

## Dr. Öğr. Üyesi SERGEN TÛMSE

### Kişisel Bilgiler

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### Uluslararası Araştırmacı ID'leri

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Publons / Web Of Science ResearcherID: T-1416-2018

Yoksis Araştırmacı ID: 283409

### Eğitim Bilgileri

Doktora, Çukurova Üniversitesi, Mühendislik Fakültesi, Makina Müh., Türkiye 2019 - 2023

Yüksek Lisans, Çukurova Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği, Türkiye 2017 - 2019

Lisans Çift Anadal, Çukurova Üniversitesi, Mühendislik-Mimarlık Fakültesi, Otomotiv Mühendisliği, Türkiye 2014 - 2018

Lisans, Çukurova Üniversitesi, Mühendislik-Mimarlık Fakültesi, Makine Mühendisliği, Türkiye 2012 - 2017

### Yabancı Diller

İngilizce, C1 İleri

### Araştırma Alanları

Makina Mühendisliği, Enerji, Akışkanlar Mekaniği, Havacılık ve Uzay Mühendisliği, Havacılık Mühendisliği, Uçuş Bilimleri, Aerodinamik, Mühendislik ve Teknoloji

### Akademik Unvanlar / Görevler

Araştırma Görevlisi, Çukurova Üniversitesi, Mühendislik Fakültesi, Makina Müh., 2018 - Devam Ediyor

### SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- Heat transfer and entropy generation in oscillating lid-driven heat sinks with variable fin configurations**  
Alhasan M., Hamzah H., TÛMSE S., Daabo A. M., Sahin B.  
International Communications in Heat and Mass Transfer, cilt.159, 2024 (SCI-Expanded)
- Comparative Analysis of Global Onshore and Offshore Wind Energy Characteristics and Potentials**  
TÛMSE S., BİLGİLİ M., Yildirim A., Sahin B.  
Sustainability (Switzerland), cilt.16, sa.15, 2024 (SCI-Expanded)
- Assessment of heating degree-days factor (HDDF) for building-oriented climate zoning in Türkiye**  
BİLGİLİ M., TÛMSE S., Sahin B.  
International Journal of Green Energy, 2024 (SCI-Expanded)
- Comprehensive Overview on the Present State and Evolution of Global Warming, Climate Change,**

## **Greenhouse Gasses and Renewable Energy**

BİLGİLİ M., TÜMSE S., Nar S.

Arabian Journal for Science and Engineering, 2024 (SCI-Expanded)

