

## Prof. HÜSEYİN TOPAL

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Dr), Turkey 1994 - 1999

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (YI) (Tezli), Turkey 1989 - 1992

Undergraduate, Gazi University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Turkey 1984 - 1989

### Dissertations

Doctorate, Dolaşımli akışkan yatağın hidrodinamik, yanma ve emisyon özelliklerinin deneysel incelenmesi, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Dr), 1999

Postgraduate, Izgaralı kazanlarda yanma odasındaki yapısal değişikliklerin kazan ısı performans ve emisyon davranışına etkisinin incelenmesi, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (YI) (Tezli), 1992

### Research Areas

Mechanical Engineering

### Academic Titles / Tasks

Professor, Gazi University, Mühendislik Fakültesi, Makina Mühendisliği, 2019 - Continues

Assistant Professor, Gazi University, Mühendislik Fakültesi, Makina Mühendisliği, 2005 - 2013

### Academic and Administrative Experience

Gazi University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2006 - 2009

### Courses

HİDROLİK MAKİNALAR, Undergraduate, 2020 - 2021  
Ölçme ve veri değerlendirme, Undergraduate, 2020 - 2021  
MM491 Buhar Kazanları, Undergraduate, 2016 - 2017  
Çevresel Risk Yönetimi, Postgraduate, 2016 - 2017  
MM 528 Katı atık yönetiminin mühendislik prensipleri, Postgraduate, 2016 - 2017  
MM487 Plazma Teknolojileri, Undergraduate, 2016 - 2017  
MM491E Steam Boiler, Undergraduate, 2016 - 2017  
MM540 HAVA KİRLİLİĞİ VE KONTROL TEKNOLOJİLERİ, Postgraduate, 2016 - 2017  
MM539 Akışkan yatakta yanmaya giriş, Postgraduate, 2016 - 2017

## Advising Theses

Topal H., Türkiye'de leonarditin tarımda kullanılabilirliğinin teknolojik incelenmesi, Postgraduate, S.YAĞLIDERE(Student), 2021  
Topal H., AKIŞKAN YATAKLI BİR GAZLAŞTIRICIDA BİYOKÜTLENİN GAZLAŞMA PERFORMANSININ TERMODİNAMİK YAKLAŞIM VE HESAPLAMALI AKIŞKANLAR DİNAMİĞİ (HAD) YAKLAŞIMI İLE DEĞERLENDİRİLMESİ, Postgraduate, M.YAZGI(Student), 2020  
TOPAL H., Analysis Of Biomass Supported Concentrated Solar Energy Organic Rankine Cycle, Postgraduate, A.BAŞEĞMEZ(Student), 2019  
Topal H., Assessing Effectiveness Of Integrated Building Design Parameters On Energy Performance And Emissions In Health Care Facilities By Means Of Building Energy Modelling, Postgraduate, M.Pooyanfar(Student), 2019  
TOPAL H., Design Of A Gas Turbine-Waste Heat Recovery System With Natural Gas Fuel, Postgraduate, Ö.BOZDAŞ(Student), 2019  
TOPAL H., Useability Analysis Of Energy Production With Forest Residuals And An Application, Postgraduate, O.DEMİRCAN(Student), 2019  
TOPAL H., Examination Of The Use Of Ozone And Chlorine Gases In The Treatment Of Textile Wastewater, Postgraduate, B.EZGİ(Student), 2019  
TOPAL H., Design Of A Combined Gas-Steam Power Cycle With Biomass Fuel, Postgraduate, S.DEKAN(Student), 2019  
Topal H., The Production Of Electrical Energy From Gas Engine Waste Heat Used In The Municipal Landfill Area, Postgraduate, T.Kankılıç(Student), 2016  
TOPAL H., Belediye düzenli depolama sahalarında kullanılan gaz motoru atık ısısından elektrik enerjisi üretimi, Postgraduate, T.KANKILIÇ(Student), 2016  
Topal H., The Solar Energy Potential Of Regional Analysis and Adaptation Of Production Systems, Postgraduate, E.ARSLAN(Student), 2015  
TOPAL H., Güneş enerjisi potansiyelinin bölgesel analizi ve enerji üretim sistemlerine uyarlanması, Postgraduate, E.ARSLAN(Student), 2015  
TOPAL H., Türkiye'de bulunan biyokütelerin piroliz özelliklerinin deneysel olarak incelenmesi, Postgraduate, I.ERKAN(Student), 2013  
TOPAL H., Solid waste disposal with plasma gasification technology, Postgraduate, C.DERELİ(Student), 2012  
Yıldırım F., Topal H., Kömür kökenli metan gazının değerlendirilerek iklim değişikliğine etkisinin azaltılması, Postgraduate, H.ÖKSÜZ(Student), 2012  
TOPAL H., Gıda sanayii biyokütle atıklarının enerji potansiyeli ve geri kazanımı, Postgraduate, M.TÜRKOĞLU(Student), 2010  
TOPAL H., Doğalgazla çalışan absorpsiyonlu iklimlendirme sistemlerinin teknik ve ekonomik açıdan karşılaştırılması, Postgraduate, F.DÖN(Student), 2010  
TOPAL H., Döner tip biyokütle gazlaştırıcı tasarımı ve prototip imalatı, Postgraduate, D.Y.(Student), 2010  
TOPAL H., TECHNICAL AND ECONOMICAL COMPARISON OF NATURAL GAS DRIVEN ABSORPTION AIR CONDITIONING SYSTEMS, Postgraduate, F.DÖN(Student), 2010  
TOPAL H., Kömür gazlaştırma prosesi ve yerli linyit kömürlerinin gazlaşma özelliklerinin incelenmesi, Postgraduate, R.ALİ(Student), 2010

