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International Researcher IDs

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Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği, Turkey 2015 - Continues

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği, Turkey 2012 - 2015

Undergraduate, Istanbul Technical University, Gemi Makineleri İşletme Mühendisliği, Turkey 2004 - 2011

Research Areas

Mechanical Engineering, Thermodynamics, Internal Combustion Engines, Engineering and Technology

Academic Titles / Tasks

Research Assistant, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2013 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **The effects of ammonia addition on the emission and performance characteristics of a diesel engine with variable compression ratio and injection timing**
OKUMUŞ F., KANBEROĞLU ARSLAN B., GONCA G., KÖKKÜLÜNK G., Aydın Z., Kaya C.
International Journal of Hydrogen Energy, vol.64, pp.186-195, 2024 (SCI-Expanded)
- II. **Renewable energy resources: Combustion and environmental impact of diesel with pyrolytic and biodiesel blends**
Sönmez H. İ., Okumuş F., Safa A., Aydın Z., Kaya C., Kökkülünk G.
Energy and Environment, vol.34, no.4, pp.855-872, 2023 (SSCI)
- III. **Exergetic and exergoeconomic analyzes of compressed natural gas as an alternative fuel for a diesel engine**
Kaya C., AYDIN Z., KÖKKÜLÜNK G., SAFA A.
Energy Sources, Part A: Recovery, Utilization and Environmental Effects, vol.45, no.2, pp.3722-3741, 2023 (SCI-Expanded)
- IV. **THERMODYNAMIC ASSESSMENT OF WATER DIESEL EMULSIFIED FUEL USAGE IN A SINGLE CYLINDER DIESEL ENGINE**

OKUMUŞ F., KÖKKÜLÜNK G., Kaya C., AYDIN Z.

Energy Sources, Part A: Recovery, Utilization and Environmental Effects, vol.45, no.2, pp.3708-3721, 2023 (SCI-Expanded)

- V. **Waste to energy conversion: Pyrolytic oil and biodiesel as a renewable fuel blends on diesel engine combustion, performance, and emissions**

Sönmez H. İ., Okumuş F., Kaya C., Aydın Z., Safa A., Kökkülünk G.

INTERNATIONAL JOURNAL OF GREEN ENERGY, vol.19, no.12, pp.1333-1344, 2022 (SCI-Expanded)

- VI. **Performance and emission characteristics of waste frying oil biodiesel blends as pilot fuel on a dual fuel compression ignition engine**

Aydın Z., Safa A.

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.0, no.0, pp.1-17, 2020 (SCI-Expanded)

- VII. **Corrosion Behavior of in-Situ AlB₂/Al-Cu Metal Matrix Composite**

Elçiçek H., Savaş Ö., Aydın Z., Özdemir O., Kayıkci R.

ACTA PHYSICA POLONICA A, vol.129, pp.661-664, 2016 (SCI-Expanded)

- VIII. **Effects of Fuel Contamination to Marine Lubricant on Friction Behaviors between Piston Ring and Cylinder Liner**

Aydın Z., Savaş Ö., Parlak A., Keskin İ., Ünlügençoğlu K.

ACTA PHYSICA POLONICA A, vol.129, no.4, pp.617-620, 2016 (SCI-Expanded)

- IX. **Application of Taguchi Methods for the Optimization of Factors Affecting Engine Performance and Emission of Exhaust Gas Recirculation in Steam-injected Diesel Engines**

Kökkülünk G., Parlak A., Bağcı E., Aydın Z.

ACTA POLYTECHNICA HUNGARICA, vol.11, pp.95-107, 2014 (SCI-Expanded)

- X. **The Effects of Different Fuels on Wear between Piston Ring and Cylinder**

Cesur E., Ayhan V., Parlak A., SAVAŞ Ö., AYDIN Z.

ADVANCES IN MECHANICAL ENGINEERING, 2014 (SCI-Expanded)

Articles Published in Other Journals

- I. **Friction Behaviours of Lubrication Oil Contaminated With Cooling Water in Marine Diesel Engines**

Aydın Z., Elçiçek H., Kökkülünk G., Okumuş F.

INTERNATIONAL JOURNAL OF ADVANCES ON AUTOMOTIVE AND TECHNOLOGY, vol.1, pp.98-103, 2018 (Peer-Reviewed Journal)

- II. **Experimental Investigation of friction coefficient between Piston ring-Cylinder Liner of Internal Combustion Engines by Taguchi Method**

Savaş Ö., Elçiçek H., Aydın Z.

JOURNAL OF ETA MARITIME SCIENCE, vol.6, no.1, 2018 (Peer-Reviewed Journal)

- III. **Taguchi Yaklaşımı ile içten yanmalı motorlarda segman-silindir gömleği arasındaki sürtünme katsayısının deneysel olarak incelenmesi**

SAVAŞ Ö., ELÇİÇEK H., AYDIN Z.

JOURNAL OF ETA MARITIME SCIENCE, vol.6, no.1, pp.17-25, 2018 (Peer-Reviewed Journal)

- IV. **Experimental Investigation of Friction Coefficient Between Piston Ring-Cylinder Liner of Internal Combustion Engines with Taguchi Method**

Savaş Ö., Elçiçek H., Aydın Z.

Journal of ETA Maritime Science, vol.6, pp.17-25, 2018 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Experimental Investigation of Using Waste Frying Oil Biodiesel-Diesel Blends on Performance**

Parameters in a Diesel Engine

Kaya C., Kökkülünk G., Aydın Z., Okumuş F.

