



AYLA DOĞAN

PROF.

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International Researcher IDs
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Learning Knowledge

Doctorate
1997 - 2003

Gazi University, Mühendislik Fakültesi, Makine Mühendisliği, Turkey

Postgraduate
1993 - 1996

Sivas Cumhuriyet University, Mühendislik Fakültesi, Makine Mühendisliği, Turkey

Undergraduate
1987 - 1991

Sivas Cumhuriyet University, Mühendislik Fakültesi, Makine/Termodinamik, Turkey

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Alt ve Üst Yüzeylerine Ayrık Isıtıcılar Yerleştirilmiş Dikdörtgen Kesitli Bir Kanalda Karışık Konveksiyonla Isı Transferinin İncelenmesi,, Gazi University, Mühendislik Mimarlık Fakültesi, Makine/Termodinamik, 2003
Postgraduate, Jeotermal Enerji Kaynaklı Isı Pompasının Kurulması ve Performans Analizi, Sivas Cumhuriyet University, Mühendislik Fakültesi, Makine/Termodinamik, 1996

Academic Titles / Tasks

Professor
2022 - Continues

Akdeniz University, Faculty of Engineering, Department of Mechanical Engineering

Associate Professor
2015 - 2022

Akdeniz University, Faculty of Engineering, Makine Mühendisliği

Assistant Professor

2007 - 2015

Akdeniz University, Faculty of Engineering, Makine

Research Assistant PhD

2004 - 2007

Sivas Cumhuriyet University, Mühendislik Fakültesi, Makine

Research Assistant

1997 - 2003

Gazi University, Mühendislik Fakültesi, Makine Mühendisliği

Research Assistant

1991 - 1997

Sivas Cumhuriyet University, Mühendislik Fakültesi, Makine Mühendisliği

Supported Projects

1. DOĞAN A., ASİLTÜRK M., ÖZBALCI O., Project Supported by Higher Education Institutions, NANOAKIŞKAN VE AÇIK HÜCRELİ METAL KÖPÜK MALZEME KULLANIMININ ELEKTRONİK SİSTEMLERİN SOĞUTULMASINA ETKİSİNİN DENEYSEL OLARAK İNCELENMESİ, 2019 - 2022
2. Çağlar A., Atmaca İ., Doğan A., Project Supported by Higher Education Institutions, Güneş Enerjisi Kaynaklı Absorpsiyonlu Soğutma Çevriminin Deneysel Olarak İncelenmesi, 2014 - 2020
3. ATMACA İ., DOĞAN A., ASİLTÜRK M., KOÇAK SOYLU S., Project Supported by Higher Education Institutions, Yassı Borulu Kanatlı Tip Çapraz Akışlı Eşanjörde Yüzey Alanını Azaltma Amaçlı Nanoakışkan Kullanımının Deneysel Araştırılması, 2016 - 2018
4. Doğan A., Atmaca İ., Project Supported by Higher Education Institutions, Metal Köpük Malzeme ile Yüzeyleri Genişletilmiş Isı Kaynakları Bulunan Bir Kanalda Laminer Zorlanmış Konveksiyonla Gerçekleşen Isı Transferinin Deneysel Olarak İncelenmesi, 2010 - 2012
5. Doğan A., Atmaca İ., Project Supported by Higher Education Institutions, Alternatif Enerji Kaynakları ile Çalışan İklimlendirme Sistemi Kullanımının Deneysel Olarak İncelenmesi, 2010 - 2012

