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Eğitim Bilgileri

Doktora, University of Michigan, Electrical Engineering, Amerika Birleşik Devletleri 1989 - 1994

Yüksek Lisans, University of Michigan, Electrical Engineering, Amerika Birleşik Devletleri 1987 - 1989

Lisans, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Türkiye 1982 - 1987

Araştırma Alanları

Elektrik-Elektronik Mühendisliği, Elektronik, Dönüştürücüler ve Algılama Aygıtları, MEMS, Optoelektronik Malzeme ve Aygıtlar, Yarı İletken Malzeme ve Aygıtlar, Mühendislik ve Teknoloji

Akademik Unvanlar / Görevler

Prof.Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Elektrik Ve Elektronik Mühendisliği Bölümü, 2004 - Devam Ediyor

Doç.Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Elektrik Ve Elektronik Mühendisliği Bölümü, 1999 - 2004

Yrd.Doç.Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Elektrik Ve Elektronik Mühendisliği Bölümü, 1995 - 1999

Akademik İdari Deneyim

Uygulama ve Araştırma Merkezi Müdürü, Orta Doğu Teknik Üniversitesi, Rektörlük, 2008 - Devam Ediyor

Anabilim/Bilim Dalı Başkanı, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Mikro Ve Nanoteknoloji (YI) (Tezli), 2013 - 2017

Verdiği Dersler

DIGITAL ELECTRONICS, Lisans, 2019 - 2020, 2018 - 2019, 2017 - 2018

Yönetilen Tezler

- Akın T., Azgın K., YÜKSEK PERFORMANS MEMS ATALETSEL SENSÖRLER, Yüksek Lisans, U.ÇEKMEZ(Öğrenci), Devam Ediyor
- Akın T., Kalay Y. E. , KENDİLİĞİNDEN SOĞUTMA ÖZELLİĞİNE SAHİP MEMS KAPASİTİF SENSÖRLERİNE PUL MERTEBESİNDE HERMETİK KAPAK TASARIMI VE GELİŞTİRİLMESİ, Doktora, G.DEMİRHAN(Öğrenci), Devam Ediyor
- Akın T., ÇOK DÜŞÜK SABİT KAYMALI MEMS DÖNÜLÇER GELİŞTİRİLMESİ, Doktora, H.DOĞAN(Öğrenci), Devam Ediyor
- Akın T., DİJİTAL OLARAK KONTROL EDİLEN MEMS DÖNÜLÇER VE ÇOK DEĞİŞKENLİ KALİBRASYONU, Doktora, F.YEŞİL(Öğrenci), Devam Ediyor
- Akın T., KÜÇÜK PİKSEL ARALIKLI VE YÜKSEK PERFORMANSLI SOĞUTMASIZ KIZILÖTESİ DETEKTÖRLER DİZİNİ GELİŞTİRİLMESİ, Doktora, S.KESKİN(Öğrenci), Devam Ediyor
- Akın T., BİOMEDİKAL UYGULAMALARI İÇİN DÜŞÜK GÜÇ TÜKETİMLİ, YÜKSEK PERFORMANSLI ANALOG-SAYISAL ÇEVİRİCİ TÜMLEŞİK DEVRESİ, Doktora, S.KOÇAK(Öğrenci), Devam Ediyor
- Akın T., Turan R., MİNYATÜR SOĞUTMASIZ KIZILÖTESİ MİKROBOLOMETRE GELİŞTİRİLMESİ, Yüksek Lisans, B.UTKU(Öğrenci), Devam Ediyor
- Akın T., MİKROBOLOMETRE TABANLI KIZILÖTESİ KAMERALARIN ÖRTÜCÜSÜZ ÇALIŞMASINA YENİ BİR YAKLAŞIM, Yüksek Lisans, S.ÇAVDAR(Öğrenci), 2021
- AKIN T., 125PS LSB column parallel time to digital converter integrated circuit for lidar applications, Yüksek Lisans, O.ÖZPINAR(Öğrenci), 2021
- AKIN T., Development of small size uncooled infrared microbolometer pixel, Yüksek Lisans, B.UTKU(Öğrenci), 2021
- Akın T., LİDAR UYGULAMALARI İÇİN 125PS LSB KOLON PARALEL ZAMAN-SAYISAL ÇEVİRİCİ TÜMLEŞİK DEVRESİ, Yüksek Lisans, O.ÖZPINAR(Öğrenci), 2021
- Akın T., VGA ÇÖZÜNÜRLÜKLÜ KIZILÖTESİ KAMERA İÇİN GERÇEK ZAMANLI FPGA YAZILIMI, Yüksek Lisans, K.ÇEVİK(Öğrenci), 2019
- Akın T., Demir Ş., RF MEMS ANAHTARLARIN PAKETLENMESİ VE BAŞARIMLARININ GELİŞTİRİLMESİ, Doktora, İ.COMART(Öğrenci), 2019
- AKIN T., A low power integrated temperature sensor with digital outputsfor on-chip temperature monitoring applications, Yüksek Lisans, Ö.TURAN(Öğrenci), 2017
- AKIN T., Advanced circuit architectures for readout electronics of low-cost microbolometer focal plane arrays, Yüksek Lisans, M.HALUK(Öğrenci), 2017
- AKIN T., Low-cost microbolometer infrared detectors utilizing cmos resistive layers, Yüksek Lisans, H.ÖZTÜRK(Öğrenci), 2017
- KALAY Y. E. , AKIN T., BONDING MATERIAL DEVELOPMENT AT WAFER LEVEL VACUUM PACKAGING FOR MEMS DEVICES BY TRANSIENT LIQUID PHASE (TLP) METHOD, Yüksek Lisans, E.CAN(Öğrenci), 2016
- AKIN T., A low-power analog-to-digital converter integrated circuit for data acquisition applications, Yüksek Lisans, S.KOÇAK(Öğrenci), 2016
- AKIN T., Design and implementation of perforation on high fill factor structures for uncooled infrared sensors, Yüksek Lisans, R.ÇETİN(Öğrenci), 2016
- TURAN R., AKIN T., Light trapping micro and nanostructures fabricated by top down approaches for solar cell applications, Doktora, H.SERRA(Öğrenci), 2016
- AKIN T., Resonance-based MEMS temperature sensors for temperature compensation of mems capacitive accelerometer, Yüksek Lisans, G.DEMİRHAN(Öğrenci), 2016
- AKIN T., A small-format microbolometer imaging sensor with digital video outputs, Yüksek Lisans, C.YALÇIN(Öğrenci), 2016
- AKIN T., AZGIN K., Development of an integrated resonant mems temperature sensor, Yüksek Lisans, T.KÖSE(Öğrenci), 2016
- DEMİR Ş., AKIN T., Design of an x-band 3-bit rf mems constant phase shifter, Yüksek Lisans, A.KUZUBAŞLI(Öğrenci), 2016
- TURAN R., AKIN T., Novel metal assisted etching technique for enhanced light management in black crystalline si solar cells, Doktora, F.ES(Öğrenci), 2016
- AKIN T., A readout circuit for resonant mems temperature sensors, Yüksek Lisans, H.ASADI(Öğrenci), 2016

AKIN T., ARIKAN M. A. S. , Development of new, simple, and robust wafer level hermetic packaging methods for MEMS sensors, Doktora, M.MERT(Öğrenci), 2015

AKIN T., A high performance closed-loop analog readout circuit for capacitive MEMS accelerometers, Yüksek Lisans, Y.TERZİOĞLU(Öğrenci), 2015

AKIN T., High speed LVDS digital input/output interface circuitries for high resolution imaging sensors, Yüksek Lisans, S.TUNCER(Öğrenci), 2015

AKIN T., 5th order sigma delta MEMS accelerometer system with enhanced linearity, Yüksek Lisans, U.AYKUTLU(Öğrenci), 2015

AKIN T., Ayrik mod ve bitişik mod MEMS dönüölçer için CMOS okuma elektroniği, Yüksek Lisans, F.Yeşil(Öğrenci), 2015

AKIN T., A low-power memory CMOS integrated circuit for image sensors, Yüksek Lisans, M.CEM(Öğrenci), 2015

AKIN T., Sığasal MEMS ivmeölçerler için yüksek performanslı kapalı döngü analog okuma devresi., Yüksek Lisans, Y.Terzioğlu(Öğrenci), 2015

AKIN T., Design and implementation of high fill factor structures on low-cost uncooled infrared sensors, Yüksek Lisans, O.ERTÜRK(Öğrenci), 2015

AKIN T., CMOS readout electronics for mismatched and mode-matched mems gyroscopes, Yüksek Lisans, F.YEŞİL(Öğrenci), 2015

AKIN T., Kapasitif MEMS ivmeölçer karakterizasyonu için çok yönlü 5 dereceli sigma-delta modülasyon devresi, Yüksek Lisans, T.Asgarlı(Öğrenci), 2014

AKIN T., A digitally programmable application specific integrated circuit for drive and data acquisition of imaging sensors, Yüksek Lisans, N.BAYHAN(Öğrenci), 2014

AKIN T., AZGIN K., Correction of temperature and acceleration effects on MEMS gyro output signals, Yüksek Lisans, M.ALI(Öğrenci), 2014

AKIN T., A versatile 5th order sigma-delta modulation circuit for MEMS capacitive accelerometer characterization, Yüksek Lisans, T.ASGARLI(Öğrenci), 2014

AKIN T., ARIKAN M. A. S. , A THREE AXIS CAPACITIVE MEMS ACCELEROMETER ON A MULTI-STACK SUBSTRATE, Doktora, S.TEZ(Öğrenci), 2014

AKIN T., EMİNOĞLU S., Görüntüleme sensörlerini sürme ve sensörlerden veri alma için uygulamaya özel sayısal programlanabilir tümdevre., Yüksek Lisans, N.Bayhan(Öğrenci), 2014

AKIN T., AZGIN K., Compensation methods for quasi-static acceleration sensitivity of MEMS gyroscopes, Yüksek Lisans, H.DOĞAN(Öğrenci), 2014

AKIN T., A low-power capacitive integrated CMOS readout circuitry for high performance MEMS accelerometers, Yüksek Lisans, O.SAMET(Öğrenci), 2013

DURUCAN C., AKIN T., A microbolometer detector based on a sol-gel technology, Doktora, Ö.DERVİŞOĞLU(Öğrenci), 2013

AKIN T., A low-cost uncooled infrared imaging sensor using MEMS and a modified standard CMOS process, Yüksek Lisans, M.ALI(Öğrenci), 2013

AKIN T., Development and characterization of low-cost uncooled infrared sensors for commercial applications, Yüksek Lisans, F.TANKUT(Öğrenci), 2013

AKIN T., EMİNOĞLU S., Düşük maliyetli soğutmasız kızılotesi detektör dizini., Yüksek Lisans, M.Ali(Öğrenci), 2013

AKIN T., Camera electronics for low-cost microbolometer type infrared detectors, Yüksek Lisans, C.TÜFEKÇİ(Öğrenci), 2013

TURAN R., AKIN T., A Three Axis Capacitive MEMS Accelerometer On A Single Substrate, Doktora, A.AYDEMİR(Öğrenci), 2013

TURAN R., AKIN T., Electrical, optical, and noise characterizations of mwir type-ii inas/gasb superlattice single pixel detectors, Yüksek Lisans, K.KUTLUER(Öğrenci), 2012

AKIN T., A successive approximation register analog-to-digital converter for low cost microbolometers, Yüksek Lisans, Y.UYGAR(Öğrenci), 2012

AKIN T., A fully-differential bulk-micromachined MEMS accelerometer with interdigitated fingers, Yüksek Lisans, O.AYDIN(Öğrenci), 2012

AKIN T., Camera electronics and image enhancement software for infrared detector arrays, Yüksek Lisans, A.KÜÇÜKKÖMÜRLER(Öğrenci), 2012

AKIN T., A dual-band uncooled infrared microbolometer detector with a tunable micro-mirror, Yüksek Lisans, S.KESKİN(Öğrenci), 2012

DURUCAN C., AKIN T., Vanadium oxide (VOx) thin films elaborated by sol-gel method for microbolometer applications, Yüksek Lisans, K.KARSLI(Öğrenci), 2012

AKIN T., A high performance automatic mode-matched MEMS gyroscope, Yüksek Lisans, S.SÖNMEZOĞLU(Öğrenci), 2012

AKIN T., An integrated imaging sensor for rare cell detection applications, Yüksek Lisans, Ç.ALTINER(Öğrenci), 2012

TURAN R., AKIN T., Development of high performance active materials for microbolometers, Yüksek Lisans, N.EROĞLU(Öğrenci), 2011

AKIN T., CMOS integrated sensor readout circuitry for DNA detection applications, Yüksek Lisans, J.MUSAYEV(Öğrenci), 2011

AKIN T., Control electronics for MEMS gyroscopes and its implementation in a CMOS technology, Yüksek Lisans, B.EMİNOĞLU(Öğrenci), 2011

AKIN T., A low-cost uncooled infrared detector array and its camera electronics, Yüksek Lisans, D.AKÇÖREN(Öğrenci), 2011

AKIN T., Development of high fill factor and high performance uncooled infrared detector pixels, Yüksek Lisans, Ş.ESRA(Öğrenci), 2011

TURAN R., AKIN T., Development of high performance uncooled infrared detector materials, Yüksek Lisans, B.KEBAPÇI(Öğrenci), 2011

AKIN T., ARIKAN M. A. S. , Wafer level vacuum packaging of MEMS sensors and resonators, Yüksek Lisans, M.MERT(Öğrenci), 2011

KÜLAH H., AKIN T., Capacitive CMOS readouts for high performance MEMS accelerometers, Yüksek Lisans, U.SÖNMEZ(Öğrenci), 2011

AKIN T., Quadrature error compensation and its effects on the performance of fully decoupled mems gyroscopes, Yüksek Lisans, E.TATAR(Öğrenci), 2010

AKIN T., Taktik seviye MEMS ivmeölçer., Doktora, İ.Ender(Öğrenci), 2010

AKIN T., Development of High Thermal Performance Uncooled Infrared Detector Pixels with Enhanced Resistor Structures, Yüksek Lisans, Ş.UFUK(Öğrenci), 2010

