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International Researcher IDs

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Education Information

Doctorate, Istanbul Technical University, Denizcilik, Deniz Ulaştırma Mühendisliği Anabilim Dalı, Turkey 2019 - Continues

Postgraduate, Istanbul Technical University, Denizcilik, Deniz Ulaştırma Mühendisliği Anabilim Dalı, Turkey 2017 - 2019

Undergraduate, İstanbul Teknik, Denizcilik , Gemi Makinaları İşletme Mühendisliği, Turkey 2011 - 2016

Research Areas

Technical Sciences, Naval Architecture and Marine Engineering, Ship Machines

Academic Titles / Tasks

Research Assistant, Istanbul Technical University, Denizcilik, Gemi Makineleri İşletme Mühendisliği, 2018 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Decision support system for ship energy efficiency management based on an optimization model**
Karatug Ç., Tadros M., Ventura M., Soares C. G.
Energy, vol.292, 2024 (SCI-Expanded)
- II. **A risk assessment of scrubber use for marine transport by rule-based fuzzy FMEA**
Karatug Ç., Ceylan B. O., Arslanoğlu Y.
Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, vol.238, no.1, pp.114-125, 2024 (SCI-Expanded)
- III. **Cost-benefit analysis of emission reduction techniques: a case for container vessel**
Ejder E., Karatug Ç., Arslanoğlu Y.
Journal of Marine Engineering and Technology, 2024 (SCI-Expanded)
- IV. **A system theory (STAMP) based quantitative accident analysis model for complex engineering systems**
Ceylan B. O., Karatug Ç., Akyüz E., Arslanoğlu Y., Boustras G.
SAFETY SCIENCE, vol.166, pp.106232, 2023 (SCI-Expanded)
- V. **Design of a decision support system to achieve condition-based maintenance in ship machinery systems**
Karatug Ç., Arslanoğlu Y., Guedes Soares C.
Ocean Engineering, vol.281, 2023 (SCI-Expanded)

- VI. **Strategy for ship energy efficiency based on optimization model and data-driven approach**
Karatuğ Ç., Tadros M., Ventura M., Guedes Soares C.
Ocean Engineering, vol.279, 2023 (SCI-Expanded)
- VII. **Review of maintenance strategies for ship machinery systems**
Karatuğ Ç., Arslanoğlu Y., Soares C. G.
Journal of Marine Engineering and Technology, vol.22, no.5, pp.233-247, 2023 (SCI-Expanded)
- VIII. **Determination of a maintenance strategy for machinery systems of autonomous ships**
Karatuğ Ç., Arslanoğlu Y., Guedes Soares C.
Ocean Engineering, vol.266, 2022 (SCI-Expanded)
- IX. **Feasibility Analysis of the Effects of Scrubber Installation on Ships**
Karatuğ Ç., Arslanoğlu Y., Guedes Soares C.
Journal of Marine Science and Engineering, vol.10, no.12, 2022 (SCI-Expanded)
- X. **A novel methodology for the use of engine simulators as a tool in academic studies**
Ceylan B. O., Karatuğ Ç., Arslanoğlu Y.
JOURNAL OF MARINE SCIENCE AND TECHNOLOGY, vol.27, no.4, pp.1220-1232, 2022 (SCI-Expanded)
- XI. **Development of condition-based maintenance strategy for fault diagnosis for ship engine systems**
Karatuğ Ç., Arslanoğlu Y.
OCEAN ENGINEERING, vol.256, pp.111515, 2022 (SCI-Expanded)
- XII. **Importance of early fault diagnosis for marine diesel engines: a case study on efficiency management and environment**
Karatuğ Ç., Arslanoğlu Y.
Ships and Offshore Structures, vol.17, no.2, pp.472-480, 2022 (SCI-Expanded)
- XIII. **Machine learning based visibility estimation to ensure safer navigation in strait of Istanbul**
Uyanık T., Karatuğ Ç., Arslanoğlu Y.
Applied Ocean Research, vol.112, 2021 (SCI-Expanded)
- XIV. **Design of a solar photovoltaic system for a Ro-Ro ship and estimation of performance analysis: A case study**
Karatuğ Ç., Durmuşoğlu Y.
Solar Energy, vol.207, pp.1259-1268, 2020 (SCI-Expanded)
- XV. **Machine learning approach to ship fuel consumption: A case of container vessel**
Uyanık T., Karatuğ Ç., Arslanoğlu Y.
TRANSPORTATION RESEARCH PART D-TRANSPORT AND ENVIRONMENT, vol.84, 2020 (SCI-Expanded)

