

Prof. OZAN TEKİNALP

Personal Information

Email: tekinalp@metu.edu.tr

Education Information

Doctorate, University Of Michigan, Mechanical Engineering And Applied Mechanics Department, United States Of America
1983 - 1988

Under Graduate, İstanbul Teknik Üniversitesi, Makine Fakültesi, Makine Mühendisliği Bölümü, Turkey 1976 - 1981

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Dynamic Modeling of Drill Bit Vibrations, University Of Michigan, Mechanical Engineering And Applied
Mechanics Department, 1988

Research Areas

Aeronautical and Space Engineering, Aeronautical Engineering , Space Engineering, Flight Sciences, Aircraft System
Technologies, Task, Flight Dynamics and Stability, Flight Control Systems, Spacecraft Dynamics Modeling, Orientation and
Orbit Control, Engineering and Technology

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 1988 -
Continues

Professional Experience

Head of Department, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering,
2009 - 2018

Advising Theses

Tekinalp O., Vibration based and miniaturizable satellite attitude actuator, Doctorate, B.AKBULUT(Student), 2019

TEKİNALP O., Smooth slew maneuvers of flexible spacecraft, Post Graduate, S.ALTINIŞIK(Student), 2019

Tekinalp O., Design, development and control of a hybrid uav, Post Graduate, A.MURATOĞLU(Student), 2019

Tekinalp O., Control system design and implementation of a tilt rotor UAV, Post Graduate, L.CEVHER(Student), 2019

Tekinalp O., Modeling and control of quadrotor formations carrying aslung load, Doctorate, S.OLUMIDE(Student), 2019

Tekinalp O., Orbit determination strategy and verification for geosynchronous satellites, Post Graduate, A.KÖKER(Student), 2019

TEKİNALP O., Autonomous spacecraft rendezvous and docking on safe trajectories, Post Graduate, A.TEVFİK(Student), 2018

TEKİNALP O., Polynomial trajectory shaping guidance algorithm for multi-missile salvo attack, Post Graduate, N.BAŞAK(Student), 2018

TEKİNALP O., Development of state dependent factorized optimal control methods with application to spacecraft Coulomb formations, Doctorate, M.MEHDI(Student), 2017

Kurtuluş D. F., Tekinalp O., Modelling and Controller Design of a VTOL Air Vehicle, Post Graduate, A.Sami(Student), 2015

TEKİNALP O., Faux riccati equation techniques for feedback control of nonlinear and time-varying systems, Doctorate, A.PRACH(Student), 2015

TEKİNALP O., Separation simulation for helicopter external stores and generation of safe separation envelopes, Post Graduate, Ö.KAPULU(Student), 2015

TEKİNALP O., Nonlinear guidance and control of leader-follower UAV formations, Post Graduate, S.KUMBASAR(Student), 2015

TEKİNALP O., Nonlinear control of unmanned aircraft formations, Post Graduate, S.ARIYIBI(Student), 2014

TEKİNALP O., YAVRUCUK İ., Developing an investment decision methodology for helicopter systems related to technology factor and base price, Post Graduate, G.KARA(Student), 2014

TEKİNALP O., Attitude control of an earth orbiting solar sail satellite to progressively change the selected orbital element, Post Graduate, Ö.ATAŞ(Student), 2014

TEKİNALP O., System identification using flight test data, Post Graduate, O.ŞİMŞEK(Student), 2014

TEKİNALP O., Response surface based performance analysis of an air-defense missile system, Post Graduate, K.GÜNAYDIN(Student), 2014

TEKİNALP O., Evaluation of rotorcraft system identification approaches, Post Graduate, S.KAYMAK(Student), 2013

TEKİNALP O., Satellite attitude determination based on GPS carrier phase measurements, Post Graduate, E.ÖZTEN(Student), 2013

TEKİNALP O., Conceptual design optimization of a nano-satellite launcher, Post Graduate, Y.EMRE(Student), 2012

TEKİNALP O., External geometry and flight performance optimization of turbojet propelled air to ground missiles, Post Graduate, E.DEDE(Student), 2011

TEKİNALP O., Control of a satellite with flexible smart beam during slew maneuver, Post Graduate, H.ÜREK(Student), 2011

TEKİNALP O., YAVRUCUK İ., Development of a UAV testbed, Post Graduate, Z.ÇAKIR(Student), 2011

