

## Personal Information

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## International Researcher IDs

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## Education Information

Doctorate, Istanbul Technical University, Makina Fakültesi, Makina Mühendisliği, Turkey 2010 - 2016

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Makina Mühendisliği, Turkey 2008 - 2010

Undergraduate, Yildiz Technical University, Makina Fakültesi, Makina Mühendisliği, Turkey 2003 - 2007

## Research Areas

Mechanical Engineering, Construction and Manufacturing, Material, Material science and engineering, Testing and Control of Materials, Mechanical Properties, Composites, Polymeric Materials, Material Characterization, Metallic Materials, Nanomaterials, Cellulosic Materials, Engineering and Technology

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

- I. **The effects of various boron compounds on the thermal, microstructural and mechanical properties of PLA biocomposites**  
Avci A., Akdoğan Eker A., Bodur M. S., Küçükyıldırım B. O.  
Thermochimica Acta, vol.731, 2024 (SCI-Expanded)
- II. **Water absorption characterization of boron compounds-reinforced PLA/flax fiber sustainable composite.**  
Avci A., Eker A., Bodur M. S., Candan Z.  
International journal of biological macromolecules, vol.233, pp.123546, 2023 (SCI-Expanded)
- III. **An experimental investigation on the thermal and mechanical characterization of boron/flax/PLA sustainable composite**  
Avci A., Eker A. A., Bodur M. S., Candan Z.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART L-JOURNAL OF MATERIALS-DESIGN AND APPLICATIONS, vol.236, pp.2561-2573, 2022 (SCI-Expanded)
- IV. **Effect of coupling agent and alkali treatment on mechanical, thermal and morphological properties of flax-fiber-reinforced PLA composites**  
Avci A., AKDOĞAN EKER A., Bodur M. S.  
GREEN MATERIALS, vol.9, no.3, pp.131-144, 2021 (SCI-Expanded)
- V. **Photostabilizers performance on the surface analysis of green composites**  
Sönmez H. E., Bodur M. S., Baysan A. A., Bakkal M., Serhatlı İ. E.  
Polymers and Polymer Composites, vol.29, no.1, pp.57-64, 2021 (SCI-Expanded)

- VI. **A study on the photostabilizer additives on the textile fiber reinforced polymer composites: Mechanical, thermal, and physical analysis**  
Bodur M. S., Bakkal M., Sonmez H. E.  
Polymer Engineering and Science, vol.58, no.7, pp.1082-1090, 2018 (SCI-Expanded)
- VII. **Water absorption behavior and kinetics of glass fiber/waste cotton fabric hybrid composites**  
Bodur M. S., Englund K., Bakkal M.  
Journal of Applied Polymer Science, vol.134, no.47, 2017 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Examination of Water Uptake Performance and Mechanical Properties of PLA/Flax Fiber Biocomposites With The Coupling Agent**  
AVCI A., AKDOĞAN EKER A., BAKKAL M., BODUR M. S.  
Synthesis and Sintering, vol.2, pp.55-61, 2022 (Peer-Reviewed Journal)
- II. **AISI 304 paslanmaz çelik talaşlı şekil verme işlemlerinde yüzey pürüzlülüğü ve güç tüketimini azaltmaya yönelik istatistiksel yaklaşım**  
BODUR M. S.  
ENGINEERING SCIENCES, vol.11, no.2, pp.379-386, 2022 (Peer-Reviewed Journal)
- III. **Young's Modulus estimation techniques for the randomly oriented natural fiber reinforced composites: Finite Element Analysis and Analytical Models**  
BODUR M. S., BAKKAL M.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.25, no.4, pp.454-461, 2019 (Peer-Reviewed Journal)
- IV. **Glass Fiber/Waste Cotton Fabric Reinforced Hybrid Composites: Mechanical Investigations**  
BODUR M. S., BAKKAL M., Englund K.  
DIFFUSION AND DEFECT DATA. SOLID STATE DATA. PART B. SOLID STATE PHENOMENA, vol.263, pp.179-183, 2017 (Scopus)

