant phase shifter, Postgraduate, A.KUZUBAŞLI(Student), 2016

DEMİR Ş., X-band high power gan power amplifier design and implementation, Postgraduate, A.İLKER(Student), 2016

DEMİR Ş., Broadband microwave diode mixer design and implementation, Postgraduate, E.KOÇ(Student), 2016

DEMİR Ş., Development of beam scheduling algorithm for frequency diverse array /, Postgraduate, R.ÇETİNER(Student), 2015

DEMİR Ş., KOÇ S. S., Analysis of frequency diverse arrays for radar and communication applications, Doctorate, Ç.ÇETİNTEPE(Student), 2015

DEMİR Ş., Medium power-wideband envelope tracking RF power amplifier design, Postgraduate, E.ŞİRİN(Student), 2015

DEMİR Ş., Design and implementation of a microwave cavity resonator for modulated backscattered wave, Postgraduate, A.AKKOÇ(Student), 2015

DEMİR Ş., Simulation and design of electron gun for travelling wave tube with particle in cell code, Postgraduate, F.ECE(Student), 2014

DEMİR Ş., YILDIRIM N., Design of high power waveguide limiter /, Postgraduate, A.YILMAZ(Student), 2014

DEMİR Ş., Experimental performance evaluation of direction finding by amplitude comparison for GSM applications /, Postgraduate, S.KARADAĞ(Student), 2014

DEMİR Ş., Modeling of time domain represented signals with multitone signals, Postgraduate, G.CANSIZ(Student), 2014

DEMİR Ş., Countermeasure methods for high power microwave pulses /, Postgraduate, M.KESKİN(Student), 2014

DEMİR Ş., Design and realization of microstrip linear antenna array based on siw (substrate integrated waveguide) feed network /, Postgraduate, A.ÖZGÜN(Student), 2014

DEMİR Ş., Design and realization of microstrip linear antenna array based on SIW (Substrate integrated waveguide) feed network, Postgraduate, A.ÖZGÜN(Student), 2014

DEMİR Ş., YILDIRIM N., Design and realization of high power low loss combiners, Postgraduate, G.SUNA(Student), 2013

DEMİR Ş., Assessment of shielding effectiveness by using electromagnetic topology method, Postgraduate, H.İBRAHİM(Student), 2013

DEMİR Ş., Improving the efficiency of microwave power amplifiers without linearity degradation using load and bias tuning in a new configuration, Doctorate, A.RONAGHZADEH(Student), 2013

DEMİR Ş., Identification of memory terms in a power amplifier, Postgraduate, E.DURSUN(Student), 2013

DEMİR Ş., True-time delay structures for microwave beamforming networks in S-band phased arrays, Postgraduate, K.TEMİR(Student), 2013

DEMİR Ş., Innovative approaches in Doherty amplifier design for higher efficiency and wider frequency bandwidth, Doctorate, N.ŞAHAN(Student), 2013

DEMİR Ş., PHASED ARRAY ANTENNA CALIBRATION AND EXPERIMENTAL VALIDATION, Postgraduate, A.YALIM(Student), 2013

DEMİR Ş., Linearization of RF power amplifiers by using memory polynomial digital predistortion technique, Postgraduate, G.ERDOĞDU(Student), 2012

DEMİR Ş., Broadband spatial power combining in coaxial medium, Postgraduate, Z.TANÇ(Student), 2012

DEMİR Ş., Broadband phase shifter realization with surface micromachined lumped components, Postgraduate, K.KAAN(Student), 2012

DEMİR Ş., Precise height estimation by differential amplitude measurement for an airborne CW doppler proximity sensor, Doctorate, A.VURAL(Student), 2012

DEMİR Ş., X-band RF switch implementation in substrate integrated waveguide, Doctorate, T.ERDÖL(Student), 2012

DEMİR Ş., X-band high power solid state RF switch, Postgraduate, K.GÜZEL(Student), 2012

DEMİR Ş., A new approach for distributed amplifier design, Postgraduate, İ.GÖKHAN(Student), 2012

