

## Asst. Prof. BAHADIR DOĞAN

### Personal Information

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### International Researcher IDs

ScholarID: NjFhLrgAAAAJ

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Publons / Web Of Science ResearcherID: K-2577-2015

ScopusID: 56814509200

Yoksis Researcher ID: 13541

### Education Information

Doctorate, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Dr), Turkey 2011 - 2017

Postgraduate, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (YI) (Tezli), Turkey 2008 - 2011

Undergraduate, Anadolu University, Faculty Of Business Administration, Department Of Business, Turkey 2005 - 2009

Undergraduate, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makine Mühendisliği Bölümü, Turkey 2003 - 2007

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Hava soğutmalı mini kanallı panjurlu kanatlı bir evsel buzdolabı kondenserinin farklı nem ve sabit soğutma yükü koşullarında sayısal ve deneysel analizi, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Dr), 2017

Postgraduate, Gelişmekte olan laminer akışta farklı kanal kesitlerinde entropi üretimi üzerine bir çalışma, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (YI) (Tezli), 2011

### Research Areas

Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, 2017 - Continues

Research Assistant, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, 2007 - 2017

## Academic and Administrative Experience

Vice Dean, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, 2022 - Continues

Fakülte Akademik Kurul Üyesi, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, 2020 - Continues

Deputy Head of Department, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, 2021 - 2022

Deputy Director of the Center, Eskisehir Osmangazi University, Rektörlük, 2019 - 2021

## Courses

MAKİNA MÜHENDİSLİĞİNDE TASARIM - I, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

TERMODİNAMİK VE AKIŞKANLAR MEKANİĞİ ARAŞTIRMALARI, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

MAKİNE MÜHENDİSLİĞİNDE TASARIM - I, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

ISI DEĞİŞTİRİCİ TASARIMI - II, Undergraduate, 2019 - 2020

DİFERANSİYEL DENKLEMLER, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018

TERMODİNAMİK VE AKIŞKANLAR MEKANİĞİ ARAŞTIRMALARI, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

ISI GEÇİŞİNDE ÖZEL PROBLEMLER, Doctorate, 2019 - 2020

ISI TRANSFERİ, Undergraduate, 2018 - 2019, 2017 - 2018

ISI DEĞİŞTİRİCİ TASARIMI - II, Undergraduate, 2017 - 2018

ENERJİ VE MOMENTUM TRANSFERİ, Doctorate, 2017 - 2018

TERMODİNAMİK, Undergraduate, 2017 - 2018

SOĞUTMA CİHAZLARININ ISIL DİZAYNI, Postgraduate, 2017 - 2018

ISI DEĞİŞTİRİCİ TASARIMI - I, Undergraduate, 2017 - 2018

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

- I. **A novel condenser with offset strip fins on a mini channel flat tube for reducing the energy consumption of a household refrigerator**  
DOĞAN B., Ozturk M. M., Tosun T., Tosun M., ERBAY L. B.  
Journal of Building Engineering, vol.44, 2021 (SCI-Expanded)
- II. **The effect of refrigerant circuitry on the performance of a freezer with a tube-on-sheet evaporator**  
Tosun T., Ozturk M. M., DOĞAN B., ERBAY L. B.  
Science and Technology for the Built Environment, vol.27, no.5, pp.557-566, 2021 (SCI-Expanded)
- III. **Performance assessment of an air source heat pump water heater from exergy aspect**  
Mete Ozturk M., DOĞAN B., Berrin Erbay L.  
Sustainable Energy Technologies and Assessments, vol.42, 2020 (SCI-Expanded)
- IV. **Assessment of design constraints for the Duplex Stirling Refrigerator with imperfect regeneration**  
Doğan B.  
JOURNAL OF CLEANER PRODUCTION, vol.265, 2020 (SCI-Expanded)
- V. **Performance analysis of a compact heat exchanger with offset strip fin by non-uniform uninterrupted fin length**  
Ozturk M. M., DOĞAN B., ERBAY L. B.  
APPLIED THERMAL ENGINEERING, vol.159, 2019 (SCI-Expanded)
- VI. **Integration of a mini-channel condenser into a household refrigerator with regard to accurate capillary tube length and refrigerant amount**  
Tosun M., DOĞAN B., Ozturk M. M., ERBAY L. B.  
INTERNATIONAL JOURNAL OF REFRIGERATION-REVUE INTERNATIONALE DU FROID, vol.98, pp.428-435, 2019

