



# BURÇİN DEDA ALTAN

## PROF.

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### International Researcher IDs

ORCID: 0000-0001-6834-9215

Publons / Web Of Science ResearcherID: IQS-6053-2023

ScopusID: 24479606900

Yoksis Researcher ID: 55473

### Education

Doctorate 2001 - 2006	Pamukkale University, Institute Of Science, Makina Mühendisliği Anabilim Dalı, Turkey
Postgraduate 1997 - 2000	Pamukkale University, Institute Of Science, Makina Mühendisliği Anabilim Dalı, Turkey
Undergraduate 1993 - 1997	Pamukkale University, Faculty Of Engineering, Department Of Mechanical Engineering, Turkey

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Perdeleme yöntemi ile Savonius rüzgar çarkının performansının incelenmesi, Pamukkale University, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, 2006

Postgraduate, Rüzgar enerjisi ve Savonius rüzgar çarklarının performanslarının artırılması, Pamukkale University, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, 2000

### Academic Titles / Tasks

Professor 2024 - Continues	Akdeniz University, Faculty of Engineering, Department of Mechanical Engineering
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Associate Professor  
2019 - 2024

Akdeniz University, Faculty of Engineering, Department of Mechanical Engineering

Associate Professor  
2017 - 2019

Pamukkale University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü

Assistant Professor  
2009 - 2017

Pamukkale University, Faculty Of Engineering, Department Of Mechanical Engineering

Research Assistant PhD  
2006 - 2009

Pamukkale University, Faculty Of Engineering, Department Of Mechanical Engineering

Research Assistant  
1997 - 2006

Pamukkale University, Faculty Of Engineering, Department Of Mechanical Engineering

## Supported Projects

1. Deda Altan B., TUBITAK Project, Otomotiv ve Isı Yalıtım Endüstrileri için Yeni Yanmaya Dirençli Poliüretan Esaslı Malzeme Geliştirilmesi ve Bu Malzemelerin Isıl Bozulma ve Yanma Davranışlarının Deneysel ve Teorik İncelenmesi, 2008 - 2011
2. Deda Altan B., Project Supported by Higher Education Institutions, Savonius Tipi Rüzgar Çarkının Sayısal ve Deneysel Yöntemlerle Performansının İncelenmesi, 2003 - 2005

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

1. **Effect of Blade Gap Ratio on Turbine Performance in Drag-Based Vertical-Axis Wind Turbines**  
ALTAN G., DEDA ALTAN B.  
Processes, vol.12, no.10, 2024 (SCI-Expanded)
2. **Investigation of the turbine performances in the case of dual usage of Savonius wind turbines**  
DEDA ALTAN B., GÜNGÖR A.  
Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, vol.237, no.6, pp.2192-2201, 2023 (SCI-Expanded)
3. **Enhancing the Performance of Savonius Wind Turbines with Wind Router**  
Altan B., Gungor A.  
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF MECHANICAL ENGINEERING, vol.47, no.3, pp.989-999, 2023 (SCI-Expanded)
4. **Investigation of Performance Enhancements of Savonius Wind Turbines through Additional Designs**  
Deda Altan B., Gultekin G. S.  
Processes, vol.11, no.5, pp.1-23, 2023 (SCI-Expanded)
5. **Improvement of Savonius Wind Turbine Performance with Using Wind Collector**  
Deda Altan B., Güngör A.  
SCIENTIA IRANICA INTERNATIONAL JOURNAL OF SCIENCE & TECHNOLOGY, vol.5, pp.20-28, 2023 (SCI-Expanded)
6. **Examination of the Effect of Triangular Plate on the Performances of Reverse Rotating Dual Savonius Wind Turbines**  
Altan B., GÜNGÖR A.  
Processes, vol.10, no.11, 2022 (SCI-Expanded)

