

Assoc. Prof. BURAK MARKAL

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAM-2402-2021

Yoksis Researcher ID: 266535

Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Makina Mühendisliği Anabilim Dalı, Turkey 2010 - 2016

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Makina Mühendisliği Anabilim Dalı, Turkey 2007 - 2010

Undergraduate, Karadeniz Technical University, Mühendislik Fakültesi, Makina Mühendisliği Bölümü, Turkey 2003 - 2007

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Mikrokanallarda Kaynamalı Akışın Deneysel İncelenmesi , Karadeniz Technical University, Fen Bilimleri Enstitüsü, Makina Mühendisliği Bölümü / Termodinamik Bilim Dalı, 2016

Postgraduate, Ranque-Hilsch Vorteks Tüpünde Enerji Ayrışmasının Deneysel ve Termodinamik İncelenmesi, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Makina Mühendisliği Bölümü / Termodinamik Bilim Dalı, 2010

Research Areas

Mechanical Engineering, Thermodynamics, Heat and Mass Transfer, Thermal Systems

Academic Titles / Tasks

Associate Professor, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, MAKİNE MÜHENDİSLİĞİ, 2020 - Continues

Associate Professor, Recep Tayyip Erdogan University, Mühendislik Fakültesi, Enerji Sistemleri Mühendisliği Bölümü, 2019 - 2020

Assistant Professor, Recep Tayyip Erdogan University, Mühendislik Fakültesi, Enerji Sistemleri Mühendisliği Bölümü, 2017 - 2019

Research Assistant, Karadeniz Technical University, Mühendislik Fakültesi, Makina Mühendisliği Bölümü, 2007 - 2009

Academic and Administrative Experience

Head of Department, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, MAKİNE MÜHENDİSLİĞİ, 2022 - Continues

Deputy Head of Department, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, MAKİNE MÜHENDİSLİĞİ, 2020 - 2022

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Comparative investigation of different types of expanding micro-pin-fin heat sinks at low mass flux**
Markal B., Kul B., AYDIN O.
International Communications in Heat and Mass Transfer, vol.148, 2023 (SCI-Expanded)
- II. **Effect of a new type staggered pin fin configuration on flow boiling characteristics of micro-heat sinks**
Markal B., Kul B.
Journal of the Brazilian Society of Mechanical Sciences and Engineering, vol.45, no.10, 2023 (SCI-Expanded)
- III. **Influence of downstream cross-sectional area ratio on flow boiling characteristics of expanding micro pin fin heat sinks**
Markal B., Kul B.
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.143, 2023 (SCI-Expanded)
- IV. **Experimental investigation and a new predictive tool for thermal performance of pulsating heat pipes**
Markal B., Varol R.
JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, vol.45, no.1, 2023 (SCI-Expanded)
- V. **Effect of gradually expanding flow passages on flow boiling of micro pin fin heat sinks**
Markal B., Kul B., Avci M., Varol R.
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.197, 2022 (SCI-Expanded)
- VI. **Combined influence of artificial nucleation site and expanding cross section on flow boiling performance of micro pin fins**
MARKAL B., Kul B.
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.135, 2022 (SCI-Expanded)
- VII. **Effect of double cross sectional ratio on performance characteristics of pulsating heat pipes**
Markal B., Candan Candere A., Avci M., Aydın O.
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.127, 2021 (SCI-Expanded)
- VIII. **Investigation of the effects of miscible and immiscible binary fluids on thermal performance of pulsating heat pipes**
Markal B., Varol R.
HEAT AND MASS TRANSFER, vol.57, no.9, pp.1527-1542, 2021 (SCI-Expanded)
- IX. **Investigation of flat plate type pulsating heat pipes via flow visualization-assisted experiments: Effect of cross sectional ratio**
Markal B., Candere A., Avci M., Aydın O.
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.125, 2021 (SCI-Expanded)
- X. **The combined effects of filling ratio and inclination angle on thermal performance of a closed loop pulsating heat pipe**
Markal B., Aksoy K.
HEAT AND MASS TRANSFER, vol.57, no.5, pp.751-763, 2021 (SCI-Expanded)
- XI. **Experimental investigation and force analysis of flat-plate type pulsating heat pipes having ternary mixtures**
Markal B., Varol R.

INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.121, 2021 (SCI-Expanded)

- XII. **Conical coaxial impinging air jets: angle effect on the heat transfer performance**
Markal B., Avci M., Aydın O.
HEAT AND MASS TRANSFER, vol.56, no.12, pp.3135-3146, 2020 (SCI-Expanded)
- XIII. **Thermal investigation and flow pattern analysis of a closed-loop pulsating heat pipe with binary mixtures**
Markal B., Varol R.
JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, vol.42, 2020 (SCI-Expanded)
- XIV. **Prediction of Two-Phase Heat Transfer Coefficient of Flow Boiling in Minichannels**
Markal B., Candan A., Aydın O., Avci M.
HEAT TRANSFER ENGINEERING, vol.41, no.1, pp.17-35, 2020 (SCI-Expanded)
- XV. **Flow boiling characteristics in a novel minichannel with a step on each corner**
Markal B., Candan A., AYDIN O.
EXPERIMENTAL HEAT TRANSFER, vol.33, no.1, pp.1-17, 2020 (SCI-Expanded)
- XVI. **The effect of Total flowrate on the cooling performance of swirling coaxial impinging jets**
Markal B.
HEAT AND MASS TRANSFER, vol.55, no.11, pp.3275-3288, 2019 (SCI-Expanded)
- XVII. **Effect of hydraulic diameter on flow boiling in rectangular microchannels**
Markal B., AYDIN O., Avci M.
HEAT AND MASS TRANSFER, vol.55, no.4, pp.1033-1044, 2019 (SCI-Expanded)
- XVIII. **Prediction of Pressure Drop for Flow Boiling in Rectangular Multi-Microchannel Heat Sinks**
Markal B., AYDIN O., Avci M.
HEAT TRANSFER ENGINEERING, vol.40, pp.26-38, 2019 (SCI-Expanded)
- XIX. **Experimental investigation of flow boiling in single minichannels with low mass velocities**
Markal B., Candan A., AYDIN O., Avci M.
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.98, pp.22-30, 2018 (SCI-Expanded)
- XX. **Experimental investigation of heat transfer characteristics and wall pressure distribution of swirling coaxial confined impinging air jets**
Markal B.
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.124, pp.517-532, 2018 (SCI-Expanded)
- XXI. **Experimental investigation of coaxial impinging air jets**
Markal B., AYDIN O.
APPLIED THERMAL ENGINEERING, vol.141, pp.1120-1130, 2018 (SCI-Expanded)
- XXII. **Çarpan Eş Eksenli Bir Hava Jetinde Debi Oranının Akış Karakteristikleri Üzerine Etkisinin Deneysel Olarak İncelenmesi**
MARKAL B.
Gümüşhane Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.8, no.2, pp.239-248, 2018 (SCI-Expanded)
- XXIII. **Saturated flow boiling characteristics in single rectangular minichannels: effect of aspect ratio**
Candan A., Markal B., AYDIN O., Avci M.
EXPERIMENTAL HEAT TRANSFER, vol.31, no.6, pp.531-551, 2018 (SCI-Expanded)
- XXIV. **EXPERIMENTAL STUDY OF SINGLE-PHASE FLUID FLOW AND HEAT TRANSFER CHARACTERISTICS IN RECTANGULAR MICROCHANNELS**
Markal B., AYDIN O., Avci M.
ISI BİLİMİ VE TEKNİĞİ DERGİSİ-JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, vol.38, no.1, pp.65-72, 2018 (SCI-Expanded)
- XXV. **Prediction of Heat Transfer Coefficient in Saturated Flow Boiling Heat Transfer in Parallel Rectangular Microchannel Heat Sinks: An Experimental Study**
Markal B., AYDIN O., Avci M.
HEAT TRANSFER ENGINEERING, vol.38, no.16, pp.1415-1428, 2017 (SCI-Expanded)
- XXVI. **An experimental investigation of saturated flow boiling heat transfer and pressure drop in square**

microchannels

Markal B., AYDIN O., Avci M.

INTERNATIONAL JOURNAL OF REFRIGERATION-REVUE INTERNATIONALE DU FROID, vol.65, pp.1-11, 2016 (SCI-Expanded)

XXVII. **Effect of aspect ratio on saturated flow boiling in microchannels**

Markal B., AYDIN O., Avci M.

INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.93, pp.130-143, 2016 (SCI-Expanded)

XXVIII. **An experimental study on the decaying swirl flow in a tube**

AYDIN O., Avci M., Markal B., YAZICI M.

INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.55, pp.22-28, 2014 (SCI-Expanded)

XXIX. **Using artificial neural network for predicting performance of the Ranque-Hilsch vortex tube**

Korkmaz M. E., GÜMÜŞEL L., Markal B.

INTERNATIONAL JOURNAL OF REFRIGERATION-REVUE INTERNATIONALE DU FROID, vol.35, no.6, pp.1690-1696, 2012 (SCI-Expanded)

XXX. **Exergy analysis of a counter-flow Ranque-Hilsch vortex tube having different helical vortex generators**

Markal B., AYDIN O., Avci M.

INTERNATIONAL JOURNAL OF EXERGY, vol.10, no.2, pp.228-238, 2012 (SCI-Expanded)

XXXI. **A new vortex generator geometry for a counter-flow Ranque-Hilsch vortex tube**

AYDIN O., Markal B., Avci M.

APPLIED THERMAL ENGINEERING, vol.30, no.16, pp.2505-2511, 2010 (SCI-Expanded)

XXXII. **An experimental study on the effect of the valve angle of counter-flow Ranque-Hilsch vortex tubes on thermal energy separation**

Markal B., AYDIN O., Avci M.

EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.34, no.7, pp.966-971, 2010 (SCI-Expanded)

Articles Published in Other Journals

I. **MİKRO PİM TİPİ KANATÇIKLI VE MİKRO OYUKLU ISI ALICIDA DOYMUŞ KAYNAMALI AKIŞIN DENEYSEL İNCELENMESİ**

Markal B., Kul B.

SELCUK UNIVERSITY JOURNAL OF ENGINEERING, SCIENCE AND TECHNOLOGY, vol.11, no.1, pp.103-123, 2023 (Peer-Reviewed Journal)

II. **Düşük Dolum Oranında İkili Karışımlarla Yüklü Üniform Olmayan Atımlı Isı Borusunun Deneysel İncelenmesi**

MARKAL B., VAROL R.

Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.9, no.4, pp.1086-1100, 2021 (Peer-Reviewed Journal)

III. **Dönmeli Eş-Eksenli Hava Jetinin Isıl Davranışının Yakın Çarpma Mesafeleri için Deneysel Olarak İncelenmesi**

MARKAL B.

Uluslararası Mühendislik Araştırma ve Geliştirme Dergisi, vol.12, no.2, pp.443-453, 2020 (Peer-Reviewed Journal)

IV. **Dönmeli Eş Eksenli Çarpan Jetlerde Isı Transferinin Deneysel İncelenmesi**

MARKAL B., AYDIN O.

Tesisat Mühendisliği, no.175, pp.39-45, 2020 (Peer-Reviewed Journal)

V. **Kare Kesitli Mikrokanallarda Doymuş Kaynamalı Akış Karakteristiklerinin Deneysel İncelenmesi**

MARKAL B., AYDIN O., AVCI M.

Mühendis ve Makina, vol.60, no.694, pp.50-66, 2019 (Peer-Reviewed Journal)

VI. **Minikanallarda Doymuş Kaynamalı Akış Karakteristiklerinin Deneysel İncelenmesi**

CANDAN A., MARKAL B., AYDIN O., AVCI M.