DEMİR Ş., Design and implementation of wideband stripline circulators, Postgraduate, G.YILMAZ(Student), 2012

DEMİR Ş., Low loss substrate integrated waveguide n-way power divider, Doctorate, P.MOHAMMADI(Student), 2012

DEMİR Ş., Modeling of asymmetric intermodulation distortion and memory effects of power amplifiers, Doctorate, A.HAYRETTİN(Student), 2011

DEMİR Ş., Design and fabrication of a high gain, broadband microwave limiting amplifier module, Postgraduate, H.HÜSEYİN(Student), 2011

DEMİR Ş., A conceptual evaluation of frequency diverse arrays and novel utilization of LFMCW, Doctorate, T.EKER(Student), 2011

- DEMİR Ş., Linearization of RF power amplifiers with memoryless baseband predistortion method, Postgraduate, T.KOLCUOĞLU(Student), 2011
- DEMİR Ş., Wideband phase shifter for 6-18 GHz applications, Postgraduate, G.BÖYACIOĞLU(Student), 2010
- DEMİR Ş., L-Band & S-Band CW Hybrid Gallium Nitride HEMT Power Amplifier Design, Postgraduate, A.AKTUĞ(Student), 2010
- DEMİR Ş., HMIC miniaturization techniques and application on an FMCW range sensor transceiver, Postgraduate, H.KORKMAZ(Student), 2010
- DEMİR Ş., Design and implementation of a broadband I-Q vector modulator and a feedforward linearizer for V/UHF band, Postgraduate, A.ÜNLÜ(Student), 2010
- DEMİR Ş., AKIN T., Zero-level packaging of microwave and millimeterwave mems components, Postgraduate, İ.COMART(Student), 2010
- DEMİR Ş., AYDIN ÇIVİ H. Ö., X-band high power ferrite phase shifters, Postgraduate, H.İLHAN(Student), 2010
- DEMİR Ş., Defected ground structure and its applications to microwave devices and antenna feed networks, Postgraduate, Ö.KILIÇ(Student), 2010
- DEMİR Ş., AKIN T., Development of MEMs technology based microwave and millimeter-wave components, Postgraduate, Ç.ÇETİNTEPE(Student), 2010
- DEMİR Ş., AKIN T., Reliability improvement of RF MEMS devices based on lifetime measurements, Postgraduate, O.DOĞAN(Student), 2010
- DEMİR Ş., AKIN T., NOVEL IMPEDANCE TUNER, PHASE SHIFTER, AND VECTOR MODULATORS USING RF MEMS TECHNOLOGY, Doctorate, M.ÜNLÜ(Student), 2009
- DEMİR Ş., S-band hybrid 4 bit phase shifter using cots components, Postgraduate, E.ERKEK(Student), 2009
- DEMİR Ş., Design and implementation of low phase noise phase locked loop based local oscillator, Postgraduate, M.ALPEREN(Student), 2009
- DEMİR Ş., Millimeterwave FMCW radar design, Postgraduate, D.İÇÖZ(Student), 2009
- DEMİR Ş., CFAR detection in K-distributed sea clutter, Postgraduate, A.ÇETİN(Student), 2008
- DEMİR Ş., Cascaded, reactively terminated, single stage distributed amplifier, Postgraduate, O.Efe(Student), 2008
- DEMİR Ş., Theory and design of microwave fet frequency triplers, Postgraduate, İ.BOZKURT(Student), 2008
- DEMİR Ş., Cascaded, reactively terminated, single stage distributed 2-18 GHz amplifier, Postgraduate, O.EFE(Student), 2008
- DEMİR Ş., Range resolution improvement of FMCW radars, Postgraduate, S.KURT(Student), 2007
- DEMİR Ş., AKIN T., Design and fabrication of RF MEMS switches and instrumentation for performance evaluation, Postgraduate, H.İBRAHİM(Student), 2007
- DEMİR Ş., Millimeter wave MMIC amplifier linearization by predistortion, Postgraduate, B.ÇAĞLAR(Student), 2006
- DEMİR Ş., X band 7 BIT MMIC phase shifter design, Postgraduate, E.ERÇİL(Student), 2006
- DEMİR Ş., Millimeter wave MMIC amplifier linearization by predistortion, Postgraduate, B.Çağlar(Student), 2006
- DEMİR Ş., X-band 7 bit mmic phase shifter design, Postgraduate, E.Ergil(Student), 2006
- DEMİR Ş., AKIN T., Design and implementation of microwave lumped components and system integration using MEMS technology, Postgraduate, E.UFUK(Student), 2006
- DEMİR Ş., ALATAN L., Re-configurable microstrip patch antennas controlled by RF mems switches, Postgraduate, S.ONAT(Student), 2006
- DEMİR Ş., TANIK Y., Design of an FM-CW radar altimeter, Postgraduate, Y.BARIŞ(Student), 2005
- DEMİR Ş., Multi-tone representation of arbitrary waveforms and application to the analysis of nonlinear amplifiers and feedforward linearizers, Postgraduate, A.MUTLU(Student), 2005
- DEMİR Ş., MMIC vector modulator design, Postgraduate, M.ALTUNTAŞ(Student), 2004
- DEMİR Ş., CMOS class-e power amplifier modelling and design including channel resistance effects, Postgraduate, İ.DEMİR(Student), 2004
- DEMİR Ş., Cmos class e power amplifier modelling and design including channel resistance effects, Postgraduate, İ.Demir(Student), 2004
- DEMİR Ş., Mimic vector modulator design, Postgraduate, M.Altuntaş(Student), 2004
- DEMİR Ş., Stochastic characterization and mathematical analysis of feedforward linearizers, Doctorate, A.HAKAN(Student), 2003

