

## Res. Asst. Berke Ođulcan PARLAK

### Personal Information

**Email:** boparlak@yildiz.edu.tr

**Web:** <https://avesis.yildiz.edu.tr/boparlak>

### International Researcher IDs

ScholarID: dUjXVaEAAAAJ

ORCID: 0000-0003-0122-8202

Publons / Web Of Science ResearcherID: AGD-0265-2022

ScopusID: 58099493500

Yoksis Researcher ID: 331971

### Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Mekatronik Mühendisliđi , Turkey 2023 - Continues

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Mekatronik Mühendisliđi , Turkey 2021 - 2023

Undergraduate, Izmir Katip Celebi University, Mühendislik Fakóltesi , Mekatronik Mühendisliđi , Turkey 2015 - 2020

### Research Areas

Nonlinear Systems, System Diagnostics, Robotics and Mechatronics Systems, Artificial Intelligence, Computer Learning and Pattern Recognition, Renewable energy, Alternate Fuels and Energy Resources, Electrical energy storage technologies

### Academic Titles / Tasks

Research Assistant, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechatronics Engineering, 2020 - Continues

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

- I. **Assessment of Vehicle-Integrated Photovoltaics: A financial and environmental perspective**  
Parlak B. O., Yavařođlu H. A.  
SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.72, no.104042, pp.1-13, 2024 (SCI-Expanded)
- II. **Enhancing hovercraft energy performance: Adaptive lift fan control for optimal efficiency**  
Rezaei S., Parlak B. O., Yavařođlu H. A.  
SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.71, pp.1-10, 2024 (SCI-Expanded)
- III. **In-depth analysis of battery life enhancement in solar-assisted fuel-cell range-extender vehicles**  
PARLAK B. O., YAVAřOđLU H. A., Ozcan H. G.  
International Journal of Hydrogen Energy, vol.67, pp.1033-1043, 2024 (SCI-Expanded)
- IV. **A Comprehensive Analysis of In-Line Inspection Tools and Technologies for Steel Oil and Gas Pipelines**

Parlak B. O., Yavaşođlu H. A.  
Sustainability (Switzerland), vol.15, no.3, 2023 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Comparison of Regression Algorithms to Predict Average Air Temperature**  
PARLAK B. O., YAVAŞOĐLU H. A.  
Uluslararası Mühendislik Araştırma ve Geliştirme Dergisi, vol.15, no.1, pp.312-322, 2023 (Peer-Reviewed Journal)
- II. **Design of a State-Feedback Control System for Sugar Tank Liquid Level Management**  
Parlak B. O., Yavaşođlu H. A.  
International Journal of Sivas University of Science and Technology, vol.1, no.2, pp.13-34, 2022 (Peer-Reviewed Journal)
- III. **Fuzzy Decision Based Modeling of Rheostatic Brake System for Autonomous Land Vehicles**  
Sünkün S., Parlak B. O., Yıldırım A., Yavaşođlu H. A.  
Journal of Computer Science, vol.2022, pp.144-150, 2022 (Conference Book)
- IV. **Design of a Toolbox for Kinematic Analysis of Jansen's Linkage**  
Sünkün S., Parlak B. O., Yıldırım A., Yavaşođlu H. A.  
Journal of Computer Science, vol.2022, pp.112-119, 2022 (Conference Book)

## Books & Book Chapters

- I. **Assembly & C Programming for PIC16F887 Microcontroller**  
Yavaşođlu H. A., Parlak B. O.  
Yıldız Teknik Üniversitesi Basım Yayın Merkezi, İstanbul, 2023
- II. **Mikroişlemciler ve Programlanması**  
Yavaşođlu H. A., Parlak B. O.  
Yıldız Teknik Üniversitesi Basım Yayın Merkezi, İstanbul, 2023

## Refereed Congress / Symposium Publications in Proceedings

- I. **Optimizing Energy Efficiency in Hovercraft through Adaptive Control of Lift Fan**  
Rezaei S., Parlak B. O., Yavaşođlu H. A.  
The 18th SDEWES Conference, Dubrovnik, Croatia, 24 - 29 September 2023
- II. **Are Solar-Assisted Electric Vehicles a Rational Investment?**  
Yavaşođlu H. A., Parlak B. O.  
The 18th SDEWES Conference, Dubrovnik, Croatia, 24 - 29 September 2023
- III. **Level Control of a Crude Oil Tank using Fuzzy-PID Controller**  
Sünkün S., Parlak B. O., Akca T. B.  
7th International Artificial Intelligence and Data Processing Symposium, Malatya, Turkey, 7 - 08 September 2023, pp.104-114
- IV. **Geometric Deformations in Natural Gas Pipelines**  
Parlak B. O., Yavaşođlu H. A.  
The 3rd LA SDEWES Conference, Sao-Paulo, Brazil, 24 - 28 July 2022
- V. **A Review on Oil and Gas Pipelines In-Line Inspection Tools and Technologies**  
Parlak B. O., Yavaşođlu H. A.  
The 3rd LA SDEWES Conference, Sao-Paulo, Brazil, 24 - 28 July 2022