

Asst. Prof. MELİH YILDIZ



Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: A-5796-2018

ScopusID: 57201136423

Yoksis Researcher ID: 264113

Education Information

Undergraduate, Anadolu University, Open Education Faculty, Department Of Sociology, Turkey 2017 - 2020

Doctorate, Anadolu University, Institute Of Science, Aircraft Airframe and Powerplant Maintenance , Turkey 2014 - 2016

Postgraduate, Atılım University, Institute Of Social Sciences, Turkey 2006 - 2007

Undergraduate, Istanbul Technical University, Uçak Ve Uzay Bilimleri, Uçak Mühendisliği, Turkey 1988 - 1995

Foreign Languages

English, C1 Advanced

Research Areas

Aeronautical Engineering

Academic Titles / Tasks

Assistant Professor, Erciyes University, Havacılık ve Uzay Bilimleri Fakültesi, Uçak Mühendisliği, 2021 - Continues

Assistant Professor, University Of Kyrenia, Faculty Of Aeronautics And Astronautics, Department Of Aircraft Engineering, 2021 - 2021

Assistant Professor, Atılım University, Academy Of Civil Aviation, Department Of Flight Training, 2017 - 2021

Academic and Administrative Experience

Erciyes University, 2023 - Continues

Vice Dean, Erciyes University, Havacılık ve Uzay Bilimleri Fakültesi, Uçak Mühendisliği, 2023 - Continues

Training Manager, Atılım University, Academy Of Civil Aviation, Department Of Aircraft Body - Engine Maintenance, 2018 - 2021

Courses

Termodinamik, Undergraduate, 2021 - 2022

Hava Uzay Yapıları, Undergraduate, 2021 - 2022

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Airfoil aerodynamic performance prediction using machine learning and surrogate modeling**
Teimourian A., Rohacs D., Dimililer K., Teimourian H., YILDIZ M., Kale U.
Heliyon, vol.10, no.8, 2024 (SCI-Expanded)
- II. **Analysis of a turbofan engine using a parametric loop**
DİŞLİTAŞ A. N., ALBAYRAK ÇEPER B., YILDIZ M.
Aircraft Engineering and Aerospace Technology, vol.96, no.1, pp.121-128, 2024 (SCI-Expanded)
- III. **A Three-Dimensional UCAV Path Planning Approach Based on Immune Plasma Algorithm**
Aslan S., Rohacs D., Yıldız M., Kale U.
INTERNATIONAL JOURNAL OF COMPUTATIONAL INTELLIGENCE SYSTEMS, vol.16, no.1, pp.1-19, 2023 (SCI-Expanded)
- IV. **Solar energy for the airport ground support equipment – a quantitative study**
YILDIZ M., Mutlu S., Nagy A., Kale U.
Aircraft Engineering and Aerospace Technology, vol.95, no.5, pp.831-837, 2023 (SCI-Expanded)
- V. **Comprehensive review of battery state estimation strategies using machine learning for battery Management Systems of Aircraft Propulsion Batteries**
Raoofi T., Yıldız M.
Journal of Energy Storage, vol.59, 2023 (SCI-Expanded)
- VI. **Analyzing well-to-pump emissions of electric and conventional jet fuel for aircraft propulsion**
Yıldız M., Kale U., Nagy A.
AIRCRAFT ENGINEERING AND AEROSPACE TECHNOLOGY, vol.94, no.10, pp.1605-1613, 2022 (SCI-Expanded)
- VII. **Initial airworthiness requirements for aircraft electric propulsion**
Yıldız M.
AIRCRAFT ENGINEERING AND AEROSPACE TECHNOLOGY, vol.94, no.8, pp.1357-1365, 2022 (SCI-Expanded)
- VIII. **A Comparative Study on Wind Energy Assessment Distribution Models: A Case Study on Weibull Distribution**
Teimourian H., Abubakar M., Yıldız M., Teimourian A.
ENERGIES, vol.15, no.15, 2022 (SCI-Expanded)
- IX. **Experimental Investigation of Communication Performance of Drones Used for Autonomous Car Track Tests**
Yildiz M., Bilgic B., Kale U., Rohacs D.
SUSTAINABILITY, vol.13, no.10, 2021 (SCI-Expanded)
- X. **Modeling and validation of temperature changes in a pouch lithium-ion battery at various discharge rates**
Yildiz M., Karakoc H., Dincer I.
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.75, pp.311-314, 2016 (SCI-Expanded)

Articles Published in Other Journals

- I. **Electric Energy Use in Aviation, Perspective and Applications**
YILDIZ M.
Journal of Polytechnic, vol.24, pp.1605-1610, 2021 (ESCI)
- II. **Battery Management System Architectures For Unmanned Air Vehicles: A Strategic Issue**
YILDIZ M.
Anadolu Strateji Dergisi, vol.3, no.1, pp.1-12, 2021 (Peer-Reviewed Journal)
- III. **SİVİL HAVACILIKTA ELEKTRİKLİ YER HİZMETLERİ TEÇHİZATI KULLANIMI FAYDALAR, KISITLAR VE ÖNERİLER**
YILDIZ M., MUTLU S.
Mühendislik Bilimleri ve Tasarım Dergisi, vol.8, no.1, pp.314-325, 2020 (Peer-Reviewed Journal)
- IV. **Havacılıkta Kullanılan Bataryaların Tasarım Parametrelerine Göre Boyutlandırılması**
YILDIZ M., KARAKOÇ T. H.
Sürdürülebilir Havacılık Araştırmaları Dergisi, vol.2, no.1, pp.27-37, 2017 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Hava Aracı Bakım Personeli için Havacılık Mevzuatı**
YILDIZ M.
Seçkin, Ankara, 2022
- II. **Lean Six Sigma Application for Aircraft Maintenance Process**
Imanov T., Yıldız M., Koruyucu E.
in: Progress in Sustainable Aviation, T. Hikmet KARAKOÇ, C. Özgür ÇOLPAN, Alper DALKIRAN, Editor, Springer Nature, Auckland, pp.1-17, 2022
- III. **Hava Aracı Bakım Personeli için Havacılık Mevzuatı SHY-66 Modül 10**
YILDIZ M.
Seçkin, Ankara, 2020