Tesisat Mühendisliği, no.164, pp.29-38, 2018 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **EFFECT OF INCLINATION ANGLE ON FLOW BOILING IN MICRO-SIZED CHANNELS**
MARKAL B., EVCİMEN A.
Fourteen International Conference on Thermal Engineering: Theory and Applications May 25-27, 2023 Yalova ,
Türkiye, 25 - 27 May 2023
- II. **TRANSIENT BEHAVIOR OF NON-UNIFORM PULSATING HEAT PIPES UNDER DIFFERENT HEAT LOADS**
MARKAL B., EVCİMEN A.
International Symposium on Convective Heat and Mass Transfer (CONV-22), İzmir, Turkey, 09 June 2022, pp.579-587
- III. **DOLUM ORANININ ÜNİFORM OLMAYAN KESİTE SAHİP ATIMLI ISI BORUSUNUN ÇALIŞMA PERFORMANSI ÜZERİNDEKİ ETKİSİ**
CANDAN CANDERE A., MARKAL B., AVCI M., AYDIN O.
ULIBTK'21 Uluslararası Katılımlı 23. Isı Bilimi ve Tekniği Kongresi, Gaziantep, Turkey, 08 September 2021, vol.2, pp.1797-1805
- IV. **A Promising Cooling Device for Electronics in Vehicles: Pulsating Heat Pipes**
MARKAL B., VAROL R.
INTERNATIONAL SYMPOSIUM ON AUTOMOTIVE SCIENCE AND TECHNOLOGY (ISASTECH 2021), Ankara, Turkey, 08 September 2021, vol.2, pp.1-8
- V. **A REVIEW OF THE EFFECTS OF MICRO FIN GEOMETRY AND ALIGNMENT ON FLOW BOILING CHARACTERISTICS IN MICROCHANNEL HEAT SINKS**
MARKAL B., KUL B.
5th International Anatolian Energy Symposium (AES 2021), Trabzon, Turkey, 24 March 2021, pp.92-101
- VI. **EXPERIMENTAL INVESTIGATION OF THE PULSATING HEAT PIPES HAVING LARGER FLOW SECTIONS IN THE EVAPORATOR REGION**
CANDAN CANDERE A., MARKAL B., AYDIN O., AVCI M.
5th International Anatolian Energy Symposium (AES 2021), Trabzon, Turkey, 24 March 2021, pp.630-636
- VII. **Effect of Filling Ratio on Thermal Performance of a Non-uniform Pulsating Heat Pipe**
MARKAL B., VAROL R.
International Conference on Energy, Environment and Storage of Energy (Iceesen 2020), Kayseri, Turkey, 19 - 21 November 2020, pp.206-213
- VIII. **Effect of Mixing Ratio of Binary Mixtures on Heat Transfer Characteristics of a Pulsating Heat Pipe**
MARKAL B., VAROL R.
International 2nd Conference on Sustainable Energy and Energy Calculations (ICSEEC2020), İstanbul, Turkey, 4 - 05 September 2020, pp.53-62
- IX. **HEAT TRANSFER BEHAVIOR OF COAXIAL IMPINGING JETS: AN EXPERIMENTAL STUDY**
MARKAL B., AYDIN O.
22nd Congress on Thermal Science and Technology, Kocaeli, Turkey, 11 - 14 September 2019
- X. **Konutlarda Yağmur Suyu Potansiyelinden Faydalanma**
VAROL R., MARKAL B.
4th INTERNATIONAL ENERGY ENGINEERING CONGRESS 2019 (UEMK 2019), Gaziantep, Turkey, 24 - 25 October 2019, pp.1109-1117
- XI. **A FLOW DYNAMIC INVESTIGATION OF JET IMPINGEMENT WITH SWIRLING COAXIAL FORM**
MARKAL B.
The International Conference on Materials Science, Mechanical and Automotive Engineering and Technology (IMSMATEC'19), Nevşehir, Turkey, 21 - 23 June 2019, pp.451-456
- XII. **The Effect of Jet Impingement on the Performance of a Photovoltaic Module**
MARKAL B., VAROL R.
3rd International Symposium on Innovative Approaches in Scientific Studies, Ankara, Turkey, 19 - 21 April 2019, pp.647-650
- XIII. **Dönmeli Eş Eksenli Çarpan Jetlerde Isı Transferinin Deneysel İncelenmesi**

MARKAL B., AYDIN O.

14. Ulusal Tesisat Mühendisliği Kongresi, İzmir, Turkey, 17 - 20 April 2019, pp.793-801

XIV. Thermal Characteristics of Swirling Coaxial Confined Impinging Air Jets: An Experimental Investigation

MARKAL B.

2nd International Symposium on Innovative Approaches in Scientific Studies, Samsun, Turkey, 30 November - 02 December 2018, vol.3, pp.66-71

XV. Flow Characteristics of Swirling Coaxial Impinging Air Jets: An Experimental Investigation

MARKAL B.

1. INTERNATIONAL TECHNOLOGICAL SCIENCES AND DESIGN SYMPOSIUM, Giresun, Turkey, 27 - 29 June 2018, pp.782-795

XVI. EXPERIMENTAL INVESTIGATION OF THE EFFECT OF FILLING RATIO AND INCLINATION ANGLE ON THE HEAT PIPE PERFORMANCE

MARKAL B., AKSOY K.

