

## Assoc. Prof. NİMETİ DÖNER

### Personal Information

**Office Phone:** [+90 312 582 3424](tel:+903125823424)

**Email:** [nimetidoner@gazi.edu.tr](mailto:nimetidoner@gazi.edu.tr)

**Web:** <https://avesis.gazi.edu.tr/nimetidoner>

**Address:** Gazi Üniversitesi Mühendislik Fakültesi Makine Mühendisliği Bölümü 06570 Maltepe/ANKARA

### Education Information

Doctorate, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Dr), Turkey 1996 - 2003

Postgraduate, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (YI) (Tezli), Turkey 1993 - 1996

Undergraduate, Anadolu University, Mühendislik-Mimarlık Fakültesi, Makine Mühendisliği Bölümü, Turkey 1988 - 1992

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Katılımcı silindirik ortamlarda ışınlam ısı transferinin SKN yöntemi ile hesabı, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Dr), 2003

Postgraduate, Bir buhar güç santralının termoekonomik fonksiyonel analizi, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (YI) (Tezli), 1996

### Research Areas

Mechanical Engineering, Energy, Thermodynamics, Engineering and Technology

### Academic Titles / Tasks

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

Associate Professor, Kütahya Dumlupınar University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2018 - 2019

Assistant Professor, Kütahya Dumlupınar University, Faculty Of Engineering, 2004 - 2018

Research Assistant, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makine Mühendisliği Bölümü, 2002 - 2004

Research Assistant, Kütahya Dumlupınar University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 1993 - 2002

### Academic and Administrative Experience

Mevlana Exchange Program Coordinator, Kütahya Dumlupınar University, Faculty Of Engineering, 2013 - 2018

## Courses

Applied Mathematics for Mechanical Engineers, Undergraduate, 2020 - 2021  
ISI TRANSFERİ PROBLEMLERİNE YAKLAŞIK ÇÖZÜMLER, Postgraduate, 2016 - 2017, 2017 - 2018  
ISI DEĞİŞTİRİCİLERİ, Undergraduate, 2016 - 2017, 2017 - 2018  
SAYISAL ANALİZ, Undergraduate, 2016 - 2017, 2017 - 2018  
Thermodynamics I, Undergraduate, 2017 - 2018  
ISIL İŞİNİM, Postgraduate, 2016 - 2017, 2017 - 2018  
ISI TRANSFERİNDE YAKLAŞIK YÖNTEMLER, Postgraduate, 2017 - 2018

## Advising Theses

Döner N., Sert Z., Investigation of Thermal Performace of Different Additives to Grease in using the Outdoor Environment, Postgraduate, G.GÖKDEMİR(Student), Continues  
Döner N., Erçetin U., Determining Energy Losses and Saving Methods in Compressed Air Systems, Postgraduate, Ö.TUTU(Student), 2021  
Döner N., optimization and thermal design of observation satellite in low Earth orbit, Postgraduate, H.SUNDU(Student), 2020  
Döner N., Timuralp C., Determination of Energy Losses in Textile Finishing Plants and Application of Waste Energy Recovery from Hot oil Central Boiler, Postgraduate, H.KAVAK(Student), 2019  
DÖNER N., Türkiye'de belli bölgelerden alınan is topraklanmalarının ışınm özelliklerinin incelenmesi, Postgraduate, E.SÜTÇÜ(Student), 2019  
Döner N., Özgören M. K. , Design and Construction of a Foot Motion Based Robotic Gait Training Device, Doctorate, K.CEM(Student), 2018  
Döner N., Aygahoglu A., Investigation of Radiative Properties of Particles in Gas After Welding Procedure, Postgraduate, A.RIZA(Student), 2018  
Döner N., Mare T., Experimental Study of Heat Exchange in Microchannels Using Carbonnanotube based Nanofluids: Solar Application, Postgraduate, S.AHLATLI(Student), 2016  
Döner N., Mare T., Performance Analysis and Use of Carbon Nanotube/Water Nanofluid in microchannel Heat Sink, Postgraduate, A.ARSLAN(Student), 2014  
Döner N., Mare T., Experimental Investigation of Reological Properties of Carbon Nanotube/Water Nanofluids, Postgraduate, B.ALADAĞ(Student), 2011  
DÖNER N., Pem tipi yakıt pili prototipinin hazırlanarak çalışma parametrelerinin performans etkilerinin deneysel olarak incelenmesi, Postgraduate, M.GÜVENLİ(Student), 2011  
DÖNER N., İmal edilen ve ticari PEM tipi yakıt hücrelerinin performanslarının kıyaslanması, Postgraduate, R.KAPLAN(Student), 2008

