

## **Prof. RAİF TUNA BALKAN**

### **Personal Information**

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### **International Researcher IDs**

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Publons / Web Of Science ResearcherID: AAZ-9159-2020

ScopusID: 6603800130

Yoksis Researcher ID: 8395

### **Education Information**

Doctorate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Makine Mühendisliği (Dr), Turkey 1983 - 1988

Postgraduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Makine Mühendisliği (YI) (Tezli), Turkey 1979 - 1983

Undergraduate, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, Turkey 1975 - 1979

### **Foreign Languages**

English, C1 Advanced

### **Research Areas**

Technical Sciences, Mechanical Engineering, Machine Theory and Dynamics, System Dynamics and Control, Robotics, Mechatronics, Modeling and Simulation of Dynamic Systems

### **Academic and Administrative Experience**

Middle East Technical University, Faculty of Engineering, 2016 - Continues

Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 2014 - 2017

Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 2004 - 2008

### **Advising Theses**

BALKAN R. T., AUTONOMOUS AND MANUAL DRIVING OF A MULTIPLE TURRET SYSTEM IN EXTREME ENVIRONMENT, Doctorate, Ü.YERLİKAYA(Student), 2021

BALKAN R. T., Design, modeling and control of a SATCOM on-the-move antenna terminal, Postgraduate, İ.Karaçal(Student), 2019

BALKAN R. T., Modeling of two stage nozzle-flapper type electrohydraulic servovalves, Postgraduate, A.Can(Student),

2019

BALKAN R. T., Design and analysis of a novel electrohydraulic draft control system in agricultural machinery,

Postgraduate, E.Murat(Student), 2019

BALKAN R. T., Design, modeling and control of 4-axis electro-optical director for high energy laser application,

Postgraduate, A.Mavuş(Student), 2019

BALKAN R. T., Modeling and performance improvements of a pressure compensated axial piston pump, Postgraduate,

O.AYDOĞAN(Student), 2018

BALKAN R. T., Dynamic modeling and control of an electromechanical control actuation system, Postgraduate,

Ü.YERLİKAYA(Student), 2016

BALKAN R. T., Design of hydraulic valveless control actuation system, Postgraduate, M.CAN(Student), 2016

PLATİN B. E., BALKAN R. T., Platform motion disturbances decoupling by means of inertial sensors for a motion

stabilized gimbal, Postgraduate, D.MUTLU(Student), 2015

BALKAN R. T., Development and control of a single rod electro hydrostatic actuator, Doctorate, H.ÇALIŞKAN(Student),

2015

BALKAN R. T., PLATİN B. E., Minimum order linear system identification and parameter estimation with application,

Postgraduate, O.CEM(Student), 2014

PLATİN B. E., BALKAN R. T., Design, construction and control of an electrohydraulic load simulator for testing hydraulic drives, Postgraduate, H.Ulaş(Student), 2014

PLATİN B. E., BALKAN R. T., Design, Construction and Control of an Electro-Hydraulic Load Simulator for Testing Hydraulic Drives, Postgraduate, H.ULAŞ(Student), 2014

BALKAN R. T., Modeling, simulation and experimental verification of a hydraulic fan drive system, Postgraduate, E.TORAMAN(Student), 2013

BALKAN R. T., PLATİN B. E.,  $H_2/H_\infty$  mixed robust controller synthesis for a fin actuation system, Postgraduate, T.Uğurlu(Student), 2013

BALKAN R. T., Single axis precise motion control using piezoactuator associated with a compliant mechanism, Postgraduate, G.YAŞAR(Student), 2013

BALKAN R. T., PLATİN B. E., Friction identification and compensation of its effects in stabilized platforms, Postgraduate, E.Sincar(Student), 2013

BALKAN R. T., KONUKSEVEN E. İ., Development of an optical system calibration and alignment methodology using Shack-Hartmann wavefront sensor, Postgraduate, F.ZEHRA(Student), 2013

