

Prof. MUAMMER KALYON

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AHB-3811-2022

ScopusID: 56631350000

Yoksis Researcher ID: 133058

Education

Doctorate, The University of Michigan, United States Of America 1989 - 1993

Undergraduate, Istanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi, Uçak Mühendisliği Bölümü, Turkey 1981 - 1985

Dissertations

Doctorate, Continuous Proximate Time Optimal Control Of Servomechanisms, The University of Michigan, 1993

Academic Positions

Professor, Istanbul Commerce University, Mühendislik Ve Tasarım Fakültesi, Mekatronik Mühendisliği Bölümü, 2012 - Continues

Professor, Gebze Yüksek Teknoloji Enstitüsü, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2005 - 2012

Associate Professor, Istanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi, Uçak Mühendisliği Bölümü, 1995 - 1999

Assistant Professor, Istanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi, Uçak Mühendisliği Bölümü, 1993 - 1995

Academic and Administrative Experience

Istanbul Commerce University, 2014 - 2016

Istanbul Commerce University, 2012 - 2014

Gebze Yüksek Teknoloji Enstitüsü, 2010 - 2012

Gebze Yüksek Teknoloji Enstitüsü, 2005 - 2012

Istanbul Technical University, 1997 - 1999

Courses

Doctorate

Linear Systems, Doctorate, 2015 - 2016

İLERİ MATEMATİK, Doctorate, 2013 - 2014

Postgraduate

Advanced Engineering Mathematics, Postgraduate, 2018 - 2019

Advanced Mathematics, Postgraduate, 2017 - 2018, 2015 - 2016

Non-Linear Control, Postgraduate, 2017 - 2018, 2016 - 2017

Linear Systems, Postgraduate, 2017 - 2018

Doktora Tezi, Postgraduate, 2016 - 2017, 2015 - 2016

İLERİ MATEMATİK, Postgraduate, 2013 - 2014

Undergraduate

Modeling And Simulation, Undergraduate, 2021 - 2022, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

Engineering Mathematics II, Undergraduate, 2021 - 2022, 2014 - 2015, 2013 - 2014

Control Theory II, Undergraduate, 2021 - 2022

Control Theory I, Undergraduate, 2021 - 2022

Control System Design, Undergraduate, 2021 - 2022, 2017 - 2018, 2016 - 2017

Engineering Mathematics I, Undergraduate, 2021 - 2022, 2015 - 2016, 2014 - 2015, 2013 - 2014

Introduction to Mechatronics Engineering, Undergraduate, 2021 - 2022, 2018 - 2019

Design Project, Undergraduate, 2018 - 2019, 2017 - 2018

Graduation Project, Undergraduate, 2017 - 2018

Dynamics, Undergraduate, 2017 - 2018, 2016 - 2017, 2014 - 2015, 2013 - 2014

Machine Dynamics And Vibrations, Undergraduate, 2017 - 2018

Mühendislik Matematiği 2, Undergraduate, 2015 - 2016

CONTROL THEORY, Undergraduate, 2015 - 2016

Mühendislik Matematiği II, Undergraduate, 2014 - 2015

SİSTEM BENZETİMİ, Undergraduate, 2013 - 2014, 2012 - 2013

SİSTEM DİNAMİĞİ, Undergraduate, 2013 - 2014, 2012 - 2013

SİSTEM ANALİZİ VE TASARIMI, Undergraduate, 2012 - 2013

SİSTEM BENZETİMİ, Undergraduate, 2011 - 2012, 2010 - 2011

SİSTEM ANALİZİ VE TASARIMI, Undergraduate, 2011 - 2012, 2010 - 2011

SİSTEM DİNAMİĞİ, Undergraduate, 2011 - 2012

SİSTEM ANALİZİ VE SİMÜLASYON, Undergraduate, 2010 - 2011

Supervised Theses

MUAMMER K., System identification and estimation of dominant parameters of aircraft linear dynamical model via recursive least square method, Postgraduate, M.ŞAHİN(Student), 2021

MUAMMER K., Altitude-hold flight controller design of supersonic aircraft for longitudinal motion, Postgraduate, A.HULUSİ(Student), 2021

MUAMMER K., Nonlinear control of power coefficient in wind turbines, Postgraduate, A.KHAMA(Student), 2019

MUAMMER K., Bir rüzgar türbininin modellenmesi, simülasyonu ve kontrolü, Postgraduate, İ.İRFAN(Student), 2006

MUAMMER K., Elektrikle tahrik edilen tek serbestlik dereceli dinamik bir sistemin kontrol sistemi tasarımı ve simülasyonu, Postgraduate, H.ŞAHİN(Student), 1999

MUAMMER K., Bilgisayar destekli tasarım ve veri tabanı yönetim sistemi entegrasyonu ile bilgi sistemlerinin oluşturulması, analizi ve işletilmesi, Postgraduate, M.MERT(Student), 1998

MUAMMER K., İki kişilik hafif askeri eğitim uçağı flap dizaynı, Postgraduate, M.KORKMAZ(Student), 1996