(SCI-Expanded)

- VII. **Effect of working fluid on the performance of the duplex Stirling refrigerator**  
DOĞAN B., Ozturk M. M., ERBAY L. B.  
JOURNAL OF CLEANER PRODUCTION, vol.189, pp.98-107, 2018 (SCI-Expanded)
- VIII. **Overall performance of the duplex Stirling refrigerator**  
ERBAY L. B., Ozturk M. M., DOĞAN B.  
ENERGY CONVERSION AND MANAGEMENT, vol.133, pp.196-203, 2017 (SCI-Expanded)
- IX. **Numerical Investigation of the Air-Side Thermal Hydraulic Performance of a Louvered-Fin and Flat-Tube Heat Exchanger at Low Reynolds Numbers**  
ERBAY L. B., UĞURLUBİLEK N., ALTUN Ö., DOĞAN B.  
HEAT TRANSFER ENGINEERING, vol.38, no.6, pp.627-640, 2017 (SCI-Expanded)
- X. **An experimental comparison of two multi-louvered fin heat exchangers with different numbers of fin rows**  
DOĞAN B., ALTUN Ö., UĞURLUBİLEK N., Tosun M., Saricay T., ERBAY L. B.  
APPLIED THERMAL ENGINEERING, vol.91, pp.270-278, 2015 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Numerical investigation of heat transfer and pressure drop characteristics in an offset strip fin heat exchanger**  
Doğan B., Öztürk M. M., Erbay L. B.  
JOURNAL OF THERMAL ENGINEERING, vol.7, no.6, pp.1417-1431, 2021 (ESCI)
- II. **A Benchmark Study for Phase Transformation of Shape Memory Alloy Based Split Ring Resonator Structure Under a Heating and Cooling Thermal Cycle**  
ÖZTÜRK M. M., DOĞAN B.  
Dicle Üniversitesi Mühendislik Fakültesi Mühendislik Dergisi, vol.11, no.1, pp.239-250, 2020 (Peer-Reviewed Journal)
- III. **Ni-Ti Akıllı Alaşım İnce Filmin Sıcaklığa Bağlı X-Ray Kırınımı ile Karakterizasyonu ve Faz Dönüşümü Tespiti**  
ÖZTÜRK M. M., DOĞAN B.  
Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.6, pp.1-11, 2019 (Peer-Reviewed Journal)
- IV. **NUMERICAL INVESTIGATION OF THE BOTTOM CABINET OF A HOUSEHOLD REFRIGERATOR**  
YILMAZ H., Erbay L. B., DOĞAN B.  
JOURNAL OF THERMAL ENGINEERING, vol.2, no.5, pp.946-953, 2016 (ESCI)
- V. **EXPERIMENTAL ANALYSIS OF THE EFFECT OF COLD FLUID INLET TEMPERATURE ON THE THERMAL PERFORMANCE OF A HEAT EXCHANGER**  
DOĞAN B., ERBAY L. B.  
JOURNAL OF THERMAL ENGINEERING, vol.2, no.1, pp.583-592, 2016 (ESCI)
- VI. **Kompakt Bir Isı Değiştiricide Dış Akış Entropi Üretiminin Sayısal İncelenmesi**  
DOĞAN B., ERBAY L. B.  
Isıtma, Soğutma, Havalandırma, Klima, Yangın ve Sıhhi Tesisat Dergisi, pp.22-31, 2015 (Peer-Reviewed Journal)
- VII. **İtalya da Makina Mühendisliği Eğitimi**  
DOĞAN B., ER Ü.  
Engineers and Machinery, vol.52, no.651, pp.56-60, 2013 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Comprehensive Study of Compact Heat Exchangers with Offset Strip Fin**  
Erbay L. B., Öztürk M. M., Doğan B.

