

Prof. Fuat ALARÇIN

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAZ-8993-2020

ScopusID: 16678519700

Yoksis Researcher ID: 174426

Education Information

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Turkey 1999 - 2005

Doctorate, Yildiz Technical University, Turkey 1999 - 2004

Undergraduate, Yildiz Technical University, Faculty Of Mechanical Engineering, Turkey 1992 - 1996

Dissertations

Doctorate, Gemi hareketlerinin dinamik analizi ve adaptif yaklaşımlarla kontrolü, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, 2005

Postgraduate, Dört tekeri tahrikli bir aracın aktif ve pasif süspansiyon sisteminin dinamik incelenmesi ve performanslarının karşılaştırılması, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, 1999

Academic Titles / Tasks

Professor, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 1998 - Continues

Academic and Administrative Experience

Fakülte Kurulu Üyesi, Yildiz Technical University, Naval Architecture And Maritime Faculty, 2020 - Continues

Fakülte Yönetim Kurulu Üyesi, Yildiz Technical University, Naval Architecture And Maritime Faculty, 2020 - Continues

Head of Department, Yildiz Technical University, Naval Architecture And Maritime Faculty, 2020 - 2023

Head of Department, Yildiz Technical University, Naval Architecture And Maritime Faculty, 2018 - 2021

Head of Department, Yildiz Technical University, Naval Architecture And Maritime Faculty, 2015 - 2018

Deputy Head of Department, Yildiz Technical University, Naval Architecture And Maritime Faculty, 2009 - 2012

Courses

Gemi Otomasyonu, Undergraduate, 2020 - 2021

Gemi Makineleri Operasyon ve Bakım, Undergraduate, 2020 - 2021

Advising Theses

- Alarçin F., Bir gemiye ait pervane-şaft burulma titreşimlerinin incelenmesi, Postgraduate, A.SARI(Student), 2019
- Alarçin F., Gemi kaynaklı emisyonların farklı yöntemlerle incelenmesi, Doctorate, K.ÜNLÜGENÇOĞLU(Student), 2018
- Alarçin F., Doğrusal matris eşitsizliklerine dayalı optimal kontrol yöntemleriyle yalpa hareketinin denetlenmesi, Doctorate, H.DEMİREL(Student), 2017
- Alarçin F., Gemi ana makine ve sevk sistemlerinin titreşim analizi, Postgraduate, F.Cüneyd(Student), 2016
- Alarçin F., Şaft layn hesaplamalarının sonlu elemanlar yöntemi ile incelenmesi, Postgraduate, H.Kayhan(Student), 2016
- Alarçin F., Tersanelerde gemi onarımı/tadilatı ve hurdaya ayırma işlemleri sırasında ortaya çıkan atık ürünlerin geri dönüşüm ve yeniden kullanım alternatiflerinin değerlendirilmesi, Postgraduate, M.KÜLTÜR(Student), 2016
- Alarçin F., Ekinci S., Makinelerde burulma titreşimlerinin bilgisayar destekli analizi, Postgraduate, O.KAHRAMAN(Student), 2016
- Alarçin F., Süreksiz sınır şartları etkisindeki katmanlı kompozit kabukların yüksek mertebeli kayma deformasyon teorisi ile analizi, Doctorate, V.ALANKAYA(Student), 2016
- Alarçin F., Gemi ana makinesi yardımcı sistemlerine yönelik simülasyon algoritmasının geliştirilmesi ve uygulanması, Postgraduate, K.ÜNLÜGENÇOĞLU(Student), 2016
- Alarçin F., Bir balıkçı teknisinin yalpa hareketinin dinamik analizi ve kontrolü, Postgraduate, H.DEMİREL(Student), 2016
- Alarçin F., Gemi donatımında detay dizayn ve modelleme, Postgraduate, G.GONCA(Student), 2016
- Alarçin F., Konteyner gemisine ait elektrohidrolik dümen sisteminin konum kontrolü, Postgraduate, F.ŞENLİTÜRK(Student), 2016
- Alarçin F., Pervane şaft titreşim analizi, Postgraduate, O.ÖZGEN(Student), 2016
- Alarçin F., Gemilerin Ana Tahrik Sistemi Seçiminde Maliyet Etkisinin İncelenmesi, Postgraduate, S.GÜMÜŞTEKİN(Student), 2015
- Alarçin F., Bir balıkçı teknisinin yalpa hareketinin dinamik analizi ve kontrolü, Postgraduate, H.DEMİREL(Student), 2013
- Alarçin F., Yılmaz H., Gemi ana makinesi yardımcı sistemlerine yönelik simülasyon algoritmasının geliştirilmesi ve uygulanması, Postgraduate, K.ÜNLÜGENÇOĞLU(Student), 2012