- DEMİR Ş., Novel microwave equal and unequal power divider and combiner structures, Doctorate, E.TURAN(Student), 2003
- DEMİR Ş., AKIN T., An adjustable impedance matching network using RF MEMS technology, Postgraduate, M.ÜNLÜ(Student), 2003
- DEMİR Ş., An Approach of thinning planar phased array antenna by using finite difference method, Postgraduate, A.CEMİL(Student), 2002
- DEMİR Ş., An approach of thinning planar phased array antenna by using finite difference method., Postgraduate, A.Cemil(Student), 2002

## **Designed Lessons**

Demir Ş., Pulsed Power Microwave Systems, Postgraduate, 2011 - 2012

Demir Ş., Mikrodalga Devre Tasarımı, Postgraduate, 2005 - 2006

## **Published journal articles indexed by SCI, SSCI, and AHCI**

- I. **A Compound ECCM Technique for FMCW Radars**  
Eser D., DEMİR Ş., Koc S. S.  
IEEE Access, vol.11, pp.62942-62954, 2023 (SCI-Expanded)
- II. **A Multi-Box Behavioural Nonlinear Mixer Model**  
Ozgun A., NESİMOĞLU T., DEMİR Ş.  
International Journal of Electronics, 2023 (SCI-Expanded)
- III. **Dual Band, Miniaturized Permittivity Measurement Sensor With Negative-Order SIW Resonator**  
Mohammadi P., Teimouri H., Mohammadi A., DEMİR Ş., KARA A.  
IEEE SENSORS JOURNAL, vol.21, no.20, pp.22695-22702, 2021 (SCI-Expanded)
- IV. **Compact Size, and Highly Sensitive, Microwave Sensor for Non-Invasive Measurement of Blood Glucose Level**  
Mohammadi P., Mohammadia A., DEMİR Ş., KARA A. G.  
IEEE Sensors Journal, vol.21, no.14, pp.16033-16042, 2021 (SCI-Expanded)
- V. **Development and Modeling of a Wafer-Level BCB Packaging Method for Capacitive RF MEMS Switches**  
Comart I., Cetintepe C., Sagiroglu E., DEMİR Ş., AKIN T.  
JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, vol.28, no.4, pp.724-731, 2019 (SCI-Expanded)
- VI. **Highly efficient dual-band GaN power amplifier utilising pin diode-based tunable harmonic load matching**  
Kilic H. H., Demir S.  
IET MICROWAVES ANTENNAS & PROPAGATION, vol.13, no.1, pp.63-70, 2019 (SCI-Expanded)
- VII. **Investigation of graphene-integrated tunable metamaterials in THz regime**  
DEMİR Ş., Yuksek Y., Sabah C.  
PRAMANA-JOURNAL OF PHYSICS, vol.90, no.5, 2018 (SCI-Expanded)
- VIII. **A folded leg Ka-band RF MEMS shunt switch with amorphous silicon (a-Si) sacrificial layer**  
Demirel K., Yazgan E., Demir Ş., Akin T.  
MICROSYSTEM TECHNOLOGIES-MICRO-AND NANOSYSTEMS-INFORMATION STORAGE AND PROCESSING SYSTEMS, vol.23, pp.1191-1200, 2017 (SCI-Expanded)