Jury Memberships

Post Graduate, Post Graduate, Akdeniz Üniversitesi, July, 2021

Post Graduate, Post Graduate, Akdeniz Üniversitesi, July, 2019

Post Graduate, Post Graduate, Akdeniz Üniversitesi, July, 2019

Post Graduate, Post Graduate, Süleyman Demirel Üniversitesi, September, 2018

Doctorate, Doctorate, Akdeniz Üniversitesi, June, 2018

Post Graduate, Post Graduate, Akdeniz Üniversitesi, February, 2018

Post Graduate, Post Graduate, Akdeniz Üniversitesi, September, 2014

Post Graduate, Post Graduate, Akdeniz Üniversitesi, July, 2012

Published journal articles indexed by SCI, SSCI, and AHCI

1. **Machine Learning Approach to Predict the Effect of Metal Foam Heat Sinks Discretely Placed in a Cavity on Surface Temperature**
ÖZBALCI O., Çakir M., ORAL O., DOĞAN A.
Tehnicki Vjesnik, vol.31, no.6, pp.2003-2013, 2024 (SCI-Expanded)

2. **Performance of discretely mounted metal foam heat sinks in a channel with nanofluid**
ÖZBALCI O., DOĞAN A., Asilturk M.
Applied Thermal Engineering, vol.235, 2023 (SCI-Expanded)
3. **Experimental Investigation of the Effect of Flexible/Rigid Flag on Heat Transfer**
Çalışkan S., Köseoğlu A. D., Doğan A., Şahin U. R.
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.188, pp.108147, 2023 (SCI-Expanded)
4. **Heat Transfer Performance of Plate Fin and Pin Fin Heat Sinks Using Al₂O₃/H₂O Nanofluid in Electronic Cooling**
Özbalcı O., Dogan A., Asilturk M.
Processes, vol.10, no.8, 2022 (SCI-Expanded)
5. **Experimental Study of Thermal and Pressure Performance of Porous Heat Sink Subjected to Al₂O₃-H₂O Nanofluid**
Ozbalci O., Dogan A., Asilturk M.
Electronics (Switzerland), vol.11, no.15, 2022 (SCI-Expanded)
6. **Effect of new punched vortex generators in a rectangular channel on heat transfer using Taguchi method**
Caliskan S., Doğan A., Sahin U. R.
EXPERIMENTAL HEAT TRANSFER, vol.35, no.5, pp.611-636, 2022 (SCI-Expanded)
7. **Experimental investigation of heat transfer from different pin fin in a rectangular channel**
ÇALIŞKAN S., DOĞAN A., KOTÇİOĞLU İ.
EXPERIMENTAL HEAT TRANSFER, vol.32, no.4, pp.376-392, 2019 (SCI-Expanded)
8. **Improving heat transfer performance of an automobile radiator using Cu and Ag doped TiO₂ based nanofluids**
Soylu S. K., ATMACA İ., ASİLTÜRK M., DOĞAN A.
APPLIED THERMAL ENGINEERING, vol.157, 2019 (SCI-Expanded)
9. **Forced convection heat transfer from porous heat sinks placed in partially open cavity: Some case studies**
ÖZBALCI O., DOĞAN A.
EXPERIMENTAL HEAT TRANSFER, vol.31, no.3, pp.183-193, 2018 (SCI-Expanded)
10. **HEAT TRANSFER IN A CHANNEL WITH INTERMITTENT HEATED ALUMINUM-FOAM HEAT SINKS**
DOĞAN A., Öney B.
HEAT TRANSFER RESEARCH, vol.48, no.3, pp.211-220, 2017 (SCI-Expanded)
11. **EXPERIMENTAL INVESTIGATION OF NATURAL CONVECTION FROM POROUS BLOCKS IN A CAVITY**
DOĞAN A., Ozbalci O., ATMACA İ.
JOURNAL OF POROUS MEDIA, vol.19, no.12, pp.1023-1032, 2016 (SCI-Expanded)
12. **EXPERIMENTAL INVESTIGATION OF CONVECTION HEAT TRANSFER FROM ALUMINUM FOAM HEAT SINKS**
DOĞAN A., Öney B.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.29, no.1, pp.71-78, 2014 (SCI-Expanded)
13. **EXPERIMENTAL INVESTIGATION OF CONVECTION HEAT TRANSFER FROM OPEN-CELLED METAL FOAM BLOCKS**
DOĞAN A., TEZEL T.
JOURNAL OF ENHANCED HEAT TRANSFER, vol.20, no.3, pp.267-275, 2013 (SCI-Expanded)
14. **NUMERICAL ANALYSIS OF NATURAL CONVECTION HEAT TRANSFER FROM ANNULAR FINS ON A HORIZONTAL CYLINDER**
DOĞAN A., Akkus S., BAŞKAYA Ş.
ISI BİLİMİ VE TEKNİĞİ DERGİSİ-JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, vol.32, no.2, pp.31-41, 2012 (SCI-Expanded)
15. **NUMERICAL ANALYSIS OF NATURAL CONVECTION HEAT TRANSFER FROM PARTIALLY OPEN CAVITIES HEATED AT ONE WALL**

