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### Kişisel Bilgiler

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### Uluslararası Araştırmacı ID'leri

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Yoksis Araştırmacı ID: 7866

### Yönetilen Tezler

ÖZGÖREN M. K., CONTROL OF A PLANAR CABLE-ACTUATED PARALLEL MANIPULATOR WITH REALISTIC CABLES, Yüksek Lisans, O.DÜZGÖREN(Öğrenci), 2018

ÖZGÖREN M. K., Design and analysis of a 3-dof translational shock absorbing parallel manipulator, Yüksek Lisans, G.YILDIZ(Öğrenci), 2016

ÖZGÖREN M. K., LEBLEBİCİOĞLU M. K., Some optimal control problems in electric vehicles, Doktora, K.AHISKA(Öğrenci), 2016

ÖZGÖREN M. K., 3 öteleme serbestlik derecesine sahip bir şok sönümleyici platform tasarımı ve analizi, Yüksek Lisans, G.Yıldız(Öğrenci), 2016

ÖZGÖREN M. K., Investigation of control of human balance-recovery reactions, Doktora, N.BİLGİN(Öğrenci), 2015

ÖZGÖREN M. K., GÜRSES S., The somatosensory and vestibular interaction in human postural control, Doktora, M.EMRE(Öğrenci), 2015

ÖZGÖREN M. K., Biased proportional navigation guidance for impact angle control with extension to three-dimensional engagements, Doktora, K.SAVAŞ(Öğrenci), 2015

ÖZGÖREN M. K., Optimal redundancy resolution for kinematically redundant parallel manipulators, Yüksek Lisans, S.TANSEL(Öğrenci), 2014

ÖZGÖREN M. K., Multistage launch vehicle design with thrust profile and trajectory optimization, Doktora, E.CİVEK(Öğrenci), 2014

ÖZGÖREN M. K., The effects of random seeker noise and target maneuver on guidance performance, Yüksek Lisans, O.ÖZGÜR(Öğrenci), 2014

ÖZGÖREN M. K., Inertial navigation system improvement using ground station data, Doktora, D.RAUF(Öğrenci), 2012

ÖZGÖREN M. K., Genetik algoritma kullanılarak bir uzay aracının darbesel itkiyle yörünge transfer optimizasyonu., Yüksek Lisans, A.Yılmaz(Öğrenci), 2012

ÖZGÖREN M. K., Research on transfer alignment for increased speed and accuracy, Doktora, U.KAYASAL(Öğrenci), 2012

ÖZGÖREN M. K., Modeling and control of autonomous underwater vehicle manipulator systems, Doktora, O.KORKMAZ(Öğrenci), 2012

KONUKSEVEN E. İ., ÖZGÖREN M. K., Kalman süzgeci kullanarak bir paletli araçüzzerinde çok algılayıcı kör adımı seyrüsefer., Yüksek Lisans, S.Kırımlioğlu(Öğrenci), 2012

ÖZGÖREN M. K., Orbit transfer optimization of spacecraft with impulsive thrusts using genetic algorithm, Yüksek Lisans, A.YILMAZ(Öğrenci), 2012

ÖZGÖREN M. K., MULTISENSOR DEAD RECKONING NAVIGATION ON A TRACKED VEHICLE USING KALMAN FILTER, Yüksek Lisans, S.KIRIMLIOĞLU(Öğrenci), 2012

ÖZGÖREN M. K., Kinematic and force analyses of overconstrained mechanisms, Yüksek Lisans, D.ÜSTÜN(Öğrenci), 2011

ÖZGÖREN M. K., İnsansı robotların 3 boyutlu uzayda 2 ayaklı hareketinin benzetimi., Yüksek Lisans, G.Akalın(Öğrenci), 2010

ÖZGÖREN M. K., Modeling and control of a hyper redundant manipulator, Doktora, A.BAYRAM(Öğrenci), 2010

ÖZGÖREN M. K., TEKİNALP O., Attitude control of multiple rigid body spacecraft with flexible hinge joints, Yüksek Lisans, B.AKBULUT(Öğrenci), 2009

ÖZGÖREN M. K., Sliding mode control of linearly actuated nonlinear systems, Yüksek Lisans, B.DURMAZ(Öğrenci), 2009

ÖZGÖREN M. K., Control of systems under the effect of friction, Yüksek Lisans, B.BAYKARA(Öğrenci), 2009

ÖZGÖREN M. K., Land vehicle navigation with GPS/INS sensor fusion using kalman filter, Yüksek Lisans, M.EMRE(Öğrenci), 2008