Articles Published in Other Journals

- I. **Environmental and Economic Evaluation of Dual-Fuel Engine Investment of a Container Ship**
Karatuğ Ç., Ejder E., Tadros M., Arslanoğlu Y.
Journal of Marine Science and Application, vol.22, no.4, pp.823-836, 2023 (ESCI)
- II. **Risk assessment of sea chest fouling on the ship machinery systems by using both FMEA method and ERS process**
Ceylan B. O., Karatuğ Ç., Ejder E., Uyanık T., Arslanoğlu Y.
Australian Journal of Maritime and Ocean Affairs, vol.15, no.4, pp.414-433, 2023 (Scopus)

Books & Book Chapters

- I. **Investigation and Examination of LNG, Methanol, and Ammonia Usage on Marine Vessels**
KARATUĞ Ç., CEYLAN B. O., EJDER E., ARSLANOĞLU Y.
in: Decarbonization of Maritime Transport, Zincir Burak, Shukla Praveesh Chandra, Agarwal Avinash Kumar, Editor, Springer, pp.65-85, 2023

Refereed Congress / Symposium Publications in Proceedings

- I. **Evaluation of decarbonization strategies for existing ships**
Karatuğ Ç., Arslanoğlu Y., Guedes Soares C.
6th International Conference on Maritime Technology and Engineering, Lisbon, Portugal, 24 - 26 May 2022
- II. **Maintenance strategies for machinery systems of autonomous ships**
Karatuğ Ç., Arslanoğlu Y., Guedes Soares C.
6th International Conference on Maritime Technology and Engineering, Lisbon, Portugal, 24 - 26 May 2022
- III. **Ammonia, And Methanol as a Marine Fuel,**
KARATUĞ Ç., CEYLAN B. O., ARSLANOĞLU Y.
4th Global Conference on Innovation in Marine Technology and the Future of Maritime Transportation (GMC'21), Turkey, 18 - 19 November 2021
- IV. **Analysis of Ship Fuel Consumption Through Multiple Linear Regression**
Karatuğ Ç., Arslanoğlu Y.
5th International Mediterranean Science and Engineering Congress (IMSEC 2020), Antalya, Turkey, 21 - 23 October 2020, pp.268-272
- V. **Data-Driven Approach For Estimation Of Marine Vessel's Fuel Oil Consumption**
KARATUĞ Ç., UYANIK T., ARSLANOĞLU Y.
9th International Conference on Advanced Technologies (ICAT'xx20), Turkey, 10 August 2020
- VI. **The Effect of Ship's Body And Propeller Condition on The Energy Efficiency of The Marine Vessels**
Karatuğ Ç., Arslanoğlu Y.
5th International Mediterranean Science and Engineering Congress (IMSEC 2020), Antalya, Turkey, 21 October 2020, pp.176-180
- VII. **Data Driven Approach for Estimation of Marine Vessel'xxs Fuel Oil Consumption**
KARATUĞ Ç., UYANIK T., ARSLANOĞLU Y.
9th International Conference on Advanced Technologies (ICAT'xx20), İstanbul, Turkey, 10 - 12 August 2020
- VIII. **Ship Electrical Power Estimation with Machine Learning**
UYANIK T., KARATUĞ Ç., ARSLANOĞLU Y.
9th International Conference on Advanced Technologies (ICAT'xx20), İstanbul, Turkey, 10 - 12 August 2020
- IX. **A Review of The Use of Solar Energy in Ships**
KARATUĞ Ç., DURMUŞOĞLU Y.
ECRES2018, 25 - 27 June 2018

Supported Projects

Arslanoğlu Y., Karatuğ Ç., Project Supported by Higher Education Institutions, Gemi Makine Dairesi Bakım İşlemlerinin Verimlilik Analizi, 2021 - 2023

Durmuşoğlu Y., Karatuğ Ç., Project Supported by Higher Education Institutions, Yük Gemilerinde Güneş pili Uygulamalarının Fizibilite Araştırması, 2018 - 2020

Metrics

Publication: 27
Citation (WoS): 57
Citation (Scopus): 233
H-Index (WoS): 3
H-Index (Scopus): 6