AKIN T., A tactical grade MEMS accelerometer, Doktora, İ.ENDER(Öğrenci), 2010

AKIN T., A monolithic readout circuit for large format uncooled infrared detector focal plane arrays, Doktora, M.TEPEGÖZ(Öğrenci), 2010

TURAN R., AKIN T., Development and Characterization of High TCR Material For Surface Micromachined Microbolometers, Yüksek Lisans, E.CANGA(Öğrenci), 2010

AYDIN ÇİVİ H. Ö. , AKIN T., Dual frequency reconfigurable reflectarray antenna of split ring elements with RF MEMS switches, Yüksek Lisans, C.GÜÇLÜ(Öğrenci), 2010

DEMİR Ş., AKIN T., Development of MEMS technology based microwave and millimeter-wave components, Yüksek Lisans, Ç.ÇETİNTEPE(Öğrenci), 2010

DEMİR Ş., AKIN T., Zero-level packaging of microwave and millimeterwave mems components, Yüksek Lisans, İ.COMART(Öğrenci), 2010

DEMİR Ş., AKIN T., Reliability improvement of RF MEMS devices based on lifetime measurements, Yüksek Lisans, O.DOĞAN(Öğrenci), 2010

AKIN T., High performance readout and control electronics for MEMS gyroscopes, Yüksek Lisans, E.ŞAHİN(Öğrenci), 2009

AKIN T., CMOS readout electronics for microbolometer type infrared detector arrays, Yüksek Lisans, A.TOPRAK(Öğrenci), 2009

AKIN T., ADVANCED CMOS READOUT ELECTRONICS FOR UNCOOLED INFRARED DETECTOR ARRAYS, Yüksek Lisans, A.OĞUZ(Öğrenci), 2009

DEMİR Ş., AKIN T., NOVEL IMPEDANCE TUNER, PHASE SHIFTER, AND VECTOR MODULATORS USING RF MEMS TECHNOLOGY, Doktora, M.ÜNLÜ(Öğrenci), 2009

KÜLAH H., AKIN T., Capacitive cmos readout circuits for high performance MEMS accelerometers, Yüksek Lisans, R.KEPENEK(Öğrenci), 2008

AKIN T., A wide-bandwidth high-sensitivity MEMS gyroscope, Yüksek Lisans, K.ŞAHİN(Öğrenci), 2008

AKIN T., A Low Cost 128x128 Uncooled Infrared Detector Array in a Standard SOI CMOS Technology, Yüksek Lisans, E.İNÇETÜRKMEN(Öğrenci), 2008

AKIN T., Development of High Fill Factor Uncooled Infrared Detector Pixels, Yüksek Lisans, F.ÇİVİTÇİ(Öğrenci), 2008

AKIN T., An uncooled infrared microbolometer detector array using surface micromachined mems technology, Doktora, M.YUSUF(Öğrenci), 2007

AKIN T., AYDIN ÇİVİ H. Ö. , A monolithic phased array using RF MEMS technology, Doktora, K.TOPALLI(Öğrenci), 2007

AKIN T., Advanced readout and control electronics for MEMS gyroscopes, Yüksek Lisans, Y.TEMİZ(Öğrenci), 2007

AYDIN ÇİVİ H. Ö. , AKIN T., Beam switching reflectarray with RF MEMS technology, Yüksek Lisans, Ö.BAYRAKTAR(Öğrenci), 2007

AKIN T., High performance MEMS gyroscopes, Yüksek Lisans, K.AZGIN(Öğrenci), 2007

TURAN R., AKIN T., Deep-trench Rie optimization for high performance MEMS microsensors, Yüksek Lisans, A.AYDEMİR(Öğrenci), 2007

DEMİR Ş., AKIN T., Design and fabrication of RF MEMS switches and instrumentation for performance evaluation, Yüksek Lisans, H.İBRAHİM(Öğrenci), 2007

AKIN T., High performance readout electronics for uncooled infrared detector arrays, Yüksek Lisans, Ö.ÖZGÜR(Öğrenci), 2006

AKIN T., High performance CMOS capacitive interface circuits for MEMS gyroscopes, Yüksek Lisans, K.MİTHAT(Öğrenci), 2006

AKIN T., KOÇ S. S. , A novel modeling methodology and performance improvement technique for dmtl phase shifters, Yüksek Lisans, İ.İSTANBULLUOĞLU(Öğrenci), 2006

DEMİR Ş., AKIN T., Design and implementation of microwave lumped components and system integration using MEMS technology, Yüksek Lisans, E.UFUK(Öğrenci), 2006

AKIN T., Development of electrochemical etch-stop techniques for integrated MEMS sensors, Yüksek Lisans, G.CEREN(Öğrenci), 2006

AKIN T., Taktik amaçlı ataletsel ölçüm uygulamaları için dönüölçerler, Doktora, S.Emre(Öğrenci), 2005

AKIN T., MEMS gyroscopes for tactical-grade inertial measurement applications, Doktora, S.EMRE(Öğrenci), 2005

AKIN T., Development of test structures and methods for characterization of mems materials, Yüksek Lisans, E.YILDIRIM(Öğrenci), 2005

AKIN T., MEMS accelerometers and gyroscopes for inertial measurement units, Yüksek Lisans, M.AKİF(Öğrenci), 2004

AKIN T., Humidity sensors using MEMS and standard CMOS technologies, Yüksek Lisans, B.OKCAN(Öğrenci), 2003

AKIN T., Kızılötesi fotoalgılayıcı odak düzlem matrisleri için 64x64 cmos entegre okuma devresi, Yüksek Lisans, M.Tepeöz(Öğrenci), 2003

AKIN T., A frost sensor system using MEMS technology, Yüksek Lisans, Z.SALMAN(Öğrenci), 2003

DEMİR Ş., AKIN T., An adjustable impedance matching network using RF MEMS technology, Yüksek Lisans, M.ÜNLÜ(Öğrenci), 2003

AKIN T., Uncooled infrared focal plane arrays with integrated readout circuitry using MEMS and standard CMOS technologies, Doktora, S.EMİNOĞLU(Öğrenci), 2003

AKIN T., Surface micromachined capacitive accelerometers using MEMS technology, Yüksek Lisans, R.FIRAT(Öğrenci), 2003

AKIN T., A 64X64 CMOS integrated readout circuit for infraret photodetector focal plane arrays, Yüksek Lisans, M.TEPEGÖZ(Öğrenci), 2003

AKIN T., A Piezoresistive pressure and temperature sensor cluster, Yüksek Lisans, Ö.ZORLU(Öğrenci), 2002

AKIN T., A CMOS compatible uncooled infrared detector focal plane array for night vision applications using MEMS technology, Doktora, D.SABUNCUOĞLU(Öğrenci), 2002

AKIN T., A High fill factor CMOS uncooled infrared microbolometer detector, Yüksek Lisans, M.YUSUF(Öğrenci), 2002

AKIN T., A high fill factor CMOS uncooled infrared microbolometer detector., Yüksek Lisans, M.Yusuf(Öğrenci), 2002

AKIN T., A silicon micromachined frost sensor for industrial applications, Yüksek Lisans, S.MUTAKA(Öğrenci), 2001

AKIN T., Silicon surface micromachined gyroscopes using mems technology, Yüksek Lisans, S.EMRE(Öğrenci), 2000

AKIN T., VLSI implementation of low-power current-mode,cmos algorithmic analog-to-digital convertes, Yüksek Lisans, A.Tezel(Öğrenci), 1999

AKIN T., VLSI implementation of low-power current mode CMOS algorithmic analog-to-digital converters, Yüksek Lisans,

A.TEZEL(Öğrenci), 1999

Akın T., Ses bandı sinyal işleme uygulamaları için analog-sayısal karışık-sinyal tümdevre modülleri, Yüksek Lisans, S.EMİNOĞLU(Öğrenci), 1998

Akın T., Silicion micromachined capacitive pressure sensors for industrial and biomedical applications, Yüksek Lisans, O.ŞEVKET(Öğrenci), 1998

Akın T., Herhangi bir standart CMOS tümleşik devre süreciyle elde edilen kızılötesi ısılküme yapıları, Yüksek Lisans, Z.OLGUN(Öğrenci), 1998

Akın T., CMOS elektronik devresi ile bütünleştirilmiş PtSi schottky-bariyer diyot tipi gece-görüş dedektörü, Yüksek Lisans, H.KÜLAH(Öğrenci), 1998

AKIN T., Analog-digital mixed-signal VLSI modules for audio signal processing applications, Yüksek Lisans, S.EMİNOĞLU(Öğrenci), 1998

AKIN T., Infrared thermopile structures using any standart CMOS integrated circuit process, Yüksek Lisans, Z.OLGUN(Öğrenci), 1998

AKIN T., Silicon micromachined capacitive pressure sensors for industrial and biomedical applications, Yüksek Lisans, O.Şevket(Öğrenci), 1998

AKIN T., Analog-digital mixed-signal, VLSI modules for audio band signal processing applications, Yüksek Lisans, S.Eminoğlu(Öğrenci), 1998

AKIN T., Infrared thermopile structures using any standard cmos integrated circuit process, Yüksek Lisans, Z.Olgun(Öğrenci), 1998

AKIN T., A CMOS integrated PtSi schottky-barrier infrared dedector for night applications, Yüksek Lisans, H.KÜLAH(Öğrenci), 1998

AKIN T., A CMOS integrated PtSi schottky-barrier infrared detector for night vision applications., Yüksek Lisans, H.Külah(Öğrenci), 1998

Jüri Üyelikleri

Tez Savunma (Yüksek Lisans), Tez Savunma (Yüksek Lisans), Orta Doğu Teknik Üniversitesi, Eylül, 2020

Akademik Kadroya Atama, Akademik Kadroya Atama, Abdullah Gül Üniversitesi, Temmuz, 2020

Akademik Kadroya Atama, Akademik Kadroya Atama, Abdullah Gül Üniversitesi, Şubat, 2019

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **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)
- II. **An all-silicon process platfom for wafer-level vacuum packaged MEMS devices**
Torunbalci M. M. , Gavcar H. D. , Yesil F., Alper S. E. , AKIN T.
IEEE Sensors Journal, cilt.21, sa.13, ss.13958-13964, 2021 (SCI-Expanded)
- III. **Interband optical absorption obtained by pseudopotential method for type-II InAs/GaSb SL photodetectors**
Akel K., HOŞTUT M., AKIN T., Ergun Y.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, cilt.54, sa.19, 2021 (SCI-Expanded)
- IV. **Wafer-Level Low-Temperature Solid-Liquid Inter-Diffusion Bonding With Thin Au-Sn Layers for MEMS Encapsulation**
Temel O., KALAY Y. E. , AKIN T.
JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, cilt.30, sa.1, ss.64-71, 2021 (SCI-Expanded)
- V. **Realization of Single Layer Microbolometer Detector Pixel Using ZnO Material**
Tanrikulu M. Y. , Yildizak C., Okyay A. K. , Akar O., Sarac A., AKIN T.
IEEE SENSORS JOURNAL, cilt.20, sa.17, ss.9677-9684, 2020 (SCI-Expanded)

- VI. **Development and Modeling of a Wafer-Level BCB Packaging Method for Capacitive RF MEMS Switches**
Comart I, Cetintepe C., Sagioglu E., DEMİR Ş., AKIN T.
JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, cilt.28, sa.4, ss.724-731, 2019 (SCI-Expanded)
- VII. **The detailed analysis of wavefunction overlaps for InAs/AlSb/GaSb based N-structure type-II SL pin photodetectors**
Hostut M., Tansel T., Kilic A., Akin T., Ergun Y.
PHYSICA SCRIPTA, cilt.94, sa.7, 2019 (SCI-Expanded)
- VIII. **Numerical and Experimental Investigation into LWIR Transmission Performance of Complementary Silicon Subwavelength Antireflection Grating (SWARG) Structures**
Cetin R., AKIN T.
SCIENTIFIC REPORTS, cilt.9, 2019 (SCI-Expanded)
- IX. **Microwave Engineering Expertise in Turkey**
Yarman B. S. , Palamutcuogullari O., Kaya I., Kizilbey O., Aksen A., Akin T., Ozkan Z. L. , Oksar I., Nesimoglu T.
IEEE MICROWAVE MAGAZINE, cilt.19, sa.3, ss.135-140, 2018 (SCI-Expanded)
- X. **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, cilt.23, ss.1191-1200, 2017 (SCI-Expanded)
- XI. **A new design and a fabrication approach to realize a high performance three axes capacitive MEMS accelerometer**
Aydemir A., Terzioglu Y., AKIN T.
SENSORS AND ACTUATORS A-PHYSICAL, cilt.244, ss.324-333, 2016 (SCI-Expanded)
- XII. **Design and fabrication of a high performance resonant MEMS temperature sensor**
Kose T., AZGIN K., Akin T.
JOURNAL OF MICROMECHANICS AND MICROENGINEERING, cilt.26, sa.4, 2016 (SCI-Expanded)
- XIII. **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, cilt.25, ss.60-68, 2016 (SCI-Expanded)
- XIV. **A method for wafer level hermetic packaging of SOI-MEMS devices with embedded vertical feedthroughs using advanced MEMS process**
Torunbalci M. M. , Alper S. E. , Akin T.
JOURNAL OF MICROMECHANICS AND MICROENGINEERING, cilt.25, 2015 (SCI-Expanded)
- XV. **A Bulk-Micromachined Three-Axis Capacitive MEMS Accelerometer on a Single Die**
TEZ S., Aykutlu U., Torunbalci M. M. , AKIN T.
JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, cilt.24, sa.5, ss.1264-1274, 2015 (SCI-Expanded)
- XVI. **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, cilt.14, 2015 (SCI-Expanded)
- XVII. **Advanced MEMS Process for Wafer Level Hermetic Encapsulation of MEMS Devices Using SOI Cap Wafers With Vertical Feedthroughs**
Torunbalci M. M. , Alper S. E. , Akin T.
JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, cilt.24, ss.556-564, 2015 (SCI-Expanded)
- XVIII. **Wafer level hermetic sealing of MEMS devices with vertical feedthroughs using anodic bonding**
Torunbalci M. M. , Alper S. E. , AKIN T.
SENSORS AND ACTUATORS A-PHYSICAL, cilt.224, ss.169-176, 2015 (SCI-Expanded)
- XIX. **Atomic-layer-deposited zinc oxide as tunable uncooled infrared microbolometer material**
Battal E., Bolat S., TANRIKULU M. Y. , OKYAY A. K. , AKIN T.
PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE, cilt.211, sa.11, ss.2475-2482, 2014 (SCI-