- IX. **A New Temperature-Tolerant RF MEMS Switch Structure Design and Fabrication for Ka-Band Applications**  
Demirel K., Yazgan E., Demir Ş., Akin T.  
JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, vol.25, pp.60-68, 2016 (SCI-Expanded)
- X. **Cantilever type radio frequency microelectromechanical systems shunt capacitive switch design and**

**fabrication**

Demirel K., Yazgan E., Demir Ş., Akin T.

JOURNAL OF MICRO-NANOLITHOGRAPHY MEMS AND MOEMS, vol.14, 2015 (SCI-Expanded)

- XI. **A fabrication process based on structural layer formation using Au-Au thermocompression bonding for RF MEMS capacitive switches and their performance**

Cetinteppe C., Topalli E. S., Demir Ş., Civi O. A., Akin T.

INTERNATIONAL JOURNAL OF MICROWAVE AND WIRELESS TECHNOLOGIES, vol.6, pp.473-480, 2014 (SCI-Expanded)

- XII. **Multipath Characteristics of Frequency Diverse Arrays Over a Ground Plane**

Cetinteppe C., DEMİR Ş.

IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.62, no.7, pp.3567-3574, 2014 (SCI-Expanded)

- XIII. **Microwave Characterization of a Wafer-Level Packaging Approach for RF MEMS Devices Using Glass Frit Bonding**

Comart I., Topalli K., DEMİR Ş., AKIN T.

IEEE SENSORS JOURNAL, vol.14, no.6, pp.2006-2011, 2014 (SCI-Expanded)

- XIV. **A low-order nonlinear amplifier model with distributed delay terms**

YÜZER A. H., DEMİR Ş.

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.22, no.4, pp.1007-1016, 2014 (SCI-Expanded)

- XV. **Height Estimation for Ballistic Platforms using Differential Measurements**

Vural A., Sengul O., DEMİR Ş., Hizal A.

IEEE TRANSACTIONS ON AEROSPACE AND ELECTRONIC SYSTEMS, vol.49, no.4, pp.2657-2665, 2013 (SCI-Expanded)

- XVI. **A 15-40-GHz Frequency Reconfigurable RF MEMS Phase Shifter**

Ünlü M., Demir Ş., Akin T.

IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol.61, pp.2865-2877, 2013 (SCI-Expanded)

- XVII. **Exploitation of Linear Frequency Modulated Continuous Waveform (LFMCW) for Frequency Diverse Arrays**

Eker T., DEMİR Ş., Hizal A.

IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.61, no.7, pp.3546-3553, 2013 (SCI-Expanded)

- XVIII. **Triple stub circuit topology as simultaneous insertion phase, amplitude and impedance control circuit for phased array applications**

Unlu M., Demir Ş., Akin T.

IET MICROWAVES ANTENNAS & PROPAGATION, vol.6, pp.1399-1406, 2012 (SCI-Expanded)

- XIX. **E-plane sectoral horn power divider**

Secmen M., DEMİR Ş., Hizal A.