ÖZGÖREN M. K., High angle of attack maneuvering and stabilization control of aircraft, Doktora, Ö.ATEŞOĞLU(Öğrenci), 2007

ÖZGÖREN M. K., AÖB ve manyetometreli bir seyrüsefer sisteminin modellenmesi ve benzetimi., Yüksek Lisans, U.Kayasal(Öğrenci), 2007

ÖZGÖREN M. K., Uçakların yüksek hücum açısında manevra ve stabilizasyon denetimi., Doktora, Ö.Ateşoğlu(Öğrenci), 2007

ÖZGÖREN M. K., Seyir füzeleri üzerine seyrüsefer ve denetim çalışmaları., Doktora, V.Ekütekin(Öğrenci), 2007

ÖZGÖREN M. K., Modeling and simulation of a maneuvering ship, Yüksek Lisans, S.PAKKAN(Öğrenci), 2007

ÖZGÖREN M. K., Sualtı aracının modellenmesi ve hareket benzetimi., Yüksek Lisans, K.Küçük(Öğrenci), 2007

ÖZGÖREN M. K., Hedef izleyici füzelerinin dinamik modellemesi, güdüm ve denetimi., Doktora, B.Özkan(Öğrenci), 2005

ÖZGÖREN M. K., En iyi öngörülü bir denetim kullanılarak üç boyutlu insansı yürüyüş benzetimi, Yüksek Lisans, G.Özyurt(Öğrenci), 2005

ÖZGÖREN M. K., Yarı otonom bir tekerlekli sandalye için kararlılık arttırımı., Yüksek Lisans, H.Müjde(Öğrenci), 2004

ÖZGÖREN M. K., Özgören M., Güdümlü füzeler için bulanık mantık güdüm sistemi tasarımı, Yüksek Lisans, A.Özgür(Öğrenci), 2003

ÖZGÖREN M. K., Robot manipulatörlerinin konum/kuvvet kontrolü, Yüksek Lisans, M.İsmet(Öğrenci), 2003

ÖZGÖREN M. K., Integration and error modelling of global positioning system (GPS) and inertial navigation system (INS), Yüksek Lisans, V.EKÜTEKİN(Öğrenci), 2000

ÖZGÖREN M. K., Design and performance of cargo type warheads, Yüksek Lisans, Ş.KORKMAZ(Öğrenci), 2000

ÖZGÖREN M. K., Kinematic and force analysis of parallel and hybrid manipulators, Yüksek Lisans, S.HİMMETOĞLU(Öğrenci), 2000

ÖZGÖREN M. K., Dynamic modeling and control of two coordinated robot manipulators, Yüksek Lisans, B.ÖZKAN(Öğrenci), 1999

ÖZGÖREN M. K., Non-linear flight dynamics of unguided missiles, Doktora, Ö.Tanrıkulu(Öğrenci), 1999

ÖZGÖREN M. K., Two new switching surface design techniques for nonlinear systems with their applications to missile control, Doktora, M.UYMAZ(Öğrenci), 1999

ÖZGÖREN M. K., Game theoretic pursuit-evasion strategies for a missile and its target, Doktora, O.Merttopçuoğlu(Öğrenci), 1998

ÖZGÖREN M. K., Analysis and control of manipulators at singular positions, Yüksek Lisans, E.BİLGE(Öğrenci), 1996

ÖZGÖREN M. K., Smooth optimal control of robotic manipulators for minimum time and energy, Yüksek Lisans, J.KARAMAN(Öğrenci), 1995

ÖZGÖREN M. K., Thrust vector and aerodynamic control of missiles, Yüksek Lisans, M.YANGEL(Öğrenci), 1995

ÖZGÖREN M. K., Dynamics and control of a stabilized platform, Doktora, Ö.ETKA(Öğrenci), 1994

ÖZGÖREN M. K., Control of a missile to follow a moving target, Yüksek Lisans, H.ERGİN(Öğrenci), 1992

ÖZGÖREN M. K., Motion and energy optimizations of a redundant manipulator, Yüksek Lisans, T.Ş.(Öğrenci), 1991

ÖZGÖREN M. K., Simulation and comparison of various control types as applied to manipulators, Yüksek Lisans, M.UYMAZ(Öğrenci), 1990

ÖZGÖREN M. K., Thrust vector control of a rocket vehicle associated with aerodynamic control, Yüksek Lisans, C.YALÇIN(Öğrenci), 1989

ÖZGÖREN M. K., The Position-force hybrid control of robotic manipulators, Yüksek Lisans, V.CEYHAN(Öğrenci), 1989