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **The assessment of air quality in the Port of Ambarli and several districts of Istanbul**
ÜNLÜGENÇOĞLU K., ALARÇİN F.
INTERNATIONAL JOURNAL OF GLOBAL WARMING, vol.20, no.1, pp.80-91, 2020 (SCI-Expanded)
- II. **An interval type-2 fuzzy QUALIFLEX approach to measure performance effectiveness of ballast water treatment (BWT) system on-board ship**
Demirel H., Akyüz E., Celik E., Alarçin F.
Ships and Offshore Structures, vol.14, pp.675-683, 2019 (SCI-Expanded)
- III. **Estimation of shipping emissions via novel developed data collecting and calculation software: a case study for the Region of Ambarli Port**
ÜNLÜGENÇOĞLU K., KÖKKÜLÜNK G., ALARÇİN F.
INTERNATIONAL JOURNAL OF GLOBAL WARMING, vol.19, no.3, pp.293-307, 2019 (SCI-Expanded)
- IV. **A fuzzy AHP and electre method for selecting stabilizing device in ship industry**
Demirel H., Balın A., Çelik E., Alarçin F.
Brodogradnja, vol.69, pp.61-77, 2018 (SCI-Expanded)
- V. **A fuzzy dematel model proposal for the cause and effect of the fault occurring in the auxiliary systems of the ships' main engine**
Balın A., Demirel H., Celik E., Alarçin F.
Transactions of the Royal Institution of Naval Architects Part A: International Journal of Maritime Engineering, vol.160, pp.141-153, 2018 (SCI-Expanded)
- VI. **Backstepping control of nonlinear roll motion for a trawler with fin stabilizer**
Demirel H., Doğrul A., Sezen S., Alarçin F.

Transactions of the Royal Institution of Naval Architects Part A: International Journal of Maritime Engineering, vol.159, pp.205-212, 2017 (SCI-Expanded)

- VII. **AN EVALUATION APPROACH FOR ELIMINATING THE FAILURE EFFECT IN GAS TURBINE USING FUZZY MULTIPLE CRITERIA**
Balın A., Demirel H., ALARÇIN F.
INTERNATIONAL JOURNAL OF MARITIME ENGINEERING, vol.158, 2016 (SCI-Expanded)
- VIII. **A novel hybrid MCDM model based on fuzzy AHP and fuzzy TOPSIS for the most affected gas turbine component selection by the failures**
Balın A., Demirel H., ALARÇIN F.
JOURNAL OF MARINE ENGINEERING AND TECHNOLOGY, vol.15, no.2, pp.69-78, 2016 (SCI-Expanded)
- IX. **Lmi Based H2 and H State Feedback Controller Design for Fin Stabilizer of Nonlinear Roll Motion of a Fishing Boat**
DEMİREL H., ALARÇIN F.
Brodogradnja, 2016 (SCI-Expanded)
- X. **Using Sandwich Composite Shells for Fully Pressurized Tanks on Liquefied Petroleum Gas Carriers**
ALANKAYA V., ALARÇIN F.
Strojnicki Vestnik-Journal Of Mechanical Engineering, vol.62, no.1, pp.32-40, 2015 (SCI-Expanded)
- XI. **APPLICATION OF FUZZY ANALYTIC HIERARCHY PROSES FOR ERROR DETECTION OF AUXILARY SYSTEMS OF SHIP MAIN DIESEL ENGINES**
Demirel H., Ünlügençoğlu K., Alarçin F., Balın A.
INTERNATIONAL JOURNAL OF MARITIME ENGINEERING, vol.157, pp.105-111, 2015 (SCI-Expanded)
- XII. **A Hierarchical Structure for Ship Diesel Engine Trouble Shooting Problem Using Fuzzy AHP and Fuzzy VIKOR Hybrid Methods**
BALIN A., DEMİREL H., ALARÇIN F.
Brodogradnja, 2015 (SCI-Expanded)
- XIII. **Nonlinear modelling of a fishing boat and Fuzzy Logic Control design for electro-hydraulic fin stabilizer system**
ALARÇIN F.
NONLINEAR DYNAMICS, vol.76, no.1, pp.581-590, 2014 (SCI-Expanded)
- XIV. **CONTROL OF A SHIP SHAFT TORSIONAL VIBRATION VIA MODIFIED PID CONTROLLER**
KORKMAZ F. C., Su M. E., ALARÇIN F.
BRODOGRADNJA, vol.65, no.1, pp.17-27, 2014 (SCI-Expanded)
- XV. **Modified pid control design for roll fin actuator of nonlinear modelling of the fishing boat**
Alarçin F., Demirel H., Su M. E., Yurtseven A.
POLISH MARITIME RESEARCH, vol.21, pp.3-8, 2014 (SCI-Expanded)
- XVI. **Conventional PID and Modified PID Controller Design for Roll Fin Electro-Hydraulic Actuator**
ALARÇIN F., Demirel H., Su M., Yurtseven A.
ACTA POLYTECHNICA HUNGARICA, vol.11, no.3, pp.233-248, 2014 (SCI-Expanded)
- XVII. **Fuzzy AHP and Fuzzy TOPSIS integrated hybrid method for auxiliary systems of ship main engines**
Alarçin F., Balın A., Demirel H.
JOURNAL OF MARINE ENGINEERING AND TECHNOLOGY, vol.13, pp.3-11, 2014 (SCI-Expanded)
- XVIII. **Rudder roll stabilization for fishing vessel using neural network approach**
ALARÇIN F., Gulez K.
OCEAN ENGINEERING, vol.34, no.13, pp.1811-1817, 2007 (SCI-Expanded)
- XIX. **Controllable pitch propeller control with fast backpropagation algorithm**
ALARÇIN F., Ekinci S., Gulez K.
MARINE TECHNOLOGY AND SNAME NEWS, vol.44, no.3, pp.180-184, 2007 (SCI-Expanded)
- XX. **Internal model control using neural network for ship roll stabilization**
ALARÇIN F.
JOURNAL OF MARINE SCIENCE AND TECHNOLOGY-TAIWAN, vol.15, no.2, pp.141-147, 2007 (SCI-Expanded)