TOPAL H., Yarı Eberhart tipi kireç fırınlarının modifikasyonunun üretim enerjisi, yakıt ekonomisi ve hava kirliliği açısından incelenmesi, Postgraduate, E.ÜĞÜR(Student), 2010

TOPAL H., Akışkan yataklı kömür yakma sistemlerinde otomatik kontrol tasarım ve uygulaması, Postgraduate, S.DÜLGER(Student), 2007

TOPAL H., Dolaşımli akışkan yatakta düşük sıcaklıklarda orman ürünlerinden oluşan gaz ürünlerin deneysel incelenmesi, Postgraduate, B.BOYACI(Student), 2007

Topal H., EXPERIMENTAL INVESTGATION OF GASIFICATION PRODUCTS AT LOW TEMPERATURE FROM WOOD WASTES IN A CIRCULATING FLUIDIZED BED, Postgraduate, B.BOYACI(Student), 2007

TOPAL H., Dolaşımli tip bir akışkan yataklı reaktörde kireçtaşı-SO<sub>2</sub> reaktivitesinin deneysel belirlenmesi, Postgraduate, M.BÜYÜKGÜNER(Student), 2005

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Modeling of a fluidized bed gasifier with computational fluid dynamics (CFD) and thermodynamic equilibrium approach and comparative analysis with experimental data Akışkan yataklı bir gazlaştırıcının hesaplamalı akışkanlar dinamiği (HAD) ve termodinamik denge yaklaşımı ile modellenmesi ve deneysel verilerle karşılaştırmalı olarak incelenmesi**  
Yazgı M., TOPAL H.  
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.39, no.1, pp.125-137, 2023 (SCI-Expanded)
- II. **Study on particle radiative properties of lignite, hard coal and biomass fly ashes in the infrared wavelength range**  
Döner N., Topal H., Aygahoğlu A., Şen F., Karimi-Maleh H.  
CHEMOSPHERE CHEMISTRY, BIOLOGY AND TOXICOLOGY AS RELATED TO ENVIRONMENTAL PROBLEMS, vol.291, no.1, pp.1-10, 2022 (SCI-Expanded)
- III. **A model of energy management analysis, case study of a sugar factory in Turkey**  
Taner T., Sivrioglu M., Topal H., Dalkılıç A. S., Wongwises S.  
SADHANA-ACADEMY PROCEEDINGS IN ENGINEERING SCIENCES, vol.43, no.3, 2018 (SCI-Expanded)
- IV. **APPLICATION OF TRIGENERATION WITH DIRECT CO-COMBUSTION OF POULTRY WASTE AND COAL A Case Study in the Poultry Industry from Turkey**  
TOPAL H., TANER T., Altinsoy Y., Amirabedin E.  
THERMAL SCIENCE, vol.22, no.6, pp.3073-3082, 2018 (SCI-Expanded)
- V. **ASSESSING EFFECTIVENESS OF INTEGRATED BUILDING DESIGN PARAMETERS ON ENERGY PERFORMANCE AND EMISSIONS IN HEALTH CARE FACILITIES BY MEANS OF BUILDING ENERGY MODELLING**  
Pooyanfar M., TOPAL H.  
ISI BİLİMİ VE TEKNİĞİ DERGİSİ-JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, vol.38, no.2, pp.151-165, 2018 (SCI-Expanded)
- VI. **Exergy analysis of a circulating fluidized bed power plant co-firing with olive pits: A case study of power plant in Turkey**  
TOPAL H., TANER T., Naqvi S. A. H., Altinsoy Y., Amirabedin E., ÖZKAYMAK M.  
ENERGY, vol.140, pp.40-46, 2017 (SCI-Expanded)
- VII. **PLASMA GASIFICATION TECHNOLOGY FOR SOLID WASTE DISPOSAL**  
TOPAL H.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.30, no.4, pp.733-741, 2015 (SCI-Expanded)
- VIII. **Peach and apricot stone combustion in a bubbling fluidized bed**  
Kaynak B., Topal H., Atımtay A.  
FUEL PROCESSING TECHNOLOGY, vol.86, no.11, pp.1175-1193, 2005 (SCI-Expanded)
- IX. **Co-combustion of olive cake with lignite coal in a circulating fluidized bed**