TEKİNALP O., YAVRUCUK İ., Development of control allocation methods for satellite attitude control, Post Graduate, T.ÇİĞDEM(Student), 2010

TEKİNALP O., Flight control system design for an over actuated UAV against actuator failures, Post Graduate, S.İŞİK(Student), 2010

TEKİNALP O., Multiobjective design optimization of rockets and missiles, Post Graduate, M.YAVUZ(Student), 2009

TEKİNALP O., Flight control of a tilt duct UAV with emphasis on the over actuated transition flight phase, Post Graduate, T.ÜNLÜ(Student), 2009

TEKİNALP O., YAVRUCUK İ., Multidisciplinary and multiobjective design optimization of an unmanned combat aerial vehicle (UCAV), Post Graduate, N.ÇAVUŞ(Student), 2009

TEKİNALP O., ÖZGÖREN M. K. , Attitude control of multiple rigid body spacecraft with flexible hinge joints, Post Graduate, B.AKBULUT(Student), 2009

TEKİNALP O., Flight simulation and control of a helicopter, Post Graduate, G.HİLAL(Student), 2008

TEKİNALP O., Design of kalman filter based attitude determination algorithms for a leo satellite and for a satellite attitude control test setup, Post Graduate, A.KUTLU(Student), 2008

TEKİNALP O., Control allocation against actuator failures in overactuated small satellites, Post Graduate, Ö.KAHRAMAN(Student), 2007

TEKİNALP O., Steering of redundant robotic manipulators and spacecraft integrated power and attitude control-control moment gyroscopes, Post Graduate, A.ALTAY(Student), 2006

TEKİNALP O., Multi objective conceptual design optimization of an agricultural aerial robot, Post Graduate, S.ÖZDEMİR(Student), 2005

TEKİNALP O., A layerwise approach to modeling piezolaminated plates, Doctorate, C.LEVENT(Student), 2005

TEKİNALP O., Simulated annealing for the generation of pareto fronts with aerospace applications, Post Graduate, G.KARSLI(Student), 2004

TEKİNALP O., Steering laws for control moment gyroscope systems used in spacecrafts attitude control, Post Graduate, E.YAVUZOĞLU(Student), 2003

TEKİNALP O., Development of a flexible satellite simulator and associated control algorithms, Post Graduate, K.TAYLAN(Student), 2002

TEKİNALP O., Optimization of north south station keeping manoeuvres for geostationary satellites, Post Graduate, Z.YILDIZ(Student), 2001

TEKİNALP O., Missile trajectory optimization using genetic algorithm, Post Graduate, M.SOYLUOĞLU(Student), 2001

TEKİNALP O., Guidance and control of a spinning missile, Post Graduate, B.SEMERCİ(Student), 2001

TEKİNALP O., Multi-disciplinary design optimization of missiles, Post Graduate, M.BİNGÖL(Student), 2000

TEKİNALP O., Neural network initialization of strapdown inertial navigation systems, Post Graduate, M.ÖZEMRE(Student), 2000

TEKİNALP O., Modeling and control of a tilt-duct VTOL UAV, Post Graduate, A.OKAN(Student), 2000

TEKİNALP O., Missile design optimization using simulated annealing technique, Post Graduate, S.UTALAY(Student), 1999

TEKİNALP O., 3- Axis attitude control of a geostationary satellite, Post Graduate, H.ÖZGÜR(Student), 1999

TEKİNALP O., Modelling and control of beam type structures with surface bonded piezoelectric sensors and actuators, Post Graduate, B.YAĞCI(Student), 1998

TEKİNALP O., Robust control of a highly maneuverable aircraft, Post Graduate, M.ERGÜN(Student), 1998

TEKİNALP O., Orbit dynamics, attitude dynamics and control: Investigation into possible applications to TURKSAT, Post Graduate, H.ÖZGE(Student), 1997

TEKİNALP O., Optimal trajectories for air-to-surface missiles using direct collocation and nonlinear programming, Post Graduate, E.MURAT(Student), 1996

TEKİNALP O., Free vibration analysis of multi-layer adhesively bonded rotating beams, Post Graduate, A.KADİR(Student), 1992

TEKİNALP O., Free vibration analysis of adhesively bonded multi-layer beams and lap-joints, Post Graduate, N.ÇAĞLAYAN(Student), 1992