in: Heat Exchangers - Advanced Features and Applications, S. M. Sohel Murshed and Manuel Matos Lopes, Editor, InTechOpen, London, pp.31-59, 2017

**II. Comprehensive Study of Heat Exchangers with Louver Fins**

Erbay L. B., Doğan B., Öztürk M. M.

in: Heat Exchangers - Advanced Features and Applications, S. M. Sohel Murshed and Manuel Matos Lopes, Editor, InTechOpen, London, pp.61-92, 2017

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

- I. Bir Telli-Boru Tip Kondenserin Boru Adımı ve Geçiş Sayısının Dikey Bir Derin Dondurucunun Performansına Etkisi**  
TOSUN T., ÖZTÜRK M. M., DOĞAN B., ERBAY L. B.  
Uluslararası Katılımlı 23. Isı Bilimi ve Tekniği Kongresi, ULIBTK21, Gaziantep, Turkey, 08 September 2021, pp.132-139
- II. Effect of Spiral Position of The Diabatic Capillary Tube on The Performance of a Vertical Freezer**  
TOSUN T., DOĞAN B., ÖZTÜRK M. M., ERBAY L. B.  
Effect of Spiral Position of The Diabatic Capillary Tube on The Performance of a Vertical Freezer, South Africa, 25 July 2021, pp.712-717
- III. Investigation of Liquefied Natural Gas (LNG) Usage Instead of Diesel in Heavy Commercial Vehicles**  
ERÇELİK B. B., DOĞAN B.  
8th International Conference on Engineering and Natural Sciences, Ankara, Turkey, 12 - 14 June 2020, pp.212-223
- IV. Numerical Investigation of Heat Transfer and Pressure Drop Characteristics in an Offset Strip Fin Heat Exchanger**  
DOĞAN B., ÖZTÜRK M. M., ERBAY L. B.  
22th Congress of Thermal Sciences and Technology, 11 - 14 September 2019, pp.1197-1205
- V. Enhancement of Heat Exchangers with Metal Foams**  
ÖZTÜRK M. M., DOĞAN B.  
7th Global Congress on Renewable Energy and Environment, Turkey, 18 - 20 October 2019, vol.9, pp.15-28
- VI. Thermo-hydraulic Performance Assessment of a Compact Heat Exchanger by Varying Plate Fins**  
Ozturk M. M., DOĞAN B., Erbay L. B.  
6th IEEE INTERNATIONAL CONFERENCE on RENEWABLE ENERGY RESEARCH and APPLICATIONS (ICRERA 2017), California, United States Of America, 5 - 08 November 2017, pp.70-75
- VII. Kompakt Bir Isı Değiştiricide Dış Akış Entropi Üretiminin Taguchi Metodu ile Optimizasyonu**  
DOĞAN B., ERBAY L. B.  
20. Ulusal Isı Bilimi ve Tekniği Kongresi, Balıkesir, Turkey, 2 - 05 September 2015, vol.1
- VIII. Kompakt Bir Isı Değiştiricide Dış Akış Entropi Üretiminin Sayısal İncelenmesi**  
DOĞAN B., ERBAY L. B.  
20. Ulusal Isı Bilimi ve Tekniği Kongresi, Balıkesir, Turkey, 2 - 05 September 2015, vol.1
- IX. Numerical Investigation of Thermal and Hydraulic Performance of Louvered Fin Aluminum Heat Exchanger**  
ALTUN Ö., UĞURLUBİLEK N., DOĞAN B., ERBAY L. B.  
XI. International HVAC R Technology Symposium, İstanbul, Turkey, 8 - 10 May 2014, vol.1, pp.169-176
- X. Bir Isı Değiştiricide Dış Akış Basınç Düşümü Karakteristiğinin Sayısal İncelenmesi**  
DOĞAN B., ERBAY L. B.  
19. Ulusal Isı Bilimi ve Tekniği Kongresi, Samsun, Turkey, 9 - 12 September 2013, vol.1, pp.386-391
- XI. Bir Isı Değiştiricide Dış Akış Isı Transferi Karakteristiğinin Sayısal İncelenmesi**  
DOĞAN B., ERBAY L. B.  
19. Ulusal Isı Bilimi ve Tekniği Kongresi, Samsun, Turkey, 9 - 12 September 2013, vol.1, pp.380-385
- XII. Numerical Analysis of Entropy Generation at the Entrance of a Channel**  
DOĞAN B., ERBAY L. B.