ÖZGÖREN M. K., Design and construction of a robotic manipulator with six revolute joints, Yüksek Lisans, İ.BAŞCUHADAR(Öğrenci), 1989

ÖZGÖREN M. K., Effect of dry-friction on the position control of robot arms, Yüksek Lisans, M.FATİH(Öğrenci), 1989

ÖZGÖREN M. K., Effects of delays on control systems, Yüksek Lisans, M.MUNGAN(Öğrenci), 1987

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Energy and Time Optimal Autopilot for Electric Vehicles Performing Ackerman Cornering**  
Ahiska K., ÖZGÖREN M. K., LEBLEBİCİOĞLU M. K.  
IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, cilt.23, sa.10, ss.17258-17270, 2022 (SCI-Expanded)
- II. **Composite impact vector control based on Apollo descent guidance**  
ERER K. S., TEKİN R., ÖZGÖREN M. K.  
Chinese Journal of Aeronautics, cilt.35, sa.7, ss.67-74, 2022 (SCI-Expanded)
- III. **Hybrid Force and Motion Control of a Three-Dimensional Flexible Robot Considering Measurement Noises**  
KILIÇASLAN S., ÖZGÖREN M. K., İDER S. K.  
Machines, cilt.10, sa.7, 2022 (SCI-Expanded)
- IV. **Motion Control of a Spatial Elastic Manipulator in the Presence of Measurement Noises**  
KILIÇASLAN S., İDER S. K., ÖZGÖREN M. K.  
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, cilt.46, sa.12, ss.12331-12354, 2021 (SCI-Expanded)
- V. **Energy Optimality in Electric Vehicles Along Uphill-Downhill Roads**  
Ahiska K., ÖZGÖREN M. K., LEBLEBİCİOĞLU M. K.  
IEEE TRANSACTIONS ON INTELLIGENT VEHICLES, cilt.6, sa.3, ss.390-405, 2021 (SCI-Expanded)
- VI. **Design and kinematic analysis of a novel rehabilitative robotic walking simulation device**  
Kose K. C., ÖZGÖREN M. K., Tekce F., DÖNER N.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART H-JOURNAL OF ENGINEERING IN MEDICINE, cilt.235, sa.7, ss.770-779, 2021 (SCI-Expanded)
- VII. **Estimation of the Balance-Keeping Control Law Applied by a Human Being Upon a Sudden Sagittal Tilt Perturbation**  
BİLGİN N., ÖZGÖREN M. K.  
JOURNAL OF BIOMECHANICAL ENGINEERING-TRANSACTIONS OF THE ASME, cilt.141, sa.4, 2019 (SCI-Expanded)
- VIII. **Kinematic and Kinetostatic Analysis of Parallel Manipulators with Emphasis on Position, Motion, and Actuation Singularities**  
ÖZGÖREN M. K.  
ROBOTICA, cilt.37, sa.4, ss.599-625, 2019 (SCI-Expanded)
- IX. **Comparative study of attitude control methods based on Euler angles, quaternions, angle-axis pairs and orientation matrices**  
ÖZGÖREN M. K.  
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, cilt.41, sa.5, ss.1189-1206, 2019 (SCI-Expanded)
- X. **Autopilot Design for Vehicle Cornering Through Icy Roads**  
Ahiska K., ÖZGÖREN M. K., LEBLEBİCİOĞLU M. K.  
IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, cilt.67, sa.3, ss.1867-1880, 2018 (SCI-Expanded)
- XI. **Performance comparison of the notable acceleration- and angle-based guidance laws for a short-range air-to-surface missile**  
Ozkan B., ÖZGÖREN M. K., Mahmutyazicioglu G.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, cilt.25, sa.5, ss.3591-3606, 2017 (SCI-Expanded)
- XII. **TRAJECTORY TRACKING CONTROL OF AN UNDERACTUATED UNDERWATER VEHICLE REDUNDANT MANIPULATOR SYSTEM**  
Korkmaz O., İDER S. K., ÖZGÖREN M. K.  
ASIAN JOURNAL OF CONTROL, cilt.18, sa.5, ss.1593-1607, 2016 (SCI-Expanded)
- XIII. **Optimal Inverse Kinematic Solutions for Redundant Manipulators by Using Analytical Methods to Minimize Position and Velocity Measures**  
ÖZGÖREN M. K.

