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International Researcher IDs

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Publons / Web Of Science ResearcherID: K-6801-2014

ScopusID: 52464282700

Yoksis Researcher ID: 18518

Education Information

Doctorate, İstanbul Technical University, Fen Bilimleri Enstitüsü, Makina Mühendisliği (Dr), Turkey 1990 - 1996

Postgraduate, İstanbul Technical University, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, Turkey 1987 - 1990

Undergraduate, İstanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi, Uçak Mühendisliği Bölümü, Turkey 1983 - 1987

Foreign Languages

English

Research Areas

Technical Sciences, Mechanical Engineering, Thermodynamics, Heat and Mass Transfer, Heating, Refrigerating and Air Conditioning, Thermal Systems

Academic Titles / Tasks

Professor, İstanbul Technical University, Makina, Makina Mühendisliği, 2014 - Continues

Associate Professor, İstanbul Technical University, Makina, Makina Mühendisliği, 2008 - 2014

Assistant Professor, İstanbul Technical University, Makina, Makina Mühendisliği, 1999 - 2008

Research Assistant, İstanbul Technical University, Makina, Makina Mühendisliği, 1988 - 1999

Academic and Administrative Experience

İstanbul Teknik Üniversitesi, Makine Fakültesi, Makine Mühendisliği Bölümü, 2013 - 2014

Published journal articles indexed by SCI, SSCI, and AHCI

- I. An experimental study on heat transfer of pulsating air flow in metal foam subjected to constant heat flux
Binark A. M., Özdemir M.
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.184, 2023 (SCI-Expanded)
- II. Heat transfer of pulsating water flow through aluminum-foam channel under asymmetric constant heat flux boundary condition
Arbak A., Özdemir M., Dukhan N.
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.183, 2023 (SCI-Expanded)
- III. Experimental study on improving the performance of vapor compression cycle by using loop-type heat pipe
Yilmaz M., Erdogan A. K., Özdemir M.
Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2023 (SCI-Expanded)
- IV. Experimental study on laminar air flow and heat transfer through a spiral channel filled with steel balls
Gökaslan M. Y., Özdemir M., Kuddusi L.
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.172, 2022 (SCI-Expanded)
- V. Experimental study on laminar air flow through spiral channel packed with steel balls
Gökaslan M. Y., Özdemir M., Kuddusi L.
HEAT AND MASS TRANSFER, vol.57, no.9, pp.1453-1465, 2021 (SCI-Expanded)
- VI. Comfort properties of socks from seacell fibers
AVCI H., Özdemir M., Iridag B. Y., Duru C. S., Candan C.
Journal of the Textile Institute, vol.109, no.3, pp.419-425, 2018 (SCI-Expanded)
- VII. Determination of Saturation versus Centrifugal Dewatering for a Multilayer Porous Cotton Textile
Kasap F., Özdemir M.
AATCC JOURNAL OF RESEARCH, vol.5, no.1, pp.21-28, 2018 (SCI-Expanded)
- VIII. Influence of pore density on thermal development in open-cell metal foam
Arbak A., Dukhan N., Bagci O., Özdemir M.
EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.86, pp.180-188, 2017 (SCI-Expanded)
- IX. Experimental heat transfer due to oscillating water flow in open-cell metal foam
Bagci O., Dukhan N., Özdemir M., KAVURMACIOGLU L. A.
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.101, pp.48-58, 2016 (SCI-Expanded)
- X. Thermal development in open-cell metal foam: An experiment with constant wall heat flux
Dukhan N., BAGCI O., Özdemir M.
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.85, pp.852-859, 2015 (SCI-Expanded)
- XI. Characteristics of oscillating liquid flow in foam-like highly-porous media: An experimental study
Bagci O., Dukhan N., Özdemir M.
EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.60, pp.96-105, 2015 (SCI-Expanded)
- XII. Metal foam hydrodynamics: Flow regimes from pre-Darcy to turbulent
Dukhan N., BAGCI O., Özdemir M.
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.77, pp.114-123, 2014 (SCI-Expanded)
- XIII. Flow Regimes in Packed Beds of Spheres from Pre-Darcy to Turbulent
Bagci O., Dukhan N., Özdemir M.
TRANSPORT IN POROUS MEDIA, vol.104, no.3, pp.501-520, 2014 (SCI-Expanded)
- XIV. Experimental flow in various porous media and reconciliation of Forchheimer and Ergun relations
Dukhan N., BAGCI O., Özdemir M.
EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.57, pp.425-433, 2014 (SCI-Expanded)
- XV. The effect of sparger geometry on gas holdup and regime transition points in a bubble column equipped with perforated plate spargers
Sal S., GUL O. F., Özdemir M.
CHEMICAL ENGINEERING AND PROCESSING, vol.70, pp.259-266, 2013 (SCI-Expanded)