- V. **Machine learning approaches in predicting the wind power output and turbine rotational speed in a wind farm**  
İLHAN A., TÜMSE S., BİLGİLİ M., Sahin B.  
Energy Sources, Part A: Recovery, Utilization and Environmental Effects, cilt.46, sa.1, ss.12084-12110, 2024 (SCI-Expanded)
- VI. **A Computational Investigation of the Influence of Seafloor Conditions on the Turbulent Flow Characteristics of an Autonomous Underwater Vehicle**  
Tabatabaei Malazi M., TÜMSE S., Ozgoren M., Sahin B.  
Arabian Journal for Science and Engineering, 2024 (SCI-Expanded)
- VII. **Numerical Investigation of Magneto-hydrodynamic Forced Convection and Entropy Production of Ferrofluid Around a Confined Cylinder Using Wire Magnetic Sources**  
Tümse S., Zontul H., Hamzah H., Sahin B.  
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, cilt.48, ss.11591-11620, 2023 (SCI-Expanded)
- VIII. **Comparison and evaluation of machine learning approaches for estimating heat index map in Türkiye**  
Tümse S., Bilgili M., Şekertekin A., Ünal Ş., Şahin B.  
NEURAL COMPUTING AND APPLICATIONS, cilt.35, ss.15721-15742, 2023 (SCI-Expanded)
- IX. **Influence of uniform magnetic field on hydrothermal characteristics and entropy production in a nanofluid filled rectangular grooved channel**  
Tümse S., Şahin B.  
CASE STUDIES IN THERMAL ENGINEERING, cilt.45, ss.1-20, 2023 (SCI-Expanded)
- X. **The impact of the ground on flow structure and aerodynamic characteristics of a double delta wing**  
Tasci M. O., TÜMSE S., Sahin B.  
AEROSPACE SCIENCE AND TECHNOLOGY, cilt.130, 2022 (SCI-Expanded)
- XI. **Vortical flow characteristics of a slender delta wing in ground effect**  
Tasci M. O., TÜMSE S., Sahin B.  
OCEAN ENGINEERING, cilt.261, 2022 (SCI-Expanded)
- XII. **Experimental Investigation of Ground Effect on the Vortical Flow Structure of a 40 degrees Swept Delta Wing**  
TÜMSE S., Karasu I., Sahin B.  
JOURNAL OF AEROSPACE ENGINEERING, cilt.35, sa.4, 2022 (SCI-Expanded)
- XIII. **Estimation of aerodynamic coefficients of a non-slender delta wing under ground effect using artificial intelligence techniques**  
TÜMSE S., BİLGİLİ M., ŞAHİN B.  
NEURAL COMPUTING & APPLICATIONS, cilt.34, sa.13, ss.10823-10844, 2022 (SCI-Expanded)
- XIV. **Estimation of wind turbine output power using soft computing models**  
TÜMSE S., İLHAN A., BİLGİLİ M., Sahin B.  
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.44, sa.2, ss.3757-3786, 2022 (SCI-Expanded)
- XV. **Particle Image Velocimetry Investigation of the Flow for the Curved Type Wind Turbine Shroud**  
İLHAN A., TÜMSE S., TAŞÇI M., BİLGİLİ M., ŞAHİN B.  
JOURNAL OF APPLIED FLUID MECHANICS, cilt.15, sa.2, ss.373-385, 2022 (SCI-Expanded)
- XVI. **Near-surface particle image velocimetry measurements over a yawed slender delta wing**  
Karasu I., TÜMSE S., TAŞÇI M., ŞAHİN B., AKILLI H.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING, cilt.235, sa.16, ss.2466-2478, 2021 (SCI-Expanded)
- XVII. **Effect of Growth in Turbine Size on Rotor Aerodynamic Performance of Modern Commercial Large-Scale Wind Turbines**

- BİLGİLİ M., TÜMSE S., Tontu M., ŞAHİN B.  
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, cilt.46, sa.8, ss.7185-7195, 2021 (SCI-Expanded)
- XVIII. **The impact of the pitching motion on the structure of the vortical flow over a slender delta wing under sideslip angle**  
Tasci M. O., Pektas M. C., TÜMSE S., Karasu I., ŞAHİN B., AKILLI H.  
JOURNAL OF VISUALIZATION, cilt.24, sa.3, ss.437-442, 2021 (SCI-Expanded)
- XIX. **Effect of ground on flow characteristics and aerodynamic performance of a non-slender delta wing**  
TÜMSE S., Tasci M. O., Karasu I., ŞAHİN B.  
AEROSPACE SCIENCE AND TECHNOLOGY, cilt.110, 2021 (SCI-Expanded)
- XX. **Flow analyses of diffuser augmented wind turbines**  
İLHAN A., ZONTUL H., TÜMSE S., BİLGİLİ M., ŞAHİN B.  
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, 2021 (SCI-Expanded)