JOURNAL OF MECHANISMS AND ROBOTICS-TRANSACTIONS OF THE ASME, cilt.5, sa.3, 2013 (SCI-Expanded)

- XIV. **The position control of a spatial binary hyper redundant manipulator through its inverse kinematics**  
Bayram A., ÖZGÖREN M. K.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART C-JOURNAL OF MECHANICAL ENGINEERING SCIENCE, cilt.227, ss.359-372, 2013 (SCI-Expanded)
- XV. **Sliding mode control for non-linear systems with adaptive sliding surfaces**  
Durmaz B., ÖZGÖREN M. K., SALAMCI M. U.  
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, cilt.34, sa.1, ss.56-90, 2012 (SCI-Expanded)
- XVI. **The conceptual design of a spatial binary hyper redundant manipulator and its forward kinematics**  
Bayram A., ÖZGÖREN M. K.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART C-JOURNAL OF MECHANICAL ENGINEERING SCIENCE, cilt.226, ss.217-227, 2012 (SCI-Expanded)
- XVII. **Hybrid force and motion control of robots with flexible links**  
KILIÇASLAN S., ÖZGÖREN M. K., Ider S. K.  
MECHANISM AND MACHINE THEORY, cilt.45, sa.1, ss.91-105, 2010 (SCI-Expanded)
- XVIII. **Comparison of position controllers designed for an elastic system using its complete and deficient dynamic models**  
ÖZGÖREN M. K.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART I-JOURNAL OF SYSTEMS AND CONTROL ENGINEERING, cilt.224, ss.93-107, 2010 (SCI-Expanded)
- XIX. **Control and Robustness Analysis for a High-alpha Maneuverable Thrust-Vectoring Fighter Aircraft**  
Atesoglu O., ÖZGÖREN M. K.  
JOURNAL OF GUIDANCE CONTROL AND DYNAMICS, cilt.32, sa.5, ss.1483-1496, 2009 (SCI-Expanded)
- XX. **An algebraic method for designing controllers for multi-input multi-output linear systems via s-domain input-output decoupling**  
ÖZGÖREN M. K.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART I-JOURNAL OF SYSTEMS AND CONTROL ENGINEERING, cilt.223, ss.263-274, 2009 (SCI-Expanded)
- XXI. **Motion control of flexible-link manipulators**  
KILIÇASLAN S., Ider S. K., ÖZGÖREN M. K.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART C-JOURNAL OF MECHANICAL ENGINEERING SCIENCE, cilt.222, sa.12, ss.2441-2453, 2008 (SCI-Expanded)
- XXII. **Kinematic analysis of spatial mechanical systems using exponential rotation matrices**  
Ozgoren M. K.  
JOURNAL OF MECHANICAL DESIGN, cilt.129, sa.11, ss.1144-1152, 2007 (SCI-Expanded)
- XXIII. **Trajectory tracking control of robots with flexible links**  
Ider S., Ozgoren M., Ay V.  
MECHANISM AND MACHINE THEORY, cilt.37, sa.11, ss.1377-1394, 2002 (SCI-Expanded)
- XXIV. **Topological analysis of 6-joint serial manipulators and their inverse kinematic solutions**  
Ozgoren M.  
MECHANISM AND MACHINE THEORY, cilt.37, sa.5, ss.511-547, 2002 (SCI-Expanded)
- XXV. **A kinematic structure-based classification and compact kinematic equations for six-dof industrial robotic manipulators**  
Balkan T., Ozgoren M., Arıkan M., Baykurt H.  
MECHANISM AND MACHINE THEORY, cilt.36, sa.7, ss.817-832, 2001 (SCI-Expanded)
- XXVI. **Invalid joint arrangements and actuator related singular configurations of a system of two cooperating SCARA manipulators**  
Ozkan B., Ozgoren M.  
MECHATRONICS, cilt.11, sa.4, ss.491-507, 2001 (SCI-Expanded)
- XXVII. **Motion control of constrained systems considering their actuation-related singular configurations**

- Ozgoren M.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART I-JOURNAL OF SYSTEMS AND CONTROL ENGINEERING, cilt.215, ss.113-123, 2001 (SCI-Expanded)
- XXVIII. **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, cilt.35, sa.9, ss.1221-1237, 2000 (SCI-Expanded)
- XXIX. **Trajectory tracking control of flexible-joint robots**  
Ider S., Ozgoren M.  
COMPUTERS & STRUCTURES, cilt.76, sa.6, ss.757-763, 2000 (SCI-Expanded)
- XXX. **Sliding mode control with optimal sliding surfaces for missile autopilot design**  
Salamci M., Ozgoren M., Banks S.  
JOURNAL OF GUIDANCE CONTROL AND DYNAMICS, cilt.23, sa.4, ss.719-727, 2000 (SCI-Expanded)
- XXXI. **Kinematic analysis of a manipulator with its position and velocity related singular configurations**  
Ozgoren M.  
MECHANISM AND MACHINE THEORY, cilt.34, sa.7, ss.1075-1101, 1999 (SCI-Expanded)
- XXXII. **SOME REMARKS ON ROTATION SEQUENCES AND ASSOCIATED ANGULAR VELOCITIES**  
OZGOREN M.  
MECHANISM AND MACHINE THEORY, cilt.29, sa.7, ss.933-940, 1994 (SCI-Expanded)