7. **Numerical and experimental analysis of a 3D printed Savonius rotor with built-in extension plate**  
Altan B., KOVAN V., Altan G.  
WIND AND STRUCTURES, vol.27, no.1, pp.1-9, 2018 (SCI-Expanded)
8. **Investigation of 3D printed Savonius rotor performance**  
Altan B., Altan G., KOVAN V.  
RENEWABLE ENERGY, vol.99, pp.584-591, 2016 (SCI-Expanded)
9. **The numerical simulation of the performances of water rotors used in pipelines with the water baffle plates**  
Altan B.  
JOURNAL OF MECHANICAL SCIENCE AND TECHNOLOGY, vol.28, no.11, pp.4555-4562, 2014 (SCI-Expanded)
10. **A study on increasing the performance of Savonius wind rotors**  
Altan B., Atilgan M.  
JOURNAL OF MECHANICAL SCIENCE AND TECHNOLOGY, vol.26, no.5, pp.1493-1499, 2012 (SCI-Expanded)
11. **The use of a curtain design to increase the performance level of a Savonius wind rotors**  
Altan B., Atilgan M.  
RENEWABLE ENERGY, vol.35, no.4, pp.821-829, 2010 (SCI-Expanded)
12. **An experimental and numerical study on the improvement of the performance of Savonius wind rotor**  
Altan B., Atilgan M.  
ENERGY CONVERSION AND MANAGEMENT, vol.49, no.12, pp.3425-3432, 2008 (SCI-Expanded)
13. **Elastic-plastic thermal stress analysis of an aluminum composite disc under parabolic thermal load distribution**  
Altan G., Topcu M., Bektas N. B., Altan B.  
JOURNAL OF MECHANICAL SCIENCE AND TECHNOLOGY, vol.22, no.12, pp.2318-2327, 2008 (SCI-Expanded)
14. **An experimental study on improvement of a Savonius rotor performance with curtaining**  
Altan B., Atilgan M., Ozdamar A.  
EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.32, no.8, pp.1673-1678, 2008 (SCI-Expanded)
15. **THERMAL ELASTIC-PLASTIC STRESS ANALYSIS OF AN ALUMINIUM COMPOSITE DISC UNDER LINEARLY DECREASING THERMAL LOADING**  
Topcu M., Altan G., Callioglu H., Altan B.  
ADVANCED COMPOSITES LETTERS, vol.17, no.3, pp.87-96, 2008 (SCI-Expanded)

### Articles Published in Other Journals

1. **Enhancement of the Performance of Vertical Axis Wind Rotors with Straight Blades**  
Deda Altan B.  
European Mechanical Science, vol.7, no.2, pp.49-55, 2023 (Peer-Reviewed Journal)
2. **Olive Cake as a Fuel: A Comparison with Lignite**  
YAKAR G., DEDA ALTAN B.  
IJRASET : INTERNATIONAL JOURNAL FOR RESEARCH IN APPLIED SCIENCE AND ENGINEERING TECHNOLOGY, vol.6, no.5, pp.92-97, 2018 (Peer-Reviewed Journal)
3. **Experimental Investigation on Thermal Conductivity of Building Materials Manufactured from Paper Wastes**  
ALTAN G., DEDA ALTAN B.  
IJRASET : INTERNATIONAL JOURNAL FOR RESEARCH IN APPLIED SCIENCE AND ENGINEERING TECHNOLOGY, vol.6, no.5, pp.33-39, 2018 (Peer-Reviewed Journal)
4. **Geçiş ve Kanal Borularının Tasarımı**  
Atilgan M., Deda Altan B., Atalay Ö.  
Tesisat Mühendisliği, vol.1, no.114, pp.10-20, 2009 (Peer-Reviewed Journal)
5. **Hidrojen Teknolojisinin Gelişimi**

- Yakar G., Deda Altan B.  
Termodinamik, vol.1, no.152, pp.54-56, 2005 (Peer-Reviewed Journal)
6. **COMPARISON OF ENERGY AND EXERGY EFFICIENCIES OF ABSORPTION REFRIGERATION SYSTEM WITH MECHANICAL COMPRESSION REFRIGERATION SYSTEM**  
Yakar G., Karabacak R., Altan B.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.11, no.2, pp.161-169, 2005 (Peer-Reviewed Journal)
7. **Savonius Rüzgar Çarklarının Performansının Geliştirilmesi ve Karşılaştırılması**  
Atılğan M., Deda Altan B.  
Mühendis ve Makina, vol.45, no.1, pp.30-34, 2004 (Peer-Reviewed Journal)
8. **Doğal Gazın ve Yenilenebilir Enerji Kaynaklarının Türkiye'nin Enerji Politikası Açısından Değerlendirilmesi**  
Atılğan M., Öztürk H. K., Deda Altan B., Yılmaz E.  
Tesisat Mühendisliği, vol.72, pp.51-56, 2002 (Peer-Reviewed Journal)