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **Quaternion-based nonlinear attitude control of quadrotor formations carrying a slung load**
Ariyibi S. O. , TEKİNALP O.
AEROSPACE SCIENCE AND TECHNOLOGY, vol.105, 2020 (Journal Indexed in SCI)
- **Output-feedback control of linear time-varying and nonlinear systems using the forward propagating Riccati equation**
Prach A., TEKİNALP O., Bernstein D. S.
JOURNAL OF VIBRATION AND CONTROL, vol.24, pp.1239-1263, 2018 (Journal Indexed in SCI)
- **Solving Constrained Optimal Control Problems Using State-Dependent Factorization and Chebyshev Polynomials**
Gomroki M. M. , Topputo F., Bernelli-Zazzera F., TEKİNALP O.
JOURNAL OF GUIDANCE CONTROL AND DYNAMICS, vol.41, pp.618-631, 2018 (Journal Indexed in SCI)
- **Infinite-Horizon Linear-Quadratic Control by Forward Propagation of the Differential Riccati Equation**
Prach A., TEKİNALP O., Bernstein D. S.
IEEE CONTROL SYSTEMS MAGAZINE, vol.35, pp.78-93, 2015 (Journal Indexed in SCI)
- **A new multiobjective simulated annealing algorithm**
Tekinalp O., Karsli G.

- JOURNAL OF GLOBAL OPTIMIZATION, vol.39, pp.49-77, 2007 (Journal Indexed in SCI)
A new steering law for redundant control moment gyroscope clusters
Tekinalp O., Yavuzoglu E.
- AEROSPACE SCIENCE AND TECHNOLOGY, vol.9, pp.626-634, 2005 (Journal Indexed in SCI)
A layerwise approach to piezo-electric plates accounting for adhesive flexibility and delaminated regions
Erturk C., Tekinalp O.
- COMPUTERS & STRUCTURES, vol.83, pp.279-296, 2005 (Journal Indexed in SCI)
Simulated annealing for missile optimization: Developing method and formulation techniques
Tekinalp O., Bingol M.
- JOURNAL OF GUIDANCE CONTROL AND DYNAMICS, vol.27, pp.616-626, 2004 (Journal Indexed in SCI)
Tilt duct vertical takeoff and landing uninhabited aerial vehicle concept design study
Armutcuoglu O., Kavsaoglu M., Tekinalp O.
- JOURNAL OF AIRCRAFT, vol.41, pp.215-223, 2004 (Journal Indexed in SCI)
Turkish Small Satellite Program: Goals and policies
Askar M., Tekinalp O.
- ACTA ASTRONAUTICA, vol.46, pp.375-378, 2000 (Journal Indexed in SCI)
Free bending vibrations of adhesively bonded orthotropic plates with a single lap joint
Yuceoglu U., Toghi F., Tekinalp O.
- JOURNAL OF VIBRATION AND ACOUSTICS-TRANSACTIONS OF THE ASME, vol.118, pp.122-134, 1996 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

- **Oscillating Control Moment Gyroscope Mathematical Model Development, Verification and Results**
AKBULUT B., ARBERKLİ F., AZGIN K., TEKİNALP O.
International Symposium on Space Technology and Science, Fukui, Japan, 15 - 21 June 2019
- **INCORPORATING REAL LIFE DESIGN PROBLEMS INTO THE AEROSPACE CURRICULUM**
TEKİNALP O.
10TH ANKARA INTERNATIONAL AEROSPACE CONFERENCE, Ankara, Turkey, 18 - 20 September 2019
- **A MISSION ANALYSIS SOFTWARE FOR SMALL SATELLITES**
KOPRÜCÜ S. U. , ÖZÇELİK S. A. , ALTUNAY Ş., YAĞLIOĞLU B., TEKİNALP O.
10th ANKARA INTERNATIONAL AEROSPACE CONFERENCE, Ankara, Turkey, 18 - 20 September 2019
- **SCATTER AND SENSITIVITY ANALYSIS OF A PROJECTILE MODELED UNDER MAGNUS EFFECT**
MUHİDDİNOĞLU A., YAYLA K., TEKİNALP O.
10th ANKARA INTERNATIONAL AEROSPACE CONFERENCE, Ankara, Turkey, 18 - 20 September 2019
- **LATERAL-DIRECTIONAL CONTROL OF A HIGHLY MANEUVERABLE JET AIRCRAFT BASED ON COMBINATION OF MODAL AND OPTIMAL CONTROL THEORY**
MESCE V., TEKİNALP O.
10th ANKARA INTERNATIONAL AEROSPACE CONFERENCE, Ankara, Turkey, 18 - 20 September 2019
- **Long Term and Safe Relative Orbit Design for Heterogeneously Distributed Spacecraft Clusters**
YAĞLIOĞLU B., TEKİNALP O.
International Workshop on Satellite Constellations and Formation Flying, Glasgow, England, 16 - 19 July 2019
- **Slew Maneuver Control of Flexible Spacecraft**
ALTINIŞIK S., TEKİNALP O.
8TH EUROPEAN CONFERENCE FOR AERONAUTICS AND SPACE SCIENCES (EUCASS), Madrid, Spain, 1 - 04 July 2019
- **Passively Safe Relative Orbit Configurations over LongTime Intervals for Heterogeneously Distributed SpacecraftClusters**
YAĞLIOĞLU B., TEKİNALP O.