## Jury Memberships

Doctorate, Doctorate, Gazi Üniversitesi, August, 2021  
Doctoral Examination, Doctoral Examination, Gazi Üniversitesi, June, 2021  
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, June, 2021  
Appointment Academic Staff, Appointment Academic Staff, Gazi Üniversitesi, May, 2021  
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, January, 2021  
Post Graduate, Post Graduate, Gazi Üniversitesi, October, 2019  
Post Graduate, Post Graduate, Gazi Üniversitesi, June, 2019  
Doctorate, Doctorate, Kütahya Dumlupınar Üniversitesi, August, 2018

Post Graduate, Post Graduate, Kütahya Dumlupınar Üniversitesi, February, 2011  
Post Graduate, Post Graduate, Kütahya Dumlupınar Üniversitesi, November, 2010  
Post Graduate, Post Graduate, Kütahya Dumlupınar Üniversitesi, September, 2008  
Post Graduate, Post Graduate, Kütahya Dumlupınar Üniversitesi, July, 2007  
Doctorate, Doctorate, Kütahya Dumlupınar Üniversitesi, March, 2007  
Post Graduate, Post Graduate, Kütahya Dumlupınar Üniversitesi, August, 2006  
Post Graduate, Post Graduate, Kütahya Dumlupınar Üniversitesi, July, 2006

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Effects of CuO, TiO<sub>2</sub> and graphite microparticles on the heat transfer properties of greases**  
Gökdemir G., Döner N., Sert Z., Şen F., Ciddi K.  
ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH, vol.25, pp.1-10, 2021  
(Journal Indexed in SCI Expanded)
- II. **Design and kinematic analysis of a novel rehabilitative robotic walking simulation device**  
Kose K. C., ÖZGÖREN M. K., Tekce F., DÖNER N.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART H-JOURNAL OF ENGINEERING IN MEDICINE, vol.235, no.7, pp.770-779, 2021 (Journal Indexed in SCI)
- III. **Numerical investigation of hydrogen production via autothermal reforming of steam and methane over Ni/Al<sub>2</sub>O<sub>3</sub> and Pt/Al<sub>2</sub>O<sub>3</sub> patterned catalytic layers**  
Cherif A., Nebbali R., Sheffield J. W., DÖNER N., Sen F.  
International Journal of Hydrogen Energy, 2021 (Journal Indexed in SCI Expanded)
- IV. **Hematite particles' radiative properties within the ultraviolet-visible spectrum and thermal properties at low temperatures**  
AYĞAHOĞLU A., DÖNER N., Pargan A. R.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.36, no.1, pp.191-200, 2021 (Journal Indexed in SCI)
- V. **A comparative study of waste energy recovery from a hot-oil central boiler in a textile finishing factory**  
Kavak H., TİMURALP Ç., DÖNER N.  
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, 2020 (Journal Indexed in SCI)
- VI. **Morphological and radiative characteristics of soot aggregates: Experimental and numerical research**  
Sutcu E., DÖNER N., Liu F., ERÇETİN Ü., ŞEN F., Yon J., Moran J., Fuentes A.  
SCIENTIFIC REPORTS, vol.10, no.1, 2020 (Journal Indexed in SCI)
- VII. **Radiative properties of hematite particles in the UV-visible spectrum**  
Doner N., Pargan A. R., Aygahoglu A., Liu F., Sen F.  
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.139, pp.79-87, 2019 (Journal Indexed in SCI)
- VIII. **Study of the Heat Transfer of a Large-Scale Tunnel Furnace Based on Numerical Modeling**  
Ercetin U., Doner N.  
JOURNAL OF THERMAL SCIENCE AND ENGINEERING APPLICATIONS, vol.10, no.3, 2018 (Journal Indexed in SCI)
- IX. **Impact of necking and overlapping on radiative properties of coated soot aggregates**  
Doner N., Liu F., Yon J.  
AEROSOL SCIENCE AND TECHNOLOGY, vol.51, no.4, pp.532-542, 2017 (Journal Indexed in SCI)
- X. **Impact of morphology on the radiative properties of fractal soot aggregates**  
Doner N., Liu F.  
JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER, vol.187, pp.10-19, 2017 (Journal Indexed in SCI)
- XI. **Comments on "Investigation of design parameters of a domestic refrigerator by artificial neural**