- DOĞAN A., Baysal S., BAŞKAYA Ş.
ISI BILIMI VE TEKNIGI DERGISI-JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, vol.29, no.1, pp.79-90, 2009 (SCI-Expanded)
16. **NUMERICAL INVESTIGATION OF NATURAL CONVECTION IN PARTIALLY OPEN AND TILTED CAVITIES**
DOĞAN A., Baysal S., BAŞKAYA Ş.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.23, no.4, pp.895-902, 2008 (SCI-Expanded)
17. **Investigation of mixed convection heat transfer in a horizontal channel with discrete heat sources at the top and at the bottom**
DOĞAN A., Sivrioğlu M., BAŞKAYA Ş.
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.49, no.15-16, pp.2652-2662, 2006 (SCI-Expanded)
18. **Experimental investigation of mixed convection heat transfer in a rectangular channel with discrete heat sources at the top and at the bottom**
DOĞAN A., Sivrioğlu M., Başkaya Ş.
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.32, no.9, pp.1244-1252, 2005 (SCI-Expanded)
19. **Thermodynamic analysis of the absorption refrigeration system with geothermal energy: an experimental study**
Keçeciler A., Acar H. İ., DOĞAN A.
ENERGY CONVERSION AND MANAGEMENT, vol.41, no.1, pp.37-48, 2000 (SCI-Expanded)

Articles Published in Other Journals

1. **Strength-Based Design Analysis of a Damaged Engine Mounting Bracket Designed for a Commercial Electric Vehicle**
Celik H. K., ERSOY H., DOĞAN A., Eravci G., Rennie A. E. W., AKINCI İ.
JOURNAL OF FAILURE ANALYSIS AND PREVENTION, vol.21, no.4, pp.1315-1322, 2021 (ESCI)
2. **Numerical investigation of heat transfer from heat sources placed in a horizontal rectangular channel**
DOĞAN A., Sivrioğlu M., Başkaya Ş.
Cumhuriyet Science Journal, vol.41, no.3, pp.732-740, 2020 (Peer-Reviewed Journal)
3. **Experimental Investigation of Free Convection from Foam Heat Sinks in an Inclined Rectangular Channel**
DOĞAN A., ÖZBALCI O.
Cumhuriyet Science Journal, vol.39, no.3, pp.756-765, 2018 (Peer-Reviewed Journal)
4. **EXPERIMENTAL INVESTIGATION OF THE EFFECT OF METAL FOAM MATERIAL ON CPU COOLING**
Doğan A., Özbacı O.
Journal of Engineering Technology and Applied Sciences, vol.2, no.3, pp.113-120, 2017 (Peer-Reviewed Journal)
5. **Investigation of Evaporative Cooling Effectiveness on the Performance of Air-Cooled Chillers**
KOÇAK SOYLU S., ATMACA İ., DOĞAN A.
The Online Journal of Science and Technology, vol.6, no.3, pp.36-39, 2016 (Peer-Reviewed Journal)
6. **Investigation of Natural Convection from Intermittent Foam Blocks in a Cavity**
DOĞAN A., Özbacı O., ATMACA İ.
The Online Journal of Science and Technology, vol.4, no.3, pp.43-48, 2014 (Peer-Reviewed Journal)
7. **İçerisinde Gözenekli Bloklar Bulunan Kanalda Karışık Konveksiyonla Isı Transferinin Sayısal Olarak İncelenmesi**
Doğan A., Pırasacı T., Gören A.
Mühendis ve Makina, vol.54, no.638, pp.33-38, 2013 (Peer-Reviewed Journal)
8. **Bina cephelerinde yalıtım yerine Trombe Duvar kullanımının incelenmesi**
DOĞAN A., PIRASACI T.