- XVI. Heat transfer in porous media of steel balls under oscillating flow
 Pamuk M. T., Özdemir M.
 EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.42, pp.79-92, 2012 (SCI-Expanded)
- XVII. Friction factor, permeability and inertial coefficient of oscillating flow through porous media of packed balls
 Pamuk M. T., Özdemir M.
 EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.38, pp.134-139, 2012 (SCI-Expanded)
- XVIII. A Comparative Study of Some Comfort-related Properties of Socks of Different Fiber Types
 Cimilli S., NERGIS B. U., Candan C., Özdemir M.
 Textile Research Journal, vol.80, no.10, pp.948-957, 2010 (SCI-Expanded)
- XIX. Correlation to predict heat transfer of an oscillating loop heat pipe consisting of three interconnected columns
 Arslan G., Özdemir M.
 ENERGY CONVERSION AND MANAGEMENT, vol.49, no.8, pp.2337-2344, 2008 (SCI-Expanded)
- XX. Heat removal from oscillating flow in a vertical annular channel
 Akdag U., Özdemir M., OZGUC A. F.
 HEAT AND MASS TRANSFER, vol.44, no.4, pp.393-400, 2008 (SCI-Expanded)
- XXI. Kontrol hacmi yaklaşımı ile salınımlı akışta ısı geçişinin deneysel ve teorik olarak incelenmesi
 Özdemir M.
 ISI BİLİMİ VE TEKNİĞİ DERGİSİ, vol.28, no.1, pp.23-31, 2008 (SCI-Expanded)
- XXII. The experimental and theoretical investigation of heat transfer in oscillating flow by control volume approach
 AKDAĞ Ü., Ozguc A. F., Özdemir M.
 ISI BILIMI VE TEKNIGI DERGISI-JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, vol.28, no.1, pp.23-31, 2008 (SCI-Expanded)
- XXIII. An experimental study on an oscillating loop heat pipe consisting of three interconnected columns
 Oezdemir M.
 HEAT AND MASS TRANSFER, vol.43, no.6, pp.527-534, 2007 (SCI-Expanded)
- XXIV. Heat transfer in an oscillating vertical annular liquid column open to atmosphere
 Akdag U., Ozdemir M.
 HEAT AND MASS TRANSFER, vol.42, no.7, pp.617-624, 2006 (SCI-Expanded)
- XXV. A simple mathematical model to analyse a fluidyne heat machine
 Ozdemir M., OZGUC A.
 PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART A-JOURNAL OF POWER AND ENERGY, vol.217, pp.91-100, 2003 (SCI-Expanded)
- XXVI. Porosity variation and determination of REV in porous medium of screen meshes
 Ozdemir M., OZGUC A.
 INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.24, no.7, pp.955-964, 1997 (SCI-Expanded)
- XXVII. Forced convective heat transfer in porous medium of wire screen meshes
 Ozdemir M., OZGUC A.
 HEAT AND MASS TRANSFER, vol.33, pp.129-136, 1997 (SCI-Expanded)

Articles Published in Other Journals

- I. UV-C İŞİNİMLİ HAVA DEZENFEKSİYON CİHAZININ PATOJENLER ÜZERİNE ETKİSİNİN DENEYSEL OLARAK İNCELENMESİ
 ERDOĞAN A. K., DALKIRAN O., ÖZDEMİR M.
 Mühendis ve Makina, vol.63, no.707, pp.376-388, 2022 (Peer-Reviewed Journal)
- II. EXPERIMENTAL FULLY-DEVELOPED THERMAL CONVECTION FOR NON-DARCY WATER FLOW IN

METAL FOAM

Dukhan N., Bagci O., Özdemir M., Kavurmacioglu L.

JOURNAL OF THERMAL ENGINEERING, vol.2, no.2, pp.677-682, 2016 (ESCI)

III. Various Flow Regimes and Permeabilities for Packed Spheres Porous Media

Bağcı Ö., Dukhan N., ÖZDEMİR M.

Defect and Diffusion Forum, vol.364, pp.1-8, 2015 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

I. Design of a Movable Hotplate System for the Measurement of Forced Heat Convection

DURU S., GÖKASLAN M. Y., CANDAN C., ÖZDEMİR M., BULUT H. M.

International Graduate Research Symposium, 01 June 2022

II. Experimental investigation on the pressure drop of pulsating air flow in metal foam

Binark A. M., Özdemir M.

Uluslararası Katılımlı 23. Isı Bilimi ve Tekniği Kongresi, Gaziantep, Turkey, 8 - 10 September 2021, vol.2, pp.1402-1413

III. Bilye doldurulmuş spiral kanalda basınç düşüşünün deneysel incelenmesi

GÖKASLAN M. Y., ÖZDEMİR M., KUDDUSİ L.