IET MICROWAVES ANTENNAS & PROPAGATION, vol.4, no.2, pp.191-199, 2010 (SCI-Expanded)

- XX. **Hybrid connection of RF MEMS and SMT components in an impedance tuner**

Unlu M., Topalli K., Atasoy H. İ., Demir Ş., Civi O. A., Akin T.

AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.64, pp.748-756, 2010 (SCI-Expanded)

- XXI. **Tunable dual-frequency RF MEMS rectangular slot ring antenna**

Topalli K., Erdil E., Civi O. A., Demir Ş., Koc S., Akin T.

SENSORS AND ACTUATORS A-PHYSICAL, vol.156, pp.373-380, 2009 (SCI-Expanded)

- XXII. **EMPIRICAL FORMULATION OF BRIDGE INDUCTANCE IN INDUCTIVELY TUNED RF MEMS SHUNT SWITCHES**

Topallı K., ÜNLÜ M., Atasoy H. İ., AYDIN ÇİVİ H. Ö., DEMİR Ş., AKIN T.

PROGRESS IN ELECTROMAGNETICS RESEARCH-PIER, vol.97, pp.343-356, 2009 (SCI-Expanded)

- XXIII. **High-power 20-100-MHz linear and efficient power-amplifier design**

Sahan N., Inal M. E., Dernir Ş., TOKER C.

IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol.56, no.9, pp.2032-2039, 2008 (SCI-

- Expanded)
- XXIV. **A monolithic phased array using 3-bit distributed RF MEMS phase shifters**  
 Topalli K., Civi O. A., Demir S., Koc S., Akin T.  
 IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol.56, pp.270-277, 2008 (SCI-Expanded)
- XXV. **Zero crossing counter for accuracy improvement of FMCW range detection**  
 Kurt S., DEMİR S., Hizal A.  
 TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.16, no.2, pp.125-132, 2008 (SCI-Expanded)
- XXVI. **Dual-polarised T/R antenna system suitable for FMCW altimeter radar applications**  
 Secmen M., Demir S., Hizal A.  
 IEE PROCEEDINGS-MICROWAVES ANTENNAS AND PROPAGATION, vol.153, no.5, pp.407-412, 2006 (SCI-Expanded)
- XXVII. **New approach for modelling distributed MEMS transmission lines**  
 Topalli K., Unlu M., Demir S., Civi O., Koc S., Akin T.  
 IEE PROCEEDINGS-MICROWAVES ANTENNAS AND PROPAGATION, vol.153, no.2, pp.152-162, 2006 (SCI-Expanded)
- XXVIII. **CMOS planar spiral inductor modeling and low noise amplifier design**  
 Telli A., Demir S., Askar M.  
 MICROELECTRONICS JOURNAL, vol.37, no.1, pp.71-78, 2006 (SCI-Expanded)
- XXIX. **A multitone model of complex enveloped signals and its application in feedforward circuit analysis**  
 Coskun A., Mutlu A., Demir S.  
 IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol.53, no.6, pp.2171-2178, 2005 (SCI-Expanded)
- XXX. **Comments on "A different perspective on taper efficiency for array antennas"**  
 Demir S.  
 IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.53, no.3, pp.1247-1248, 2005 (SCI-Expanded)
- XXXI. **Efficiency calculation of feed structures and optimum number of antenna elements in a subarray for highest G/T**  
 Demir S.  
 IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.52, no.4, pp.1024-1029, 2004 (SCI-Expanded)
- XXXII. **A mathematical characterization and analysis of a feedforward circuit for CDMA applications**  
 Coskun A., Demir S.  
 IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol.51, no.3, pp.767-777, 2003 (SCI-Expanded)
- XXXIII. **Design of Wideband Impedance Transformers**  
 Demir S.  
 IEEE Antennas and Propagation Magazine, vol.45, no.5, pp.71-72, 2003 (SCI-Expanded)
- XXXIV. **Optimum design of feed structures for high G/T passive and active antenna arrays**  
 Demir S., Toker C.  
 IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.47, no.3, pp.443-452, 1999 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Prospects of FMCW-based frequency diverse array radar**  
 Cetiner R., Cetintepe C., DEMİR S., Hizal A.  
 JOURNAL OF ENGINEERING-JOE, vol.2019, no.21, pp.7299-7303, 2019 (ESCI)
- II. **Space scanning FMCW-based two-dimensional frequency diverse array radar**  
 KARADAĞ S., DEMİR S., Hizal A.  
 JOURNAL OF ENGINEERING-JOE, vol.2019, no.20, pp.6452-6456, 2019 (ESCI)
- III. **Waveguide multiplexer: miniaturized contiguous-band six-channel multiplexer structure**  
 Sevinc Y., DEMİR S.