Tesisat Mühendisliği Dergisi, vol.16, no.112, pp.41-52, 2009 (Peer-Reviewed Journal)

9. **Dikdörtgen kesitli bir kanalda ayrık ısı kaynaklarından karışık konveksiyonla ısı transferinin deneysel olarak incelenmesi,**
DOĞAN A., Sivrioğlu M., Başkaya Ş.
Gazi Üniv. Müh. Mim. Fakültesi Dergisi, vol.21, no.2, pp.311-318, 2006 (Peer-Reviewed Journal)
10. **LiBr-H₂O Akışkan Çifti ile Çalışan Absorbsiyonlu Soğutma Sisteminin Termodinamik Analizi**
Keçeciler A., CANBEK A.
Niğde Üniversitesi Mühendislik-Mimarlık Fakültesi Mühendislik Bilimleri Dergisi, vol.1, no.1, pp.95-104, 1997 (Peer-Reviewed Journal)

Books & Book Chapters

1. **Işınım İle Enerji Transferi**
Koçak Soylu S., Çağlar A., Doğan A., Atmaca İ.
in: Kapalı Hacimlerde ve İklimlendirme Sistemlerinde Ultraviyole Işınım ile Dezenfeksiyon Teori ve Pratik, Macit Toksoy Sait C. Sofuoğlu Z. Haktan Karadeniz Orhan Ekren, Editor, Doğa Yayıncılık Ltd. Şti., İstanbul, pp.29-46, 2021

Refereed Congress / Symposium Publications in Proceedings

1. **Al₂O₃-Su Nanoakışkan Kullanımının Isınan Bir Yüzeyden Olan Isı Transferine Etkisinin Deneysel Olarak İncelenmesi**
ÖZBALCI O., DOĞAN A., ASİLTÜRK M.
22. Isı Bilimi ve Tekniği Kongresi, Kocaeli, Turkey, 11 - 14 September 2019, pp.35-40
2. **Eğimli Bir Kanal İçerisindeki Gözenekli Bloklardan Zorlanmış Taşınım ile Isı Transferinin Deneysel Olarak İncelenmesi**
ÖZBALCI O., DOĞAN A.
22. Isı Bilimi ve Tekniği Kongresi, Kocaeli, Turkey, 11 - 14 September 2019, pp.468-473
3. **Çakıl Taşlarında Depolanan Isının Sera Isıtmada Kullanılmasının Deneysel Olarak İncelenmesi**
Doğan A., Çelik M. A.
Antalya İklimlendirme Sempozyumu , Antalya, Turkey, 15 December 2017, pp.133-143
4. **EXPERIMENTAL INVESTIGATION OF THE EFFECT OF THE METAL FOAM MATERIAL ON CPU COOLING**
Doğan A., Özbalcı O.
International Congress on Fundamental and Applied Sciences, Sarajevo, Bosnia And Herzegovina, 21 August 2017, pp.60
5. **Investigation of a Solar Assisted Water Source Heat Pump System for Different Solar Radiations**
KOÇAK SOYLU S., Çarkacı Ç., ATMACA İ., DOĞAN A.
CLIMA 2016 - 12th REHVA World Congress, Aalborg, Denmark, 22 - 25 May 2016, vol.3, pp.1
6. **Investigation of Evaporative Cooling Effectiveness on the Performance of Air - Cooled Chillers**
KOÇAK SOYLU S., ATMACA İ., DOĞAN A.
International Science and Technology Conference ISTEK 2015, St.Petersburg, Russia, 2 - 04 September 2015, pp.803-806
7. **INVESTIGATION OF FORCED CONVECTION HEAT TRANSFER FROM METAL FOAM BLOCKS HAVING DIFFERENT PORE DENSITY**
Doğan A., Özbalcı O., Atmaca İ.
International Science and Technology Conference ISTEK 2015, Sankt-Peterburg, Russia, 2 - 04 September 2015, pp.755-761
8. **Metal Köpük Malzemeler ve Yüzey Soğutmada Kullanımı**
DOĞAN A., ÖZBALCI O., ATMACA İ.
XII. Ulusal Tesisat Mühendisliği Kongresi, İzmir, Turkey, 8 - 11 April 2015, pp.2641-2652