8TH EUROPEAN CONFERENCE FOR AERONAUTICS AND SPACE SCIENCES (EUCASS), Madrid, Spain, 1 - 04 July 2019

● **Control of a Quadrotor Formation Carrying a Slung Load Using Flexible Bars**

TEKİNALP O., ARIYIBI S.

● AIAA Aviation 2019 Forum, Dallas, Texas, United States Of America, 17 - 21 June 2019

● **Safe Spacecraft Rendezvous Using Dual Quaternions on Time-Dependent Trajectories Generated by Model Predictive Control**

TEKİNALP O., BÜYÜKKOÇAK A. T.

● AIAA Scitech 2019 Forum, San Diego, California, United States Of America, 7 - 11 January 2019

● **Oscillating Control Moment Gyroscope Experimental Results**

AKBULUT B., ARBERKLİ F., AZGIN K., TEKİNALP O.

● AIAA Scitech 2019 Forum, San Diego, California, United States Of America, 7 - 11 January 2019

● **SAFE SPACECRAFT RENDEZVOUS WITH CONSTRAINED MODEL PREDICTIVE CONTROL**

BÜYÜKKOÇAK A. T. , TEKİNALP O.

AAS/AIAA Astrodynamics Specialist Conference, Utah, United States Of America, 19 - 23 August 2018, vol.167, pp.883-895

● **A Multi-National Multi-Institutional Educaiton Framework: APSCO SSS-2B CubeSat Project**

Yaglioglu B., Atas O., Kahraman D., Kose S., TEKİNALP O., Suer M.

● 9th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 11 - 14 June 2019, pp.553-557

● **Solar Sail Application with a Proposed Low Earth Orbit Mission Concept**

Polat H. C. , TEKİNALP O.

● 9th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 11 - 14 June 2019, pp.285-291

● **TRACKING CONTROL OF SPACECRAFT ATTITUDE AND POSITION ON TIME DEPENDENT TRAJECTORIES USING DUAL QUATERNIONS**

BÜYÜKKOÇAK A. T. , TEKİNALP O.

● AAS/AIAA Astrodynamics Specialist Conference, Utah, United States Of America, 19 - 23 August 2018, vol.167, pp.1411-1422

● **Formation Flight Design near Sun-Earth Collinear Libration Points under the Effect of Disturbances**

Kutlu A., TEKİNALP O.

● 9th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 11 - 14 June 2019, pp.137-144

● **Orbit Estimation Strategy for Low Earth Orbit and Geostationary Satellites**

TEKİNALP O., KÖKER A.

● AIAA/American Astronautical Society, 2018 Astrodynamics Specialst Conference, Snowbird, Utah, United States Of America, 19 - 23 August 2018

● **A Hypothetical Mechanical Design for Vibrating Mass Control Moment Gyroscopes**

BURAK A., ARBERKLİ F., TEKİNALP O., AZGIN K.

● 2018 Space Flight Mechanics Meeting, Kissimmee, Florida, United States Of America, 8 - 12 January 2018

● **Modeling and Control of Quadrotor Formations Carrying a Slung Load**

ARIYIBI S., TEKİNALP O.