International Design and Engineering Symposium, İzmir, Turkey, 10 - 12 October 2019, pp.152

- II. **Investigation of the Effects of Marine Fuels in Lubrication Oil on The Friction of Piston Ring-Cylinder Liner in Marine Diesel Engines**
Sert O., Aydın Z., Kökkülünk G.
III. GLOBAL CONFERENCE ON INNOVATION IN MARINE TECHNOLOGY AND THE FUTURE OF MARITIME TRANSPORTATION, İzmir, Turkey, 18 - 19 April 2019, pp.24-36
- III. **The Investigation of Improvement with Tall Oil Fatty Acid of Negative Effects Through Diesel Oil Mixed with Lubricating Oil in Marine Diesel Generators**
Kaya C., Sert O., Elçiçek H., Aydın Z., Kökkülünk G.
III. GLOBAL CONFERENCE ON INNOVATION IN MARINE TECHNOLOGY AND THE FUTURE OF MARITIME TRANSPORTATION, İzmir, Turkey, 18 - 19 April 2019, pp.462-472
- IV. **Investigation of the Effects of Marine Fuels in Lubrication Oil on The Friction of Piston Ring-Cylinder Liner in Marine Diesel Engines**
SERT O., AYDIN Z., KÖKKÜLÜNK G.
III. GLOBAL CONFERENCE ON INNOVATION IN MARINE TECHNOLOGY AND THE FUTURE OF MARITIME TRANSPORTATION, İzmir, Turkey, 18 - 19 April 2019
- V. **The Investigation of Improvement with Tall Oil Fatty Acid of Negative Effects Through Diesel Oil Mixed with Lubricating Oil in Marine Diesel Generators**
KAYA C., SERT O., ELÇİÇEK H., AYDIN Z., KÖKKÜLÜNK G.
III. GLOBAL CONFERENCE ON INNOVATION IN MARINE TECHNOLOGY AND THE FUTURE OF MARITIME TRANSPORTATION, 18 - 19 April 2019
- VI. **Friction Behaviours of Lubrication Oil Contaminated With Cooling Water in Marine Diesel Engines**
AYDIN Z., ELÇİÇEK H., KÖKKÜLÜNK G., OKUMUŞ F.
3rd International Conference on Advances in Mechanical Engineering, 19 - 21 December 2017
- VII. **ANALYSIS OF THE FRICTION FORCES BETWEEN PISTON RING-CYLINDER LINER PAIRS ON MARINE DIESEL ENGINES USING EMULSIFIED FUEL**
OKUMUŞ F., KÖKKÜLÜNK G., AYDIN Z., ELÇİÇEK H.
3rd INTERNATIONAL CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING, İstanbul, Turkey, 19 December 2017, pp.321-327
- VIII. **The Effects of Contamination of Heavy Fuel Oil with Cylinder Oil on Wear Characteristic**
AYDIN Z., SAVAŞ Ö., ELÇİÇEK H., PARLAK A.
6th International Advances in Applied Physics and Materials Science Congress Exhibition, 1 - 03 June 2016
- IX. **OXIDATION BEHAVIOR OF IN-SITU SiC REINFORCED COMPOSITE MATERIAL**
ELÇİÇEK H., SAVAŞ Ö., AVCI A., AYDIN Z.
6th International Advances in Applied Physics and Materials Science, 01 June 2016
- X. **Corrosion Behaviors of AlB2 Al Metal Matrix Composites**
SAVAŞ Ö., AYDIN Z., ÜNLÜGENÇOĞLU K., KAYIKCI R.
5th International Advances in Applied Physics and Materials Science Congress & Exhibition (APMAS2015), 16 - 19 April 2015
- XI. **An Experimental Investigation On Influence Of Different Lubricants On Tribological Behaviour Of Cylinder Liner And Piston Ring Pair**
AYDIN Z., SAVAŞ Ö., PARLAK A.
5th International Advances in Applied Physics and Materials Science Congress & Exhibition (APMAS2015), 16 - 18 April 2015
- XII. **Balast Suyunun Çevresel Etkileri**
ELÇİÇEK H., Parlak A., Aydın Z.
Su ve Biyolojik Çeşitlilik Sempozyumu, 01 May 2013

Supported Projects

KÖKKÜLÜNK G., ERGENÇ A. T., ELÇİÇEK H., AYDIN Z., SERT O., OKUMUŞ F., KAYA A., SAFA A., Kaya C., Project Supported by Higher Education Institutions, Uluslararası emisyon standartlarına uyum için gezinti ve balıkçı tekne motorlarında emülsife yakıt kullanımının deneysel olarak araştırılması, 2018 - 2020
Savaş Ö., Ünlügençoğlu K., Aydın Z., Kökkülünk G., Project Supported by Higher Education Institutions, Deniz taşıtlarında kullanılan farklı yağların segman silindir çifti yüzeylerindeki tribolojik özelliklerine etki eden parametrelerin incelenmesi, 2013 - 2016

Metrics

Publication: 27
Citation (WoS): 45
Citation (Scopus): 74
H-Index (WoS): 5
H-Index (Scopus): 5

Non Academic Experience

Business Establishment Private, İnce Denizcilik
Business Establishment Private, Limakport Liman İşletmeciliği
Business Establishment Private, Bergen Denizcilik
Business Establishment Private, Mardaş Denizcilik
Business Establishment Private, Akar Denizcilik
Business Establishment Private, İnce Denizcilik
Business Establishment Private, İnce Denizcilik
Business Establishment Private, Şahin Çelik Tersanesi