Doç.Dr. HARUN YILMAZ

Kişisel Bilgiler

E-posta: hyilmaz@erzincan.edu.tr
Web: https://avesis.ebyu.edu.tr/hyilmaz

Uluslararası Araştırmacı ID'leri
ORCID: 0000-0003-1657-4079
ScopusID: 57211970312
Yoksis Araştırmacı ID: 32700

Eğitim Bilgileri

Post Doktora, Universitaet Bayreuth, Faculty of Engineering Science, Department of Engineering Thermodynamics and Transport Processes, Almanya 2022 - 2022
Bütünleşik Doktora, Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Sivil Havacılık, Türkiye 2013 - 2018
Lisans, Erciyes Üniversitesi, Sivil Havacılık Yüksekokulu, Uçak Gövde Motor, Türkiye 2002 - 2007

Araştırma Alanları

Makina Mühendisliği, Yakıtlar ve Yanma , Mühendislik ve Teknoloji

Akademik Unvanlar / Görevler

Doç.Dr., Erzincan Binali Yıldırım Üniversitesi, Ali Cavit Çelebioğlu Sivil Havacılık Yüksekokulu, Uçak Gövde-Motor Bölümü, 2021 - Devam Ediyor
Araştırmacı, Universitaet Bayreuth, Faculty of Engineering Science, Department of Engineering Thermodynamics and Transport Processes, 2022 - 2022
Dr.Öğr.Üyesi, Erzincan Binali Yıldırım Üniversitesi, Ali Cavit Çelebioğlu Sivil Havacılık Yüksekokulu, Uçak Gövde-Motor Bölümü, 2018 - 2021
Araştırma Görevlisi, Erzincan Binali Yıldırım Üniversitesi, Ali Cavit Çelebioğlu Sivil Havacılık Yüksekokulu, Uçak Gövde-Motor Bölümü, 2016 - 2018
Okutman, Gümüşhane Üniversitesi, Kelkit Aydın Doğan Meslek Yüksekokulu, Ulaştırma Hizmetleri, 2009 - 2016

Akademik İdari Deneyim

Yüksekokul Müdürü, Erzincan Binali Yıldırım Üniversitesi, Ali Cavit Çelebioğlu Sivil Havacılık Yüksekokulu, Uçak Gövde-Motor Bölümü, 2021 - Devam Ediyor
Bölüm Başkanı, Erzincan Binali Yıldırım Üniversitesi, Ali Cavit Çelebioğlu Sivil Havacılık Yüksekokulu, Uçak Gövde-Motor Bölümü, 2018 - 2021
Gümüşhane Üniversitesi, Kelkit Aydın Doğan Meslek Yüksekokulu, Sivil Hava Ulaştırma İşletmeciliği, 2009 - 2016

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

I. **Laser and pre-chamber ignition, combustion and flame propagation characteristics of CH4/air mixtures in a constant volume combustion chamber**
Yılmaz H., Schröder L., Hillenbrand T., Brüggemann D.
ENERGY CONVERSION AND MANAGEMENT, cilt.280, ss.1-15, 2023 (SCI-Expanded)

II. **Effects of hydrogen addition on combustion and flame propagation characteristics of laser ignited methane/air mixtures**
Yılmaz H., Schröder L., Hillenbrand T., Brüggemann D.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, cilt.1, sa.1, ss.1-16, 2023 (SCI-Expanded)

III. **Colorless distributed combustion characteristics of hydrogen/air mixtures in a micro combustor**
Yılmaz H., Karyeyen S., Tepe A. Ü., Brüggemann D.
FUEL, cilt.332, ss.1-7, 2023 (SCI-Expanded)

IV. **Thermal–hydraulic performance of the circular-slice-shaped-winglet for tube bank heat exchanger**
Tepe A. Ü., Yılmaz H.
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, cilt.179, ss.1-14, 2022 (SCI-Expanded)

V. **Combustion and emission characteristics of premixed biogas mixtures: An experimental study**
Sivri İ., Yılmaz H., Çam Ö., Yılmaz İ.
International Journal of Hydrogen Energy, cilt.47, sa.24, ss.12377-12392, 2022 (SCI-Expanded)