9. **Experimental study of air natural convection on aluminum foam-blocks in a cavity**
DOĞAN A., ÖZBALCI O., ATMACA İ.
3rd International Scientific Conference on Engineering Manufacturing and Advanced Technologies, MAT 2014,, Saraybosna, Bosnia And Herzegovina, 18 - 20 September 2014, pp.54-59
10. **An Assessment of the Heat Transfer Applications of Nanofluids**
KOÇAK SOYLU S., ATMACA İ., DOĞAN A.
3rd International Scientific Conference on Engineering "Manufacturing and Advanced Technologies", Mostar, Bosnia And Herzegovina, 18 - 20 September 2014, pp.46-53
11. **Bir Kanal İçerisinde Bulunan Gözenekli Bloklardan Isı Transferinin Deneysel Olarak İncelenmesi**
DOĞAN A., ÖNEY B., PIRASACI T.
Isı Bilim Tekniği Kongres, Samsun, Turkey, 9 - 12 September 2013, pp.452-456
12. **Determination of the Optimum Thermal Comfort Zone for Work Safety of the Employees Working in Manufacturing Sector**
ATMACA İ., KOÇAK SOYLU S., DOĞAN A.
International Science and Technology Conference ISTEK 2013, Roma, Italy, 25 - 27 June 2013, pp.359-364
13. **Investigation Of Natural Convection From Intermittent Foam Blocks An A Cavity**
DOĞAN A., Özbalcı O., Atmaca İ.
International Science and Technology Conference ISTEK 2013, Roma, Italy, 25 - 27 June 2013, pp.613-618
14. **Investigation of convection heat transfer from porous blocks in a channel**
DOĞAN A., TEZEL T.
3rd International Science, Tecnology and Engineering Conference, Dubai, United Arab Emirates, 13 - 15 December 2012, pp.710-716
15. **Heat Transfer from Aluminum Foam Blocks in a Horizontal Channel**
DOĞAN A., Öney B., TEZEL T.
2nd International Scientific Conference on Engineering MAT 2012, Antalya, Turkey, 22 - 24 November 2012, pp.374-380
16. **Farklı Tipte Modellenmiş Güneş Duvarlarının Isıl Performansının Sayısal Olarak İncelenmesi**
DOĞAN A., PIRASACI T.
Ulusal İklimlendirme kongresi, Antalya, Turkey, 18 - 20 November 2011, pp.349-360
17. **Alt ve Üst Yüzeylerine Ayırık Isıtıcılar Yerleştirilmiş dikdörtgen Kesitli Bir Kanalda Karışık Konveksiyonla Isı Transferinin İncelenmesi**
DOĞAN A., Sivrioğlu M., Başkaya Ş.
Isı Bilim Tekniği Kongresi, Isparta, Turkey, 3 - 05 September 2003, pp.1-5
18. **Jeotermal Enerji Kaynaklı Absorbsiyonlu Soğutma Sistemi- Bir Uygulama**
DOĞAN A., Acar H. İ., Keçeciler A.
III. Teskon Ulusal Tesisat Mühendisliği Kongresi, İzmir, Turkey, 20 - 23 November 1997, pp.701-713