**networks and numerical simulations" by D. Kumlutas et al. [Int. J. Refrigeration 35, 1678-1689, 2012]**

Doner N.

INTERNATIONAL JOURNAL OF REFRIGERATION-REVUE INTERNATIONALE DU FROID, vol.65, pp.332-334, 2016  
(Journal Indexed in SCI)

**XII. M-1 model for radiative heat transfer in absorbing, emitting, and scattering medium**

Doner N.

INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.79, pp.34-39, 2014 (Journal Indexed in SCI)

**XIII. Viscosity of carbon nanotubes water-based nanofluids: Influence of concentration and temperature**

Halelfadl S., Estelle P., Aladag B., Doner N., Mare T.

INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.71, pp.111-117, 2013 (Journal Indexed in SCI)

**XIV. Shear History Effect on the Viscosity of Carbon Nanotubes Water-based Nanofluid**

Estelle P., Halelfadl S., Doner N., Mare T.

CURRENT NANOSCIENCE, vol.9, no.2, pp.225-230, 2013 (Journal Indexed in SCI)

**XV. An application of Spectral line-based weighted sum of grey gases (SLW) model with geometric optics approximation for radiative heat transfer in 3-D participating media**

Doner N., SELÇUK N.

APPLIED THERMAL ENGINEERING, vol.50, no.1, pp.89-93, 2013 (Journal Indexed in SCI)

**XVI. Experimental investigations of the viscosity of nanofluids at low temperatures**

Aladag B., Halelfadl S., Doner N., Mare T., Duret S., Estelle P.

APPLIED ENERGY, vol.97, pp.876-880, 2012 (Journal Indexed in SCI)

**XVII. A 3-D radiation model for non-grey gases**

SELÇUK N., DÖNER N.

JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER, vol.110, no.3, pp.184-191, 2009 (Journal Indexed in SCI)

## Articles Published in Other Journals

**I. Investigation of Temperature and Absorption Properties of ZnO Additived Greases**

Gökdemir G., Döner N., Sert Z., Şen F.

Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.37, no.2, pp.240-248, 2021 (National Refreed University Journal)

**II. Detailed Thermal Design and Control of an Observation Satellite in Low Earth Orbit**

Sundu H., Döner N.

European Mechanical Science, vol.4, no.4, pp.171-178, 2020 (National Refreed University Journal)

**III. Numerical Investigations of Stall Development in a Transonic Axial Compressor Stage**

Özkara M., Erçetin Ü., Döner N., Şen F.

BioNanoScience, vol.9, no.2, pp.461-473, 2019 (Journal Indexed in ESCI)

**IV. İS (SİYAH KARBON) TOPAKLANMALARINDA YAPISAL DURUMLARIN IŞINIM ÖZELLİKLERİNE ETKİLERİ**

DÖNER N.

Uludağ University Journal of The Faculty of Engineering, vol.22, no.1, pp.125, 2017 (Refereed Journals of Other Institutions)

**V. THERMAL PERFORMANCE OF CARBON NANOTUBE NANOFUIDS IN SOLAR MICROCHANNEL COLLECTORS: AN EXPERIMENTAL STUDY**

Ahlatli S., Mare T., Estelle P., Doner N.