Articles Published in Other Journals

- I. **SHIPPING EMISSION DISPERSIONS ON THE PORT OF AMBARLI VIA CFD MODELLING**
Ünlügençoğlu K., Yurtseven A., Alarçin F.
JOURNAL OF THERMAL ENGINEERING, vol.6, pp.1-14, 2020 (ESCI)
- II. **Controller Design for Roll Motion of a Planing Hull From a Safe Transportation Perspective**
DEMİREL H., ALARÇİN F.
Journal of Transportation and Logistics, vol.5, no.1, pp.1-11, 2020 (Peer-Reviewed Journal)
- III. **MODELING, SIMULATION AND ANALYSIS OF A NONLINEAR HALF MODEL SHIP MAIN ENGINE SYSTEM USING BOND GRAPH MODELING APPROACH**
Demirel H., Ünlügençoğlu K., Su M. E., Elçiçek H., Alarçin F.
International Journal of Advances in Science Engineering and Technology, vol.4, no.2, pp.76-80, 2016 (Peer-Reviewed Journal)
- IV. **Development and Application of Simulator Algorithm in Accordance With Ship Main Engine Auxiliary Systems**
ÜNLÜGENÇOĞLU K., Alarçin F.
Journal of Maritime Transport and Engineering, vol.2, no.1, pp.61-73, 2013 (Peer-Reviewed Journal)
- V. **VIBRATION ANALYSIS OF SHIP MAIN ENGINE AND SHAFT SYSTEM**
Alarçin F., Korkmaz F. C.
Sigma Journal of Engineering and Natural Sciences, vol.3, pp.310-319, 2012 (ESCI)
- VI. **Gemi Ana Makine ve Şaft Sisteminin Titreşim Analizi**
ALARÇİN F.
Sigma Mühendislik ve Fen Bilimleri Dergisi, pp.310-319, 2012 (Peer-Reviewed Journal)
- VII. **A Brief Survey On The Deflection Effects Of Composite Characteristics**
ALARÇİN F.
Journal of Naval Science and Engineering, 2011 (Peer-Reviewed Journal)
- VIII. **Definition of Dimension Limitations for Composite Bulkhead Applications At Yachts By Higher Order Shear Deformation Theory**
ALARÇİN F.
Sigma Mühendislik ve Fen Bilimleri dergisi, pp.316-328, 2011 (Peer-Reviewed Journal)
- IX. **Definition of Dimension Limitations for Composite Bulwark Applications at Yachts by Higher Order Shear Deformation Theory**
ALANKAYA V., ALARÇİN F.
Sigma Journal of Engineering and Natural Sciences, vol.29, no.3, pp.316-328, 2011 (ESCI)
- X. **Fuzzy and Internal Model Control of an Active Suspension System for a 2 DOF Vehicle Model**
DEMİR Ö., ALARÇİN F.
NUMERICAL ANALYSIS AND APPLIED MATHEMATICS: International Conference of Numerical Analysis and Applied Mathematics, vol.936, no.1, pp.151-154, 2007 (Peer-Reviewed Journal)
- XI. **Comparison of Adaptive and Optimal Autopilot Systems for a Containership**
ALARÇİN F.
Journal of Naval Science and Engineering, vol.3, pp.71-82, 2005 (Non Peer-Reviewed Journal)
- XII. **Fuzzy Logic Control of Ship Course Keeping Autopilot**
ALARÇİN F.
Journal of Naval Science and Engineering, vol.3, no.1, pp.71-80, 2005 (Peer-Reviewed Journal)
- XIII. **MRAC PD ile Gemi Rota Kontrolü**
ALARÇİN F.
Sigma Mühendislik ve Fen Bilimleri Dergisi, vol.1, pp.38-46, 2004 (Peer-Reviewed Journal)
- XIV. **Yalpa Hareketinin Kanat Sistemi Kullanılarak Otomatik Kontrolü**
ALARÇİN F.
Gemi ve Deniz Teknolojisi, no.159, pp.21-29, 2003 (Peer-Reviewed Journal)
- XV. **Farklı Aks Modellerinin Taşıt Titreşimlerine Etkisi**