Academic and Administrative Experience

2022 - Continues	Member of the Senate	Akdeniz University, Faculty Of Engineering, Department of Mechanical Engineering
2022 - Continues	Faculty Management Board Member	Akdeniz University, Faculty Of Engineering, Department of Mechanical Engineering
2018 - 2021	Faculty Management Board Member	Akdeniz University, Faculty Of Engineering
2018 - 2021	BAP Scientific Commissioner	Akdeniz University, Faculty Of Engineering

2016 - 2019	Deputy Head of Department	Akdeniz University, Faculty Of Engineering, Department of Mechanical Engineering
2007 - 2015	Head of Department	Akdeniz University, Faculty Of Engineering, Department of Mechanical Engineering
2007 - 2012	Deputy Head of Department	Akdeniz University, Faculty Of Engineering, Department of Mechanical Engineering

Courses

TERMODİNAMİK I, Undergraduate, 2022 - 2023
SINIR TABAKA TEORİSİ, Doctorate, 2021 - 2022
SAYISAL ANALİZ, Undergraduate, 2022 - 2023
İLERİ AKIŞKANLAR MEKANİĞİ, Postgraduate, 2021 - 2022
MÜHENDİSLİK MATEMATİĞİ, Undergraduate, 2021 - 2022
İLERİ MÜHENDİSLİK MATEMATİĞİ, Postgraduate, 2021 - 2022
ELEKTRONİK SİSTEMLERİN SOĞUTULMASI, Doctorate, 2021 - 2022
TERMODİNAMİK II, Undergraduate, 2021 - 2022
İLETİMLE ISI TRANSFERİ, Postgraduate, 2021 - 2022
BİTİRME ÇALIŞMASI, Undergraduate, 2021 - 2022
MAKİNE PROJE, Undergraduate, 2021 - 2022

Advising Theses

Doğan A., İçerisinde ayrıık gözenekli ısı alıcılar bulunan bir kanalda nanoakışkan kullanımının ısı transferine etkisinin incelenmesi, Doctorate, O.ÖZBALCI(Student), 2022
DOĞAN A., Kısmi açık bir hacim içerisine yerleştirilmiş metal köpük bloklarından ısı transferinin deneysel olarak incelenmesi, Postgraduate, O.Özbalcı(Student), 2015
Doğan A., Elektronik sistemlerin soğutulmasında alüminyum köpük malzeme kullanımının ısı transferine etkisinin deneysel olarak incelenmesi, Postgraduate, T.TEZEL(Student), 2013
Doğan A., Yüzeyleri Alüminyum Köpük Malzeme ile Genişletilmiş Ayrıık Isıtıcılar Bulunan Bir Kanalda Isı Transferinin Deneysel Olarak İncelenmesi, Postgraduate, B.ÖNEY(Student), 2013

Scientific Refereeing

HEAT TRANSFER RESEARCH, SCI Journal, May 2018
HEAT TRANSFER RESEARCH, SCI Journal, May 2016
HEAT TRANSFER RESEARCH, SCI Journal, June 2015
GAZİ MÜHENDİSLİK BİLİMLERİ DERGİSİ, National Scientific Refreed Journal, March 2015
HEAT TRANSFER RESEARCH, SCI Journal, January 2015
Cumhuriyet Science Journal, National Scientific Refreed Journal, June 2014
HEAT TRANSFER RESEARCH, SCI Journal, February 2014
SÜLEYMAN DEMİREL ÜNİVERSİTESİ FEN BİLİMLERİ ENSTİTÜSÜ DERGİSİ, National Scientific Refreed Journal, May 2013
Cumhuriyet Science Journal, National Scientific Refreed Journal, May 2013
HEAT TRANSFER RESEARCH, SCI Journal, February 2013

Metrics

Publication: 48
Citation (WoS): 209
Citation (Scopus): 263
H-Index (WoS): 7
H-Index (Scopus): 7

Research Areas

Mechanical Engineering, Thermodynamics, Fuels and Combustion, Heating, Refrigerating and Air Conditioning, Computational fluid dynamics, Thermal Systems, Engineering and Technology