- Atımtay A., Topal H.  
FUEL, vol.83, no.7-8, pp.859-867, 2004 (SCI-Expanded)
- X. **Emission characteristics of co-combustion of sewage sludge with olive cake and lignite coal in a circulating fluidized bed**  
Toraman O., Topal H., BAYAT O., Atımtay A.  
JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART A-TOXIC/HAZARDOUS SUBSTANCES & ENVIRONMENTAL ENGINEERING, vol.39, no.4, pp.973-986, 2004 (SCI-Expanded)
- XI. **Olive cake combustion in a circulating fluidized bed**  
Topal H., Atımtay A., Durmaz A.  
FUEL, vol.82, no.9, pp.1049-1056, 2003 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Asphaltite Pyrolysis in Fluidized Bed Reactor**  
Topal H., Moghanirahimi S.  
Gazi University Journal of Science Part A: Engineering and Innovation, vol.10, no.2, pp.166-175, 2023 (Peer-Reviewed Journal)
- II. **A comparison of crash investigation of two aircraft, one with flight data recorder and cockpit voice recorder and the other, without them**  
Inan H. A., TOPAL H.  
INTERNATIONAL JOURNAL OF SUSTAINABLE AVIATION, vol.6, no.1, pp.36-50, 2020 (ESCI)
- III. **Thermal Design of a Fluidized Bed Steam Boiler Using Refuse Derived Fuel (RDF) in Organic Rankine Cycle**  
TOPAL H.  
Gazi University Journal of Science PART A: ENGINEERING AND INNOVATION, vol.5, no.4, pp.173-189, 2018 (Peer-Reviewed Journal)
- IV. **EXPERIMENTAL AND NUMERICAL INVESTIGATION OF CEILING MOUNTED RADIANTPANELS HEAT OUTPUT FOR DIFFERENT INLET-OUTLET WATER TEMPERATURES**  
Ergür E., Serhat Ü., Çalıřır T., Bařkaya ř., Topal H.  
International Journal of Scientific Research in Information Systems and Engineering, vol.4, no.1, pp.42-48, 2018 (Peer-Reviewed Journal)
- V. **Experimental and numerical investigation of ceiling mounted radiant panels heat output for different inlet-outlet water temperatures**  
Ergür E., Ünver S., ÇALIřIR T., BAřKAYA ř., TOPAL H.  
Int. J. of Scientific Research in Information Systems and Engineering, vol.4, no.1, pp.42-50, 2018 (Peer-Reviewed Journal)
- VI. **Design and Application of Automatic Control System in a Laboratory Scale Fluidized Bed Coal Combustion System**  
TOPAL H., Altınsoy Y., ERBAř O.  
Gazi University Journal of Science PART A: ENGINEERING AND INNOVATION, vol.5, no.1, pp.49-63, 2018 (Peer-Reviewed Journal)
- VII. **Akıřkan Yatakta Rejim Bölgesinin Isı Transferine Etkisi**  
ERBAř O., TOPAL H., řENTÜRK ACAR M., ARSLAN O.  
Bilecik řeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.4, no.2, pp.24-27, 2017 (Peer-Reviewed Journal)
- VIII. **Güneřlenme řiddetini ölçen aletlerin verilerinin İğdir ilinde gösterdiđi deđiřkenlikler ve bunların nedenlerinin incelenmesi**  
Arslan E., TOPAL H., YILDIRIM M. U.  
Gazi Mühendislik Bilimleri Dergisi, 2016 (Peer-Reviewed Journal)
- IX. **BELEDİYEATIKLARINDAN DÜZENLİ DEPOLAMA SAHALARINDA BİYOGAZI VE ENERJİ ÜRETİMİ**  
Turgay K., TOPAL H.

