

## Assoc. Prof. ALAATTİN METİN KAYA

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### International Researcher IDs

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### Research Areas

Energy, Fluid Mechanics, Fluid Machinery, Renewable Energy Systems, Alternative Energy Resources, Heating, Refrigerating and Air Conditioning, Computational fluid dynamics

### Academic Titles / Tasks

Assistant Professor, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, MAKİNA MÜHENDİSLİĞİ, 2020 - Continues

### Advising Theses

Kaya A. M., Bir açık deniz rüzgar türbini için yüzer platform sistemi tasarımı ve demirleme sisteminin hidrodinamik analizi, Postgraduate, S.ALKAN(Student), 2013

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

- I. **Thermal and mechanical properties of a new insulation composite material**  
Kocyigit F., KAYA A. M.  
MATERIALS TESTING, vol.65, no.9, pp.1453-1463, 2023 (SCI-Expanded)
- II. **Sepsis Episodes Caused by Pressure Injuries in Critical Illness: A Retrospective Observational Cohort Study**  
KÜÇÜKDEMİRCİ KAYA P., KAYA A. M., Girgin N. K., Kahveci F. Ş., AKALIN E. H., İŞÇİMEN R.  
Wound Management and Prevention, vol.69, no.4, pp.4-9, 2023 (SCI-Expanded)
- III. **Analysis of vapor compression refrigeration cycle using advanced exergetic approach with Taguchi and ANOVA optimization and refrigerant selection with enviroeconomic concerns by TOPSIS analysis**  
USTAOĞLU A., KURŞUNCU B., KAYA A. M., ÇALIŞKAN H.  
SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.52, 2022 (SCI-Expanded)
- IV. **Examination of the performance effects of refrigerants in a multistage refrigeration cycle using advanced exergy analysis**  
Kaya A. M.  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, vol.19, no.7, pp.6163-6182, 2022 (SCI-Expanded)

- V. **Investigation of a cross-flow turbine under natural conditions**  
KAYA A. M., ÖZDEMİR Y. H., YİĞİT K. S.  
SADHANA-ACADEMY PROCEEDINGS IN ENGINEERING SCIENCES, vol.47, no.1, 2022 (SCI-Expanded)
- VI. **THERMODYNAMICAL STUDY AND TAGUCHI OPTIMIZATION OF A TWO-STAGE VAPOR COMPRESSION REFRIGERATION SYSTEM**  
KAYA A. M.  
Thermal Science, vol.26, no.5 Part A, pp.3951-3963, 2022 (SCI-Expanded)
- VII. **Mesoscale Morphologies of Nafion-Based Blend Membranes by Dissipative Particle Dynamics**  
Sen U., Ozdemir M., ERKARTAL M., KAYA A. M., Manda A. A., Oveisi A. R., Ali Aboudzadeh M., Tokumasu T.  
PROCESSES, vol.9, no.6, 2021 (SCI-Expanded)
- VIII. **Investigation of Optimum Working Conditions of a Micro Cross Flow Turbine**  
Kaya A. M., Kandemir I., Aksit M. F., YİĞİT K. S.  
ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, vol.34, no.5, pp.1506-1511, 2015 (SCI-Expanded)
- IX. **Molecular dynamics simulation of compressible hot/cold moving lid-driven microcavity flow**  
Kandemir I., Kaya A. M.  
MICROFLUIDICS AND NANOFUIDICS, vol.12, pp.509-520, 2012 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Çok Kademeli Buhar Sıkıştırma İdeal Soğutma Çevrimlerinde Farklı Soğutucu Akışkanlar Kullanarak Enerji ve Ekserji Analizi**  
KAYA A. M.  
Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.8, pp.42-55, 2021 (Peer-Reviewed Journal)
- II. **NUMERICAL INVESTIGATION OF THE EFFECTS OF CONE TIP DIAMETERS ON THE EFFICIENCY OF A CYCLONE SEPARATOR**  
KAYA A. M., ÖZKAN M.  
European Journal of Technique, vol.10, no.2, pp.395-401, 2020 (Peer-Reviewed Journal)