Expanded)

- XX. **A Sigma Delta micro accelerometer with 6 μ g/ $\sqrt{\text{Hz}}$ resolution and 130 dB dynamic range**
Sonmez U., Kulah H., Akin T.
ANALOG INTEGRATED CIRCUITS AND SIGNAL PROCESSING, cilt.81, sa.2, ss.471-485, 2014 (SCI-Expanded)
- XXI. **A fabrication process based on structural layer formation using Au-Au thermocompression bonding for RF MEMS capacitive switches and their performance**
Cetintepe C., Topalli E. S., Demir Ş., Civi O. A., Akin T.
INTERNATIONAL JOURNAL OF MICROWAVE AND WIRELESS TECHNOLOGIES, cilt.6, ss.473-480, 2014 (SCI-Expanded)
- XXII. **Capturing and detection of MCF-7 breast cancer cells with a CMOS image sensor**
Musayev J., Altiner C., Adiguzel Y., KÜLAH H., Eminoglu S., AKIN T.
SENSORS AND ACTUATORS A-PHYSICAL, cilt.215, ss.105-114, 2014 (SCI-Expanded)
- XXIII. **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, cilt.14, sa.6, ss.2006-2011, 2014 (SCI-Expanded)
- XXIV. **Label-Free DNA Detection Using a Charge Sensitive CMOS Microarray Sensor Chip**
Musayev J., Adiguzel Y., KÜLAH H., Eminoglu S., AKIN T.
IEEE SENSORS JOURNAL, cilt.14, sa.5, ss.1608-1616, 2014 (SCI-Expanded)
- XXV. **An Automatically Mode-Matched MEMS Gyroscope With Wide and Tunable Bandwidth**
Sonmezoglu S., Alper S. E., Akin T.
JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, cilt.23, ss.284-297, 2014 (SCI-Expanded)
- XXVI. **A Bulk-Micromachined Fully Differential MEMS Accelerometer With Split Interdigitated Fingers**
Aydin O., Akin T.
IEEE SENSORS JOURNAL, cilt.13, ss.2914-2921, 2013 (SCI-Expanded)
- XXVII. **A 15-40-GHz Frequency Reconfigurable RF MEMS Phase Shifter**
Ünlü M., Demir Ş., Akin T.
IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, cilt.61, ss.2865-2877, 2013 (SCI-Expanded)
- XXVIII. **Ultrahigh-Dynamic-Range Resonant MEMS Load Cells for Micromechanical Test Frames**
Azgin K., Akin T., Valdevit L.
JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, cilt.21, sa.6, ss.1519-1529, 2012 (SCI-Expanded)
- XXIX. **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, cilt.6, ss.1399-1406, 2012 (SCI-Expanded)
- XXX. **Prevention of sidewall redeposition of etched byproducts in the dry Au etch process**
Aydemir A., Akin T.
JOURNAL OF MICROMECHANICS AND MICROENGINEERING, cilt.22, sa.7, 2012 (SCI-Expanded)
- XXXI. **Quadrature-Error Compensation and Corresponding Effects on the Performance of Fully Decoupled MEMS Gyroscopes**
Tatar E., Alper S. E., Akin T.
JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, cilt.21, ss.656-667, 2012 (SCI-Expanded)
- XXXII. **Beam Switching Reflectarray Monolithically Integrated With RF MEMS Switches**
Bayraktar O., Civi O. A., Akin T.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, cilt.60, ss.854-862, 2012 (SCI-Expanded)
- XXXIII. **Effect of pattern size and geometry on the use of Cassie-Baxter equation for superhydrophobic surfaces**
Cansoy C. E., Erbil H. Y., Akar O., AKIN T.
COLLOIDS AND SURFACES A-PHYSCOCHEMICAL AND ENGINEERING ASPECTS, cilt.386, ss.116-124, 2011 (SCI-Expanded)
- XXXIV. **MEMS resonant load cells for micro-mechanical test frames: feasibility study and optimal design**

- Torrents A., Azgin K., Godfrey S. W. , Topalli E. S. , AKIN T., Valdevit L.
JOURNAL OF MICROMECHANICS AND MICROENGINEERING, cilt.20, sa.12, 2010 (SCI-Expanded)
- XXXV. **Plasma-activated direct bonding of diamond-on-insulator wafers to thermal oxide grown silicon wafers**
Bayram B., Akar O., Akin T.
DIAMOND AND RELATED MATERIALS, cilt.19, ss.1431-1435, 2010 (SCI-Expanded)
- XXXVI. **A high performance Sigma-Delta readout circuitry for mu g resolution microaccelerometers**
Ocak I. E. , Kepenek R., KÜLAH H., AKIN T.
ANALOG INTEGRATED CIRCUITS AND SIGNAL PROCESSING, cilt.64, sa.2, ss.137-145, 2010 (SCI-Expanded)
- XXXVII. **Hybrid connection of RF MEMS and SMT components in an impedance tuner**
Unlu M., Topalli K., Atasoy H. I. , Demir Ş., Civi O. A. , Akin T.
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, cilt.64, ss.748-756, 2010 (SCI-Expanded)
- XXXVIII. **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, cilt.156, ss.373-380, 2009 (SCI-Expanded)
- XXXIX. **A tunable multi-band metamaterial design using micro-split SRR structures**
EKMEKÇİ E., TOPALLI K., AKIN T., Turhan-Sayan G.
OPTICS EXPRESS, cilt.17, sa.18, ss.16046-16058, 2009 (SCI-Expanded)
- XL. **A wide-bandwidth and high-sensitivity robust microgyroscope**
Sahin K., Sahin E., Alper S. E. , Akin T.
JOURNAL OF MICROMECHANICS AND MICROENGINEERING, cilt.19, sa.7, 2009 (SCI-Expanded)
- XLI. **Low-Loss Ku-Band Artificial Transmission Line With MEMS Tuning Capability**
Perruisseau-Carrier J., Topalli K., AKIN T.
IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS, cilt.19, sa.6, ss.377-379, 2009 (SCI-Expanded)
- XLII. **Pirani Vacuum Gauges Using Silicon-on-Glass and Dissolved-Wafer Processes for the Characterization of MEMS Vacuum Packaging**
Topalli E. S. , Topalli K., Alper S. E. , Serin T., Akin T.
IEEE SENSORS JOURNAL, cilt.9, ss.263-270, 2009 (SCI-Expanded)
- XLIII. **EMPIRICAL FORMULATION OF BRIDGE INDUCTANCE IN INDUCTIVELY TUNED RF MEMS SHUNT SWITCHES**
Topalli K., ÜNLÜ M., Atasoy H. İ. , AYDIN ÇİVİ H. Ö. , DEMİR Ş., AKIN T.
PROGRESS IN ELECTROMAGNETICS RESEARCH-PIER, cilt.97, ss.343-356, 2009 (SCI-Expanded)
- XLIV. **A Compact Angular Rate Sensor System Using a Fully Decoupled Silicon-on-Glass MEMS Gyroscope**
Alper S. E. , Temiz Y., Akin T.
JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, cilt.17, ss.1418-1429, 2008 (SCI-Expanded)
- XLV. **Strain-controlled bulge test**
Alaca B. E. , Toga K. B. , Akar O., AKIN T.
JOURNAL OF MATERIALS RESEARCH, cilt.23, sa.12, ss.3295-3302, 2008 (SCI-Expanded)
- XLVI. **A low-cost 128x128 uncooled infrared detector array in CMOS process**
Eminoglu S., Tanrikulu M. Y. , AKIN T.
JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, cilt.17, sa.1, ss.20-30, 2008 (SCI-Expanded)
- XLVII. **A monolithic phased array using 3-bit distributed RF MEMS phase shifters**
Topalli K., Civi O. A. , Demir Ş., Koc S., Akin T.
IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, cilt.56, ss.270-277, 2008 (SCI-Expanded)
- XLVIII. **A low-power robust humidity sensor in a standard CMOS process**
Okcan B., Akin T.
IEEE TRANSACTIONS ON ELECTRON DEVICES, cilt.54, ss.3071-3078, 2007 (SCI-Expanded)
- XLIX. **Ultrathick and high-aspect-ratio nickel microgyroscope using EFAB multilayer additive electroforming**
Alper S. E. , Ocak I. E. , Akin T.

- JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, cilt.16, sa.5, ss.1025-1035, 2007 (SCI-Expanded)
- L. **Frequency tunable microstrip patch antenna using RF MEMS technology**
Erdil E., Topallı K., Unlu M., Civi O. A. , Akin T.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, cilt.55, ss.1193-1196, 2007 (SCI-Expanded)
- LI. **A high-performance silicon-on-insulator MEMS gyroscope operating at atmospheric pressure**
Alper S. E. , Azgin K., Akin T.
SENSORS AND ACTUATORS A-PHYSICAL, cilt.135, ss.34-42, 2007 (SCI-Expanded)
- LII. **A low-cost rate-grade nickel microgyroscope**
Alper S. E. , Silay K. M. , Akin T.
SENSORS AND ACTUATORS A-PHYSICAL, cilt.132, ss.171-181, 2006 (SCI-Expanded)
- LIII. **New approach for modelling distributed MEMS transmission lines**
Topalli K., Unlu M., Demir Ş., Civi O., Koc S., Akin T.
IEE PROCEEDINGS-MICROWAVES ANTENNAS AND PROPAGATION, cilt.153, sa.2, ss.152-162, 2006 (SCI-Expanded)
- LIV. **A single-crystal silicon symmetrical and decoupled MEMS gyroscope on an insulating substrate**
Alper S. E. , Akin T.
JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, cilt.14, ss.707-717, 2005 (SCI-Expanded)
- LV. **Symmetrical and decoupled nickel microgyroscope on insulating substrate**
Alper S., Akin T.
SENSORS AND ACTUATORS A-PHYSICAL, cilt.115, ss.336-350, 2004 (SCI-Expanded)
- LVI. **Low-cost uncooled infrared detectors in CMOS process**
Eminoglu S., Tezcan D., Tanrikulu M., Akin T.
SENSORS AND ACTUATORS A-PHYSICAL, cilt.109, ss.102-113, 2003 (SCI-Expanded)
- LVII. **A current mirroring integration based readout circuit for high performance infrared FPA applications**
Kulah H., Akin T.
IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS II-ANALOG AND DIGITAL SIGNAL PROCESSING, cilt.50, sa.4, ss.181-186, 2003 (SCI-Expanded)
- LVIII. **A low-cost uncooled infrared microbolometer detector in standard CMOS technology**
Tezcan D., Eminoglu S., Akin T.
IEEE TRANSACTIONS ON ELECTRON DEVICES, cilt.50, sa.2, ss.494-502, 2003 (SCI-Expanded)
- LIX. **A wireless batch sealed absolute capacitive pressure sensor**
Akar O., Akin T., Najafi K.
Sensors and Actuators, A: Physical, cilt.95, ss.29-38, 2001 (SCI-Expanded)
- LX. **A modular micromachined high-density connector system for biomedical applications**
Akin T., Ziaie B., Nikles S., Najafi K.
IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING, cilt.46, sa.4, ss.471-480, 1999 (SCI-Expanded)
- LXI. **An integrated thermopile structure with high responsivity using any standard CMOS process**
Akin T., Olgun Z., Akar O., Kulah H.
Sensors and Actuators, A: Physical, cilt.66, ss.218-224, 1998 (SCI-Expanded)
- LXII. **A wireless implantable multichannel digital neural recording system for a micromachined sieve electrode**
Akin T., Najafi K., Bradley R.
IEEE JOURNAL OF SOLID-STATE CIRCUITS, cilt.33, sa.1, ss.109-118, 1998 (SCI-Expanded)
- LXIII. **Long term chronic recordings from peripheral sensory fibers using a sieve electrode array**
Bradley R., Cao X., Akin T., Najafi K.
JOURNAL OF NEUROSCIENCE METHODS, cilt.73, sa.2, ss.177-186, 1997 (SCI-Expanded)
- LXIV. **Chronic recordings from fibers of rat glossopharyngeal nerve regenerated through a micromachined sieve electrode array**
Bradley R., Akin T., Gurkan S., Cao X., Najafi K.
CHEMICAL SENSES, cilt.20, sa.6, ss.29, 1995 (SCI-Expanded)
- LXV. **A MICROMACHINED SILICON SIEVE ELECTRODE FOR NERVE REGENERATION APPLICATIONS**

AKIN T., NAJAFI K., SMOKE R., BRADLEY R.

IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING, cilt.41, sa.4, ss.305-313, 1994 (SCI-Expanded)

LXVI. **Functional regeneration of glossopharyngeal nerve through micromachined sieve electrode arrays**

Bradley R. M. , Smoke R. H. , Akin T., Najafi K.