Mühendis ve Makina, vol.56, no.669, pp.58-69, 2015 (Peer-Reviewed Journal)

- X. **A RESEARCH ON SOLAR POWER POTENTIAL S REGIONAL ANALYZE AND ADAPTATION OF ENERGY PRODUCTION SYSTEM**  
Aslan E., TOPAL H.  
INTERNATIONAL REFEREED ACADEMIC SOCIAL SCIENCES JOURNAL, no.4, pp.14, 2015 (Peer-Reviewed Journal)
- XI. **Techno environmental assesment of co gasification of low grade Turkish lignite with biomass in a trigeneration power plant**  
Amirabedin E., Rahim M. A., Mirparham P., TOPAL H.  
ENVIRONMENTAL AND CLIMATE TECHNOLOGIES, vol.13, pp.5-11, 2014 (Scopus)
- XII. **Design and Economic Analysis of a Heating/Absorption Cooling System Operating with Municipal Solid Waste Digester: A Case Study of Gazi University**  
Cosar G., Pooyanfar M., Amirabedin E., Topal H.  
ENVIRONMENTAL AND CLIMATE TECHNOLOGIES, vol.11, no.1, pp.12-18, 2013 (ESCI)
- XIII. **Determiation of some important emissions of poultry waste co-combustion**  
Topal H., Amirabedin E.  
Publication in a Scientific Journal of the Series of Scientific Journal of RTU Environmantal and Climate Technologies, vol.8, pp.12-17, 2012 (Peer-Reviewed Journal)
- XIV. **Effects of the size distribution of fuel particulate on the heat gate in the inner surface of fluidized bed**  
ERBAŞ O., TOPAL H.  
Dumlupınar Üniversitesi Fen Bilimleri Enstitüsü Dergisi, pp.91-96, 2008 (Peer-Reviewed Journal)

## **Books & Book Chapters**

- I. **Energy Production from Municipal Solid Waste Using Plasma Gasification**  
Topal H.  
in: Progress in Exergy, Energy, and the Environment, İ Dinçer, Editor, Springer, London/Berlin , Bern, pp.857-865, 2014

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **Investigation of the Effect of Convector on the Flow Field above Panel Radiators**  
Çalışır T., Başkaya Ş., Yazar H. O., Topal H.  
3rd International Conference on Engineering Technology and Applied Sciences, ICETAS, Skopje, Macedonia, Skopje, Macedonia, 17 - 21 July 2018
- II. **Solar and Biogas Hybrid Energy Resources Used With An Example of Hospital Building Project in Turkey**  
TOPAL H., Altınsoy Y., ÇALIŞIR T., BAŞKAYA Ş.  
4th International Conference on Engineering and Natural Science, ICENS, Kiev, Ukraine, 2 - 06 May 2018
- III. **Energy and Exergy Analysis of 10 kWe Solar Organic Rankine Cycle**  
Topal H., Başığmez A., Altınsoy Y., Çalışır T., Başkaya Ş.  
ICENS 4th International Conference on Engineering and Natural Science, Kyyiv, Ukraine, 2 - 06 May 2018
- IV. **Solar And Biogas Hybrid Energy Resources Used With An Example Of Hospital Building Projecet In Turkey**  
Topal H., Altınsoy Y., Başkaya Ş., Çalışır T.  
ICENS 4th International Conference on Engineering and Natural Science, Kyyiv, Ukraine, 2 - 06 May 2018
- V. **Experimental and numerical investigation of ceiling mounted radiant panels heat output for different inlet-outlet water temperatures**  
Eda E., Ünver S., ÇALIŞIR T., BAŞKAYA Ş., TOPAL H.