● 2018 AIAA Information Systems-AIAA Infotech @ Aerospace, Kissimmee, Florida, United States Of America, 8 - 12 January 2018

● **Nonlinear optimal adaptive transition control of a tolt-prop VTOL UAV**

Senipek M., YAYLA M., Gungor O., Cevher L., KUTAY A. T. , TEKİNALP O.

● 44th European Rotorcraft Forum 2018, ERF 2018, Delft, Netherlands, 18 - 21 September 2018, vol.2, pp.952-964

● **Constrained Model Predictive Control for Spacecraft Rendezvous**

BÜYÜKKOÇAK A. T. , ALTINIŞIK S., TEKİNALP O.

● 9th Ankara International Aerospace Conference, 20 - 22 September 2017

● **Angle Only Orbit Determination Using a Telescope System**

KÖKER A., TEKİNALP O.

9th Ankara International Aerospace Conference, 20 - 22 September 2017

● **Experimental Characterization and Validation of Vibrating Rotor Control Moment Gyroscope**

AKBULUT B., ARBERKLİ F., AZGIN K., TEKİNALP O.

AIAA SPACE and Astronautics Forum and Exposition, Orlando, FL, United States Of America, 12 - 14 September 2017

● **Effects of Rotor Geometry on the Performance of Vibrating Mass Control Moment Gyroscopes**

ARBERKLİ F., AKBULUT B., AZGIN K., TEKİNALP O.

AAS/AIAA Astrodynamics Specialist Conference, Columbia River George, Stevenson, WA, United States Of America, 20 - 24 August 2017

● **Experimental Investigation of Optimal Gap Distance between Rotors of a Quadrotor UAV**

KAYA D. D. , KUTAY A. T. , TEKİNALP O.

AIAA Aviation Forum 2017, Atmospheric Flight Mechanics Conference, 5 - 09 June 2017

● **ORBIT TRANSFER OF AN EARTH ORBITING SOLAR SAIL CUBESAT**

Atas O., TEKİNALP O.

27th AAS/AIAA Space Flight Mechanics Meeting, San-Antonio, Northern Mariana Islands, 5 - 09 February 2017, vol.160, pp.2201-2212

● **A SIMPLIFIED MODEL FOR VIBRATING MASS CONTROL MOMENT GYROSCOPE**

Akbulut B., Arberkli F., AZGIN K., TEKİNALP O.

27th AAS/AIAA Space Flight Mechanics Meeting, San-Antonio, Northern Mariana Islands, 5 - 09 February 2017, vol.160, pp.2961-2974

● **Main Rotor Downwash Effect on Separation Characteristics of External Stores**

Kapulu Ö., TEKİNALP O.

AIAA SciTech 2017, Atmospheric Flight Mechanics Conference, 9 - 13 January 2017

● **A Novel Flight Control Algorithm for Multicopters**

TEKİNALP O., Kumbasar S.

30th Congress of International Council of Aeronautical Sciences, 26 - 29 September 2016

● **Vibrating Mass Control Moment Gyroscope Dynamic Model Validation**

AKBULUT B., ARBERKLİ F., AZGIN K., TEKİNALP O.

AIAA/AAS Astrodynamics Specialist Conference, Long Beach, California, United States Of America, 13 - 16 September 2016

● **Propulsion System Selection and Modeling for a Quadrotor with Search and Rescue Mission**

KAYA D., KUTAY A. T. , KURTULUŞ D. F. , TEKİNALP O., ŞİMŞEK İ., SOYSAL S., HOSGİT G.

54th AIAA Aerospace Sciences Meeting, San Diego, United States Of America, 4 - 08 January 2016

● **Design and control of a micro UAV**

Kaya D., Büyükköçak A. T. , KUTAY A. T. , TEKİNALP O.

AIAA Atmospheric Flight Mechanics Conference, 2016, California, United States Of America, 4 - 08 January 2016

● **SOLAR SAIL SPACECRAFT BOOM VIBRATION DURING DEPLOYMENT AND DAMPING MECHANISMS**

Atas O., Demiral E., TEKİNALP O.

AAS/AIAA Astrodynamics Specialist Conference, Colorado, United States Of America, 11 - 13 August 2015, vol.156, pp.2189-2202

● **NONLINEAR TRACKING ATTITUDE CONTROL OF SPACECRAFT ON TIME DEPENDENT TRAJECTORIES**

TEKİNALP O., Gomroki M. M. , Atas O.