Journal articles indexed in SCI, SSCI, and AHCI

- I. **Stability analysis of rotating blade vibration due to torsional excitation**
Al-Nassar Y., KALYON M., Pakdemirli M., Al-Bedoor B.
JVC/Journal of Vibration and Control, vol.13, no.9-10, pp.1379-1391, 2007 (SCI-Expanded)
- II. **Analytical solution for multilayer assembly including heating and cooling cycles with laser pulse parameter variation**
Yilbas B., KALYON M.
Optics and Lasers in Engineering, vol.44, no.11, pp.1219-1234, 2006 (SCI-Expanded)
- III. **An approach for analytical solution pertinent to lattice temperature variation due to laser short-pulse heating**
KALYON M., Yilbas B.
Heat and Mass Transfer/Waerme- und Stoffuebertragung, vol.42, no.12, pp.1111-1117, 2006 (SCI-Expanded)
- IV. **Repetitive laser pulse heating analysis: Pulse parameter variation effects on closed form solution**
KALYON M., Yilbas B.
Applied Surface Science, vol.252, no.6, pp.2242-2250, 2006 (SCI-Expanded)
- V. **Maintaining uniform surface temperature along pipes by insulation**
Şahin A. Z., KALYON M.
Energy, vol.30, no.5, pp.637-647, 2005 (SCI-Expanded)
- VI. **Formulation of laser pulse heating: A closed form solution including heating and cooling cycles with pulse parameter variation**
Yilbas B., KALYON M.
Lasers in Engineering, vol.14, no.3-4, pp.213-228, 2004 (SCI-Expanded)
- VII. **Laser induced thermal stresses in solids: Exponentially time decaying pulse case**
Yilbas B., Al-Aqeeli N., KALYON M.
Lasers in Engineering, vol.14, no.1, pp.81-101, 2004 (SCI-Expanded)
- VIII. **The critical radius of insulation in thermal radiation environment**
Şahin A. Z., KALYON M.
Heat and Mass Transfer/Waerme- und Stoffuebertragung, vol.40, no.5, pp.377-382, 2004 (SCI-Expanded)
- IX. **Thermoeconomic optimization of vapor-compression refrigeration systems**
Al-Otaibi D., Dincer I., KALYON M.
International Communications in Heat and Mass Transfer, vol.31, no.1, pp.95-107, 2004 (SCI-Expanded)
- X. **Parametric variation of the maximum surface temperature during laser heating with convective boundary conditions**
Yilbas B., KALYON M.
Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, vol.216, no.6, pp.691-699, 2002 (SCI-Expanded)
- XI. **Application of optimal control theory in pipe insulation**
KALYON M., Şahin A. Z.
Numerical Heat Transfer; Part A: Applications, vol.41, no.4, pp.391-402, 2002 (SCI-Expanded)
- XII. **Design of continuous time controllers having almost minimum time response**
KALYON M.
Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, vol.124, no.2, pp.252-260, 2002 (SCI-Expanded)
- XIII. **Parametric variation analysis on time corresponding to initiation and ending of evaporation during laser heating**
Yilbas B., KALYON M., Shuja S.
International Communications in Heat and Mass Transfer, vol.29, no.2, pp.243-254, 2002 (SCI-Expanded)
- XIV. **Formulation of surface temperature for laser evaporative pulse heating: The time exponentially decaying pulse case**
Yilbas B., KALYON M.
Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, vol.216,

no.3, pp.289-299, 2002 (SCI-Expanded)

- XV. **Closed form solution for exponentially decaying laser pulse heating: Evaporation at the surface**
KALYON M., Yilbas B.
Japanese Journal of Applied Physics, Part 1: Regular Papers and Short Notes and Review Papers, vol.41, no.6 A, pp.3737-3746, 2002 (SCI-Expanded)
- XVI. **Analytical solution for thermal stresses during the laser pulse heating process**
KALYON M., Yilbas B.
Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, vol.215, no.12, pp.1429-1445, 2001 (SCI-Expanded)
- XVII. **Analytical solution for laser evaporative heating process: Time exponentially decaying pulse case**
KALYON M., Yilbas B.
Journal of Physics D: Applied Physics, vol.34, no.22, pp.3303-3311, 2001 (SCI-Expanded)
- XVIII. **Laser shortpulse heating: Determination of lagging time due to difference pulse parameters**
Yilbas B., Hyder S., KALYON M.
International Communications in Heat and Mass Transfer, vol.28, no.6, pp.815-822, 2001 (SCI-Expanded)
- XIX. **Continuous proximate time-optimal control of an aerodynamically unstable rocket**
KALYON M.
Journal of Guidance, Control, and Dynamics, vol.20, no.5, pp.1049-1052, 1997 (SCI-Expanded)

Articles Published in Other Journals

- I. **ESTIMATING DOMINANT PARAMETERS OF AIRCRAFT LINEAR DYNAMICAL MODEL VIA LEAST SQUARE METHOD**
ŞAHİN M., KALYON M.
İstanbul Ticaret Üniversitesi Fen Bilimleri Dergisi, vol.20, no.39, pp.35-56, 2021 (Peer-Reviewed Journal)
- II. **ALTITUDE-HOLD FLIGHT CONTROL SYSTEM DESIGN FOR LONGITUDINAL MOTION**
ÖZ A. H., KALYON M.
İstanbul Ticaret Üniversitesi Fen Bilimleri Dergisi, vol.20, no.39, pp.19-34, 2021 (Peer-Reviewed Journal)
- III. **NONLINEAR CONTROL OF POWER COEFFICIENTS IN WIND TURBINES**
KALYON M., Khama BADJIE A.
İstanbul Ticaret Üniversitesi Teknoloji ve Uygulamalı Bilimler Dergisi, vol.1, no.2, pp.1-15, 2019 (Peer-Reviewed Journal)

Papers Presented at Peer-Reviewed Scientific Conferences

- I. **Design of relay and variable structure observers for multi-input multi-output systems with time-lag**
Jafarov E. M., KALYON M.
Proceedings of the 1997 IEEE International Symposium on Intelligent Control, İstanbul, Turkey, 16 - 18 July 1997, pp.355-360, (Full Text)