EWRES - European Workshop on Renewable Energy Systems, Antalya, Turkey, 17 - 28 September 2012, vol.1

**XIII. Endüstriyel Tip Bir Bisküvi Fırının Deneysel Isıl Analizi 17 Ulusal Isı Bilimi ve Tekniği Kongresi Bildiri Kitabı**

DOĞAN B., ERBAY L. B.

17. Ulusal Isı Bilimi ve Tekniği Kongresi, Sivas, Turkey, 24 - 27 June 2009, vol.1, pp.843-849

## Supported Projects

Erbay L. B., Doğan B., Öztürk M. M., Industrial Thesis Project, Şerit ve İnovatif-Şerit Kanatlı Yassı Borulu Isı Değiştirici Geliştirilmesi 0888.STZ.2015, 2016 - 2019

Erbay L. B., Uğurlubilek N., Altun Ö., Industrial Thesis Project, Ev Tipi Mini Mikro Kanallı Kondenser Geliştirme Projesi 865 STZ 2011 1, 2011 - 2015

## Memberships / Tasks in Scientific Organizations

Türk Isı Bilimi ve Tekniği Derneği, Member, 2012 - Continues, Turkey

Makina Mühendisleri Odası, Member, 2007 - Continues, Turkey

## Scientific Refereeing

APPLIED THERMAL ENGINEERING, SCI Journal, October 2022

APPLIED THERMAL ENGINEERING, Journal Indexed in SSCI, October 2022

INTERNATIONAL JOURNAL OF REFRIGERATION, SCI Journal, October 2022

APPLIED THERMAL ENGINEERING, SCI Journal, May 2022

APPLIED THERMAL ENGINEERING, SCI Journal, April 2022

INTERNATIONAL JOURNAL OF REFRIGERATION, SCI Journal, April 2022

INTERNATIONAL JOURNAL OF REFRIGERATION, SCI Journal, February 2022

APPLIED THERMAL ENGINEERING, Journal Indexed in SCI-E, January 2022

EXPERIMENTAL HEAT TRANSFER, Journal Indexed in SCI-E, November 2021

APPLIED THERMAL ENGINEERING, Journal Indexed in SCI-E, November 2021

INTERNATIONAL JOURNAL OF REFRIGERATION-REVUE INTERNATIONALE DU FROID, Journal Indexed in SCI-E, November 2021

FRONTIERS IN ENERGY, Journal Indexed in SCI-E, October 2021

International Journal Of Energy Research, Journal Indexed in SCI-E, May 2021

INTERNATIONAL JOURNAL OF REFRIGERATION-REVUE INTERNATIONALE DU FROID, Journal Indexed in SCI-E, May 2021

APPLIED ENERGY, SCI Journal, March 2021

EXPERIMENTAL HEAT TRANSFER, Journal Indexed in SCI-E, February 2021

INTERNATIONAL JOURNAL OF REFRIGERATION-REVUE INTERNATIONALE DU FROID, Journal Indexed in SCI-E, January 2021

Journal of Thermal Engineering, Journal Indexed in ESCI, January 2021

KOSGEB, STANDART ARGE TASARIM ÜRETİM SANAYİ VE TİCARET ANONİM ŞİRKETİ, Turkey, January 2021

Journal of Thermal Engineering, Journal Indexed in ESCI, November 2020

International Journal Of Refrigeration-Revue Internationale Du Froid, Journal Indexed in SCI-E, October 2020