INTERNATIONAL JOURNAL OF TECHNOLOGY, vol.7, no.2, pp.219-226, 2016 (Journal Indexed in ESCI)

**VI. Ticari Nükleer Santral Modellerinin Yakıt Masraflarına göre Elektrik Üretim Maliyetlerinin Değerlendirilmesi**

DÖNER N.

## Books & Book Chapters

- I. **Carbon-polymer hybrid-supported nanomaterials for alcohol fuel cells**  
Bayat R., Döner N., Şen F.  
in: Nanomaterials for Direct Alcohol Fuel Cells, Fatih SEN, Editor, Elsevier, Cambridge, pp.371-387, 2021
- II. **Catalysts for high-temperature fuel cells operated by alcohol fuels**  
Cherif A., Döner N., Şen F.  
in: Nanomaterials for Direct Alcohol Fuel Cells, Fatih SEN, Editor, Elsevier, Cambridge, pp.173-186, 2021
- III. **Sayısal Analiz Uygulamaları**  
DÖNER N.  
Academia Yayınevi, Kütahya, 2016

## Refereed Congress / Symposium Publications in Proceedings

- I. **Metal Mikroparçacık katkılı Greslerin Isıl Özelliklerinin Araştırılması**  
Döner N., Sert Z., Şen F., Gökdemir G.  
23. Uluslararası Katılımlı Isı Bilimi ve Tekniği Kongresi, Gaziantep, Turkey, 8 - 10 September 2021, pp.1-8
- II. **İs Topaklanmalarının Modellenmesi ve Işınım Analizi**  
Sütçü E., DÖNER N., Ercetin U., ŞEN F.  
22nd Congress on Thermal Science and Technology, Kocaeli, Turkey, 11 - 14 September 2019, vol.2, pp.1090-1100
- III. **Numerical Simulations of The Heat Transfer on Liquid-cooled and Air-Cooled Computer Processors**  
ERÇETİN Ü., KEÇECİLER A., DÖNER N., ERBAŞ O.  
International Congress on Applied Science and Technology (ASTECH'xx2017), 17 - 20 April 2017
- IV. **Thermal performance of carbon nanotube nanofluids in solar microchannel collectors An experimental study**  
AHLATLI S., MARE T., ESTELLE P., DÖNER N.  
8th International Meeting on Advances in Thermofluids (IMAT), 2015, Jakarta, Indonesia, 11 - 12 November 2015
- V. **Experimental Investigation of a Micro channel Heat Sink Performance Using Aqueous Carbon Nanotubes Based Nanofluid**  
Arslan A., Halefadi S., Mare T., Patrice E., DÖNER N., Norma-M G.  
5th International Conference on Applied Energy ICAE 2013, Pretoria, South Africa, 1 - 04 July 2013
- VI. **Experimental Investigation of PEM Fuel Cells Operating Parameters with Nafion 212 Membrane**  
GÜVENLİ M., DÖNER N., İÇİNGÜR Y.  
5th International Conference on Applied Energy ICAE 2013, Pretoria, South Africa, 1 - 04 July 2013
- VII. **Bir Boyutlu Katılımcı Homojen Silindirik Ortamlarda Işınım Isı Transferinin SKN Yöntemi ile Hesaplanması**  
DÖNER N., ALTAÇ Z.  
15. Ulusal Isı Bilimi ve Tekniği Kongresi, Trabzon, Turkey, 7 - 09 September 2005, vol.1, pp.326-331
- VIII. **Solution of The Radiative Transfer Problems in Two Dimensional Participating Cylindrical Medium with Isotropic Scattering Using the SKN Approximation**  
DÖNER N., ALTAÇ Z.  
9th International Conference on Advanced Computational Methods and Experimental Measurements in Heat and Mass Transfer, The New Forest, England, 5 - 07 July 2006, pp.109-120
- IX. **The Synthetic Kernel SKN Method Applied to Radiative Transfer in Anisotropically Scattering and Participating One Dimensional Cylindrical Medium**  
DÖNER N., ALTAÇ Z.