## Books

1. **The Wind Energy Potential for Urban Electricity**  
Boyacı Ö., Yavuz S., Güngör A., Deda Altan B.  
in: Versatile Multidisciplinary Engineering Research, x, Editor, European Press Academic Publishing , Alloo, pp.1-18, 2022
2. **Isı İletimine Giriş**  
DEDA ALTAN B.  
in: Isı Transferi, Prof. Dr. Aydoğan Özdamar, Mak. Y. Müh. Dilara Koçak, Editor, Seçkin Yayıncılık, Ankara, pp.50-60, 2020

## Papers Published in Refereed Scientific Meetings

1. **Investigation of The Effect of Additional Arrangements on Turbine Performance in Vertical Axis Wind Turbines**  
DEDA ALTAN B.  
Euroasia Summit Congress on Scientific Researches and Recent Trends-7, Baku, Azerbaijan, 6 - 09 December 2020, pp.263-270
2. **Investigation of the Usability of Three Dimensional Printer Technology in Wind Turbines**  
Deda Altan B.  
Cukurova 5th International Scientific Researches Conference, Adana, Turkey, 9 - 11 October 2020, pp.81-88
3. **Investigation of Savonius Wind Rotors with Exterior Design**  
Deda Altan B.  
Cukurova 5th International Scientific Researches Conference, Adana, Turkey, 9 - 11 October 2020, pp.89-98
4. **Rüzgar Türbini Uygulamaları**  
Atılğan M., Deda Altan B., Atlıhan A. B.  
2. Rüzgar Enerjisi Sempozyumu (Rüges 2009), Samsun, Turkey, 4 - 05 June 2009, pp.67-73
5. **Savonius Rüzgar Çarklarının İyileştirilmesinde Son Gelişmeler**  
Deda Altan B., Atılğan M., Yakar G.  
II. Ege Enerji Sempozyumu ve Sergisi, Kütahya, Turkey, 26 - 28 May 2004, pp.243-247
6. **Isı Değiştiricilerinin Konstrüksiyon Özelliklerine Göre İncelenmesi ve Performansları Yönünden Karşılaştırılmaları**  
Yakar G., Öztürk H. K., Deda Altan B., Karabacak R.  
I. Ege Enerji Sempozyumu ve Sergisi, Denizli, Turkey, 22 - 24 May 2003, pp.417-424

7. **Türkiye'nin Rüzgar Enerjisi Uygulamaları ve Politikaları**  
Deda Altan B., Öztürk H. K., Yakar G., Atılgan M.  
I. Ege Enerji Sempozyumu ve Sergisi, Denizli, Turkey, 22 - 24 May 2003, pp.417-424
8. **Savonius Rüzgar Çarklarının Performanslarının Arttırılması**  
Deda Altan B., Öztürk H. K., Atılgan M.  
Yenilenebilir Enerji Kaynakları Sempozyumu ve Sergisi, Kayseri, Turkey, 12 - 13 October 2001, pp.157-164
9. **Savonius Rüzgar Çarklarının Performanslarının İyileştirilmesi**  
Deda Altan B., Öztürk H. K., Atılgan M.  
III. Ulusal Temiz Enerji Sempozyumu, İstanbul, Turkey, 15 - 17 November 2000, pp.423-430
10. **Savonius Tipi Rüzgar Çarklarının Performanslarının İncelenmesi**  
Deda Altan B., Öztürk H. K., Atılgan M.  
Bilim Günleri, Denizli, Turkey, 5 - 09 May 1999, pp.315-322