ALARÇIN F.

Yıldız Teknik Üniversitesi Dergisi, no.2, pp.58-69, 2001 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **AMBARLI LİMANI HAVA KALİTESİNİN AVRUPA VE TÜRKİYE SINIRDEĞERLERİ AÇISINDAN DEĞERLENDİRİLMESİ**
ÜNLÜGENÇOĞLU K., KÖKKÜLÜNK G., ALARÇIN F.
TRANSİST İstanbul Ulaşım Kongresi, 8 - 10 November 2018
- II. **MODELING, SIMULATION AND ANALYSIS OF A NONLINEAR HALF MODEL SHIP MAIN ENGINE SYSTEM USING BOND GRAPH MODELING APPROACH**
DEMİREL H., ÜNLÜGENÇOĞLU K., ELÇİÇEK H., Su M. E., ALARÇIN F.
61st The IIER International Conference, Osaka, Japan, 16 February 2016, pp.30-34
- III. **Modelling and Simulation of Main Engine Vibration using Bond Graph**
SU M. E., Elçiçek H., Alarçin F.
7th International Advanced Technologies Symposium, 01 November 2013, pp.39-42
- IV. **Effects of Controller on System Characteristics and an Application on Ship Propulsion System**
SU M. E., KORKMAZ F. C., ALARÇIN F.
International Science and Technology Conference, 01 December 2012
- V. **Determination of Appropriate Torsional Vibration Dampers For a Ship Propulsion Plant**
ALARÇIN F.
14th International Conference Maritime Transport and Infrastructure, 01 October 2012
- VI. **PID Control Of A Ship Shaft Torsional Vibration**
ALARÇIN F.
International Conference on Advances and Challengers in Marine Noise and Vibration, 01 September 2012
- VII. **Inspection on Structural Effect of Geometry in Composite Sonar Domes by High Order Shear Deformation Theory**
ALANKAYA V., ALARÇIN F.
INT-NAM 2011, İstanbul, Turkey, 24 October 2011, pp.625-632
- VIII. **Failure Inspection of Composite Plates on High Speed Composite Crafts Caused by Water Impact**
ALANKAYA V., ŞENYILMAZ H., ALARÇIN F.
INT-NAM 2011, İstanbul, Turkey, 24 October 2011, pp.645-652
- IX. **Neural Networks Based Analysis of Ship Roll Stabilization**
Alarçin F., ÇELEBİ U. B., Ünsalan D.
3rd International Conference on Maritime and Naval Science and Engineering (MN'10), Constanta, Romania, 03 September 2010, pp.217-220
- X. **The Risk of Occupational Safety and Health in Shipbuilding Industry in Turkey**
ÇELEBİ U. B., EKİNCİ S., ALARÇIN F., Unsalan D.
3rd International Conference on Maritime and Naval Science and Engineering, Constanta, Romania, 3 - 05 September 2010, pp.178-180
- XI. **Ship Autopilot Control for Tanker using Fuzzy Logic Algoritihm**
ALARÇIN F.
Tehnonav 2008, 01 December 2008
- XII. **Ship Autopilot control for Tanker using Fuzzy Logic Algorithm**
Unsalan K. I., ALARÇIN F.
TEHNONAV 2008, Constanta, Romania, 22 May 2008
- XIII. **Fuzzy and Internal Model Control of an Active Suspension System for a 2-DOF Vehicle Model**
ALARÇIN F.
International Conference of Numerical Analysis and Applied Mathematics, 01 December 2007
- XIV. **Application of Genetic Algorithms on Ship Control Systems**