JOURNAL OF ENHANCED HEAT TRANSFER, SCI Journal, October 2020

Journal of Thermal Engineering, Journal Indexed in ESCI, June 2020

International Journal Of Refrigeration-Revue Internationale Du Froid, Journal Indexed in SCI-E, April 2020

International Journal Of Refrigeration-Revue Internationale Du Froid, Journal Indexed in SCI-E, March 2020

JOURNAL OF CLEANER PRODUCTION, Journal Indexed in SCI-E, March 2020  
Energy Conversion And Management, Journal Indexed in SCI-E, February 2020  
International Journal Of Refrigeration-Revue Internationale Du Froid, Journal Indexed in SCI-E, January 2020  
JOURNAL OF CLEANER PRODUCTION, Journal Indexed in SCI-E, January 2020  
International Journal Of Refrigeration-Revue Internationale Du Froid, Journal Indexed in SCI-E, January 2020  
International Journal Of Refrigeration-Revue Internationale Du Froid, Journal Indexed in SCI-E, October 2019  
Journal Of Cleaner Production, Journal Indexed in SCI-E, October 2019  
Journal Of Cleaner Production, Journal Indexed in SCI-E, October 2019  
Journal Of Cleaner Production, Journal Indexed in SCI-E, September 2019  
International Journal Of Refrigeration-Revue Internationale Du Froid, Journal Indexed in SCI-E, September 2019  
Journal Of Enhanced Heat Transfer, Journal Indexed in SCI-E, September 2019  
Journal Of Cleaner Production, Journal Indexed in SCI-E, August 2019  
Journal Of Cleaner Production, Journal Indexed in SCI-E, August 2019  
International Journal Of Refrigeration-Revue Internationale Du Froid, Journal Indexed in SCI-E, August 2019  
International Journal Of Refrigeration-Revue Internationale Du Froid, Journal Indexed in SCI-E, August 2019  
Journal Of Cleaner Production, Journal Indexed in SCI-E, August 2019  
Journal Of Cleaner Production, Journal Indexed in SCI-E, July 2019  
Journal Of Cleaner Production, Journal Indexed in SCI-E, June 2019  
Journal Of Cleaner Production, Journal Indexed in SCI-E, June 2019  
Journal Of Cleaner Production, Journal Indexed in SCI-E, May 2019  
International Journal Of Refrigeration-Revue Internationale Du Froid, Journal Indexed in SCI-E, April 2019  
Journal Of Cleaner Production, Journal Indexed in SCI-E, March 2019  
International Journal Of Refrigeration-Revue Internationale Du Froid, Journal Indexed in SCI-E, February 2019  
International Journal Of Refrigeration-Revue Internationale Du Froid, Journal Indexed in SCI-E, January 2019  
Journal Of Cleaner Production, Journal Indexed in SCI-E, January 2019  
Journal Of Cleaner Production, Journal Indexed in SCI-E, December 2018  
Journal Of Cleaner Production, Journal Indexed in SCI-E, December 2018  
KOSGEB, KOSGEB, Turkey, November 2018  
International Journal Of Refrigeration-Revue Internationale Du Froid, Journal Indexed in SCI-E, October 2018  
Experimental Heat Transfer, Journal Indexed in SCI-E, October 2018  
JOURNAL OF THERMAL ENGINEERING, Other Indexed Journal, June 2018  
Journal of Thermal Engineering, Other Indexed Journal, September 2017  
Journal of Thermal Engineering, Other Indexed Journal, July 2016

## Tasks In Event Organizations

Doğan B., Timuralp Ç., 23. Isı Bilimi ve Tekniği Kongresini (ULIBTK 2021), Scientific Congress, Gaziantep, Turkey, Eylül 2021

## Metrics

Publication: 32

Citation (WoS): 121

Citation (Scopus): 133

H-Index (WoS): 7

H-Index (Scopus): 7