BALKAN R. T., YAMAN Y., Single axis precise motion control using piezoactuator associated with a compliant mechanism, Postgraduate, G.Yaşar(Student), 2013

BALKAN R. T., Friction identification and compensation in stabilized platforms, Postgraduate, E.SİNCAR(Student), 2013

BALKAN R. T., Optomechanical analysis and experimental validation of bonding based prism and mirror mounts in a laser system, Postgraduate, U.ÜNAL(Student), 2012

BALKAN R. T., KONUKSEVEN E. İ., Identification of kinematic parameters using pose measurements and building a flexible interface, Postgraduate, A.BAYRAM(Student), 2012

BALKAN R. T., Modelling and experimental evaluation of an electrohydraulic pitch trim servo actuator, Postgraduate, A.ÖZTÜRKAN(Student), 2012

BALKAN R. T., Modeling and stabilization control of a main battle tank, Doctorate, T.KARAYUMAK(Student), 2011

BALKAN R. T., KÜLAH H., A MEMS thermoelectric energy harvester for energy generation in mobile systems,

Postgraduate, E.TAN(Student), 2011

BALKAN R. T., Modeling, identification and real time position control of a two-axis Gimbaled mirror system, Postgraduate, K.ÇAĞATAY(Student), 2010

BALKAN R. T., Development of a SCADA control system for a weighing and bagging machine, Postgraduate, E.SİNEM(Student), 2010

BALKAN R. T., Modeling and experimental evaluation of variable speed pump and valve controlled hydraulic servo drives, Postgraduate, H.Çalışkan(Student), 2009

BALKAN R. T., SÖYLEMEZ E., Dynamic modelling of a backhoe-loader, Postgraduate, B.KILIÇ(Student), 2009

BALKAN R. T., PLATİN B. E., A real time test setup design and realization for performance verification of controller

designs for unmanned air vehicles, Postgraduate, F.KÜREKSİZ(Student), 2008

BALKAN R. T., KÜLAH H., Design, fabrication and implementation of a vibration based MEMS energy scavenger for wireless microsystems, Doctorate, İ.SARI(Student), 2008

BALKAN R. T., Development of sled range test facility for store separation model, Postgraduate, A.ARDA(Student), 2007

BALKAN R. T., Nonlinear modeling and flight control system design of an unmanned aerial vehicle, Postgraduate, D.KARAKAŞ(Student), 2007

Gökler M. I., Balkan R. T., Acquisition of field data for agricultural tractor, Postgraduate, A.KOYUNCU(Student), 2006

BALKAN R. T., GPS based altitude control of an unmanned air vehicle using digital terrain elevation data, Postgraduate, S.ATAÇ(Student), 2006

BALKAN R. T., Design and construction of a six degree of freedom platform, Postgraduate, S.GÜRBÜZ(Student), 2006

BALKAN R. T., Analysis of welding parameters in gas metal arc welding by a welding robot, Postgraduate, Y.ERENER(Student), 2006

BALKAN R. T., Modeling and real-time control system implementation for a Stewart platform, Postgraduate, O.ALBAYRAK(Student), 2005

BALKAN R. T., Design of a secondary packaging robotic system, Postgraduate, H.ŞAHİN(Student), 2005

BALKAN R. T., Conceptual design of a model support system ant its controller for Ankara wind tunnel, Postgraduate, N.Ulusul(Student), 2005

BALKAN R. T., PLATİN B. E., Conceptual design of a model support system and its controller for Ankara wind tunnel, Postgraduate, N.ULUSAL(Student), 2005

BALKAN R. T., PLATİN B. E., Desing, construction and preliminary testing of an aeroservoelastic test apparatus to be used in Ankara wind tunnel, Postgraduate, S.UTKU(Student), 2005

BALKAN R. T., Design, construction and preliminary testin of an aeroservoelastic test apparatus to be used in Ankara Wind Tunnel, Postgraduate, S.Utku(Student), 2005

BALKAN R. T., Optimal Design of truss structure with actuators, Postgraduate, A.AKÖZ(Student), 2004