Refereed Congress / Symposium Publications in Proceedings

- I. **Lidar Sensör Destekli Dört Rotorlu Hava Aracının Modellenmesi ve Simülasyonu**
ERKİN T., ASLAN S., YILDIZ M.
Savunma Sanayii Sempozyumu ve Sergisi '22, Kayseri, Turkey, 13 - 15 October 2022
- II. **Yeni Nesil Hava Aracı İtke Sistemlerinin Ülkemiz Havacılık ve Savunma Sanayi Açısından Değerlendirilmesi**
YILDIZ M., KORUYUCU E.
Savunma Sanayi Sempozyumu ve Sergisi 22, Kayseri, Turkey, 13 October 2022, pp.280-285
- III. **Reliability Considerations of the Common Unit in Hybrid Electric Propulsion**
Can S., Gizem Gül C., KORUYUCU E., YILDIZ M.
11th EASN Virtual Conference on Innovation in Aviation & Space to the Satisfaction of the European Citizens, Italy, 01 September 2021
- IV. **Aircraft Batteries for Hybrid Electric Propulsion: Certification and Related Issues**
YILDIZ M., KORUYUCU E.
13th International Green Energy Conference, Tianjin, China, 15 - 17 July 2021, pp.577-581
- V. **Application and Development of Aircraft Maintenance Procedures Using Lean Tools**
Imanov T., YILDIZ M., KORUYUCU E.
International Symposium on Aircraft Technology, MRO & Operations 2021, Budapest, Hungary, 28 June 2021
- VI. **Reliability Assessment of Aircraft Hybrid Electric Propulsion Architecture Candidates**
KORUYUCU E., YILDIZ M.
GLOBAL CONFERENCE on ENGINEERING RESEARCH, Bandırma, Turkey, 02 June 2021, pp.286-291

- VII. **Electric Energy Production and Transmission Scenarios For Hybrid Electric Aircraft**
YILDIZ M.
International Symposium On Electric Aviation and Autonomous Systems, Kiev, Ukraine, 22 - 24 September 2020, pp.184-186
- VIII. **Analysis and Performance Evaluation of Solar Energy Production At the Esenboğa Airport**
YILDIZ M., MUTLU S.
International Symposium on Electric Aviation and Autonomous Systems, Kiev, Ukraine, 22 - 24 September 2020, pp.260-261
- IX. **A Methodology for Calculating Emissions of An Aircraft Throughout Its Flight Phases**
ÖZTÜRK O., YILDIZ M.
International Symposium on Electric Aviation and Autonomous Systems 2019, Budapest, Hungary, 26 - 29 May 2019, pp.20
- X. **CAN ELECTRICAL GROUND SUPPORT EQUIPMENT REPLACE INTERNAL COMBUSTION ENGINE GSE AT AIRPORTS?**
YILDIZ M., MUTLU S.
International Symposium on Electric Aviation and Autonomous Systems 2019, Budapest, Hungary, 26 - 29 May 2019, pp.17-19
- XI. **MAINTAINABILITY AND SAFETY ISSUES OF AIRCRAFT BATTERY SYSTEMS**
YILDIZ M., KARAKOÇ T. H.
ISATECH-2018, İstanbul, Turkey, 25 - 28 November 2018
- XII. **BATTERY MANAGEMENT SYSTEM ARCHITECTURES FOR USE IN AVIATION**
YILDIZ M., KARAKOÇ T. H.
7TH EASN INTERNATIONAL CONFERENCE, Warszawa, Poland, 26 - 29 September 2017, pp.312-322
- XIII. **Havacılıkta Kullanılan Bataryaların Tasarım Parametrelerine Göre Boyutlandırılması**
YILDIZ M., KARAKOÇ T. H.
Sürdürülebilir Havacılık Araştırmaları Dergisi, Turkey, 1 - 30 June 2017
- XIV. **Studying and Sizing of Batteries for Efficient Battery Management in Aviation Applications**
YILDIZ M., KARAKOÇ T. H.
6th EASN International Conference, Porto, Portugal, 18 - 21 October 2016

Supported Projects

YILDIZ M., İLHAN E., ÖNAL M. E., KONAÇ G., BAĞCI M. Z., AKBAL M., ASLAN M. İ., Project Supported by Higher Education Institutions, Soğuk Gaz İtici Sistemi ile Tahrik Edilen Dikey İnişli Roket Tasarımı, 2023 - 2023

YILDIZ M., ALTUN H., ÖNLER Ş., DAĞ V., CİHAN E., Project Supported by Higher Education Institutions, Taşınabilir Rüzgar Türbini Geliştirilmesi, 2022 - 2023

Scientific Refereeing

ENERGY JOURNAL, SCI Journal, January 2019

Metrics

Publication: 33
Citation (WoS): 49
Citation (Scopus): 57
H-Index (WoS): 4
H-Index (Scopus): 4