III. ULUSLARARASI MESLEKİ VE TEKNİK BİLİMLER KONGRESİ, Gaziantep, Turkey, 21 - 22 June 2018, pp.284-291

XVII. Effects of Flowrate Ratio and Nozzle-to-plate Distance on the Hydrodynamic Characteristics of Impinging Coaxial Jets

MARKAL B.

7th International Conference on Advanced Technologies (ICAT'18), Antalya, Turkey, 28 April - 01 May 2018, pp.832-839

XVIII. KESİTİ T-ŞEKLİNDE OLAN TEK BİR MİNİ KANALDA DOYMUŞ KAYNAMALI AKIŞ KARAKTERİSTİKLERİNİN DENEYSEL İNCELENMESİ

MARKAL B., CANDAN A., AYDIN O.

4. Uluslararası Katılımlı Anadolu Enerji Sempozyumu (AES 2018), Edirne, Turkey, 18 - 20 April 2018, pp.561-572

XIX. Yenilikçi Soğutma Teknolojileri: Isı Boruları

MARKAL B., AKSOY K.

1st International Symposium on Innovative Approaches in Scientific Studies (ISAS 2018), Antalya, Turkey, 11 - 13 April 2018, vol.2, pp.336-342

XX. Flow Boiling Characteristics in a Single Rectangular Microchannel

MARKAL B., CANDAN A., AYDIN O., AVCI M.

8th International Advanced Technologies Symposium (IATS217), 19 - 22 October 2017, pp.2075-2081

XXI. Mikro boyutlu dikdörtgenel kanallarda kaynamalı akışın deneysel incelenmesi

MARKAL B., AYDIN O., AVCI M.

VIII. Ulusal Hidrolik Pnömatik Kongresi, Turkey, 22 - 25 November 2017

XXII. MİKRO BOYUTLU DİKDÖRTGENSEL KANALLARDA KAYNAMALI AKIŞIN DENEYSEL İNCELENMESİ

MARKAL B., AYDIN O., AVCI M.

VIII. ULUSAL HİDROLİK PNÖMATİK KONGRESİ, İzmir, Turkey, 22 - 25 November 2017, pp.491-498

XXIII. Flow Boiling Characteristics in a Single Rectangular Minichannel

MARKAL B., CANDAN A., AYDIN O., AVCI M.

8th International Advanced Technologies Symposium (IATS'17), Elazığ, Turkey, 19 - 22 October 2017, pp.2075-2081

XXIV. KARE KESİTLİ MİNİ BİR KANAL İÇERİSİNDE KAYNAMALI AKIŞIN DENEYSEL İNCELENMESİ

CANDAN A., MARKAL B., AYDIN O., AVCI M.

ULIBTK'17 21. Ulusal Isı Bilimi ve Tekniği Kongresi, Çorum, Turkey, 13 - 16 September 2017, pp.313-321

XXV. Kare kesitli mikrokanallarda doymuş kaynamalı akış karakteristiklerinin deneysel incelenmesi

MARKAL B., AYDIN O., AVCI M.

13. Ulusal Tesisat Mühendisliği Kongresi, Turkey, 19 - 22 April 2017

XXVI. Minikanallarda Doymuş Kaynamalı Akış Karakteristiklerinin Deneysel İncelenmesi

CANDAN A., MARKAL B., AYDIN O., AVCI M.

13. Ulusal Tesisat Mühendisliği Kongresi, Turkey, 19 - 22 April 2017

XXVII. Kare kesitli mikrokanallarda doymuş kaynamalı akış karakteristiklerinin deneysel incelenmesi

MARKAL B., AYDIN O., AVCI M.

13. Ulusal Tesisat Mühendisliği Kongresi, İzmir, Turkey, 19 - 22 April 2017, pp.1433-1442

XXVIII. Minikanallarda doymuş kaynamalı akış karakteristiklerinin deneysel incelenmesi

CANDAN A., MARKAL B., AYDIN O., AVCI M.

13. Ulusal Tesisat Mühendisliği Kongresi, İzmir, Turkey, 19 - 22 April 2017, pp.1483-1494

XXIX. Kare kesitli mini bir kanal içerisinde kaynamalı akışın deneysel incelenmesi

CANDAN A., AVCI M., MARKAL B., AYDIN O.