BALKAN R. T., On-line controller tuning by matlab using real system responses, Postgraduate, S.Pektaş(Student), 2004

BALKAN R. T., Design scaling of aeroballistic range models, Postgraduate, Ü.Kutluay(Student), 2004

BALKAN R. T., Design scaling of aerobalistic range models, Postgraduate, Ü.KUTLUAY(Student), 2004

BALKAN R. T., Optimal design of truss structure with actuators /, Postgraduate, A.Akgöz(Student), 2004

BALKAN R. T., On-line controller tuning by MATLAB® using real system responses, Postgraduate, S.PEKTAŞ(Student), 2004

BALKAN R. T., PLATİN B. E., Modeling and control of a stabilization system, Postgraduate, K.AFACAN(Student), 2004  
BALKAN R. T., Balkan R., Design and control of self-parking model car, Postgraduate, U.Avgan(Student), 2003  
BALKAN R. T., Design and control of a self-parking model car, Postgraduate, U.AVĞAN(Student), 2003  
BALKAN R. T., Design and manufacturing of a two degree of freedom gyro stabilized opto-mechanical platform., Postgraduate, T.KARAYUMAK(Student), 2003

BALKAN R. T., Design, construction and performance testing of a ball-beam balancing experimental set-up, Postgraduate, İ.SARI(Student), 2002

BALKAN R. T., Computer aided analysis of dynamic systems employing graph theory, Postgraduate, KALTUN(Student), 2002

BALKAN R. T., Vibration isolation of a platform with a shock disturbance., Postgraduate, M.PARLAK(Student), 2002

BALKAN R. T., Dynamic modeling and control of a stewart platform type motion simulator, Postgraduate, M.ÖZDAĞLAR(Student), 2001

BALKAN R. T., Development of a software for the inverse kinematics of six-dof serial link manipulators, Postgraduate, H.TİFTİKÇİ(Student), 2001

BALKAN R. T., Design and construction of a 3d laser rangefinder for indoor applications, Postgraduate, U.FİDAN(Student), 2001

BALKAN R. T., Minimum time reorientation of gimbal angles and supression of gyroscopic noise effects, Postgraduate, M.ERDOĞAN(Student), 2000

BALKAN R. T., Line of sight stabilization of a thermal imaging system in two axes, Postgraduate, A.ARAT(Student), 2000

BALKAN R. T., Modeling for robotic spray painting, Postgraduate, U.DALLI(Student), 2000

BALKAN R. T., Computer aided design of friction brakes and clutches., Postgraduate, G.KIZILTAŞ(Student), 1998

BALKAN R. T., Optimal design of power transmission shafts., Postgraduate, A.ATAY(Student), 1998  
BALKAN R. T., Determination of a mobile crane characteristics by flexible multibody analysis, Postgraduate, S.KILIÇASLAN(Student), 1997  
BALKAN R. T., Development of a system architecture for off-line programming of robots for arc welding, Postgraduate, M.BULUT(Student), 1997  
BALKAN R. T., Computer aided simulation of injection molding process for thermoplastic materials, Postgraduate, B.ÖNALIR(Student), 1997  
BALKAN R. T., Stabilisation of an inverted pendulum by using a fuzzy controller, Postgraduate, M.EMİN(Student), 1995  
BALKAN R. T., Palletizing software developed for multifunctional use of an industrial robot, Postgraduate, A.ŞİŞMAN(Student), 1994  
BALKAN R. T., Design and construction of a multi-purpose robot gripper, Postgraduate, M.ATILLA(Student), 1994  
BALKAN R. T., Optimal control of robotic manipulators using dynamic programming, Postgraduate, N.DEMİRTAŞ(Student), 1992