## Books

- I. **Doğal Lif Takviyeler**  
AVCI A., AKDOĞAN EKER A., BODUR M. S.  
in: Mühendislik Bilimleri alanında Yeni Terendler, Birol KILIÇ, Gülden BAŞYİĞİT KILIÇ, Editor, DUVAR, Ankara, pp.47-61, 2022
- II. **Biyokompozitlerin Termal Özellikleri**  
AVCI A., AKDOĞAN EKER A., BODUR M. S.  
in: Mühendislik Bilimleri alanında Yeni Trendler, Birpl KILIÇ, Gülden BAŞYİĞİT KILIÇ, Editor, DUVAR Yayınları, Ankara, pp.721-742, 2022

## Papers Published in Refereed Scientific Meetings

- I. **The Effect of Ulexite Compound on The Mechanical Properties of the PLA Matrix**  
AVCI A., AKDOĞAN EKER A., BODUR M. S.  
6th INTERNATIONAL CONFERENCE ON ADVANCES IN NATURAL & APPLIED SCIENCE MATERIALS SCIENCE, Ağrı, Turkey, 11 - 13 October 2022, pp.209-213
- II. **An Experimental Study on the Thermal Properties of Boron/PLA Sustainable Biocomposites**  
AVCI A., AKDOĞAN EKER A., BODUR M. S.  
6th INTERNATIONAL CONFERENCE ON ADVANCES IN NATURAL & APPLIED SCIENCE MATERIALS SCIENCE,

Ađrı, Turkey, 11 - 13 October 2022, pp.203-208

- III. **Effect of electrospun polycarbonate nano fiber on the mechanical properties of glass fiber reinforced composites**  
BODUR M. S., Baysan A. A.  
Global Summit on Advanced Materials and Sustainable Energy (GAMSE22), Turkey, 3 - 04 October 2022
- IV. **EFFECT OF WATER UPTAKE PERFORMANCE OF PLA/FLAX FIBER GREEN COMPOSITES ON THE IMPACT BEHAVIOUR**  
AVCI A., AKDOĐAN EKER A., BODUR M. S.  
International Conference on Nuclear Technology, Radiation Safety and Advanced Technological Researches (ICNRA2021), Turkey, 10 - 11 December 2021
- V. **TOUGHENING METHOD OF GLASS FIBER REINFORCED THERMOSET MATRIX COMPOSITE MATERIALS: THERMOPLASTIC ADDITION**  
BODUR M. S.  
Global Conference on Engineering Research (GLOBCER'21), Turkey, 2 - 05 June 2021
- VI. **Effect of cutting parameters on the surface roughness of AISI 304 stainless steel**  
BODUR M. S.  
International Congress of Academic Research (ICAR21), Turkey, 19 - 21 April 2021
- VII. **INVESTIGATION OF MECHANICAL AND THERMO MECHANICAL BEHAVIOR OF FLAX FIBER-REINFORCED PLA BIO-COMPOSITES WITH A COUPLING AGENT AND INTERNAL LUBRICANT**  
AVCI A., AKDOĐAN EKER A., BODUR M. S.  
6th INTERNATIONAL CONGRESS ON ENGINEERING, ARCHITECTURE AND DESIGN, İstanbul, Turkey, 17 - 18 December 2020, pp.531-540

## Supported Projects

BODUR M. S., AKDOĐAN EKER A., CANDAN Z., AVCI A., Project Supported by Higher Education Institutions, Dođal kaynaklardan elde edilen nanoselüloz ve polilaktik asit PLA ierikli biyokompozitlerin otomotiv sektörüne yönelik olarak kullanımının araştırılması, 2024 - Continues

Bodur M. S., Yıldız A., Yıldız E., Şahin Y., TÜBİTAK Project, Endüstriyel Kenevir (Cannabis Sativa L.) Liflerinin Özelliklerinin Borlu Bileşikler İle Emprenye Edilerek İyileştirilmesi Ve Modifiye Edilen Liflerin Biyokompozit Malzeme Üretiminde Kullanılabilirliğinin Araştırılması, 2025 - 2026