Brain Research, cilt.594, ss.84-90, 1992 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

- I. **Resonance-Based Temperature Sensors using a Wafer Level Vacuum Packaged SOI MEMS Process**
Aydın G. D. , Akin T.
Advanced Materials Letters, cilt.11, sa.1, 2020 (Hakemli Dergi)
- II. **MEMS Malzeme Karakterizasyonu için Bütünleşik bir Elektrostatik Mikro Bükülme Test Yapısı Tasarımı ve Gerçekleştirilmesi**
YILDIRIM E., AKIN T., ARIKAN M. A. S.
Cankaya University Journal of Science and Engineering, cilt.9, ss.9-23, 2012 (Hakemli Dergi)
- III. **CMOS Elektronik Devreli PtSi Schottky Bariyer Kızılötesi Gece Görüş Dedektörü**
KÜLAH H., AKIN T.
Kaynak Elektrik Dergisi, ss.103-110, 1997 (Hakemsiz Dergi)

Kitap & Kitap Bölümleri

- I. **CMOS-based Thermal Sensors**
Akin T.
Advanced Micro & Nanosystems Volume 2: CMOS-MEMS, H. Baltes,O. Brand,G.K. Fedder,C. Hierold,J. Kornivk,O. Tabata, Editör, Wiley-VCH Verlag Weinheim GmbH , Berlin, ss.479-512, 2004

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **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
- II. **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
- III. **Low-Cost LWIR-Band CMOS Infrared (CIR) Microbolometers for High Volume Applications**
Akin T.
33rd IEEE International Conference on Micro Electro Mechanical Systems, MEMS 2020, Vancouver, Kanada, 18 - 22 Ocak 2020, ss.147-152
- IV. **SELF-PACKAGED THREE AXIS CAPACITIVE MEMS ACCELEROMETER**
Aydemir A., Akin T.
33rd IEEE International Conference on Micro Electro Mechanical Systems (MEMS), Vancouver, Kanada, 18 - 22 Ocak 2020, ss.777-780
- V. **A 160×120 LWIR-band CMOS infrared (CIR) microbolometer**
Tankut F., Cologlu M. H. , Ozturk H., Cilbir G., Akar O. S. , Akin T.
Infrared Technology and Applications XLV 2019, Maryland, Amerika Birleşik Devletleri, 14 - 18 Nisan 2019, cilt.11002

- VI. **DESIGN, ANALYSIS AND IMPLEMENTATION OF QUARTER-WAVE ABSORBER STRUCTURE FOR UNCOOLED INFRARED DETECTORS WITH HIGH FILL FACTOR**
Cetin R., Erturk O., AKIN T.
43rd International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz), Nagoya, Japonya, 9 - 14 Eylül 2018
- VII. **Single layer microbolometer detector pixel using ZnO material**
TANRIKULU M. Y. , Yildizak C., Okyay A. K. , Akar O., Sarac A., AKIN T.
Conference on Infrared Technology and Applications XLIV, Florida, Amerika Birleşik Devletleri, 16 - 19 Nisan 2018, cilt.10624
- VIII. **DESIGN AND IMPLEMENTATION OF HIGH FILL-FACTOR STRUCTURES FOR LOW-COST CMOS MICROBOLOMETERS**
Erturk O., Akin T.
31st IEEE International Conference on Micro Electro Mechanical Systems (MEMS), Belfast, Birleşik Krallık, 21 - 25 Ocak 2018, ss.692-695
- IX. **An Advanced Presence Detection System Using the CMOS Infrared (CIR) Technology**
Arslan T., Cilbir G., Tepegoz M., Akin T.
Conference on Infrared Technology and Applications XLIII, California, Amerika Birleşik Devletleri, 9 - 13 Nisan 2017, cilt.10177
- X. **A 1024x768-12 mu m digital ROIC for uncooled microbolometer FPAs (Conference Presentation)**
Eminoglu S.
Conference on Infrared Technology and Applications XLIII, California, Amerika Birleşik Devletleri, 9 - 13 Nisan 2017, cilt.10177
- XI. **An 80x80 Microbolometer Type Thermal Imaging Sensor using the LWIR-Band CMOS Infrared (CIR) Technology**
Tankut F., Cologlu M. H. , Askar H., Ozturk H., Dumanli H. K. , Oruc F., Tilkioglu B., Ugur B., Akar O. S. , Tepegoz M., et al.
Conference on Infrared Technology and Applications XLIII, California, Amerika Birleşik Devletleri, 9 - 13 Nisan 2017, cilt.10177
- XII. **A Novel Method for Fabricating MEMS Three-Axis Accelerometers using Low Temperature Au-Sn Eutectic Bonding**
Tez S., Torunbalci M. M. , Akin T.
15th IEEE Sensors Conference, Florida, Amerika Birleşik Devletleri, 30 Ekim - 03 Kasım 2016
- XIII. **A single-mass self-resonating closed-loop capacitive MEMS accelerometer**
Kose T., Terzioglu Y., Azgin K., Akin T.
15th IEEE Sensors Conference, SENSORS 2016, Florida, Amerika Birleşik Devletleri, 30 Ekim - 02 Kasım 2016
- XIV. **A High Throughput Lab-On-A-Chip System for Label Free Quantification of Breast Cancer Cells under Continuous Flow**
ASLAN M. Y. , YALÇIN Y., Ozgur E., GÜNDÜZ U., Eminoglu S., KÜLAH H., AKIN T.
26th Anniversary World Congress on Biosensors (Biosensors), Gothenburg, İsveç, 25 - 27 Mayıs 2016, cilt.27, ss.59-61
- XV. **Micro and Nano Hole Texturing Single Crystalline Silicon Wafer for Solar Cell Applications Effects of Hole Diameter and Distribution**
ALTINOLUK H. S. , ÇİFTPINAR E. H. , DEMİRCİOĞLU o., BAYTEMİR G., ES F., AKAR o., AYDEMİR a., SARAC a., AKIN T., TURAN R.
MRS Spring 2016, 28 Mart - 01 Nisan 2016
- XVI. **TEMPERATURE COMPENSATION OF A CAPACITIVE MEMS ACCELEROMETER BY USING A MEMS OSCILLATOR**
Kose T., Azgin K., Akin T.
3rd IEEE International Symposium on Inertial Sensors and Systems, California, Amerika Birleşik Devletleri, 22 - 25 Şubat 2016, ss.33-36
- XVII. **Wafer Level Au Sn TLP Bonding from Eutectic Composition**

YILMAZ S., DEMİR E. C. , Temel O., AKIN T., KALAY Y. E.

TMS 2016, Amerika Birleşik Devletleri, 14 - 18 Şubat 2016

- XVIII. **A 640x512-20 μ m Dual-Polarity ROIC for MWIR and LWIR Hybrid FPAs**
Eminoglu S., Incedere O. S. , Bayhan N., Isikhan M., Soyer S. T. , Ustundag C. M. B. , Kocak S., Turan O., Eksi U., Akin T.
42 Conference on Infrared Technology and Applications XLII, Massachusetts, Amerika Birleşik Devletleri, 18 - 21 Nisan 2016, cilt.9819
- XIX. **Light trapping by micro and nano-hole texturing of single-crystalline silicon solar cells**
ALTINOLUK S. H. , CIFTPINAR H. E. , DEMİRCİOĞLU O., ES F., BAYTEMİR G., AKAR O., AYDEMİR A., SARAC A., AKIN T., TURAN R.
6th International Conference on Crystalline Silicon Photovoltaics (SiliconPV), Chambéry, Fransa, 7 - 09 Mart 2016, cilt.92, ss.291-296
- XX. **Fabrication of a Three-Axis Capacitive MEMS Accelerometer on a Single Substrate**
Aydemir A., AKIN T.
2015 IEEE SENSORS, Busan, Güney Kore, 1 - 04 Kasım 2015, ss.528-531
- XXI. **A simple out of plane capacitive MEMS accelerometer utilizing lateral and vertical electrodes for differential sensing**
Terzioglu Y., Kose T., Azgın K., Akın T.
2015 IEEE SENSORS, Busan, Güney Kore, 1 - 04 Kasım 2015, ss.1-3
- XXII. **An Ultimate Capacitive MEMS Vertical Accelerometer with Differential Sensing Capability**
AYDEMİR A., AKIN T.
The 26th Micromechanics and Micro Systems Europe Workshop, (MME'15), 20 - 23 Eylül 2015
- XXIII. **DRIE Process Optimization to Achieve High Aspect Ratio for Capacitive MEMS Sensors**
AYDEMİR A., AKIN T.
The 26th Micromechanics and Micro Systems Europe Workshop, (MME'15), 20 - 23 Eylül 2015
- XXIV. **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
- XXV. **Process Development for the Fabrication of a Three Axes Capacitive MEMS Accelerometer**
Aydemir A., AKIN T.
Conference on EUROSENSORS, Freiburg, Almanya, 6 - 09 Eylül 2015, cilt.120, ss.727-730
- XXVI. **Development of Wafer Level Au Sn Eutectic Bonding Techniques for MEMS Applications**
YILMAZ S., Demir E. C. , Temel O., AKIN T., KALAY Y. E.
Elektron Mikroskopi Kongresi, Türkiye, 2 - 04 Eylül 2015
- XXVII. **THE ADVANCED MEMS (aMEMS) PROCESS FOR FABRICATING WAFER LEVEL VACUUM PACKAGED SOI-MEMS DEVICES WITH EMBEDDED VERTICAL FEEDTHROUGHS**
Torunbalci M. M. , Alper S. E. , AKIN T.
18th International Conference on Solid-State Sensors, Actuators and Microsystems (TRANSDUCERS), Alaska, Amerika Birleşik Devletleri, 21 - 25 Haziran 2015, ss.472-475
- XXVIII. **LABEL-FREE DETECTION OF LEUKEMIA CELLS WITH A LAB-ON-A-CHIP SYSTEM INTEGRATING DIELECTROPHORESIS AND CMOS IMAGING**
Demircan Y., Orguc S., Musayev J., Ozgur E., ERDEM M., GÜNDÜZ U., Eminoglu S., KÜLAH H., AKIN T.
18th International Conference on Solid-State Sensors, Actuators and Microsystems (TRANSDUCERS), Alaska, Amerika Birleşik Devletleri, 21 - 25 Haziran 2015, ss.1589-1592
- XXIX. **AN AUTOMATIC MODE MATCHING SYSTEM FOR A HIGH Q-FACTOR MEMS GYROSCOPE USING A DECOUPLED PERTURBATION SIGNAL**
Yesil F., Alper S. E. , Akin T.
18th International Conference on Solid-State Sensors, Actuators and Microsystems (TRANSDUCERS), Alaska, Amerika Birleşik Devletleri, 21 - 25 Haziran 2015, ss.1148-1151
- XXX. **AN AUTOMATIC ACCELERATION COMPENSATION SYSTEM FOR A SINGLE-MASS MEMS GYROSCOPE**

Gavcar H. D. , AZGIN K., Alper S. E. , Akin T.

18th International Conference on Solid-State Sensors, Actuators and Microsystems (TRANSDUCERS), Alaska, Amerika Birleşik Devletleri, 21 - 25 Haziran 2015, ss.19-22

- XXXI. **RF MEMS Based Millimeter Wave Phased Array for Short Range Communication**
Bayraktar O., Kobal E., Sevinc Y., Cetintepe C., Comart I., Demirel K., Topalli E. S. , Akin T., Demir Ş., Civi O. A.
9th European Conference on Antennas and Propagation EuCAP, Lisbon, Portekiz, 13 - 17 Mayıs 2015
- XXXII. **A 640x480-17 mu m ROIC for uncooled microbolometer FPAs**
Eminoglu S., Gulden M. A. , Bayhan N., Incedere O. S. , Isikhan M., Soyer S. T. , Yalcin C., Ustundag C. M. B. , Kocak S., Turan O., et al.
41st Conference on Infrared Technology and Applications, Maryland, Amerika Birleşik Devletleri, 20 - 23 Nisan 2015, cilt.9451
- XXXIII. **A 1280x1024-15 mu m CTIA ROIC for SWIR FPAs**
Eminoglu S., Isikhan M., Bayhan N., Gulden M. A. , Incedere O. S. , Soyer S. T. , Kocak S., Yalcin C., Ustundag M. C. B. , Turan O., et al.
41st Conference on Infrared Technology and Applications, Maryland, Amerika Birleşik Devletleri, 20 - 23 Nisan 2015, cilt.9451
- XXXIV. **A single mass two-axis capacitive MEMS accelerometer with force rebalance**
Köse T., Terzioğlu Y., Azgln K., Akln T.
2nd IEEE International Symposium on Inertial Sensors and Systems, IEEE ISISS 2015, Hawaii, Amerika Birleşik Devletleri, 23 - 26 Mart 2015
- XXXV. **Die Size Reduction by Optimizing the Dimensions of the Vertical Feedthrough Pitch and Sealing Area in the Advanced MEMS (aMEMS) Process**
Torunbalci M. M. , Alper S. E. , Akin T.
2nd IEEE International Symposium on Inertial Sensors and Systems (ISSS), Hawaii, Amerika Birleşik Devletleri, 23 - 26 Mart 2015, ss.86-89
- XXXVI. **A NOVEL FABRICATION AND WAFER LEVEL HERMETIC SEALING METHOD FOR SOI-MEMS DEVICES USING SOI CAP WAFERS**
Torunbalci M. M. , Alper S. E. , Akin T.
28th IEEE International Conference on Micro Electro Mechanical Systems (MEMS), Estoril, Portekiz, 18 - 22 Ocak 2015, ss.409-412
- XXXVII. **Fabrication and Characterization of Gold-Tin Eutectic Bonding for Hermetic Packaging of MEMS Devices**
DEMİR E. C. , TORUNBALCI M. M. , DONMEZ I., KALAY Y. E. , AKIN T.
IEEE 16th Electronics Packaging Technology Conference (EPTC), Marina Bay Sands, Singapur, 3 - 05 Aralık 2014, ss.241-245
- XXXVIII. **Gold-tin eutectic bonding for hermetic packaging of MEMS devices with vertical feedthroughs**
Torunbalci M. M. , Demir E. C. , Donmez I., Alper S. E. , Akin T.
13th IEEE SENSORS Conference, SENSORS 2014, Valencia, İspanya, 2 - 05 Kasım 2014, ss.2187-2190
- XXXIX. **A Method of Fabricating Vacuum Packages with Vertical Feedthroughs in a Wafer Level Anodic Bonding Process**
Torunbalci M. M. , Alper S. E. , Akin T.
28th European Conference on Solid-State Transducers (EUROSENSORS), Brescia, İtalya, 7 - 10 Eylül 2014, cilt.87, ss.887-890
- XL. **A Miniature Low-Cost LWIR Camera with a 160x120 Microbolometer FPA**
Tepegöz M., Kucukkomurler A., Tankut F., Eminoglu S., Akin T.
40th Conference on Infrared Technology and Applications, Maryland, Amerika Birleşik Devletleri, 4 - 08 Mayıs 2014, cilt.9070
- XLI. **MT3825BA: A 384x288-25 mu m ROIC for Uncooled Microbolometer FPAs**
Eminoglu S., Gulden M. A. , Bayhan N., Incedere O. S. , Soyer S. T. , Ustundag C. M. B. , Isikhan M., Kocak S., Turan O., Yalcin C., et al.
40th Conference on Infrared Technology and Applications, Maryland, Amerika Birleşik Devletleri, 4 - 08 Mayıs