### **Diğer Dergilerde Yayınlanan Makaleler**

- I. **Lift Coefficient Estimation of a Delta Wing Under the Ground Effect Using Artificial Neural Network**  
TÜMSE S., BİLGİLİ M., ŞAHİN B.  
Çukurova Üniversitesi Mühendislik Fakültesi Dergisi, cilt.36, 2021 (Hakemli Dergi)
- II. **The Influence of Perturbation Motion Over a Slender Delta Wing Under Sideslip Angle**  
Taşcı M. O., Tümse S., Şahin B., Karasu İ., Akıllı H.  
Niğde Üniversitesi Mühendislik Bilimleri Dergisi, cilt.10, sa.1, ss.393-403, 2021 (Hakemli Dergi)
- III. **The Turbulence Intensity Effect on the Flow Characteristics and Aerodynamics of a Circular Cylinder**  
KARASU İ., TÜMSE S.  
Çukurova Üniversitesi Mühendislik Fakültesi Dergisi, 2021 (Hakemli Dergi)

### **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **Cross-Flow PIV Measurements of the Ground Effect on Flow Characteristics of a Slender Delta Wing**  
Taşcı M. O., TÜMSE S., ŞAHİN B.  
INTERNATIONAL CONFERENCE ON ENGINEERING, NATURAL AND APPLIED SCIENCE 2021, Osmaniye, Türkiye, 24 Kasım 2021
- II. **Investigation of Ground Effect on Flow Structures over 70 Swept Delta Wing by Flow Visualization Method**  
Taşcı M. O., TÜMSE S., ŞAHİN B.  
23rd Congress on Thermal Science and Technology, Gaziantep, Türkiye, 08 Eylül 2021
- III. **Estimation of wind power output and rotational speed of a turbine by using Adaptive Neuro-Fuzzy Interference System**  
Tümse S., Bilgili M., Şahin B.  
5th International GAP MATHEMATICS-ENGINEERING-SCIENCE AND HEALTH SCIENCES , Şanlıurfa, Türkiye, 4 - 06 Aralık 2020, ss.213-225
- IV. **Prediction of lift forces of a non-slender delta wing under ground effect using Artificial Neural Network**  
Tümse S., Bilgili M., Şahin B.  
5th INTERNATIONAL GAP MATHEMATICS-ENGINEERING-SCIENCE AND HEALTH SCIENCES, Şanlıurfa, Türkiye, 4 - 06 Aralık 2020, ss.65
- V. **The influence of a transversely and coaxially oriented wire on the location of vortex breakdown**  
Taşcı M. O., Tümse S., Şahin B., Karasu İ., Akıllı H.  
5TH INTERNATIONAL CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING, İstanbul, Türkiye, 17 - 19 Aralık 2019, ss.471-480

- VI. **The impact of the ground on the velocity fluctuations and the breakdown of leading-edge vortices on a 40° swept delta wing**  
TÜMSE S., TAŞÇI M. O., ŞAHİN B.  
5TH INTERNATIONAL CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING, İstanbul, Türkiye, 17 - 19 Aralık 2019
- VII. **The effect of the ground on the lift coefficient and vortical flow structure of a non-slender delta wing**  
TÜMSE S., TAŞÇI M. O., ŞAHİN B., KARASU İ.  
22nd Congress on Thermal Science and Technology, Kocaeli, Türkiye, 11 - 14 Eylül 2019, cilt.2, ss.1461-1470

## **Desteklenen Projeler**

ÖZKAN G. M., ŞAHİN B., TÜMSE S., Yükseköğretim Kurumları Destekli Proje, Investigation of Flow Characteristics and Heat Transfer Performance in Heat Exchangers with Magnetic Field Effect, 2021 - 2023  
ÖZKAN G. M., ZONTUL H., TÜMSE S., ŞAHİN B., Yükseköğretim Kurumları Destekli Proje, Oluklu dikdörtgen kanallarda konvektif ısı transferinin ve akış hidrodinamiğinin araştırılması, 2021 - 2023  
ŞAHİN B., TÜMSE S., Yükseköğretim Kurumları Destekli Proje, Ground Effect on the Aerodynamic Parameters and Flow Characteristics of a Nonslender Delta Wing, 2019 - 2020

## **Metrikler**

Yayın: 30  
Atıf (WoS): 4  
Atıf (Scopus): 7  
H-İndeks (WoS): 1  
H-İndeks (Scopus): 2