- ALARÇIN F.
TMT 2006, 01 December 2006
- XV. **Fuzzy and Classical Control of Swath Ship Stabilization System**
ALARÇIN F.
Technonav 2006, 01 December 2006
- XVI. **Fuzzy Logic and Model Reference Control of Ship Roll Stabilization Using Fin Actuator**
ALARÇIN F.
International Maritime Association of the Mediterranean 2005, 01 December 2006
- XVII. **A control system for diving of an underwater vehicle**
Altunsaray E., ŞENER B., ALARÇIN F.
Small Craft, İzmir, Turkey, 16 November 2006, pp.131-137
- XVIII. **A Control System for Diving of a Underwater Vehicle**
ALTUNSARAY E., ALARÇIN F., ŞENER B.
An International Conference on Small Craft Related Sciences&Engineering, Muğla, Turkey, 16 - 18 November 2006
- XIX. **Control of SWATH ship heave and pitch motions**
Alarçin F., Türkmen S.
An International Conference on Small Craft Related Sciences&Technology, Muğla, Turkey, 16 November 2006, pp.123-130
- XX. **Robust Control For Roll Motion Of A Mega Yacht**
ALARÇIN F., YILMAZ H.
Small Craft An International Conference on Small Craft Related Sciences & Technology, Muğla, Turkey, 16 November 2006, pp.180-185
- XXI. **Application of Genetic Algorithms on Ship Control Systems 10th International Research Expert Conference**
BOLAT B., ALARÇIN F.
10th International Research/Expert Conference, Trends in the Development of Machinery and Associated Technology, 11 - 15 October 2006
- XXII. **Control application for controllable pitch propeller**
EKİNCİ S., ALARÇIN F.
The 5th International Scientific Conference on Naval Technologies (TEHNONAV 2006), Constanta, Romania, 19 May 2006, pp.93-96
- XXIII. **Konteyner Gemi Rota Dengesinin Yapay Sinir Ağları Tarafından Denetimi**
ALARÇIN F.
Bilimde Modern Yöntemler Sempozyumu, 01 December 2005
- XXIV. **A Containership Maneuvering Control**
ALARÇIN F.
4th International Advanced Technologies Symposium, 01 December 2005
- XXV. **Model Reference Adaptive Control of Vehicle Suspensions Dynamics**
ALARÇIN F.
International Advanced Technologies Symposium, 01 December 2005
- XXVI. **Automatic Steering for Underwater Vehicle using Fuzzy Logic Control**
ALARÇIN F.
First Conference on Marine Technology in Memoriam of the Academician Zlatko Winkler, 01 December 2005
- XXVII. **Rudder Roll Stabilization for Fishing Vessels**
ALARÇIN F.
Technique and Technology In Fishing Vessels, 01 December 2005
- XXVIII. **Fuzzy Logic Control of Ship Course Keeping Autopilot**
ALARÇIN F.
INISTA 2005, İstanbul, Turkey, 15 June 2005, pp.247-250
- XXIX. **Rudder Roll Stabilization for Fishing Vessel**
ALARÇIN F., YÜKSEK İ., YILMAZ H.

Technics and Technology for Fishing Vessel, Ancona, Italy, 14 May 2005

XXX. **Dahili Model Kontrol ile Füze Kontrol Sistem Tasarımı**

ALARÇİN F.

Havacılıkta İleri Teknolojiler ve Uygulamaları Sempozyumu (HITEK), 01 December 2004

XXXI. **Gemilerde Kullanılan Klasik ve Modern Otopilot Sistemlerinin Tarihsel Gelişimi**

ALARÇİN F.

Gemi Mühendisliği ve Sanayimiz Sempozyumu, 01 December 2004

Metrics

Publication: 69

Citation (WoS): 138

Citation (Scopus): 165

H-Index (WoS): 7

H-Index (Scopus): 7

Entrepreneurship Activities

Limited, Onasor Grup Bilişim Yönetim Danışmanlık Ltd. Şti., 31 December 2019, Partner

Non Academic Experience

İSTANBUL BÜYÜKŞEHİR BELEDİYESİ

Company, The Istanbul Metropolitan Municipality

Metro İstanbul A.Ş.

İSTANBUL BÜYÜKŞEHİR BELEDİYESİ

Company, The Istanbul Metropolitan Municipality

İSBAK İSTANBUL BİLİŞİM VE AKILLI KENT TEKNOLOJİLERİ A.Ş.