2014, cilt.9070

- XLII. **Broadband absorption enhancement in an uncooled microbolometer infrared detector**
Kebapci B., Dervisoglu O., Battal E., OKYAY A. K. , AKIN T.
40th Conference on Infrared Technology and Applications, Maryland, Amerika Birleşik Devletleri, 4 - 08 Mayıs 2014, cilt.9070
- XLIII. **A Capacitive MEMS Accelerometer Readout with Concurrent Detection and Feedback Using Discrete Components**
Terzioglu Y., Alper S. E. , AZGIN K., Akin T.
IEEE/ION Position, Location and Navigation Symposium (PLANS), Monterrey, Meksika, 5 - 08 Mayıs 2014, ss.12-15
- XLIV. **Wafer level hermetic encapsulation of MEMS inertial sensors using SOI cap wafers with vertical feedthroughs**
Mert Torunbalci M., Alper S. E. , Akin T.
1st IEEE International Symposium on Inertial Sensors and Systems, ISSS 2014, Laguna Beach, CA, Amerika Birleşik Devletleri, 25 - 26 Şubat 2014
- XLV. **SIMULTANEOUS DETECTION OF LINEAR AND CORIOLIS ACCELERATIONS ON A MODE-MATCHED MEMS GYROSCOPE**
Sonmezoglu S., Gavcar H. D. , AZGIN K., Alper S. E. , AKIN T.
27th IEEE International Conference on Micro Electro Mechanical Systems (MEMS), San-Francisco, Kostarika, 26 - 30 Ocak 2014, ss.32-35
- XLVI. **Fabrication of A Sandwich Type Three Axis Capacitive MEMS Accelerometer**
Tez S., Akin T.
12th IEEE Sensors Conference, Maryland, Amerika Birleşik Devletleri, 3 - 06 Kasım 2013, ss.1863-1866
- XLVII. **A Fabrication Process Flow for Stacked Structural Layer Formation Using Au Au Thermocompression Bonding for RF MEMS Capacitive Switches**
Topallı E., Çetintepe Ç., Aydın Çivi H. Ö. , Demir Ş., Akin T.
14th Int. Symposium on RF-MEMS and RF-Microsystems, Potsdam, Almanya, 1 - 03 Temmuz 2013
- XLVIII. **A high performance automatic mode-matched MEMS gyroscope with an improved thermal stability of the scale factor**
Sonmezoglu S., Alper S., AKIN T.
2013 17th International Conference on Solid-State Sensors, Actuators and Microsystems, TRANSDUCERS and EUROSENSORS 2013, Barcelona, İspanya, 16 - 20 Haziran 2013, ss.2519-2522
- XLIX. **MT6415CA: A 640x512-15 mu m CTIA ROIC for SWIR InGaAs Detector Arrays**
Eminoglu S., Isikhan M., Bayhan N., Gulden M. A. , Incedere O. S. , Soyer S. T. , Kocak S., Yilmaz G. S. , Akin T.
Conference on Infrared Technology and Applications XXXIX, Maryland, Amerika Birleşik Devletleri, 29 Nisan - 03 Mayıs 2013, cilt.8704
- L. **A Plasmonically Enhanced Pixel Structure for Uncooled Microbolometer Detectors**
Erturk O., Battal E., Kucuk S. E. , Okyay A. K. , AKIN T.
Conference on Infrared Technology and Applications XXXIX, Maryland, Amerika Birleşik Devletleri, 29 Nisan - 03 Mayıs 2013, cilt.8704
- LI. **MT3250BA: A 320x256-50 mu m Snapshot Microbolometer ROIC for High-Resistance Detector Arrays**
Eminoglu S., Akin T.
Conference on Infrared Technology and Applications XXXIX, Maryland, Amerika Birleşik Devletleri, 29 Nisan - 03 Mayıs 2013, cilt.8704
- LII. **Cell detection using a CMOS image sensor with modified pixel structure suitable for bio-chemical surface activation**
Musayev J., Adiguzel Y., Kulah H., Eminoglu S., Akin T.
IEEE 26th International Conference on Micro Electro Mechanical Systems, MEMS 2013, Taipei, Tayvan, 20 - 24 Ocak 2013, ss.941-944
- LIII. **A bulk-micromachined fully-differential MEMS accelerometer with interdigitated fingers**
Aydin O., AKIN T.

11th IEEE SENSORS 2012 Conference, Taipei, Tayvan, 28 - 31 Ekim 2012

- LIV. **Comparison of Two Alternative Fabrication Processes for a Three-Axis Capacitive MEMS Accelerometer**
Tez S., Akin T.
26th European Conference on Solid-State Transducers (Euroensors), Krakow, Polonya, 9 - 12 Eylül 2012, cilt.47, ss.342-345
- LIV. **Veils-Free DRY (ICP) Etching of Gold Films with a Vertical Sharp Sidewall**
Keskin S., Aydemir A., Akin T.
The 23rd Micromechanics and Micro Systems Europe Workshop, (MME'12), Erfurt, Almanya, 9 - 12 Eylül 2012, ss.1-5
- LVI. **3-bit CPW Phase Shifter Implemented by a Reduced Branch Line Coupler**
Kılıç O., Comart İ., Demir Ş., Akin T.
The 13th International. Symposium on RF MEMS and RF Microsystems (MEMSWAVE 2012), Antalya, Türkiye, 2 - 04 Temmuz 2012
- LVII. **A 35 GHz High Isolation RF MEMS SPDT Switch**
Comart I., Çetintepe Ç., Demir Ş., Akin T.
The 13th International. Symposium on RF MEMS and RF Microsystems (MEMSWAVE 2012), Antalya, Türkiye, 2 - 04 Temmuz 2012
- LVIII. **A 5-Bit DMTL Phase Shifter with Analog Tuning Capabilities**
Çetintepe Ç., Demirel K., Demir Ş., Akin T.
The 13th International. Symposium on RF MEMS and RF Microsystems (MEMSWAVE 2012), Antalya, Türkiye, 2 - 04 Temmuz 2012
- LIX. **Surface Micromachining Implementation of S-Band 4-bit Phase Shifter**
Tokgöz K., Demir Ş., Akin T.
The 13th International. Symposium on RF MEMS and RF Microsystems (MEMSWAVE 2012), Antalya, Türkiye, 2 - 04 Temmuz 2012
- LX. **The First Fabricated Dual-Band Uncooled Infrared Microbolometer Detector with a Tunable Micro-Mirror Structure**
Keskin S., Akin T.
Conference on Infrared Technology and Applications XXXVIII, Maryland, Amerika Birleşik Devletleri, 23 - 27 Nisan 2012, cilt.8353
- LXI. **MT6425CA: A 640x512-25 μ m CTIA ROIC for SWIR InGaAs Detector Arrays**
Eminoglu S., Mahsereci Y. U., Altiner C., AKIN T.
Conference on Infrared Technology and Applications XXXVIII, Maryland, Amerika Birleşik Devletleri, 23 - 27 Nisan 2012, cilt.8353
- LXII. **An Analysis for the Broad-Band Absorption Enhancement Using Plasmonic Structures on Uncooled Infrared Detector Pixels**
Lulec S. Z., KÜÇÜK S., Battal E., Okyay A. K., Tanrikulu M. Y., AKIN T.
Conference on Infrared Technology and Applications XXXVIII, Maryland, Amerika Birleşik Devletleri, 23 - 27 Nisan 2012, cilt.8353
- LXIII. **An Uncooled Microbolometer Focal Plane Array Using Heating Based Resistance Nonuniformity Compensation**
Tepegöz M., Oğuz A., Toprak A., Senveli S. U., Canga E., Tanrikulu M. Y., Akin T.
Conference on Infrared Technology and Applications XXXVIII, Maryland, Amerika Birleşik Devletleri, 23 - 27 Nisan 2012, cilt.8353
- LXIV. **An automatically mode-matched MEMS gyroscope with 50 Hz bandwidth**
Sonmezoglu S., Alper S., Akin T.
2012 IEEE 25th International Conference on Micro Electro Mechanical Systems, MEMS 2012, Paris, Fransa, 29 Ocak - 02 Şubat 2012, ss.523-526
- LXV. **A method and electrical model for the anodic bonding of SOI and glass wafers**
Tatar E., Torunbalci M., Alper S., AKIN T.

2012 IEEE 25th International Conference on Micro Electro Mechanical Systems, MEMS 2012, Paris, Fransa, 29 Ocak - 02 Şubat 2012, ss.68-71

- LXVI. **A New Baseband Equivalent Model for Sense Mode Dynamics and Its Effects on Force-Feedback Controller Design for MEMS Gyroscopes**
Eminoglu B., Alper S. E. , AKIN T.
10th IEEE Conference on Sensors, Limerick, İrlanda, 28 - 31 Ekim 2011, ss.157-160
- LXVII. **Comparison of Two Alternative Silicon-On-Glass Microfabrication Processes for MEMS Inertial Sensors**
Torunbalci M. M. , Tatar E., Alper S. E. , AKIN T.
25th Eurosensors Conference, Athens, Yunanistan, 4 - 07 Eylül 2011, cilt.25
- LXVIII. **An Optimized Analog Drive-Mode Controller for Vibratory MEMS Gyroscopes**
Eminoglu B., Alper S. E. , AKIN T.
25th Eurosensors Conference, Athens, Yunanistan, 4 - 07 Eylül 2011, cilt.25
- LXIX. **Reconfigurable antennas using RF-MEMS research in Turkey**
Civi O. A. , Demir Ş., Akın T.
2011 IEEE MTT-S International Microwave Symposium, IMS 2011, Baltimore, MD, Amerika Birleşik Devletleri, 5 - 10 Haziran 2011
- LXX. **A fourth order unconstrained $\Sigma\Delta$ capacitive accelerometer**
Sonmez U., KÜLAH H., AKIN T.
2011 16th International Solid-State Sensors, Actuators and Microsystems Conference, TRANSDUCERS'11, Beijing, Çin, 5 - 09 Haziran 2011, ss.707-710
- LXXI. **Experimental evaluation of alternative drive-mode control electronics developed for high-performance MEMS gyroscopes**
ŞAHİN E., Alper S., AKIN T.
2011 16th International Solid-State Sensors, Actuators and Microsystems Conference, TRANSDUCERS'11, Beijing, Çin, 5 - 09 Haziran 2011, ss.2817-2820
- LXXII. **Novel, simple, and Q-independent self oscillation loop designed for vibratory MEMS gyroscopes**
Eminoglu B., Alper S., AKIN T.
2011 16th International Solid-State Sensors, Actuators and Microsystems Conference, TRANSDUCERS'11, Beijing, Çin, 5 - 09 Haziran 2011, ss.1440-1443
- LXXIII. **A Thermal Conductance Optimization and Measurement Approach for Uncooled Microbolometers**
Senveli S. U. , Tanrikulu M. Y. , AKIN T.
Conference on Infrared Technology and Applications XXXVII, Florida, Amerika Birleşik Devletleri, 25 - 29 Nisan 2011, cilt.8012
- LXXIV. **A Two-Stage Digital-to-Analog Converter for Bias Correction in Uncooled Microbolometer Arrays**
Toprak A., Tepegoz M., AKIN T.
Conference on Infrared Technology and Applications XXXVII, Florida, Amerika Birleşik Devletleri, 25 - 29 Nisan 2011, cilt.8012
- LXXV. **A Detailed Analysis for the Absorption Coefficient of Multilevel Uncooled Infrared Detectors**
KÜÇÜK S., Tanrikulu M. Y. , AKIN T.
Conference on Infrared Technology and Applications XXXVII, Florida, Amerika Birleşik Devletleri, 25 - 29 Nisan 2011, cilt.8012
- LXXVI. **A RESONANT TUNING FORK FORCE SENSOR WITH UNPRECEDENTED COMBINATION OF RESOLUTION AND RANGE**
Azgin K., Ro C., Torrents A., Akin T., Valdevit L.
24th IEEE International Conference on Micro Electro Mechanical Systems (MEMS), Cancun, Meksika, 23 - 27 Ocak 2011, ss.545-548
- LXXVII. **EFFECT OF QUADRATURE ERROR ON THE PERFORMANCE OF A FULLY-DECOUPLED MEMS GYROSCOPE**
Tatar E., Alper S. E. , AKIN T.
24th IEEE International Conference on Micro Electro Mechanical Systems (MEMS), Cancun, Meksika, 23 - 27 Ocak

2011, ss.569-572

LXXVIII. A 35 GHz coplanar waveguide power divider

Gürbüz O. D. , Topalli K., Ünlü M., DEMİR Ş., AKIN T.

2010 10th Mediterranean Microwave Symposium, MMS 2010, Guzelyurt, Kıbrıs (Gkry), 25 - 27 Ağustos 2010, ss.22-24

LXXIX. 35 GHz phased array antenna using DMTL phase shifters

Guclu C., Cetintepe C., Civi O. A. , DEMİR Ş., AKIN T.

2010 10th Mediterranean Microwave Symposium, MMS 2010, Guzelyurt, Kıbrıs (Gkry), 25 - 27 Ağustos 2010, ss.114-117

LXXX. RF MEMS Anahtarlı Ayarlanabilir Yansıtıcı Dizi Anteni

BAYRAKTAR Ö., AYDIN ÇİVİ H. Ö. , AKIN T.

URSI Türkiye 5. Bilimsel Kongresi, Türkiye, 25 - 27 Ağustos 2010

LXXXI. Beam Switching Reflectarray with MEMS Controls

Bayraktar O., Civi O. A. , Akın T.