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

- I. **Collision-Free Motion Planning for an Aligned Multiple-Turret System Operating in Extreme Environment**  
Yerlikaya Ü., BALKAN R. T.  
Robotica, vol.40, pp.690-719, 2022 (SCI-Expanded)
- II. **Collision Free Motion Planning for Double Turret System Operating in a Common Workspace**  
Yerlikaya Ü., BALKAN R. T.  
INTERNATIONAL JOURNAL OF CONTROL AUTOMATION AND SYSTEMS, vol.19, no.10, pp.3487-3502, 2021 (SCI-Expanded)
- III. **End control damping algorithm for a stabilized gun turret system for the satisfaction of the collision avoidance requirement**  
Yerlikaya Ü., BALKAN R. T.  
Robotics and Autonomous Systems, vol.143, 2021 (SCI-Expanded)
- IV. **A Mathematical Model for Simulation of Flow Rate and Chamber Pressures in Spool Valves**  
Afatsun A. C., BALKAN R. T.  
JOURNAL OF DYNAMIC SYSTEMS MEASUREMENT AND CONTROL-TRANSACTIONS OF THE ASME, vol.141, no.2, 2019 (SCI-Expanded)
- V. **Optical alignment procedure utilizing neural networks combined with Shack-Hartmann wavefront sensor**  
Adil F. Z., Konukseven E. I., Balkan T., Adila O. F.  
OPTICAL ENGINEERING, vol.56, no.5, 2017 (SCI-Expanded)
- VI. **A Complete Analysis and a Novel Solution for Instability in Pump Controlled Asymmetric Actuators**  
ÇALIŞKAN H., BALKAN R. T., PLATİN B. E.  
JOURNAL OF DYNAMIC SYSTEMS MEASUREMENT AND CONTROL-TRANSACTIONS OF THE ASME, vol.137, no.9, 2015 (SCI-Expanded)
- VII. **Pressure prediction on a variable-speed pump controlled hydraulic system using structured recurrent neural networks**  
KILIÇ E., DÖLEN M., ÇALIŞKAN H., KOKU A. B., Balkan T.  
CONTROL ENGINEERING PRACTICE, vol.26, pp.51-71, 2014 (SCI-Expanded)
- VIII. **Accurate pressure prediction of a servo-valve controlled hydraulic system**  
KILIÇ E., DÖLEN M., KOKU A. B., ÇALIŞKAN H., Balkan T.  
MECHATRONICS, vol.22, no.7, pp.997-1014, 2012 (SCI-Expanded)
- IX. **Development of a design verification methodology including strength and fatigue life prediction for agricultural tractors**  
Koyuncu A., GÖKLER M. İ., Balkan T.

- INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.60, pp.777-785, 2012 (SCI-Expanded)
- X. An Electromagnetic Micro Power Generator for Low-Frequency Environmental Vibrations Based on the Frequency Upconversion Technique  
 Sari I., Balkan T., KÜLAH H.  
 JOURNAL OF MICROELECTROMECHANICAL SYSTEMS, vol.19, no.1, pp.14-27, 2010 (SCI-Expanded)
- XI. An electromagnetic micro energy harvester based on an array of parylene cantilevers  
 Sari I., Balkan T., KÜLAH H.  
 JOURNAL OF MICROMECHANICS AND MICROENGINEERING, vol.19, no.10, 2009 (SCI-Expanded)
- XII. An electromagnetic micro power generator for wideband environmental vibrations  
 Sari I., Balkan T., KÜLAH H.  
 SENSORS AND ACTUATORS A-PHYSICAL, vol.145, pp.405-413, 2008 (SCI-Expanded)
- XIII. Modeling of paint flow rate flux for elliptical paint sprays by using experimental paint thickness distributions  
 Arikan M., Balkan T.  
 INDUSTRIAL ROBOT-AN INTERNATIONAL JOURNAL, vol.33, no.1, pp.60-66, 2006 (SCI-Expanded)
- XIV. A kinematic structure-based classification and compact kinematic equations for six-dof industrial robotic manipulators  
 Balkan T., Ozgoren M., Arikan M., Baykurt H.  
 MECHANISM AND MACHINE THEORY, vol.36, no.7, pp.817-832, 2001 (SCI-Expanded)
- XV. Process simulation and paint thickness measurement for robotic spray painting  
 Arikan M., Balkan T.  
 CIRP ANNALS-MANUFACTURING TECHNOLOGY, vol.50, no.1, pp.291-294, 2001 (SCI-Expanded)
- XVI. A method of inverse kinematics solution including singular and multiple configurations for a class of robotic manipulators  
 Balkan T., Ozgoren M., Arikan M., Baykurt H.  
 MECHANISM AND MACHINE THEORY, vol.35, no.9, pp.1221-1237, 2000 (SCI-Expanded)
- XVII. Process modeling, simulation, and paint thickness measurement for robotic spray painting  
 Arikan M., Balkan T.  
 JOURNAL OF ROBOTIC SYSTEMS, vol.17, no.9, pp.479-494, 2000 (SCI-Expanded)
- XVIII. Modeling of paint flow rate flux for circular paint sprays by using experimental paint thickness distribution  
 Balkan T., Arikan M.  
 MECHANICS RESEARCH COMMUNICATIONS, vol.26, no.5, pp.609-617, 1999 (SCI-Expanded)
- XIX. Tipping loads of mobile cranes with flexible booms  
 Kilicaslan S., Balkan T., Ider S.  
 JOURNAL OF SOUND AND VIBRATION, vol.223, no.4, pp.645-657, 1999 (SCI-Expanded)
- XX. A dynamic programming approach to optimal control of robotic manipulators  
 Balkan T.  
 MECHANICS RESEARCH COMMUNICATIONS, vol.25, no.2, pp.225-230, 1998 (SCI-Expanded)
- XXI. Application of computer-aided injection moulding simulation for thermoplastic materials  
 Onalir B., Kaftanoglu B., Balkan T.  
 INTERNATIONAL JOURNAL OF MATERIALS & PRODUCT TECHNOLOGY, vol.13, pp.282-300, 1998 (SCI-Expanded)
- XXII. A load control system for mobile cranes  
 Balkan T.  
 MECHANICS RESEARCH COMMUNICATIONS, vol.23, no.4, pp.395-400, 1996 (SCI-Expanded)

## Articles Published in Other Journals

- I. Yapay Sinir Ağ Modellerinin Valf Denetimli Hidrolik Bir Sistemin Uzun Süreli Basınç Tahmininde

**Kullanılması**

KILIÇ E., ÇALIŞKAN H., DÖLEN M., KOKU A. B., BALKAN R. T.

Mühendis ve Makina, vol.53, pp.50-61, 2012 (Peer-Reviewed Journal)

**II. ATV Tabanlı İnsansız Kara Aracı Geliştirilmesi**

BAYAR G., KONUKSEVEN E. İ., KOKU A. B., BALKAN R. T.

Makina Tasarım ve İmalat Dergisi, vol.9, pp.55-66, 2007 (Peer-Reviewed Journal)

**Refereed Congress / Symposium Publications in Proceedings****I. Increasing the Bandwidth Frequency by Coulomb Friction Compensation Method in Electromechanical Control Actuation Systems**

YERLİKAYA Ü., BALKAN R. T.

IEEE/ASME International Conference on Advanced Intelligent Mechatronics, Hong Kong, 8 - 12 July 2019

**II. Identification of Viscous and Coulomb Friction in Motion Constrained Systems**

Yerlikaya U., BALKAN R. T.

IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM), Auckland, New Zealand, 9 - 12 July 2018, pp.91-96

**III. Identification of Viscous and Coulomb Friction in Motion Constrained Systems**

YERLİKAYA Ü., BALKAN R. T.

The 2018 IEEE/ASME International Conference on Advanced Intelligent Mechatronics, Auckland, New Zealand, 9 - 12 July 2018

**IV. Tarım Traktörlerinde Kullanılan Ön Yükleyicinin Hidrolik Sisteminin Modellenmesi ve Simülasyonu**

GÜLTEKİN İ. İ., CÖMERT S. A., ŞAHİN A., ERKAL G., KARAKOÇ E. M., Ünlüsoy Y. S., BALKAN R. T.