### **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **Biased Proportional Navigation with Exponentially Decaying Error for Impact Angle Control and Path Following**  
Erer K. S., Tekin R., ÖZGÖREN M. K.  
24th Mediterranean Conference on Control and Automation (MED), Athens, Yunanistan, 21 - 24 Haziran 2016, ss.238-243
- II. **A Balance Keeping Control for Humanoid Robots by Using Model Predictive Control**  
Bilgin N., ÖZGÖREN M. K.  
17th IEEE International Carpathian Control Conference (ICCC), Tatranska Lomnica, Slovakya, 29 Mayıs - 01 Haziran 2016, ss.60-65
- III. **Energy Optimal Controller for Electric Vehicles on Partially Icy Roads with Heuristic Skidding Compensation**  
Ahiska K., ÖZGÖREN M. K., LEBLEBİCİOĞLU M. K.  
15th International Conference on Control, Automation and Systems (ICCAS), Busan, Güney Kore, 13 - 16 Ekim 2015, ss.101-106
- IV. **Control of a Planar Satellite with an Unactuated Movable Solar Panel**  
Acar Y., Yavuzylmaz C., ÖZGÖREN M. K.  
7th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Türkiye, 16 - 19 Haziran 2015, ss.105-110
- V. **Sliding Mode based Longitudinal Guidance of UAVs**  
Shah M. Z., ÖZGÖREN M. K., Samar R.  
United-Kingdom-Automatic-Control-Council (UKACC) 10th International Conference on Control (CONTROL), Loughborough, Birleşik Krallık, 9 - 11 Temmuz 2014, ss.121-126
- VI. **A Generalized Staging Optimization Program For Space Launch Vehicles**  
Civek-Coskun E., ÖZGÖREN M. K.  
6th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Türkiye, 12 - 14 Haziran 2013, ss.857-862
- VII. **Application of Beacon Navigation and Angle-Only Artillery Surveying Methods for INS Aiding on Aerial Platforms in GNSS Denied Environments**

Guner D. R. L., ÖZGÖREN M. K., PLATİN B. E.

ION Pacific PNT Meeting, Hawaii, Amerika Birleşik Devletleri, 23 - 25 Nisan 2013, ss.858-868

VIII. **ATTITUDE CONTROL OF MULTIPLE RIGID BODY SPACECRAFT WITH FLEXIBLE HINGE JOINTS**

Akbulut B., ÖZGÖREN M. K., TEKİNALP O.

20th AAS/AIAA Spaceflight Mechanics Meeting, California, Amerika Birleşik Devletleri, 14 - 18 Şubat 2010, cilt.136, ss.2477-2478

IX. **POINTING PERFORMANCE INVESTIGATION OF A MULTIPLE RIGID BODY SPACECRAFT**

Akbulut B., ÖZGÖREN M. K., TEKİNALP O.

AAS/AIAA 19th Space Flight Mechanics Meeting, Savannakhet, Laos, 8 - 12 Şubat 2009, cilt.134, ss.1029-1030

X. **The Stabilization Controller Design for a Tripod Type Parallel Manipulator Used for Active Suspension of a Delicate Device**

Atesoglu O., ÖZGÖREN M. K.

IEEE International Conference on Control Applications, San-Antonio, Kuzey Mariana Adaları, 3 - 05 Eylül 2008, ss.237-238

XI. **Control of constrained spatial three-link flexible manipulators**

KILIÇASLAN S., ÖZGÖREN M. K., İDER S. K.

15th Mediterranean Conference on Control and Automation, Athens, Yunanistan, 27 - 29 Haziran 2007, ss.1526-1527

XII. **Removing force indeterminacy in a Hooke joint mechanism by increasing and modifying its joints without causing singularities**

Himmetoglu S., Ozgoren M.

11th World Congress in Mechanism and Machine Science, Tianjin, Çin, 1 - 04 Nisan 2004, ss.1305-1308

## **Metrikler**

Yayın: 44

Atıf (WoS): 294

Atıf (Scopus): 331

H-İndeks (WoS): 10

H-İndeks (Scopus): 10