21. Ulusal Isı Bilimi ve Tekniği Kongresi, Turkey, 13 - 16 April 2017

XXX. Paralel mikro kanallı ısı alıcıda kaynamalı akış karakteristiklerinin deneysel olarak incelenmesi

MARKAL B., AYDIN O., AVCI M.

20. Ulusal Isı Bilimi ve Tekniği Kongresi 2015 (ULIBTK'15), Turkey, 2 - 05 September 2015

XXXI. Paralel mikro kanallı ısı alıcıda kaynamalı akış karakteristiklerinin deneysel olarak incelenmesi

MARKAL B., AYDIN O., AVCI M.

ULIBTK'15 20. Isı Bilimi ve Tekniği Kongresi, Balıkesir, Turkey, 2 - 05 September 2015, pp.85-95

XXXII. Ortam sıcaklığı ve yalıtımın Ranque-Hilsch vorteks tüpü performansı üzerindeki etkisinin deneysel olarak incelenmesi

MARKAL B., AYDIN O., AVCI M.

ULIBTK'13 19. Ulusal Isı Bilimi ve Tekniği Kongresi, Samsun, Turkey, 9 - 12 September 2013, pp.905-910

Supported Projects

Yağcı O. K., Markal B., Aydın O., TUBITAK Project, Fotovoltaik Panellerin Hava ve Faz Değiştiren Madde Destekli Sistemlerle Soğutulması, 2021 - 2023

Markal B., Avcı M., TUBITAK Project, Kademeli Genişleyen Akış Kesitine Sahip Mikro Pim Tipi Kanatçıklı Isı Alıcılarda Kaynamalı Akışın Deneysel İncelenmesi, 2020 - 2023

Markal B., Avcı M., TUBITAK Project, Değişken Kanal Genişliğine Sahip Düz Plakalı Kapalı Döngülü Atımlı Isı Borularının Deneysel İncelenmesi, 2018 - 2020

Aydın O., Avcı M., TUBITAK Project, Mikrokanal Akışlarında Kaynamada Isı Transferi ve Sistem Parametrelerinin Deneysel olarak İncelenmesi, 2013 - 2016

Patent

Markal B., Giydirmeye tip eksantrik namlu soğutucusu, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Registration Number: TR 2021 012781 A1 , Standard Registration, 2022
Avcı M., Markal B., Aydın O., Düz plakalı atımlı ısı borusu, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Registration Number: TR 2017 23286 B , Standard Registration, 2020

Scientific Refereeing

Applied Thermal Engineering, SCI Journal, July 2018

Applied Thermal Engineering, SCI Journal, June 2018

Applied Thermal Engineering, SCI Journal, March 2018

Open Access Library Journal, Other Indexed Journal, January 2018

Energy, SCI Journal, December 2017

International Journal of Refrigeration, SCI Journal, October 2017

ISH Journal of Hydraulic Engineering, Other Indexed Journal, October 2017

International Journal of Refrigeration, SCI Journal, September 2017

International Journal of Refrigeration, SCI Journal, August 2017

Alexandria Engineering Journal / Elsevier, SCI Journal, July 2017
International Journal of Refrigeration / Elsevier, SCI Journal, June 2017
Chemical Engineering Communications / Taylor & Francis, SCI Journal, April 2015
Energy / Elsevier, SCI Journal, March 2015

Metrics

Publication: 70
Citation (WoS): 524
Citation (Scopus): 603
H-Index (WoS): 15
H-Index (Scopus): 16

Congress and Symposium Activities

VIII. ULUSAL HİDROLİK PNÖMATİK KONGRESİ, Attendee, İzmir, Turkey, 2017
8th International Advanced Technologies Symposium (IATS'17), Attendee, Elazığ, Turkey, 2017
13. Ulusal Tesisat Mühendisliği Kongresi, Attendee, İzmir, Turkey, 2017
20. Isı Bilimi ve Tekniği Kongresi (ULIBTK'15), Attendee, Balıkesir, Turkey, 2015
19. Ulusal Isı Bilimi ve Tekniği Kongresi (ULIBTK'13), Attendee, Samsun, Turkey, 2013

Awards

MARKAL B., Karadeniz Teknik Üniversitesi Makina Mühendisliği Bölüm İkincisi, Karadeniz Teknik Üniversitesi, June 2007
MARKAL B., Karadeniz Teknik Üniversitesi Mühendislik Fakültesi Üçüncüsü, Karadeniz Teknik Üniversitesi, June 2007