VIII. Ulusal Hidrolik Pnömatik Kongresi, İzmir, Turkey, 22 - 25 November 2017

**V. DYNAMIC MODELING AND CONTROL OF AN ELECTROMECHANICAL CONTROL ACTUATION SYSTEM**

Yerlikaya U., BALKAN R. T.

10th ASME Annual Dynamic Systems and Control Conference, Virginia, United States Of America, 11 - 13 October 2017

**VI. Proceedings of the ASME 2017 Dynamic Systems and Control Conference**

Yerlikaya Ü., BALKAN R. T.

ASME 2017 Dynamic Systems and Control Conference, 11 - 13 October 2017

**VII. An online intelligent algorithm pipeline for the elimination of springback effect during sheet metal bending**

Dilan R. A., BALKAN R. T., Platin B. E.

International Conference on the Technology of Plasticity, ICTP 2017, Cambridge, Canada, 17 - 22 September 2017, vol.207, pp.1576-1581

**VIII. Hareket Kısıtlı Sistemlerde Viskoz ve Coulomb Sürtünme Tanılaması**

Yerlikaya Ü., BALKAN R. T.

18. Ulusal Makina Teorisi Sempozyumu, Trabzon, Turkey, 5 - 07 July 2017

**IX. Elektromekanik Kontrol Tahrik Sisteminin Matematiksel Modellenmesi ve Kontrolü**

Yerlikaya Ü., BALKAN R. T.

Türkiye Robotbilim Konferansı (TORK), İstanbul, Turkey, 2 - 03 November 2016

**X. Modelling and Simulation of Power Steering System for Agricultural Tractors**

Gültekin İ. İ., Cömert S. A., Erkal G., Ünlüsoy Y. S., BALKAN R. T.

International Conference on Advances in Automotive Technologies 2016 – AAT2016, 11 - 14 October 2016

**XI. Application of Multivariate Adaptive Regression Splines to Sheet Metal Bending Process for Springback Compensation**

Dilan R. A., Balkan T., PLATİN B. E.

12th International Conference on Numerical Methods in Industrial Forming Processes (NUMIFORM), Troyes, France, 4 - 07 July 2016, vol.80