5th International Symposium on Engineering, Artificial Intelligence Applications, ISEAIA 2017, Girne, Cyprus (Kktc), 1 - 03 November 2017

- VI. **Numerical investigation of different parameters on the laminar natural convection heat transfer in annular space between horizontal cylinders filled with non-newtonian nano fluid**  
Harab B. A., Çalıřır T., Bařkaya ř., Topal H.  
5th International Symposium on Engineering, Artificial Intelligence Applications, ISEAIA 2017, Girne, Cyprus (Kktc), 1 - 03 November 2017
- VII. **Experimental investigation of system performance and emission behavior in biomass fueled domestic heating boilers**  
Topal H., Altınsoy Y., Bařkaya ř., Çalıřır T.  
International Symposium on Engineering, Artificial Intelligence Applications, ISEAIA 2017, Girne, Cyprus (Kktc), 1 - 03 November 2017
- VIII. **Determining energy consumption in hospital buildings and evaluating energy saving potentials by means of building energy modelling**  
TOPAL H., Altınsoy Y.  
ULIBTK'17 21. Ulusal Isı Bilimi ve Teknięi Kongresi, Turkey, 13 - 16 September 2017
- IX. **Effect of Fluidization Regime Zone on The Heat Transfer in Circulating Fluidized Bed**  
ERBAř O., TOPAL H., KEÇECİLER A., ERÇETİN Ü., ARSLAN O.  
INTERNATIONAL CONGRESS ON APPLIED SCIENCE AND TECHNOLOGY, 17 - 20 April 2017
- X. **Interaction Model of Long-Range Transboundary Air Pollution for Turkey and Europe**  
ERBAř O., Altıncı Y., TOPAL H., ARSLAN O.  
INTERNATIONAL CONGRESS ON APPLIED SCIENCE AND TECHNOLOGY, 17 - 20 April 2017
- XI. **Experimental investigation of pyrolysis characteristics of some biomasses in Turkey and It'xxx gasification potential**  
Altıncı Y., TOPAL H., ERBAř O., ARSLAN O.  
INTERNATIONAL CONGRESS ON APPLIED SCIENCE AND TECHNOLOGY, 17 - 20 April 2017
- XII. **Heating of A Greenhouse and A House Buildings with Solar Power and Thermal Storage**  
TOPAL H., Altınsoy Y., ERBAř O., ARSLAN O.  
INTERNATIONAL CONGRESS ON APPLIED SCIENCE AND TECHNOLOGY, 7 - 10 April 2017
- XIII. **Performance and sensitivity analysis of Seyitömer coal used in fluidized bed power plant**  
TOPAL H., ERBAř O., Kömürcü A., YOLCAN O. O.  
8th International Ege Energy Symposium & Exhibition, 11 - 13 May 2016
- XIV. **The removal of hydrogen sulfide from biogas plant**  
TOPAL H., ERBAř O., YOLCAN O. O., Kömürcü A.  
8th International Ege Energy Symposium & Exhibition, 11 - 13 May 2016, vol.1
- XV. **THE EXPERIMENTAL INVESTIGATION OF HEAT TRANSFER PROPERTIES OF A BUBLING FLUIDIZED BED**  
TOPAL H., TANER T., ERBAř O.  
8th International Symposium on Turbulence, Heat and Mass Transfer, 15 - 18 September 2015
- XVI. **Energy analyse and management A sample of milk factory in Turkey**  
TANER T., TOPAL H., ÖZTUNA TANER Ö.  
1st International Conference on Engineering and Natural Sciences, 15 - 19 May 2015
- XVII. **Energy performance and efficiency for Turkey s energy policy**  
TANER T., TOPAL H.  
The Proceedings of Second International Iron and Steel Symposium (IISS'15), Karabük, Turkey, 1 - 03 April 2015, vol.1, pp.812-814
- XVIII. **HASTANE VE KAMU BİNALARINDA ISITMA VE SOęUTMA SİSTEMLERİNDE TASARRUF YÖNTEMLERİ**  
TOPAL H.  
SAęLIK VE KAMU BİNALARINDA ENERJİ VERİMLİLİęİ SEMPOZYUMU, Turkey, 26 - 27 February 2015
- XIX. **The Evaluation of the Air Pollution Problem Originating from Combustion During the EU Adaptation Process**