AAS/AIAA Astrodynamics Specialist Conference, Colorado, United States Of America, 11 - 13 August 2015, vol.156, pp.1585-1597

● **Two ASRE Approaches with Application to Spacecraft Coulomb Formations**

Gomroki M. M. , Topputo F., TEKİNALP O., Bernelli-Zazzera F.

AstroNet-II International Final Conference, Tossa de Mar, Spain, 15 - 19 June 2015, vol.44, pp.109-120

● **Vibrationally Excited Satellite Attitude Actuator: a Feasibility Study**

Akbulut B., TEKİNALP O., AZGIN K.

7th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 16 - 19 June

2015, pp.183-186

Fuzzy Logic Guidance of Formation Flight

Kumbasar S., TEKİNALP O.

International Conference on Unmanned Aircraft Systems (ICUAS), Colorado, United States Of America, 9 - 12 June 2015, pp.167-175

Modeling and Controller Design of a VTOL UAV

Onen A. S., Cevher L., Şenipek M., Mutlu T., Gungor O., Uzunlar I. O., Kurtulus D. F., Tekinalp O.

International Conference on Unmanned Aircraft Systems (ICUAS), Colorado, United States Of America, 9 - 12 June 2015, pp.329-337

ATTITUDE CONTROL OF AN EARTH ORBITING SOLAR SAIL SATELLITE TO PROGRESSIVELY CHANGE THE SELECTED ORBITAL ELEMENT

Atas O., TEKİNALP O.

25th American-Astronautical-Society (AAS)/American-Institute-of-Aeronautics-and-Astronautics (AIAA) Space Flight Mechanics Meeting, Virginia, United States Of America, 11 - 15 January 2015, vol.155, pp.3529-3546

STATE DEPENDENT RICCATI EQUATION CONTROL OF COLLINEAR SPINNING THREE-CRAFT COULOMB FORMATIONS

Gomroki M. M., TEKİNALP O.

25th American-Astronautical-Society/American Institute of Aeronautics and Astronautics Space Flight Mechanics Meeting, Virginia, United States Of America, 11 - 15 January 2015, vol.155, pp.643-657

ARCHITECTURES FOR VIBRATING MASS ATTITUDE CONTROL ACTUATORS

Akbulut B., TEKİNALP O.

25th American-Astronautical-Society/American Institute of Aeronautics and Astronautics Space Flight Mechanics Meeting, Virginia, United States Of America, 11 - 15 January 2015, vol.155, pp.3509-3528

Faux-Riccati Synthesis of Nonlinear Observer-Based Compensators for Discrete-Time Nonlinear Systems

Prach A., TEKİNALP O., Bernstein D. S.

53rd IEEE Annual Conference on Decision and Control (CDC), Los-Angeles, Chile, 15 - 17 December 2014, pp.854-859

A Numerical Comparison of Frozen-Time and Forward-Propagating Riccati Equations for Stabilization of Periodically Time-Varying Systems

Prach A., TEKİNALP O., Bernstein D. S.

American Control Conference, Oregon, United States Of America, 4 - 06 December 2014, pp.5633-5638

Response Surface Based Performance Analysis of an Air-Defense Missile System

Gunaydin K., Cimen T., TEKİNALP O.

IEEE Aerospace Conference, Montana, United States Of America, 1 - 08 March 2014

DYNAMIC STABILITY FLIGHT TESTS OF REMOTE SENSING MEASUREMENT CAPABLE AMPHIBIOUS UNMANNED AERIAL VEHICLE (A-UAV)

Yayla M., Sarsılmaz S. B., Mutlu T., Coşgun V., Kurtuluş B., Kurtuluş D. F., Tekinalp O.

7. ANKARA INTERNATIONAL AEROSPACE CONFERENCE, Ankara, Turkey, 11 - 13 September 2013

Attitude Control of Satellites with De-Orbiting Solar Sails

TEKİNALP O., Atas O.

6th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 12 - 14 June 2013, pp.347-351

COMBINED USE OF CONTROL MOMENT GYROS AND MAGNETIC TORQUE RODS FOR SATELLITE ATTITUDE CONTROL

Elmas T. C., TEKİNALP O.