JOURNAL OF ENGINEERING-JOE, 2017 (ESCI)

- IV. **Loss reduction in substrate integrated waveguide structures**  
Mohammadi P., DEMİR \$.  
Progress In Electromagnetics Research C, vol.46, pp.125-133, 2014 (Scopus)
- V. **Substrate integrated waveguide unequal power divider with adjustable dividing ratio**  
Mohammadi P., DEMİR \$.  
Journal of Electrical Engineering, vol.14, no.2, pp.168-172, 2014 (Scopus)
- VI. **Analysis, design optimization and performance comparison of bias adapted and asymmetrical doherty power amplifiers**  
Sahan N., DEMİR \$.  
Progress In Electromagnetics Research B, no.54, pp.337-356, 2013 (Scopus)
- VII. **Designing an Octave-Bandwidth doherty amplifier using a novel power combination method**  
Sahan N., DEMİR \$.  
Progress In Electromagnetics Research B, no.56, pp.327-346, 2013 (Scopus)
- VIII. **Multi-layer substrate integrated wave-guide E-plane power divider**  
Mohammadi P., DEMİR \$.  
Progress In Electromagnetics Research C, vol.30, pp.159-172, 2012 (Scopus)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Otonom su devrilmesi izleme-uyarı-müdahale sistemi**  
Şanlı E. B., Şimşir S., Sömek S. K., Kallem A., Yücel Bilen Ö., Çelebi E. B., Ünalan U. B., Ahmadian R., Demir \$., Aksoy A.  
14. Ulusal 2.Uluslararası Çevre Mühendisliği Kongresi, 09 December 2021, pp.279-284
- II. **An autonomous system for minimization of turnover effects in eutrophic lakes**  
Şimşir S., Sömek S. K., Şanlı E. B., Aydoğ'a K., Yücel Bilen Ö., Çelebi E. B., Ünalan U. B., Reza A., Demir \$., Aksoy A.  
AQUA≈360, Exeter, England, 31 August - 02 September 2021
- III. **Compact and Directional Printed Dipole Antenna Pair Conformed on a Conical Surface**  
Haykir Y., Kallem A., DEMİR \$.  
34th General Assembly and Scientific Symposium of the International Union of Radio Science, URSI GASS 2021,  
Rome, Italy, 28 August - 04 September 2021
- IV. **A Low-Profile DielectricWaveguide Altimeter Antenna**  
Haykir Y., Dagdeviren B., Korkmaz A. D., DEMİR \$.  
33rd General Assembly and Scientific Symposium of the International Union of Radio Science, URSI GASS 2020,  
Rome, Italy, 29 August - 05 September 2020
- V. **Cold Test Validation of Metamaterial Based Rectangular Slow Wave Structure for High-Power Backward-Wave Oscillators**  
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## **Contractual Researches**

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## **Metrics**

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## **Scholarships**

NATO A-2 Fellowship, NATO, 1995 - 1995

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Anonymous, PRF ArGe A.Ş., 16 July 2013, Founder Owner

Anonymous, AREFSENS A.Ş., 05 January 2015, Co-Founder

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Company, PRF Araştırma Geliştirme Müh. San ve Tic. A.Ş., Yönetim

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