VI. **Experimental Investigation of Flame Characteristics of H-2/CO/CH4/CO2 Synthetic Gas Mixtures**
Yılmaz H., Çam Ö., Yılmaz İ.
COMBUSTION SCIENCE AND TECHNOLOGY, cilt.193, sa.11, ss.1843-1865, 2021 (SCI-Expanded)

VII. **Flame and Instability Characteristics of High Hydrogen Content Gas Mixtures**
Yılmaz H., Yılmaz İ.
ENERGY, cilt.223, ss.1-10, 2021 (SCI-Expanded)

VIII. **A comparison study on combustion and emission characteristics of actual synthetic gas mixtures**
Yılmaz H., Çam Ö., Yılmaz İ.
FUEL, cilt.263, ss.1-6, 2020 (SCI-Expanded)

IX. **Experimental investigation of flame instability in a premixed combustor**
Yılmaz H., Çam Ö., Yılmaz İ.
FUEL, cilt.262, 2020 (SCI-Expanded)

X. **Investigation of combustion and emission performance of a micro combustor: Effects of bluff body insertion and oxygen enriched combustion conditions**
Yılmaz H.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, cilt.44, sa.47, ss.25985-25999, 2019 (SCI-Expanded)

XI. **Effects of synthetic gas constituents on combustion and emission behavior of premixed H-2/CO/CO2/CNG mixture flames**
Yılmaz H., Yılmaz İ.
JOURNAL OF THE ENERGY INSTITUTE, cilt.92, sa.4, ss.1091-1106, 2019 (SCI-Expanded)

XII. **Combustion and emission characteristics of premixed CNG/H-2/CO/CO2 blending synthetic gas flames in a combustor with variable geometric swirl number**
Yılmaz H., Yılmaz İ.
ENERGY, cilt.172, ss.117-133, 2019 (SCI-Expanded)

XIII. **Combustion characteristics of premixed hydrogen/air flames in a geometrically modified micro combustor**
Yılmaz İ., Yılmaz H., Cam O., Ilbas M.
FUEL, cilt.217, ss.536-543, 2018 (SCI-Expanded)

XIV. **A numerical study on combustion and emission characteristics of premixed hydrogen air flames**
Cam O., Yılmaz H., Tangöz S., Yılmaz İ.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, cilt.42, sa.40, ss.25801-25811, 2017 (SCI-Expanded)

XV. **Effect of different turbulence models on combustion and emission characteristics of hydrogen/air flames**
Yılmaz H., Cam O., Tangöz S., Yılmaz İ.

INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, cilt.42, sa.40, ss.25744-25755, 2017 (SCI-Expanded)

XVI. **Effect of micro combustor geometry on combustion and emission behavior of premixed hydrogen/air flames**
Yılmaz H., Cam O., Yılmaz İ.
ENERGY, cilt.135, ss.585-597, 2017 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

I. **Swirler geometry effects (Dh/do ratio) on synthetic gas flames. part 2: Dynamic flame behaviour at externally altered acoustic conditions Suktuvo geometrijos (Dh/do) poveikis sintetinių dujų liepsnoms. 2 dalis: dinaminė liepsnos elgsena veikiant išorėje pakeistomis akustinėmis sąlygomis**
YILMAZ H., ÇAM Ö., YILMAZ İ.
Energetika, cilt.67, sa.1-2, ss.55-61, 2021 (Scopus)

II. **Swirler geometry effects (Dh /do ratio) on synthetic gas flames: Part 1: Combustion and emission characteristics Suktuvo geometrijos (Dh /do) poveikis sintetinių dujų liepsnoms. 1 dalis: degimo ir emisijų charakteristikos**
YILMAZ H., ÇAM Ö., YILMAZ İ.
Energetika, cilt.67, sa.1-2, ss.48-54, 2021 (Scopus)

III. **Assessment of Combustion and Emission Characteristics of Various Gas Mixtures under Different Combustion Techniques**
Yılmaz H.
International Journal of Energy Studies, cilt.5, sa.1, ss.13-41, 2020 (Hakemli Dergi)

IV. **Kaya Gazı Karışımlarının Yanma ve Emisyon Davranışlarının Laboratuvar Ölçekli Bir Yakıcıda Sayısal Olarak İncelenmesi**
Yılmaz H.
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, cilt.12, sa.3, ss.1579-1589, 2019 (Hakemli Dergi)