22. Isı Bilimi ve Tekniği Kongresi, Kocaeli, Turkey, 11 - 14 September 2019, vol.2, pp.844-852

IV. A New Approach for Testing Air Permeability

GÖKASLAN M. Y., DURU S., CANDAN C., ÖZDEMİR M., NERGİS F. B.

17th National 3rd International the Recent Progress Symposium on Textile Technology And Chemistry, 20 - 22 November 2019

V. NUMERICAL MODELING OF PRESSURE DROP AND HEAT TRANSFER IN OPEN-CELL METAL FOAM

ARBAK A., ÖZDEMİR M., Dukhan N., Bağcı Ö.

The Porous and Powder Materials Symposium and Exhibitions, İzmir, Turkey, 12 - 15 September 2017

VI. Numerical Solution of Flow in Open Cell Metal Foam and Comparison to Experiment

BAĞCI Ö., DUKHAN N., KAVURMACIOĞLU L. A., ÖZDEMİR M.

8th International Conference on Computational Heat and Mass Transfer, ICCHMT 8, İstanbul, Turkey, 25 - 28 May 2015

VII. Heat transfer due to turbulent flow water in metalfoam limited experimental results and difficulties

BAĞCI Ö., DUKHAN N., ÖZDEMİR M., ARBAK A.

Turbulence, Heat and Mass Transfer 8, Sarajevo, Bosnia And Herzegovina, 15 - 18 September 2015, pp.923-926

VIII. Experimental Heat Transfer Due to High Frequency Oscillating Water Flow in 20 PPI Aluminum Foam

BAĞCI Ö., DUKHAN N., ÖZDEMİR M., KAVURMACIOĞLU L. A., ARBAK A.

International Porous Powder Materials Symposium & Exhibition PPM 15-18 September 2015 Çeşme, İzmir, Turkey, 15 - 18 September 2015, vol.1, pp.443-449

IX. Experimental Thermal Development in Open Cell Metal Foam darcy Flow of water

BAĞCI Ö., DUKHAN N., ÖZDEMİR M.

7th International Conference on Porous Media&Annual Meeting, PADOVA, Italy, 18 - 21 May 2015

Supported Projects

Özdemir M., Binark A. M., Project Supported by Higher Education Institutions, Metal Köpük İçinde Zorlanmış Taşınımı Kaynama, 2022 - Continues

Özdemir M., Project Supported by Higher Education Institutions, Genişletilmiş Yüzeylerde Buzlanma Esnasındaki Isı ve Kütle Geçişinin İncelenmesi, 2016 - Continues

Özdemir M., Binark A. M., Project Supported by Higher Education Institutions, Gözenekli Ortamda Darbeli Hava Akışı Durumunda Isı Geçişinin Deneysel İncelenmesi, 2018 - 2021

Özdemir M., Project Supported by Higher Education Institutions, Yıvli borular üzerinde kaynama, 2016 - 2021

Özdemir M., Project Supported by Higher Education Institutions, Üç kolonlu Titreşimli Isı Borusunun Farklı Çalışma Basınçlarında Davranışının Deneysel Olarak İncelenmesi, 2014 - 2021

Özdemir M., Project Supported by Higher Education Institutions, HEAT TRANFER DUE TO TURBULENT FLOW WATER IN METAL FOAM, 2015 - 2018

Özdemir M., Project Supported by Higher Education Institutions, Ayrık Düşey Kanatlarda Sınır Tabaka Oluşumu ve Doğal Taşınımıla Isı Geçişine Etkisinin Deneysel Olarak İncelenmesi, 2015 - 2015

Özdemir M., TUBITAK Project, Kompakt Grafitli Dökme Demirin Minimum Yağlama Sistemi İle Derin Delik Delme İşleminin Optimizasyonu Ve Isıl Modellemesi, 2013 - 2015

Özdemir M., Project Supported by Higher Education Institutions, Binalarda Enerji Analizinin Dinamik Olarak İncelenmesi, 2010 - 2015

Özdemir M., Project Supported by Higher Education Institutions, GÖZENEKLİ ORTAM İÇİNDE TİTREŞİMLİ AKIŞTA ISI VE KÜTLE GEÇİŞİ, 2010 - 2015

Özdemir M., Project Supported by Higher Education Institutions, Üç Kolonlu Titreşimli Isı Borusunun Deneysel Analizi ve Matematik Modellemesi, 2006 - 2007

Özdemir M., Project Supported by Higher Education Institutions, Gözenekli Ortamda Doğal Isı Taşınımı; I Isı İletim ve Dispersiyon Katsayılarının Tespiti; II.Gözene, 2000 - 2001

Metrics

Publication: 39
Citation (WoS): 397
Citation (Scopus): 450
H-Index (WoS): 11
H-Index (Scopus): 13

Non Academic Experience

İTÜ Makina Fak.