Eurotherm78-Computational Thermal Radiation in Participating Media II, Poitiers, France, 5 - 07 April 2006, pp.1-10

- X. **Solution of The Radiative Transfer Equation Using The Synthetic Kernel SKN Method in inhomogeneous Participating and Anisotropically Scattering One Dimensional Cylindrical Medium**  
DÖNER N., ALTAÇ Z.

2nd International Conference on Thermal Engineering Theory and Applications, Al Ain, United Arab Emirates, 3 - 06 January 2006, pp.176-180

- XI. **Application of the SKN Method to Two Dimensional Cylindrical Medium with Isotropic Scattering**  
DÖNER N., ALTAÇ Z.

Fourth International Symposium on Radiative Heat Transfer, İstanbul, Turkey, 20 - 25 June 2004

- XII. **Çatalağzı Termik Santralinin TermoekonomikFonksiyonel Analizi**

DÖNER N., Erbay L. B.

11. Ulusal Isı Bilimi ve Tekniği Kongresi, Edirne, Turkey, 17 - 19 September 1997, vol.2, pp.726-735

## Supported Projects

DÖNER N., Project Supported by Higher Education Institutions, Isıl Güce Dayalı Yenilenebilir Enerji Sistemi Geliştirilmesi (TGES), 2020 - Continues

DÖNER N., Project Supported by Higher Education Institutions, Türkiye’de Belli Bölgelerdeki Havadan Alınan Is Topaklanmalarının Yapısal ve Işınım Özelliklerinin İncelenmesi, 2018 - 2019

DÖNER N., Project Supported by Higher Education Institutions, Mikro kanallı kolektör kullanılarak karbon nanotüplü nanoakışkanların ışınımsal özelliklerinin tespit edilmesi ve güneş kolektörünün verim analizi, 2012 - 2014

DÖNER N., Project Supported by Higher Education Institutions, Farklı Malzemeler Kullanılarak Polimer Elektrolit Membran Yakıt Pili Yapımı Parametrik Olarak İncelenmesi ve Maliyet analizi, 2009 - 2012

## Memberships / Tasks in Scientific Organizations

Turkish Society of thermal Sciences and Technology, Member, 1995 - Continues, Turkey

## Scientific Refereeing

Journal of Scientific Reports-A, Other Journals, September 2021

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

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Gazi University, Turkey, May 2021

International Journal of Thermodynamics, Journal Indexed in ESCI, April 2021

JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER, SCI Journal, October 2020

JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, May 2020

Thermal Science and Engineering Process, Other Indexed Journal, December 2019

Heliyon, Other Indexed Journal, November 2019

INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, June 2019

FUEL, SCI Journal, May 2019

JOURNAL OF THERMAL ENGINEERING, Journal Indexed in ESCI, December 2018

JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER, SCI Journal, August 2018

APPLIED MATHEMATICAL MODELLING, SCI Journal, March 2018

ENERGY & FUELS, SCI Journal, December 2017

INTERNATIONAL JOURNAL OF REFRIGERATION-REVUE INTERNATIONALE DU FROID, SCI Journal, August 2017

PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, SCI Journal, October 2016

INTERNATIONAL JOURNAL OF THERMAL SCIENCES, SCI Journal, May 2014  
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, SCI Journal, October 2013  
HEAT AND MASS TRANSFER, Journal Indexed in SCI-E, September 2009  
Osmangazi Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, Other Journals, September 2005

### **Tasks In Event Organizations**

Döner N., 23rd Congress on Thermal Science and Technology (ULIBTK 2021) September 8-10, 2021, Scientific Congress, Gaziantep, Turkey, Eylül 2021

### **Edit Congress and Symposium Activities**

Session Moderator, Gaziantep, Turkey, 2021

### **Citations**

Total Citations (WOS):429

h-index (WOS):8

### **Scholarships**

2219 International Postdoctoral Research Fellowship Program for Turkish Citizens, TUBITAK, 2015 - 2015

Araştırma Bursu, YOK, 2011 - 2012

### **Non Academic Experience**

State Agency, National Research Council of Canada, Measurement Science and Standards

State Agency, National Research Council of Canada, Measurement Science and Standards