V. **An experimental study on premixed CNG/H-2/CO2 mixture flames**
YILMAZ İ., YILMAZ H., Cam O.
OPEN ENGINEERING, cilt.8, sa.1, ss.32-40, 2018 (ESCI)

Kitap & Kitap Bölümleri

I. **Investigation of an Optimal Operating Condition for a Micro Combustor Regarding Basic Thermophotovoltaic System Requirements**
YILMAZ H., ÇAM Ö., YILMAZ İ.
The Role of Exergy in Energy and the Environment, Sandro NižetićAgis Papadopoulos, Editör, Springer International Publishing AG, part of Springer Nature, Cham, ss.27-41, 2018

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

I. **Dynamic Flame Behavior of 30%H2 30%CO 20%CO2 20%CNG Synthetic Gas Mixture During Acoustic Forcing**
Çam Ö., Yılmaz H., Yılmaz İ.
16. Uluslararası Yanma Sempozyumuna (16th International Combustion Symposium – INCOS 2022, Aydın, Türkiye, 8 - 11 Eylül 2022, cilt.1, sa.1, ss.1-7

II. **Experimental Investigation of Combustion Characteristics of Premixed Biogas Flames**
Sivri İ., Yılmaz H., Çam Ö., Yılmaz İ.
8th International Conference on Renewable Fuels, Combustion and Fire (FCE'21), Ankara, Türkiye, 5 - 07 Mart

2021, ss.1-10

III. **Flameless Distributed Combustion Characteristics of Syngas Mixtures**
YILMAZ H.
3. International Mersin Symposium, Mersin, Türkiye, 31 Ekim - 02 Kasım 2019, cilt.1, sa.1, ss.1

IV. **Combustion Characteristics of Natural Gas at Oxygen Enriched Conditions: Effects of Oxidizer Composition**
YILMAZ H.
3. International Mersin Symposium, Mersin, Türkiye, 31 Ekim - 02 Kasım 2019, cilt.1, sa.1, ss.1

V. **Experimental Investigation of Effects of The Ratio of Swirler Hub Diameter to Outer Diameter (Dh/Do) on Synthetic Gas Flames: Part 2: Dynamic Flame Behaviour at Externally Altered Acoustic Conditions**
YILMAZ H., ÇAM Ö., YILMAZ İ.
The 16th International Conference of Young Scientists on Energy Issues (CYSENI 2019), Kaunas, Litvanya, 23 - 24 Mayıs 2019, ss.329

VI. **Experimental Investigation of Effects of The Ratio of Swirler Hub Diameter to Outer Diameter (Dh/Do) on Synthetic Gas Flames: Part 1: Combustion and Emission Characteristics**
YILMAZ H., ÇAM Ö., YILMAZ İ.
The 16th International Conference of Young Scientists on Energy Issues (CYSENI 2019), Kaunas, Litvanya, 23 - 24 Mayıs 2019, ss.328

VII. **Comparison of Combustion and Emission Characteristics of Output Synthetic Gas Compositions ofTwo Different Power Stations**
Yılmaz H., Çam Ö., Yılmaz İ.
7th International Conference on Renewable Fuels Combustion and Fire, Antalya, Türkiye, 10 - 12 Mart 2019, cilt.1, sa.1, ss.1-10

VIII. **YÜKSEK H2/CO ORANINA SAHİP SENTETİK GAZ YAKITLARIN YANMA KARAKTERİSTİKLERİNİN DENEYSEL İNCELENMESİ**
YILMAZ H., ÇAM Ö., YILMAZ İ.
1. ULUSLARARASI MATEMATİK - MÜHENDİSLİK - FEN VE SAĞLIK BİLİMLERİ KONGRESİ, Şanlıurfa, Türkiye, 4 - 07 Ekim 2018, ss.42-49

IX. **SENTETİK GAZ YAKITLARIN YANMA KARARSIZLIKLARININ DENEYSEL İNCELENMESİ**
YILMAZ İ., YILMAZ H., ÇAM Ö.
1. ULUSLARARASI MATEMATİK - MÜHENDİSLİK - FEN VE SAĞLIK BİLİMLERİ KONGRESİ, Şanlıurfa, Türkiye, 4 - 07 Ekim 2018, ss.33-41