## Courses

### Postgraduate

Rüzgar Enerjisi Uygulamaları, Postgraduate, 2022 - 2023, 2021 - 2022

Rüzgar Enerjisi, Postgraduate, 2023 - 2024, 2022 - 2023

Rüzgar Enerjisi ve Sistemleri, Postgraduate, 2011 - 2012, 2009 - 2010

### Undergraduate

Rüzgar Enerjisi, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021

Dış Akışlar, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021

Hidrolik Makineleri, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

Bitirme Çalışması, Undergraduate, 2020 - 2021

Yenilenebilir Enerji Kaynakları, Undergraduate, 2021 - 2022, 2020 - 2021

Fabrika Organizasyonu, Undergraduate, 2019 - 2020

Makine Proje, Undergraduate, 2020 - 2021

Seminer, Undergraduate, 2019 - 2020

Enerji Dönüşümü, Undergraduate, 2019 - 2020

Akışkanlar Mekaniği II, Undergraduate, 2018 - 2019, 2017 - 2018, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012

Laboratuvar III, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

Laboratuvar I, Undergraduate, 2018 - 2019, 2017 - 2018, 2014 - 2015

Akışkanlar Mekaniği I, Undergraduate, 2018 - 2019, 2017 - 2018, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012

Lisans Tezi I, Undergraduate, 2018 - 2019, 2017 - 2018, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013

Lisans Tezi II, Undergraduate, 2016 - 2017, 2013 - 2014, 2012 - 2013, 2011 - 2012

Rüzgar Enerjisi, Undergraduate, 2017 - 2018, 2016 - 2017, 2014 - 2015, 2013 - 2014, 2012 - 2013

Laboratuvar II, Undergraduate, 2014 - 2015

### Associate Degree

Tesisat, Associate Degree, 2021 - 2022, 2019 - 2020

## Supervised Theses

Deda Altan B., Savonius türbinlerinin performans yönünden incelenmesi, Postgraduate, G.GÜLTEKİN(Student), 2022

Deda Altan B., Farklı kanat tiplerinde savonius rüzgar çarkı tasarımı, Postgraduate, Ş.SERT(Student), 2019

## Peer Reviews in Scientific Publications

OCEAN ENGINEERING, SCI Journal, August 2023  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS, PART C: JOURNAL OF MECHANICAL ENGINEERING SCIENCE, SCI Journal, July 2023  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS, PART E: JOURNAL OF PROCESS MECHANICAL ENGINEERING, SCI Journal, February 2023  
AEJ - ALEXANDRIA ENGINEERING JOURNAL, SCI Journal, January 2023  
JOURNAL OF APPLIED FLUID MECHANICS, SCI Journal, August 2022  
JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, SCI Journal, December 2021  
OCEAN ENGINEERING, SCI Journal, October 2021  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS, PART E: JOURNAL OF PROCESS MECHANICAL ENGINEERING, SCI Journal, September 2021  
JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, SCI Journal, July 2021  
JOURNAL OF FLUIDS ENGINEERING, TRANSACTIONS OF THE ASME, SCI Journal, November 2020  
AEJ - ALEXANDRIA ENGINEERING JOURNAL, SCI Journal, July 2020  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS, PART A: JOURNAL OF POWER AND ENERGY, SCI Journal, July 2020  
JOURNAL OF MECHANICAL SCIENCE AND TECHNOLOGY, SCI Journal, April 2020  
ENERGY CONVERSION AND MANAGEMENT, SCI Journal, April 2020  
WIND AND STRUCTURES, AN INTERNATIONAL JOURNAL, SCI Journal, February 2020  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS, PART C: JOURNAL OF MECHANICAL ENGINEERING SCIENCE, SCI Journal, December 2018  
JOURNAL OF FLUIDS ENGINEERING, TRANSACTIONS OF THE ASME, SCI Journal, August 2018  
JOURNAL OF APPLIED POLYMER SCIENCE, SCI Journal, July 2018  
ENERGY CONVERSION AND MANAGEMENT, SCI Journal, February 2018  
BUILDING AND ENVIRONMENT, SCI Journal, October 2017  
INTERNATIONAL JOURNAL OF COMPUTATIONAL METHODS, SCI Journal, January 2017  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART M: JOURNAL OF ENGINEERING FOR THE MARITIME ENVIRONMENT, SCI Journal, October 2016

## Metrics

Publication: 35  
Citation (WoS): 474  
Citation (Scopus): 602  
H-Index (WoS): 6  
H-Index (Scopus): 6

## Research Areas

Renewable energy, Mechanical Engineering, Energy, Fluid Mechanics, Alternative Energy Resources, Wind power, Engineering and Technology