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#### International Researcher IDs

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Publons / Web Of Science ResearcherID: ABI-2427-2020

ScopusID: 57219086672

Yoksis Researcher ID: 303855

#### Education Information

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- I. Doctorate, Karadeniz Technical University, -, Makina Mühendisliği, Turkey 2019 - Continues
- II. Postgraduate, Karadeniz Technical University, -, Makina Mühendisliği, Turkey 2015 - 2019
- III. Undergraduate, Karadeniz Technical University, -, Makina Mühendisliği, Turkey 2011 - 2015

#### Foreign Languages

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- I. English, B2 Upper Intermediate

#### Dissertations

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- I. Postgraduate, TABANINA AYRIK ISI KAYNAKLARI YERLEŞTİRİLMİŞ DİKDÖRTGEN KESİTLİ YATAY BİR KANALDA KARMA TAŞINIM İLE ISI TRANSFERİNİN İNCELENMESİ, Karadeniz Technical University, -, Makina Mühendisliği, 2019

#### Research Areas

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Mechanical Engineering, Thermodynamics, Engineering and Technology

#### Academic Titles / Tasks

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- I. Research Assistant, Karadeniz Technical University, Mühendislik Fakültesi, Makine Mühendisliği, 2019 - Continues

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

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- I. **Thermal cycling performance of a Shell-and-tube latent heat thermal energy storage system with paraffin/graphite matrix composite**  
SAĞLAM M., Ceboglu E., BİRİNCİ S., Sarper B., AYDIN O.  
Journal of Energy Storage, vol.83, 2024 (SCI-Expanded)
- II. **The role of jet-to-crossflow velocity ratio on convective heat transfer enhancement in the cooling of**

#### **discrete heating modules**

Albayrak M., Sarper B., SAĞLAM M., BİRİNCİ S., AYDIN O.

THERMAL SCIENCE AND ENGINEERING PROGRESS, vol.37, 2023 (SCI-Expanded)

#### **III. Constructal enhancement of cooling performance of local heating elements with different heat generation rates under free and mixed convection regimes**

Sarper B., BİRİNCİ S., SAĞLAM M., AYDIN O.

INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.135, 2022 (SCI-Expanded)

#### **IV. Effect of heaters' clearance on mixed convection cooling performance in a discretely heated horizontal duct**

BİRİNCİ S., SAĞLAM M., Sarper B., AYDIN O.

International Journal of Thermal Sciences, vol.163, 2021 (SCI-Expanded)

#### **V. Constructal design of heat sources with different heat generation rates for the hot spot mitigation**

BİRİNCİ S., SAĞLAM M., Sarper B., AYDIN O.

INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.163, 2020 (SCI-Expanded)

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

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#### **I. A numerical investigation on a liquid-cooled battery thermal management system: Effect of inlet temperature and flow rate**

BİRİNCİ S., Albayrak M., Yazici M., Sarper B., AYDIN O.

9th European Thermal Sciences Conference, EURO THERM 2024, Bled, Slovenia, 10 - 13 June 2024, vol.2766

#### **II. Experimental and numerical convective heat transfer performance analysis of a confined impinging round jet with triangular tabs under crossflow influence**

Sağlam M., Birinci S., Sarper B., Aydın O.

9th European Thermal Sciences Conference, EURO THERM 2024, Bled, Slovenia, 10 - 13 June 2024, vol.2766

#### **III. The influence of cold plate height on thermal management of a liquid-cooled battery pack**

BİRİNCİ S., Albayrak M., SAĞLAM M., Sarper B., AYDIN O.

9th European Thermal Sciences Conference, EURO THERM 2024, Bled, Slovenia, 10 - 13 June 2024, vol.2766

#### **IV. Numerical Investigation of the Thermal Performance of a Liquid Cooled Battery Pack**

Birinci S., Sağlam M., Sarper B., Yazıcı M. Y., Aydın O.

9th International IFS and Contemporary Mathematics and Engineering Conference, Mersin, Turkey, 8 July - 11 October 2023, pp.183-184

#### **V. EFFECT OF SURFACE RADIATION ON JET IMPINGEMENT COOLING OF A CONCAVE SURFACE**

Albayrak M., Sarper B., Birinci S., Sağlam M., Aydın O.

Proceedings of CONV-22: Int. Symp. on Convective Heat and Mass Transfer, İzmir, Turkey, 5 - 10 June 2022, pp.512-522

#### **VI. FORCED CONVECTION HEAT TRANSFER ENHANCEMENT IN A RECTANGULAR CHANNEL BY BIOMIMETIC CYLINDRICAL RIBS**

Sağlam M., Birinci S., Sarper B., Aydın O.

23rd Congress on Thermal Science and Technology with International Participation, Gaziantep, Turkey, 8 - 10 September 2021, pp.1767-1773

#### **VII. VALIDATION STUDY OF A NATURALLY VENTILATED SOLAR FACADE**

Sarper B., Birinci S., Sağlam M., Aydın O.

5th International Anatolian Energy Symposium, Trabzon, Turkey, 24 - 25 March 2021, pp.239-248

#### **VIII. NUMERICAL INVESTIGATION OF NATURALLY VENTILATED FACADE WITH PCM LOCATED IN MEDITERRANEAN REGION**

Birinci S., Sağlam M., Sarper B., Yazıcı M. Y., Avcı M., Aydın O.

5th International Anatolian Energy Symposium, Trabzon, Turkey, 24 - 25 March 2021, pp.259-265

#### **IX. EFFECT OF THE CLEARANCE BETWEEN HEATED BLOCKS ON OVERALL COOLING PERFORMANCE IN A**

## HORIZONTAL DUCT

Birinci S., Saęlam M., Sarper B., Aydın O.

INTERNATIONAL CONFERENCE ON ENERGY, ENVIRONMENT AND STORAGE OF ENERGY, ICEESEN 2020, Kayseri, Turkey, 19 - 21 November 2020, pp.260-267

### X. EFFECT OF DIFFERENT CONFIGURATIONS OF INLET POSITIONS ON HEAT TRANSFER IN A DISCRETELY HEATED HORIZONTAL CHANNEL

Birinci S., Saęlam M., Sarper B., Aydın O.

22nd Congress on Thermal Science and Technology, ULIBTK'19 , Kocaeli, Turkey, 11 - 14 September 2019, vol.1, no.1, pp.526-532

### XI. Ayrık Isı Kaynaklarıyla Isıtılan Düşey Kanalda Kaynak Dizilişlerinin Isı Transferine Etkisi SARPER B., SAęLAM M., birinci S., AYDIN O.

4. Uluslararası Katılımlı Anadolu Enerji Sempozyumu, Edirne, Turkey, 18 - 20 April 2018, pp.652-662

### XII. DÜŞEY YÜZEYİNDE AYRIK ISI KAYNAKLARI BULUNAN KANALDA YÜZEY İŞİNİMİNİN ISI TRANSFERİNE ETKİSİ

SARPER B., BİRİNCİ S., SAęLAM M., AYDIN O., AVCI M.

13. ULUSAL TESİSAT MÜHENDİSLİĞİ KONGRESİ, İzmir, Turkey, 19 - 22 April 2017, pp.1027-1036

## Supported Projects

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- I. Aydın O., Avcı M., TUBITAK Project, Hava ile Elektronik Soęutmada Optimum Geometri ve İşletme Parametrelerinin Araştırılması, 2014 - 2017

## Metrics

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Publication: 17

Citation (WoS): 29

Citation (Scopus): 34

H-Index (WoS): 4

H-Index (Scopus): 4

## Coaching Duties

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## Refereeing Duties

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