ASME Dynamic Systems and Control Conference, Cambridge, Canada, 12 - 15 September 2010, pp.189-196

POINTING PERFORMANCE CONTROL OF A SPACECRAFT CAMERA USING PIEZOELECTRIC ACTUATORS

Kayastha S., TEKİNALP O., Ozgoren K.

20th AAS/AIAA Spaceflight Mechanics Meeting, California, United States Of America, 14 - 18 February 2010, vol.136, pp.661-663

● **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, United States Of America, 14 - 18 February 2010, vol.136, pp.2477-2478

● **Simulation and Flight Control of a Tilt Duct UAV**

TEKİNALP O., ÜNLÜ T., YAVRUCUK İ.

Modeling and Simulation Technologies Conference, Chicago, United States Of America, 10 - 12 August 2009

● **Gimbal Angle Restricted Control Moment Gyroscope Clusters**

TEKİNALP O., Elmas T., YAVRUCUK İ.

4th International Conference on Recent Advances in Space Technologies, İstanbul, Turkey, 11 - 13 June 2009, pp.585-590

● **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 February 2009, vol.134, pp.1029-1030

● **KALMAN FILTER BASED MULTIMODE ATTITUDE DETERMINATION ALGORITHMS FOR A LEO SATELLITE**

Kutlu A., TEKİNALP O.

AAS/AIAA 19th Space Flight Mechanics Meeting, Savannakhet, Laos, 8 - 12 February 2009, vol.134, pp.1551-1566

● **SATELLITE ATTITUDE CONTROL USING DISSIMILAR REDUNDANT ACTUATORS**

Kahraman O., TEKİNALP O.

AAS/AIAA 19th Space Flight Mechanics Meeting, Savannakhet, Laos, 8 - 12 February 2009, vol.134, pp.2303-2315

● **Attitude determination and rotational motion parameters identification of a LEO satellite through magnetometer and sun sensor data**

Kutlu A., Hacıyev C., TEKİNALP O.

3rd International Conference on Recent Advances in Space Technologies, İstanbul, Turkey, 14 - 16 June 2007, pp.458-459

● **Spacecraft energy storage and attitude control**

Altay A., Tekinalp O.

2nd International Conference on Recent Advances in Space Technologies, İstanbul, Turkey, 9 - 11 June 2005, pp.201-206

● **Trajectory optimization of advanced launch system**

Karsli G., Tekinalp O.

2nd International Conference on Recent Advances in Space Technologies, İstanbul, Turkey, 9 - 11 June 2005, pp.374-378

● **NEURAL NETWORK BASED ORBIT PREDICTION FOR A GEOSTATIONARY SATELLITE**

KUTAY A. T. , Yurdanur T., Tulunay E., TEKİNALP O.

Automatic Systems for Building the Infrastructure in Developing Countries 2001. Knowledge and Technology Transfer, Ohrid, Macedonia, 21 - 23 May 2001, pp.3-14

● **Minimum fuel station keeping maneuver strategy for Turksat geostationary satellites**

Erdal T., Tekinalp O., Tulunay Y.

3rd International Symposium on Reducing the Cost of Spacecraft Ground Systems and Operations, Tainan, Taiwan, 22 - 24 March 1999, vol.3, pp.33-40

● **An attitude control system design based on the TURKSAT-1B geostationary satellite**

Tekinalp O., Uslu O., Tulunay Y.

COSPAR Colloquium on Microsatellites as Research Tools, Tainan, Taiwan, 14 - 17 December 1997, vol.10, pp.143-151

● **Interacting fuzzy multimodel intelligent tracking system for swift target manoeuvres**

Gokkus L., Erkmén A., Tekinalp O.

1997 IEEE/RSJ International Conference on Intelligent Robot and Systems - Innovative Robotics for Real-World Applications (IROS 97), Grenoble, France, 7 - 11 September 1997, pp.766-771

● **Tracking a swift target using the interacting fuzzy multi-model algorithm**

Gokkus L., Erkmen A., Tekinalp O.

1997 IEEE International Symposium on Intelligent Control, İstanbul, Turkey, 16 - 18 July 1997, pp.331-336

NATURAL VIBRATION CHARACTERISTICS OF ROTATING, COMPOSITE MULTI-LAYER BEAMS AND BLADES

TEKINALP O., YUCEOGLU U., YAVUZ A.

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