### Books & Book Chapters

- I. **Endüstriyel Tip Ön Isıtıcı Siklon Ayırıcı Tasarımı ve İmalatı**  
Kaya A. M., Coşkun S.  
in: Mühendislikte Öncü ve Çağdaş Çalışmalar, Yiğit Enes, Özkaya Umut, Editor, Duvar, İzmir, pp.257-270, 2023
- II. **Performance Evaluation of R-290 as a Substitute for R-22 in a Domestic Refrigerator by Advanced Exergy Analysis Method**  
KAYA A. M., USTAOĞLU A., Alptekin M.  
in: Proceedings of the 2022 International Symposium on Energy Management and Sustainability, Sogut, M.Z., Karakoc, T.H., Secgin, O., Dalkiran, A., Editor, Springer Cham., pp.555-562, 2023
- III. **Energy Analysis of a Solar Air Heater with a Fin-Added Absorber**  
USTAOĞLU A., GÖK M. S., KAYA A. M., Amjed Z., Altok T., KOÇYİĞİT F.  
in: Proceedings of the 2022 International Symposium on Energy Management and Sustainability, Sogut, M.Z., Karakoc, T.H., Secgin, O., Dalkiran, A., Editor, Springer, Cham, pp.819-825, 2023
- IV. **RADYAL FAN PERFORMANS ANALİZİ İÇİN AMCA 210 STANDARDINDA DÜZENEK KURULUMU VE DÜZELTİCİNİN ETKİSİNİN İNCELENMESİ**  
DOĞRUOĞLU D., KAYA A. M.  
in: Mühendislik Alanında Uluslararası Araştırmalar - I, özalp, Coşkun; Hürdoğan, Ertay, Editor, Serüven Yayınevi, İzmir, pp.197-211, 2022

## Refereed Congress / Symposium Publications in Proceedings

- I. **Radyal Fan Performans Analizi İçin AMCA 210 Standardında Düzenek Kurulumu ve Düzelticinin Etkisinin İncelenmesi**  
DOĞRUOĞLU D., KAYA A. M.  
1st International Conference on Scientific and Academic Research ICSAR 2022, Konya, Turkey, 10 - 13 December 2022, pp.366
- II. **Energy Analysis of a Solar Air Heater with Fin Added Absorber**  
Ustaoglu A., Gök M. S., Kaya A. M., Amjed Z., Altıok T., Koçyiğit F.  
International Symposium on Energy Management and Sustainability (ISEMAS) 2022, İstanbul, Turkey, 5 - 09 April 2022, pp.187
- III. **Performance evaluation of r290 as a substitute to r22 in a domestic refrigerator by advanced exergy analysis method**  
KAYA A. M., USTAOĞLU A., Alptekin M.  
International Symposium on Energy Management and Sustainability (ISEMAS) 2022, İstanbul, Turkey, 09 April 2022
- IV. **MULTI-OBJECTIVE OPTIMIZATION OF A MULTISTAGE VAPOR COMPRESSION REFRIGERATION CYCLE**  
USTAOĞLU A., KURŞUNCU B., KAYA A. M., ÇALIŞKAN H.  
TUBA World Conference on Energy Science and Technology (TUBA WCEST-2021), Turkey, 8 - 20 August 2021
- V. **Exergy Analysis of the Performances of Variable Refrigerants on a Two-stage Refrigeration System**  
KAYA A. M.  
IV. International Congress on New Trends in Science, Engineering and Technology (ICONTRENDS), St.Petersburg, Russia, 7 - 09 July 2020, pp.26
- VI. **Parametric Energy Analysis of the Performances of Various Refrigerants on a Multistage Refrigeration System**  
KAYA A. M.  
ICSEEC: Sustainable Energy and Energy Calculations, 4 - 05 September 2020, pp.6
- VII. **Computational Investigation of the Effect of Sliding Valve on a Cross Flow Turbine**  
KAYA A. M., KANDEMİR İ., ERMAN ÖNGÜÇ Ö.  
ENTECH 'xx15 / III. International Energy Technologies Conference, İstanbul, Turkey, 21 - 22 December 2015, pp.144-149
- VIII. **A hardware test setup for grid connected and island operation of micro hydro power generation systems**  
DAL M., KAYA A. M., AKŞİT M. F., YİĞİT K. S., KANDEMİR İ., YÜKSEL E.  
2010 IEEE International Energy Conference, Manama, Bahrain, 18 - 22 December 2010
- IX. **ÜLKEMİZDE HİBRİD ELEKTRİKLİ ARAÇLARIN GELECEĞİ**  
KAYA A. M., KANDEMİR İ., Benli M.  
OTEKON'10 5. Otomotiv Teknolojileri Kongresi, Bursa, Turkey, 7 - 08 June 2010

## Expert Reports

- I. **Mekân İçerisinde Pencere Altında Bulunan Radyatörlerin Etrafına Yerleştirilen Engellerin Deneysel Olarak İncelenmesi**  
KAYA A. M.  
2015

## Supported Projects

KAYA A. M., COŞKUN S., DOĞRUOĞLU D., Project Supported by Higher Education Institutions, Siklon Ayırıcılarda Koni Ucu

## Patent

Kaya A. M., Çapraz akış türbinlerinde sürgülü vana ile güç kontrolü, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Registration Number: TR 2012 05779 B , Standard Registration, 2012

## Metrics

Publication: 25

Citation (WoS): 17

Citation (Scopus): 30

H-Index (WoS): 3

H-Index (Scopus): 4

## Non Academic Experience

BİLİM SANAYİ VE TEKNOLOJİ BAKANLIĞI