- XII. **A Complete Analysis for Pump Controlled Single Rod Actuator**  
 ÇALIŞKAN H., BALKAN R. T., PLATİN B. E.  
 10th International Fluid Power Conference (10. IFK), 8 - 10 March 2016, vol.2, pp.119-132
- XIII. **A Complete Analysis for Pump Controlled Single Rod Actuators**  
 ÇALIŞKAN H., BALKAN R. T., PLATİN B.  
 10th International FluidPower Conference, Dresden, Germany, 8 - 10 March 2016
- XIV. **Compensation of Friction Effects in Gyro-Stabilized Motion Platforms**  
 Sincar E., BALKAN R. T., PLATİN B. E.  
 American Control Conference, Illinois, United States Of America, 1 - 03 July 2015, pp.3242-3248
- XV. **A CONTROL SYSTEM FOR HYDRAULIC SINGLE AXIS DURABILITY TEST RIG**  
 ÇALIŞKAN H., BALKAN R. T., PLATİN B. E., KONUKSEVEN E. İ.  
 5th Annual Dynamic Systems and Control Division Conference / 11th JSME Motion and Vibration Conference, Florida, United States Of America, 17 - 19 October 2012, pp.723-732
- XVI. **3 Serbestlik Derecesine Sahip Bir Hareket Taklitçisinin Mafsal Uzayı Eniyilemesi ve Çözüm Analizi**  
 DİLАН R. A., YAMAN U., ÇALIŞKAN H., DEMİRER S., BALKAN R. T.  
 VI. Ulusal Hidrolik Pnömatik Kongresi, İzmir, Turkey, 12 - 15 October 2011, pp.539-552
- XVII. **Yapay Sinir Ağ Modellerinin Valf Denetimli Hidrolik Bir Sistemin Uzun Süreli Basınç Tahmininde Kullanılması**  
 KILIÇ E., ÇALIŞKAN H., DÖLEN M., KOKU A. B., BALKAN R. T.  
 VI. Ulusal Hidrolik Pnömatik Kongresi, İzmir, Turkey, 12 - 15 October 2011
- XVIII. **HYDRAULIC POSITION CONTROL SYSTEM WITH VARIABLE SPEED PUMP**  
 ÇALIŞKAN H., BALKAN R. T., PLATİN B. E.  
 2nd Annual Dynamic Systems and Control Conference (DSCC 2009)/Bath/ASME Symposium on Fluid Power and Motion Control, California, United States Of America, 12 - 14 October 2009, pp.275-282
- XIX. **An Electromagnetic Micro Power Generator for Low Frequency Environmental Vibrations Based on the Frequency Up Conversion Technique**  
 Sarı İ., BALKAN R. T., KÜLAH H.  
 22nd IEEE International Conference on Micro Electro Mechanical Systems (MEMS 2009), Sorrento, Italy, 25 - 29 January 2009, pp.1075-1078
- XX. **A micro power generator with planar coils on parylene cantilevers**  
 Sarı İ., BALKAN R. T., KÜLAH H.  
 Conference on PhD Research in Microelectronics and Electronics, İstanbul, Turkey, 22 - 25 June 2008, pp.133-136
- XXI. **Optimal posture control for a 7 DOF haptic device based on power minimization**  
 Baser O., KONUKSEVEN E. İ., BALKAN R. T.  
 6th EuroHaptics International Conference, Madrid, Spain, 10 - 13 June 2008, vol.5024, pp.555-560
- XXII. **Design and Optimization of an Electromagnetic Micro Energy Scavenger with Parylene Cantilevers**  
 Sarı İ., BALKAN R. T., KÜLAH H.  
 PowerMEMS Conference 2007, Freiburg, Germany, 28 - 29 November 2007, pp.745-746

## Expert Reports

- I. **MERCEDES BENZ TÜRK A.Ş. Mercedes Benz E350 CDI 4MATIC Binek Aracın Karşılığı Trafik Kazası Esnasında Hava Yastıklarının Açılıp Açılmamasını İnceleyen Uzman Raporu**  
 Bayer Ö., Balkan R. T., Konukseven E. İ.  
 Mercedes Benz Türk, pp.8, Ankara, 2018
- II. **ALARKO CARRIER SAN. VE TİC. A.Ş. SATIŞ MÜESSESESİ ANA HAVALANDIRMA ELEMANI VAV'LARIN PNÖMATİK OTOMASYONU UZMAN RAPORU**  
 Bayer Ö., Balkan R. T.  
 Alarko Carrier, pp.11, Ankara, 2018
- III. **Yürüyen merdiven sisteminin onarım firması tarafından yenisi ile değiştirilip değiştirilmemişinin**

### **tespiti**

Yaman U., Balkan R. T., Konukseven E. İ.

ANADOLU ANONİM TÜRK SİGORTA ŞİRKETİ, pp.5, Ankara, 2017

IV. "NWL Diamond Reaming Shell (Step Profile) – Elmaslı Portkron" isimli parçanın incelenmesi

YAMAN U., KONUKSEVEN E. İ., YAMAN U.

Barkom Grup Sondaj Mak. Ve Ekip. San. Tic. Ltd. Şti., pp.4, Ankara, 2016

### **Supported Projects**

BALKAN R. T., Project Supported by Higher Education Institutions, Abkant Presler için Otomatikleştirilmiş Malzeme Büküm Yardımı, 2015 - 2016

### **Patent**

BALKAN R. T., Otomatik kapı açma mekanizması içeren bir bulaşık makinası, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, Standard Registration, 2015

### **Metrics**

Publication: 51

Citation (WoS): 745

Citation (Scopus): 886

H-Index (WoS): 13

H-Index (Scopus): 13

### **Non Academic Experience**

METU

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