4th European Conference on Antennas and Propagation (EuCAP), Barcelona, İspanya, 12 - 16 Nisan 2010

LXXXII. Feasibility study for tunable metamaterial design using multi-split SRR structures and RF MEMS switching

Ekmekci E., Topalli K., AKIN T., Turhan-Sayan G.

2009 IEEE International Symposium on Antennas and Propagation and USNC/URSI National Radio Science Meeting, APSURSI 2009, North Charleston, SC, Amerika Birleşik Devletleri, 1 - 05 Haziran 2009

LXXXIII. Investigation of Contact Angle Behavior on Superhydrophobic Patterned Surfaces

Cansoy C., Erbil H., Akar O., Akın T.

13th European Conference on Applications of Surface and Interface Analysis, Antalya, Türkiye, 18 - 23 Ekim 2009

LXXXIV. Effects of Array Dimensions on the Resonance Characteristics of SRR Type Metamaterial Arrays with Small Sizes: Simulations and Experiments

Ekmekci E., Topalli K., AKIN T., Turhan-Sayan G.

Progress in Electromagnetics Research Symposium (PIERS 2009 Moscow), Moscow, Rusya, 12 - 21 Ağustos 2009, ss.83-86

LXXXV. A Wide-Bandwidth and High-Sensitivity Robust Microgyroscope

Akın T., Şahin K., Şahin E., Alper S. E.

19th MicroMechanics Europe Workshop (MME 2008), Aachen, Almanya, 28 - 30 Eylül 2008, ss.97-100

LXXXVI. Stepped-etching for preserving critical dimensions in through-wafer deep reactive ion etching of thick silicon

Alper S. E. , Aydemir A., AKIN T.

TRANSDUCERS 2009 - 15th International Conference on Solid-State Sensors, Actuators and Microsystems, Denver, CO, Amerika Birleşik Devletleri, 21 - 25 Haziran 2009, ss.1110-1113

LXXXVII. A Feasibility Study for Tunable Metamaterial Design Using Multi-Split SRR Structures and RF MEMS Switching

Ekmekci E., Topalli K., AKIN T., SAYAN G.

IEEE Antennas and Propagation International Symposium /USNC/URSI National Radio Science Meeting, South-Carolina, Amerika Birleşik Devletleri, 1 - 05 Haziran 2009, ss.1548-1551

LXXXVIII. A column-based two-stage analog-to-digital converter for uncooled microbolometer arrays

Toprak A., Tepegoz M., AKIN T.

Infrared Technology and Applications XXXV, Orlando, FL, Amerika Birleşik Devletleri, 13 - 17 Nisan 2009, cilt.7298

LXXXIX. A bias heating cancellation method for resistive uncooled microbolometer detectors

Oguz A., Tepegoz M., AKIN T.

Infrared Technology and Applications XXXV, Orlando, FL, Amerika Birleşik Devletleri, 13 - 17 Nisan 2009, cilt.7298

XC. Experimental Investigation of Metamaterial Array Structures With Split Ring Resonators

Ekmekci E., Topalli K., AKIN T., SAYAN G.

IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Türkiye, 9 - 11 Nisan 2009, ss.551-554

- XCI. MODELING OF A CAPACITIVE Sigma-Delta MEMS ACCELEROMETER SYSTEM INCLUDING THE NOISE COMPONENTS AND VERIFICATION WITH TEST RESULTS**
Boga B., Ocak I. E. , KÜLAH H., AKIN T.
22nd International Conference on Micro Electro Mechanical Systems (MEMS), Sorrento, İtalya, 25 - 29 Ocak 2009, ss.821-824
- XCII. AN ANALYSIS TO IMPROVE STABILITY OF DRIVE-MODE OSCILLATIONS IN CAPACITIVE VIBRATORY MEMS GYROSCOPES**
Alper S. E. , Sahin K., AKIN T.
22nd International Conference on Micro Electro Mechanical Systems (MEMS), Sorrento, İtalya, 25 - 29 Ocak 2009, ss.817-820
- XCIII. RF MEMS Anahtarlama Teknigi ile AHR Tipi Metamalzemelerde Manyetik Rezonans Frekansinin Adaptif Bicimde Ayarlanması**
EKMEKÇİ E., TOPALLI K., AKIN T.
URSI-Türkiye 2008 4. Bilimsel Kongresi, Antalya, Türkiye, 20 - 22 Ekim 2008, ss.106-109
- XCIV. RF MEMS Teknolojisi ile S Bandı Tümlüşik Bant Geçiren Filtre Yapısı**
ÇETİNTEPE Ç., DEMİR Ş., AKIN T.
URSI-Türkiye 2008 4. Bilimsel Kongresi, Antalya, Türkiye, 20 - 22 Ekim 2008, ss.137-140
- XCV. RF MEMS Yapıların Glass Frit ile 0 seviye Paketlenmesi**
TOPALLI K., COMART İ., AKIN T.
URSI-Türkiye 2008 4. Bilimsel Kongresi, Antalya, Türkiye, 20 - 22 Ekim 2008, ss.110-113
- XCVI. Sogutmasiz Kizilötesi Termomekanik Algilayici Tasarimi Üretimi ve Testi**
TOY M. F. , FERHANOĞLU O., AKAR O., AKIN T.
10. Ulusal Fotonik Çalistayi, Kocaeli, Türkiye, 17 Ekim 2008
- XCVII. A mu g resolution microaccelerometer system with a second-order Sigma-Delta readout circuitry**
Kepenek R., Ocak I. E. , KÜLAH H., AKIN T.
Conference on PhD Research in Microelectronics and Electronics, İstanbul, Türkiye, 22 - 25 Haziran 2008, ss.41-44
- XCVIII. A new method to estimate the absorption coefficient for uncooled infrared detectors**
Tanrikulu M. Y. , Civitci F., AKIN T.
34th Conference on Infrared Technology and Applications, Florida, Amerika Birleşik Devletleri, 17 - 20 Mart 2008, cilt.6940
- XCIX. An optimum reference detector design for uncooled microbolometer FPAs**
Tepegoz M., Civitci F., AKIN T.
34th Conference on Infrared Technology and Applications, Florida, Amerika Birleşik Devletleri, 17 - 20 Mart 2008, cilt.6940
- C. A low power readout circuit approach for uncooled resistive microbolometer FPAs**
Tepegoz M., Toprak A., AKIN T.
34th Conference on Infrared Technology and Applications, Florida, Amerika Birleşik Devletleri, 17 - 20 Mart 2008, cilt.6940
- CI. Reconfigurable RF MEMS Devices and Antennas**
Kaan T., Ünlü M., İstanbulluoğlu İ., Atasoy H. İ. , Bayraktar Ö., Aydın Çivi H. Ö. , Demir Ş., Koç S. S. , Akın T.
5th International Conference on Electrical and Electronics Engineering (ELECO 2007), Bursa, Türkiye, 5 - 09 Aralık 2007
- CII. Reconfigurable Antennas by RF MEMS Technology**
Topallı K., Ünlü M., İstanbulluoğlu İ., Atasoy H. İ. , Bayraktar Ö., Aydın Çivi H. Ö. , Demir Ş., Koç S. S. , Akın T.
5th International Conference on Electrical and Electronics Engineering (ELECO 2007), Bursa, Türkiye, 5 - 09 Aralık 2007, ss.204-209
- CIII. Beam switching reflectarray using RF MEMS technology**
Bayraktar O., Topalli K., Unlu M., Civi O., Demir Ş., Akın T.
2nd European Conference on Antennas and Propagation, EuCAP 2007, Edinburgh, Birleşik Krallık, 11 - 16 Kasım 2007, cilt.2007
- CIV. A novel in-operation high g-survivable MEMS gyroscope**

Azgin K., Temiz Y., Akın T.

6th IEEE Sensors Conference, Georgia, Amerika Birleşik Devletleri, 28 - 31 Ekim 2007, ss.111-114

- CV. **Double stub and triple stub RF MEMS impedance tuners**
Akın T.
Proceedings of 8th International Symposium on RF MEMS and RF Microsystems, MEMSWAVE, Barcelona, İspanya, 26 - 29 Haziran 2007, ss.169-172
- CVI. **Monolithically Integrated MEMS Phased Array**
Topallı K., Aydın Çivi H. Ö. , Demir Ş., Koç S. S. , Akın T.
Proceedings of 8th International Symposium on RF MEMS and RF Microsystems, MEMSWAVE, Barcelona, İspanya, 26 - 29 Haziran 2007, ss.119-122
- CVII. **Dual-frequency reconfigurable slot dipole array with a CPW-based feed network using RF MEMS technology for X- and Ka-band applications**
Topallı K., Civi Ö. A. , Demir Ş., Koc S., Akın T.
2007 IEEE Antennas and Propagation Society International Symposium, AP-S, Honolulu, HI, Amerika Birleşik Devletleri, 10 - 15 Haziran 2007, ss.825-828
- CVIII. **Resistance non-uniformity correction method using bias heating for resistance type uncooled microbolometer FPAs**
Tepegöz M., Akın T.
Conference on Infrared Technology and Applications XXXIII, Florida, Amerika Birleşik Devletleri, 9 - 13 Nisan 2007, cilt.6542
- CIX. **An SOI-MEMS tuning fork gyroscope with linearly coupled drive mechanism**
Azgin K., Temiz Y., Akın T.
20th IEEE International Conference on Micro Electro Mechanical Systems (MEMS 2007), Kobe, Japonya, 21 - 25 Ocak 2007, ss.482-485
- CX. **A monolithic phased array using 3-bit DMTL RF MEMS phase shifters**
Topallı K., Unlu M., AYDIN ÇİVİ H. Ö. , DEMİR Ş., KOÇ S. S. , AKIN T.
IEEE Antennas and Propagation Society International Symposium, APS 2006, Albuquerque, NM, Amerika Birleşik Devletleri, 9 - 14 Temmuz 2006, ss.517-520
- CXI. **A Low Cost Rate Grade Nickel Microgyroscope**
Alper S. E. , Silay K. M. , Akın T.
The 19th European Conf. on Solid-State Transducers (EuroSensors XIX), Barcelona, İspanya, 11 - 14 Eylül 2005
- CXII. **Tactical-Grade Silicon-on-Glass Gyroscope with Very-Small Quadrature Coupling**
Alper S. E. , Silay K. M. , Akın T.
The 19th European Conf. on Solid-State Transducers (EuroSensors XIX), Gothenburg, İsveç, 17 - 20 Eylül 2006
- CXIII. **A reconfigurable RF MEMS triple stub impedance matching network**
Unlu M., Topallı K., Atasoy H., Temocin E., Istanbuloglu I., Bayraktar O., Demir Ş., Civi O., Koç S. S. , Akın T.
36th European Microwave Conference, EuMC 2006, Manchester, Birleşik Krallık, 10 - 12 Eylül 2006, ss.1370-1373
- CXIV. **Investigation of on-wafer TRL calibration accuracy dependence on transitions and probe positioning**
Atasoy H., Unlu M., Topallı K., Istanbuloglu I., Temocin E., Bayraktar O., Demir Ş., Civi O., Koç S. S. , Akın T.
36th European Microwave Conference, EuMC 2006, Manchester, Birleşik Krallık, 10 - 12 Eylül 2006, ss.1582-1585
- CXV. **MEMS and Microsystem Technologies for Microsensors and Biological Microdevices**
Külah H., Akın T.
The 7th Workshop on Biosensors and Bioanalytical u-Techniques in Environmental and Clinical Analysis, Aydın, Türkiye, 10 - 14 Eylül 2006
- CXVI. **Radio Frequency Micro Electro Mechanical Systems RF MEMS**
AKIN T.
National URSI Symposium Turkey, Antalya, Türkiye, 6 - 08 Eylül 2006, ss.11
- CXVII. **TRL Kalibrasyonunda Uç Konumlandırması ve Geçişlerin Etkileri**
ATASOY H. İ. , ÜNLÜ M., TOPALLI K., İSTANBULLUOĞLU İ., TEMOÇİN E. U. , BAYRAKTAR Ö., DEMİR Ş., AYDIN ÇİVİ H. Ö. , KOÇ S. S. , AKIN T.
National URSI Symposium Turkey, Türkiye, 6 - 08 Eylül 2006, ss.426-428