X. **An Experimental Study on Effect of Swirl Number and Gas Composition on Combustion and Emission Behavior of Premixed H2/CO/CNG Blending Synthetic Gas Flames in a Novel Combustor**
Yılmaz H., Çam Ö., Yılmaz İ.
16th International Conference on Clean Energy (ICCE-2018), Gazimagusa, Kıbrıs (Kktc), 9 - 11 Mayıs 2018, cilt.1, sa.1, ss.1-10

XI. **Effect of CO2 Dılutıon on Premıxed H2/CO/CNG Blending Synthesis Gas Flames**
YILMAZ İ., YILMAZ H., ÇAM Ö., SOYTÜRK M. A.
16th International Conference on Clean Energy (ICCE-2018), Famagusta, Kıbrıs (Kktc), 9 - 11 Mayıs 2018

XII. **Dynamic and Static Flame Behavior of Premixed H2/CO/CNG/CO2-Air Mixtures under Externally Modified Acoustic Conditions**
Yılmaz H., Çam Ö., Yılmaz İ.
14 th International Conference of Combustion, Karabük, Türkiye, 25 - 27 Nisan 2018, ss.1-10

XIII. **Combustion and Emission Behavior of Premixed CNG/H2/CO2 Mixture Flames: Effect of Swirl Number and Gas Composition**
YILMAZ İ., YILMAZ H., ÇAM Ö.
International Research Conference on Sustainable Energy, Engineering, Materials and Environment (SEEME), Newcastle Upon Tyne, Birleşik Krallık, 26 - 28 Temmuz 2017, ss.144-150

XIV. **Numerical Investigation on Combustion Behavior of Premixed Hydrogen/Air Flames in a Micro**

Combustor with Varying Geometric Properties: Part - I Effect of Backward Facing Step and Cavity
YILMAZ H., ÇAM Ö., İLBAŞ M., YILMAZ İ.
6th International Conference on Renewable Fuels, Combustion and Fire (FCE`17), Nevşehir, Türkiye, 18 - 21 Mayıs 2017, ss.212-224

XV. **Numerical Investigation on Combustion Behavior of Premixed Hydrogen/Air Flames in a Micro Combustor with Varying Geometric Properties: Part - II Effect of Multi-Channel Arrangement**
YILMAZ H., ÇAM Ö., TANGÖZ S., YILMAZ İ.
6th International Conference on Renewable Fuels, Combustion and Fire (FCE`17), Nevşehir, Türkiye, 18 - 21 Mayıs 2017, ss.225-236

XVI. **Investigation of Effects of Equivalence Ratio and Thermal Power on Combustion and Emission Behavior of Premixed Hydrogen Air Mixtures in a Micro Combustor**
YILMAZ H., YILMAZ İ., ÇAM Ö.
9th International Exergy, Energy and Environment Symposium (IEEES-9), Split, Hırvatistan, 14 - 17 Mayıs 2017

XVII. **The Effect of Different Turbulence Models on the Flame and Emissions Characteristics of Hydrogen-Air Flames**
YILMAZ H., ÇAM Ö., TANGÖZ S., YILMAZ İ.
9th International Conference on Sustainable Energy and Environmental Protection, Kayseri, Türkiye, 22 - 25 Eylül 2016, ss.200-207

XVIII. **Numerical Investigation of NOx Emissions in a Micro-Cylindrical Combustor with Premixed Hydrogen-Air Mixture**
ÇAM Ö., TANGÖZ S., YILMAZ H., YILMAZ İ.
9th International Conference on Sustainable Energy and Environmental Protection, Kayseri, Türkiye, 22 - 25 Eylül 2016, ss.324-330

Desteklenen Projeler

Yılmaz H., Yükseköğretim Kurumları Destekli Proje, Plazma Destekli Yanmanın Deneysel İncelenmesi, 2023 - 2024
Yılmaz İ., TÜBİTAK Projesi, Sentetik Gaz Yakıtların Yanma Kararsızlığı ve Alev Geri Tepmesinin İncelenmesi, 2016 - 2018
Yılmaz H., Yılmaz İ., Yükseköğretim Kurumları Destekli Proje, Sentetik Gaz Yakıtların Yanma Karakteristiklerinin Deneysel İncelenmesi, 2016 - 2018

Metrikler

Yayın: 40
Atıf (WoS): 140
Atıf (Scopus): 312
H-İndeks (WoS): 7
H-İndeks (Scopus): 8