## Expert Reports

- I. **Pre-design of a thermal power plant**  
Topal H.  
BİYOSAN ENERJİ ÜRETİM DANIŞMANLIK A.Ş., pp.23, Ankara, 2020
- II. **Expertiz Raporu - KAYRA Alüminyum Nak. Oto. İnş.Gıda.Geri Dön. Petrol San. Tic. Ltd. Şti.**  
Topal H.  
T.C. TİCARET BAKANLIĞI Ankara Gümrük Müdürlüğü, pp.6, Ankara, 2020
- III. **TEHLİKELİ ATIK RAPORU**  
Ünal R., Topal H.  
Ankara Gümrük Müdürlüğü, pp.3, Ankara, 2020

## Supported Projects

- TOPAL H., Moghanirahimi S., Project Supported by Higher Education Institutions, AKIŞKAN YATAKLI BİR REAKTÖRDE ŞIRNAK VE HAKKARİ ASFALTİTLERİNİN KATALİZÖR İLE PİROLİZİ, 2022 - 2023
- Pekmezci Karaman B., Mürtezaoğlu K., Oktar N., Topal H., Değirmenci L., TUBITAK Project, Biyo-Yakıt Üretiminde Kullanılacak Karbon Oluşumuna Dayanıklı Nitelikli Katalizörlerin Geliştirilmesi ve Uygulamaları, 2021 - 2023
- TOPAL H., Project Supported by Other Private Institutions, Baca gazı desülfürizasyon sisteminde adsorbent madde olarak kullanılması planlanan kireçtaşının kimyasal ve fiziksel özelliklerinin araştırılması CENAVA İNŞAAT MADEN SAN VE TİC A Ş nin 21 11 2016, 2016 - 2016
- TOPAL H., Project Supported by Other Private Institutions, 160 MWe DETES 1 ENTEGRE TERMİK SANTRALİ PROJESİ TEKNİK İNCELEME RAPORU DETES ELEKTRİK ÜRETİM A Ş TEKNOLOJİK UYGUNLUK RAPORU, 2016 - 2016
- TOPAL H., TUBITAK Project, Dinamik seyreltmeli uçucu organik bileşenleri VOC örnekleme cihazının geliştirilmesi, 2015 - 2016
- TOPAL H., Project Supported by Other Private Institutions, Buhar Kazanı Hesap ve Proje Kontrolü, 2014 - 2016
- TOPAL H., Project Supported by Other Private Institutions, Teknolojik Uygunluk Raporu, 2015 - 2015
- TOPAL H., Project Supported by Higher Education Institutions, Yüksek sıcaklıklı buharlı bir gazlaştırıcıda biyokütle gazlaştırmasının deneysel incelenmesi, 2010 - 2015
- Topal H., Project Supported by Higher Education Institutions, 06 2007 38, 2010 - 2015
- Başkaya Ş., Topal H., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Linyit kullanımının artırılması amaçlı yanma emisyon kontrolü enerji verimliliği vb Ar Ge çalışmaları için Gazi Üniversitesi GEÇER Araştırma Merkezi laboratuvar altyapısının yenilenmesi ve geliştirilmesi, 2007 - 2010
- TOPAL H., Project Supported by Higher Education Institutions, Katı Yakıt Yanmasında Uçucu Hidrokarbon Bileşiklerinin Oluşum Mekanizmalarının Deneysel İncelenmesi ve Hava Kirliliğine Etkileri, 2005 - 2006
- TOPAL H., Project Supported by Higher Education Institutions, Orman Ürünleri Atıkları ve Seka Kağıt Fabrikası Atık Çamurlarının Gazlaşma Davranışının Akışkan Yatakta Deneysel İncelenmesi ve Enerji Potansiyeli, 2003 - 2004
- TOPAL H., Project Supported by Higher Education Institutions, Endüstriyel ve evsel atıkların dolaşimli akışkan yatakta yanma ve emisyon davranışlarının inc., 2002 - 2004

## Scientific Refereeing

Gazi Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, National Scientific Refreed Journal, March 2021

ENERGY, SCI Journal, January 2019

## **Metrics**

Publication: 48

Citation (WoS): 238

Citation (Scopus): 255

H-Index (WoS): 7

H-Index (Scopus): 7