- CXVIII. RF MEMS Teknolojisi ile Kapasitif ve Metal Metal Baglantili Paralel Anahtar Yapilari**
ATASOY H. İ. , TOPALLI K., ÜNLÜ M., İSTANBULLUOĞLU İ., ENGİN UFUK T., ÖMER B., DEMİR Ş., AYDIN ÇİVİ H. Ö. ,
KOÇ S. S. , AKIN T.
National URSI Symposium Turkey, Türkiye, 6 - 08 Eylül 2006, ss.410-412
- CXIX. RF MEMS Teknolojisi ile Yansitici Dizi Anteni Tasarimi**
BAYRAKTAR Ö., TOPALLI K., ÜNLÜ M., İSTANBULLUOĞLU İ., ENGİN UFUK T., ATASOY H. İ. , DEMİR Ş., AYDIN ÇİVİ H.
Ö. , KOÇ S. S. , AKIN T.
National URSI Symposium Turkey, Ankara, Türkiye, 6 - 08 Eylül 2006, ss.438-440
- CXX. RF MEMS Kapasitörler ile Rezonans Frekansi Ayarlanabilen Antenler**
ERDİL E., TOPALLI K., ÜNLÜ M., AYDIN ÇİVİ H. Ö. , AKIN T.
National URSI Symposium Turkey, Türkiye, 6 - 08 Eylül 2006, ss.404-406
- CXXI. RF MEMS Teknolojisi ile Tek Parça Faz Dizili Anten Yapisi**
TOPALLI K., ÜNLÜ M., AYDIN ÇİVİ H. Ö. , DEMİR Ş., KOÇ S. S. , AKIN T.
National URSI Symposium Turkey, Ankara, Türkiye, 6 - 08 Eylül 2006, ss.413-415
- CXXII. RF MEMS Teknolojisi ile Ayarlanabilir Empedans Uyumlama Devresi**
ÜNLÜ M., TOPALLI K., DEMİR Ş., AYDIN ÇİVİ H. Ö. , KOÇ S. S. , AKIN T.
National URSI Symposium Turkey, Ankara, Türkiye, 6 - 08 Eylül 2006, ss.407-409
- CXXIII. Esdüzlemsel Dalga Klavuzundan Mikroserit Hatta Geçiş Üzerine Çalışmalar**
TEMOÇİN E. U. , TOPALLI K., ÜNLÜ M., İSTANBULLUOĞLU İ., ATASOY H. İ. , BAYRAKTAR Ö., DEMİR Ş., AYDIN ÇİVİ H.
Ö. , KOÇ S. S. , AKIN T.
National URSI Symposium Turkey, Ankara, Türkiye, 6 - 08 Eylül 2006, ss.448-450
- CXXIV. RF MEMS Yapılarının Vakum Testi İçin Pirani Gauge**
PASİN Ö., AKIN T.
National URSI Symposium Turkey, Türkiye, 6 - 08 Eylül 2006, ss.386-388
- CXXV. RF MEMS Teknolojisi Kullanılarak Tasarlanmış Ayarlanabilir Bant Geçiren Bağlanmış Hat Süzgeç**
İSTANBULLUOĞLU İ., TOPALLI K., TEMOÇİN E. U. , ATASOY H. İ. , ÜNLÜ M., BAYRAKTAR Ö., DEMİR Ş., AYDIN ÇİVİ H.
Ö. , KOÇ S. S. , AKIN T.
National URSI Symposium Turkey, Ankara, Türkiye, 6 - 08 Eylül 2006, ss.416-418
- CXXVI. A Reconfigurable RF MEMS Impedance Tuner for Impedance Matching of a Two Stage Low Noise Amplifier**
ÜNLÜ M., TOPALLI K., ATASOY H. İ. , TEMOÇİN E. U. , İSTANBULLUOĞLU İ., BAYRAKTAR Ö., DEMİR Ş., AYDIN ÇİVİ H.
Ö. , KOÇ S. S. , AKIN T.
7th Workshop on MEMS for MilimeterWave Communications (MEMSWAVE), 27 - 30 Haziran 2006
- CXXVII. Metal to metal and capacitive contact RF MEMS shunt switch structures**
ATASOY H. İ. , TOPALLI K., ÜNLÜ M., İSTANBULLUOĞLU İ., TEMOÇİN E. U. , BAYRAKTAR Ö., DEMİR Ş., AYDIN ÇİVİ H.
Ö. , KOÇ S. S. , AKIN T.
7th Workshop on MEMS for MilimeterWave Communications (MEMSWAVE), 27 - 30 Haziran 2006, ss.154-156
- CXXVIII. Dynamic resistance nonuniformity compensation circuit for uncooled microbolometer detector arrays**
Yildirim O. O. , AKIN T.
32nd Conference on Infrared Technology and Applications, Florida, Amerika Birleşik Devletleri, 17 - 21 Nisan
2006, cilt.6206
- CXXIX. High-performance SOI-MEMS gyroscope with decoupled oscillation modes**
Alper S., Azgin K., Akin T.
19th IEEE International Conference on Micro Electro Mechanical Systems (MEMS 2006), İstanbul, Türkiye, 22 - 26
Ocak 2006, ss.70-73
- CXXX. Ultra-thick and high-aspect-ratio nickel microgyroscope using EFAB (TM) multi-layer additive electroforming**
Alper S., Ocak I., Akin T.
19th IEEE International Conference on Micro Electro Mechanical Systems (MEMS 2006), İstanbul, Türkiye, 22 - 26
Ocak 2006, ss.670-673

- CXXXI. Reconfigurable slot antenna with fixed-fixed beam type RF MEMS capacitors**
Erdil E., Topalli K., Unlu M., Istanbuluoglu I., Temocin E. U. , Atasoy H. I. , Bayraktar O., AYDIN ÇİVİ H. Ö. , DEMİR Ş., Koc S., et al.
European Conference on Antennas and Propagation: EuCAP 2006, Nice, Fransa, 6 - 10 Kasım 2006, cilt.626 SP
- CXXXII. Reconfigurable reflectarray using RF MEMS technology**
Bayraktar O., Topalli K., Unlu M., Istanbuluoglu I., Temocin E. U. , Atasoy H. I. , AYDIN ÇİVİ H. Ö. , DEMİR Ş., Koc S., AKIN T.
European Conference on Antennas and Propagation: EuCAP 2006, Nice, Fransa, 6 - 10 Kasım 2006, cilt.626 SP
- CXXXIII. RF MEMS teknolojisi ile mikroserit ve esduzlemsel dalga kilavuzu hat ustunde paralel anahtar yapıları**
TOPALLI K., ÜNLÜ M., DEMİR Ş., AYDIN ÇİVİ H. Ö. , KOÇ S. S. , AKIN T.
National URSI Symposium Turkey, Türkiye, 8 - 10 Eylül 2004, ss.370-372
- CXXXIV. Design of a Re-configurable dual frequency microstrip antenna with integrated RF MEMS switches**
Onat S., Ünlü M., Alatan L., Demir Ş., Akın T.
2005 IEEE Antennas and Propagation Society International Symposium and USNC/URSI Meeting, Washington, Amerika Birleşik Devletleri, 3 - 08 Temmuz 2005, ss.384-387
- CXXXV. Reconfigurable CPW-FED dual-frequency rectangular slot antenna using RF MEMS technology**
Erdil E., Topalli K., Civi O. A. , Akın T.
2005 IEEE Antennas and Propagation Society International Symposium and USNC/URSI Meeting, Washington, Amerika Birleşik Devletleri, 3 - 08 Temmuz 2005, ss.392-395
- CXXXVI. Reconfigurable Antenna Structures Using MEMS Technology**
Erdil E., Onat S., Topalli K., İstanbulluoğlu İ., Ünlü M., Demir Ş., Aydın Çivi H. Ö. , Alatan L., Koç S. S. , Akın T.
6th Workshop on MEMS for MilimeterWave Communications (MEMSWAVE), Lausanne, İsviçre, 23 - 24 Haziran 2005
- CXXXVII. A parametric modeling study on distributed MEMS transmission lines**
Unlu M., Topalli K., Demir Ş., Civi O., Koc S., Akın T.
Conference Proceedings- 34th European Microwave Conference, London, Birleşik Krallık, 12 - 14 Ekim 2004, cilt.3, ss.1157-1160
- CXXXVIII. Sıralanmış MEMS iletim hatları için yeni bir model**
ÜNLÜ M., TOPALLI K., DEMİR Ş., AYDIN ÇİVİ H. Ö. , KOÇ S. S. , AKIN T.
National URSI Symposium Turkey, Türkiye, 8 - 10 Eylül 2004, ss.435-437
- CXXXIX. Design and Modeling of a Reconfigurable Triple Stub Impedance Matching Network using Distributed MEMS Transmission Lines**
ÜNLÜ M., TOPALLI K., DEMİR Ş., AYDIN ÇİVİ H. Ö. , KOÇ S. S. , AKIN T.
5th Workshop on MEMS for MilimeterWave Communications (MEMSWAVE), 30 Haziran - 02 Temmuz 2004
- CXL. A thermal conductivity based humidity sensor in a standard CMOS process**
Okean B., Akın T.
17th IEEE International Conference on Micro Electro Mechanical Systems, Maastricht, Hollanda, 25 - 29 Ocak 2004, ss.552-555
- CXLI. A new model for distributed mems transmission lines**
Topalli K., Unlu M., Sagkol H., Demir Ş., Civi O., Koc S., Akın T.
IEEE Antennas and Propagation Society Symposium 2004 Digest held in Conjunction with: USNC/URSI National Radio Science Meeting, Monterey, CA, Amerika Birleşik Devletleri, 20 - 25 Haziran 2004, cilt.3, ss.2855-2858
- CXLII. A readout circuit for QWIP infrared detector arrays using current mirroring integration**
Tepegoz M., Akın T.
29th European Solid-State Circuits Conference, ESTORIL, Portekiz, 16 - 18 Eylül 2003, ss.133-136
- CXLIII. A Cross-Cultural VLSI Design Project**
Harris D., Akın T.
The American Society for Engineering Education (ASEE) 2003 Annual Conference, Tennessee, Amerika Birleşik Devletleri, 22 Haziran - 25 Temmuz 2003
- CXLIV. A single-crystal silicon symmetrical and decoupled gyroscope on insulating substrate**

- Alper S., Akin T.
12th International Conference on Solid-State Sensors, Actuators and Microsystems (TRANSDUCERS 03),
Massachusetts, Amerika Birleşik Devletleri, 8 - 12 Haziran 2003, ss.1399-1402
- CXLV. **A low-cost 64x64 uncooled infrared detector array in standard CMOS**
Eminoglu S., Tanrikulu M., Akin T.
12th International Conference on Solid-State Sensors, Actuators and Microsystems (TRANSDUCERS 03),
Massachusetts, Amerika Birleşik Devletleri, 8 - 12 Haziran 2003, ss.316-319
- CXLVI. **Low-cost uncooled infrared detector arrays in standard CMOS**
Eminoglu S., Tanrikulu M., Akin T.
Infrared Technology and Applications XXIX Conference, Florida, Amerika Birleşik Devletleri, 21 - 25 Nisan 2003,
cilt.5074, ss.425-436
- CXLVII. **Optimum Designs For High Performance Micromachined Gyroscopes**
ALPER S. E. , AKIN T.
NATO RTO Sensors Electronics Technology (RTO-SET) Panel: Symposium on Emerging Military Capabilities
Enabled by Advances in Navigation Sensors, 14 - 16 Ekim 2002
- CXLVIII. **RF MEMS Teknolojisi ile Faz Dizili Anten**
TOPALLI K., SAĞKOL H., ÜNLÜ M., AYDIN ÇİVİ H. Ö. , DEMİR Ş., KOÇ S. S. , AKIN T.
URSI-Türkiye'2002, Türkiye, 18 - 20 Eylül 2002, ss.134-137
- CXLIX. **RF MEMS Teknolojisi ile Ayarlanabilir Empedans Uyumlama ve Güç Bölücü Devreleri**
ÜNLÜ M., SAĞKOL H., TOPALLI K., AYDIN ÇİVİ H. Ö. , DEMİR Ş., KOÇ S. S. , AKIN T.
URSI-Türkiye'2002, Türkiye, 18 - 20 Eylül 2002, ss.142-145
- CL. **A Symmetrical and Decoupled Microgyroscope with Electroforming Process on Insulating Substrate**
Akin T., Alper S. E.
European conference on solid-state transducers; Eurosensors XVI , Praha, Çek Cumhuriyeti, 15 - 18 Eylül 2002,
ss.471-472
- CLI. **Anten Uygulamaları için Yeni MEMS Anahtar Yapıları**
ÜNLÜ M., SAĞKOL H., TOPALLI K., AYDIN ÇİVİ H. Ö. , DEMİR Ş., KOÇ S. S. , AKIN T.
URSI-Türkiye'2002, Türkiye, 18 - 20 Eylül 2002, ss.146-149
- CLII. **RF MEMS Teknolojisi ile Mikrodalga Faz Kaydiricileri**
SAĞKOL H., ÜNLÜ M., TOPALLI K., AYDIN ÇİVİ H. Ö. , DEMİR Ş., KOÇ S. S. , AKIN T.
URSI-Türkiye'2002, Türkiye, 18 - 20 Eylül 2002, ss.138-141
- CLIII. **Design of a Piezoelectric Ultrasonic Motor for Micro-Robotic Application**
Akin T., Koç B., Başaran D., Erden A.
Int. Conf. Mechatronic Design and Modeling, Nevşehir, Türkiye, 2 - 05 Eylül 2002, ss.205-219
- CLIV. **RF Telemetry Powering and Control of Hermetically-Sealed Integrated Sensors and Actuators**
Akin T., Ziaie B., Najafi K.
Digest, IEEE Solid-State Sensors and Actuators Workshop, South-Carolina, Amerika Birleşik Devletleri, 4 - 07
Haziran 1990, ss.145-148
- CLV. **A monolithic phased array with RF MEMS technology**
Sagkol H., Topalli K., Unlu M., AYDIN ÇİVİ H. Ö. , KOÇ S. S. , DEMİR Ş., AKIN T.
2002 IEEE Antennas and Propagation Society International Symposium, San Antonio, TX, Amerika Birleşik
Devletleri, 16 - 21 Haziran 2002, cilt.4, ss.760-763
- CLVI. **RF MEMS adjustable impedance matching network and adjustable power divider**
Unlu M., Topalli K., Sagkol H., DEMİR Ş., AYDIN ÇİVİ H. Ö. , KOÇ S. S. , AKIN T.
2002 IEEE Antennas and Propagation Society International Symposium, San Antonio, TX, Amerika Birleşik
Devletleri, 16 - 21 Haziran 2002, cilt.2, ss.26-29
- CLVII. **New MEMS Swich Structures for Antenna Applications**
ÜNLÜ M., TOPALLI K., SAĞKOL H., DEMİR Ş., AYDIN ÇİVİ H. Ö. , KOÇ S. S. , AKIN T.
2002 IEEE AP-S International Symposium and USNC/URSI National Radio Science Meeting, 16 - 21 Haziran 2002
- CLVIII. **A low-cost small pixel uncooled infrared detector for large focal plane arrays using a standard CMOS process**

Eminoglu S., Tanrikulu M., Tezcan D., Akin T.

Conference on Infrared Detectors and Focal Plane Arrays VII, Florida, Amerika Birleşik Devletleri, 2 - 03 Nisan 2002, cilt.4721, ss.111-121

- CLIX. **A symmetric surface micromachined gyroscope with decoupled oscillation modes**
Alper S. E. , AKIN T.
Transducers'01 Eurosensors XV, Munich, Almanya, 10 - 14 Haziran 2001, ss.347-358
- CLX. **A CMOS n-well microbolometer FPA with temperature coefficient enhancement circuitry**
Eminoglu S., Tezcan D., Akin T.
Infrared Technology and Applications XXVII Conference, Florida, Amerika Birleşik Devletleri, 16 - 20 Nisan 2001, cilt.4369, ss.240-249
- CLXI. **A low cost uncooled infrared microbolometer focal plane array using the CMOS n-well layer**
Tezcan D., Eminoglu S., Akar O., Akin T.
14th IEEE International Conference on Micro Electro Mechanical Systems (MEMS 2001), INTERLAKEN, İsviçre, 21 - 25 Ocak 2001, ss.566-569
- CLXII. **An uncooled microbolometer infrared focal plane array in standard CMOS**
Tezcan D., Eminoglu S., Akar O., Akin T.
Conference on Photodetectors - Materials and Devices VI, San-Jose, Kostarika, 22 - 24 Ocak 2001, cilt.4288, ss.112-121
- CLXIII. **A CMOS Visible Image Sensor Array Using Current Mirroring Integration Readout Circuitry**
Akbay S. S. , Bircan A., Akin T.
The 14th European Conf. on Solid-State Transducers (Eurosensors XIV), Kobenhavn, Danimarka, 27 - 30 Ağustos 2000, ss.21-24
- CLXIV. **A Planar Gyroscope Using a Standard Surface Micromachining Process**
Alper S. E. , Akin T.
The 14th European Conf. on Solid-State Transducers (Eurosensors XIV), Kobenhavn, Danimarka, 27 - 30 Ağustos 2000, ss.387-390
- CLXV. **A High Performance Readout Circuit for Infrared Focal Plane Array Applications**
KÜLAH H., AKIN T.
Invited to Design Automation Conference 2000, 5 - 09 Haziran 2000
- CLXVI. **An Uncooled Microbolometer Infrared Detector in any Standard CMOS Technology**
Tezcan D. S. , Koçer F., Akin T.
The 10th Int. Conf. on Solid-State Sensors and Actuators (TRANSDUCERS'99), Sendai, Japonya, 7 - 10 Haziran 1999, ss.610-613
- CLXVII. **A low-power switched-current algorithmic A/D converter**
Tezel A., Akin T.
1999 IEEE International Symposium on Circuits and Systems (ISCAS 99), Florida, Amerika Birleşik Devletleri, 30 Mayıs - 02 Haziran 1999, ss.282-285
- CLXVIII. **An infrared FPA readout circuit based on Current Mirroring Integration**
Kulah H., Akin T.
Infrared Technology and Applications XXV Conference, Florida, Amerika Birleşik Devletleri, 5 - 09 Nisan 1999, cilt.3698, ss.778-788
- CLXIX. **A CAD environment for digital filters using a VerilogHDL based functional bit-serial compiler**
Eminoglu S., AKIN T.
10th International Conference on Microelectronics, ICM 1998, Monastir, Tunus, 14 - 16 Aralık 1998, ss.91-94
- CLXX. **A CMOS current mirroring integration readout structure for infrared focal plane arrays**
Kulah H., Akin T.
24th European Solid-State Circuits Conference: Challenges for the Next Millennium, ESSCIRC 1998, The Hague, Hollanda, 22 - 24 Eylül 1998, ss.468-471
- CLXXI. **Endüstriyel ve Biyomedikal Uygulamaları için Silisyum Mikroişlenmiş Kapasitif Basınç Sensörü**
AKAR O., AKIN T.
Elektrik-Elektronik-Bilgisayar Muhendisliği 7. Ulusal Kongresi, Türkiye, 31 Ağustos - 06 Eylül 1997, ss.83-86

- CLXXII. **Mikro Elektro Mekanik Sistemler MEMS ve Silisyum Mikroisleme Teknikleri**
AKIN T.
Elektrik-Elektronik-Bilgisayar Muhendisligi 7. Ulusal Kongresi, Türkiye, 31 Ağustos - 06 Eylül 1997
- CLXXIII. **Standart CMOS Teknolojisi ile Üretilen Isı Küme Tipi Kızılötesi Dedektörler**
OLGUN Z., AKAR O., KÜLAH H., AKIN T.
Elektrik-Elektronik-Bilgisayar Muhendisligi 7. Ulusal Kongresi, Türkiye, 31 Ağustos - 06 Eylül 1997, ss.75-78
- CLXXIV. **PtSi Schottky Bariyer Gece Görüş Dedektörü ve CMOS Elektronik Okuma Devresi Tasarımı**
KÜLAH H., AKIN T.
Elektrik-Elektronik-Bilgisayar Muhendisligi 7. Ulusal Kongresi, Türkiye, 31 Ağustos - 06 Eylül 1997, ss.79-82
- CLXXV. **A modular micromachined high-density connector for implantable biomedical systems**
Akin T., Ziaie B., Najafi K.
IEEE 9th Annual International Workshop on Micro Electro Mechanical Systems - An Investigation of Micro Structures, Sensors, Actuators, Machines and Systems, California, Amerika Birleşik Devletleri, 11 - 15 Şubat 1996, ss.497-502
- CLXXVI. **An Implantable Multichannel Digital Neural Recording System for a Micromachined Sieve Electrode**
Akin T., Najafi K., Bradley R.
Digest, Int. Conf. on Solid-State Sensors and Actuators (TRANSDUCERS'95-EUROSENSORS'IX), Stockholm, İsveç, 25 - 29 Haziran 1995, ss.51-54
- CLXXVII. **Chronic Recordings from Fibers of Rat Glossopharyngeal Nerve Regenerated Through a Micromachined Sieve Electrode Array**
BRADLEY R. M., AKIN T., GÜRKAN S., CAO X., NAJAFİ K.
AChems XVII (Ass. for Chemoreception Sciences), 19 - 23 Nisan 1995
- CLXXVIII. **Long Term Recordings from a Micromachined Sieve Electrode Implanted in the Rat Glossopharyngeal Nerve.**
Bradley R., AKIN T., Gürkan S., Khalil N.
Digest, Society for Neuroscience, 13 - 18 Kasım 1994
- CLXXIX. **A TELEMETRICALLY POWERED AND CONTROLLED IMPLANTABLE NEURAL RECORDING-SYSTEM WITH CMOS INTERFACE CIRCUITRY**
AKIN T., NAJAFI K.
7th Mediterranean Electrotechnical Conference (MeleCON 94), Antalya, Türkiye, 12 - 14 Nisan 1994, ss.545-548
- CLXXX. **SILICON MICROMACHINING AND MICROFABRICATION TECHNIQUES FOR INTEGRATED SENSOR AND ACTUATOR SYSTEMS**
AKIN T.
7th Mediterranean Electrotechnical Conference (MeleCON 94), Antalya, Türkiye, 12 - 14 Nisan 1994, ss.529-532
- CLXXXI. **A Micromachined Silicon Sieve Electrode for Nerve Regeneration Applications**
AKIN T., NAJAFI K.
IEEE Int. Conf. on Solid-State Sensors and Actuators (TRANSDUCERS'xx91), 24 - 27 Haziran 1991

Desteklenen Projeler

ASİL ALPTEKİN D., ERTÜRK O., AKIN T., Yükseköğretim Kurumları Destekli Proje, PbSe Koloidal Kuantum Noktacık Tabanlı Yüksek Çözünürlüklü, Kısa Dalga Boylu Kızılötesi Görüntüleme Sensörleri için Detektör Dizini Geliştirilmesi, 2017 - 2019

AKIN T., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Endüstriyel Mikro-Elektro-Mekanik Sistemler (MEMS), 2002 - 2011

Patent

Alper S. E. , Torunbalcı M. M. , Akin T., Hermetic packaging method for soi-mems devices with embedded vertical

feedthroughs, Patent, BÖLÜM B İşlemlerin Uygulanması; Taşıma, Buluşun Tescil No: TR 2017 04320 B , Standart Tescil, 2020

Azgin K., Gavcar H. D. , Akın T., Method for Suppression Of G-Sensitivity of MEMS Gyroscope, Patent, BÖLÜM B İşlemlerin Uygulanması; Taşıma, Buluşun Tescil No: 2020 17869 T4 , Birden Fazla Ülkede Tescil, 2020

Ardanuç M. S. , Zorlu Ö., Külah H., Akın T., METHOD OF ENERGY HARVESTING USING BUILT-IN POTENTIAL DIFFERENCE OF METAL-TO-METAL JUNCTIONS AND DEVICE THEREOF, Patent, BÖLÜM H Elektrik, Buluşun Tescil No: US10027254B2 , Birden Fazla Ülkede Tescil, 2018, 2016

Alper S. E. , Torunbalcı M. M. , Akın T., METHOD OF WAFER-LEVEL HERMETIC PACKAGING WITH VERTICAL FEEDTHROUGHs., Patent, BÖLÜM B İşlemlerin Uygulanması; Taşıma, Buluşun Tescil No: ZL 201380079417.5 , Birden Fazla Ülkede Tescil, 2018, 2017, 2016

Akın T., Eminoğlu S., Uncooled Infrared Detector And Methods For Manufacturing The Same, Patent, BÖLÜM G Fizik, Buluşun Tescil No: 2,800,847 , Birden Fazla Ülkede Tescil, 2015, 2018

Kuzubaşlı A., Demir Ş., Akın T., Microfluidic channel integrated microwave mems biosensor, Patent, BÖLÜM H Elektrik, Buluşun Başvuru Numarası: EP15777752.5 , Standart Tescil, 2015

Aydemir A., Akın T., A THREE AXIS CAPACITIVE MEMS ACCELEROMETER ON A SINGLE SUBSTRATE, Patent, BÖLÜM G Fizik, Buluşun Başvuru Numarası: EP 3 241 027 A1 , Standart Tescil, 2014

Akın T., Ünlü M., Demir Ş., SIMULTANEOUS PHASE AND AMPLITUDE CONTROL USING TRIPLE STUB TOPOLOGY AND ITS IMPLEMENTATION USING RF MEMS TECHNOLOGY, Patent, BÖLÜM H Elektrik, Buluşun Tescil No: 2012 02917 , Birden Fazla Ülkede Tescil, 2012, 2013

Bilimsel Hakemlikler

Tamamlanmış Tez Çalışması, TÜRKİYE TEKNOLOJİ GELİŞTİRME VAKFI 2018 DR. AKIN ÇAKMAKÇI ÖDÜLÜ, TTGV, Türkiye, Kasım 2018

Tamamlanmış Tez Çalışması, TÜRKİYE TEKNOLOJİ GELİŞTİRME VAKFI TTGV ÖDÜLLERİ 2018 DR. AKIN ÇAKMAKÇI ÖDÜLÜ, TTGV, Türkiye, Kasım 2018

Tamamlanmış Tez Çalışması, TÜRKİYE TEKNOLOJİ GELİŞTİRME VAKFI 2018 DR. AKIN ÇAKMAKÇI ÖDÜLÜ, TTGV, Türkiye, Kasım 2018

Etkinlik Organizasyonlarındaki Görevler

Akın T., SPIE Defense & Commercial Sensing Symposium, Infrared Technology and Applications XLV, Bilimsel Kongre / Sempozyum Organizasyonu, Maryland, Amerika Birleşik Devletleri, Nisan 2019

Akın T., SPIE Defence and Commercial Sensing Symposium, Infrared Technology and Applications XLIV, Bilimsel Kongre / Sempozyum Organizasyonu, Florida, Amerika Birleşik Devletleri, Nisan 2018

Akademik Dolaşım Faaliyetleri

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H-İndeks (Scopus): 31

Kongre ve Sempozyum Katılımı Faaliyetleri

“MEMS 2020 , The 33rd IEEE International Conference on Micro Electro Mechanical Systems “, Davetli Konuşmacı, Vancouver, Kanada, 2020

21 st Milipol Paris 2019, İzleyici / Dinleyici, Paris, Fransa, 2019

ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ KONGRESİ 2019 , Davetli Konuşmacı, İstanbul, Türkiye, 2019

ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ KONGRESİ 2019, Oturum Başkanı, İstanbul, Türkiye, 2019

30th AMC-Asian Advanced Materials , Katılımcı, Singapore, Singapur, 2019

TEKNOFEST 2019, Katılımcı, İstanbul, Türkiye, 2019

20th International Conference on Solid-State Sensors, Actuators and Microsystems, Transducers 2019, İzleyici / Dinleyici, Berlin, Almanya, 2019

2018 43rd International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz), Katılımcı, Nagoya, Japonya, 2018

International Security and Defence Conference, Davetli Konuşmacı, Ankara, Türkiye, 2018

GÜVENLİK VE SAVUNMA KONFERANSI 2018, Çalışma Grubu, Ankara, Türkiye, 2018

National NanoFab Center” da gerçekleşecek olan 3. Eureka Project’in “Development and Implementation of MEMS and CMOS based on the uncooled infrared detectors” konulu çalıştay, Çalışma Grubu, Seoul, Güney Kore, 2018

SPIE Photonics West, İzleyici / Dinleyici, California, Amerika Birleşik Devletleri, 2018

Davetli Konuşmalar

Çukurova Üniversitesi 2019-2020 Akademik Yılı açılış töreninde, açılış dersini vermek üzere davetli olarak katılım,, Seminer, Çukurova Üniversitesi, Türkiye, Eylül 2019

Turkey-Taiwan Electronics and Optoelectronics Semiconductor, Seminer, TÜBİTAK, Türkiye, Haziran 2019

BURSA ULUDAĞ ÜNV. PROF. DR. FUAT SEZGİN VIII. BİLGİLENDİRME VE AR-GE GÜNLERİ, Seminer, Bursa Uludağ Üniversitesi, Türkiye, Mart 2019

18th China International Optoelectronic Expo 2016” içindeki “1st Executive Infrared Imaging Forum : From Niche to Large Volume Applications” isimli etkinlik, Seminer, Yole Development , Çin, Eylül 2016

20th NanoEngineering and MicroSystem Technology Conference (NMC'16) , Konferans, 20th NanoEngineering and MicroSystem Technology Conference (NMC'16) , Tayvan, Ağustos 2016

Infrared Array Sensor Forum, Seminer, Ritsumeikan Üniversitesi, Japonya, Temmuz 2016

Ödüller

Akan T., Mikroelektronik ve Mikrosensörler Konusundaki Özgün Çalışmalar, Orta Doğu Teknik Üniversitesi, Haziran 1996