

# YASIN ÜST

## PROF.

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### International Researcher IDs

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ScopusID: 6507984321

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### Biography

Prof. Dr. Yasin ÜST, Lisans eğitimini 1999 yılında Yıldız Teknik Üniversitesi Gemi İnşaatı ve Gemi Makineleri Mühendisliği Bölümünde, Yıldız Teknik Üniversitesi (YTÜ) Fen Bilimleri Enstitüsü Gemi İnşaatı ve Gemi Makineleri Mühendisliği Anabilim Dalında 2001 yılında Yüksek Lisans eğitimini ve 2005 yılında ise Doktora eğitimini tamamlamıştır.

YTÜ Gemi İnşaatı ve Gemi Makineleri Mühendisliği Bölümü Gemi Makinaları Anabilim Dalında 1999-2006 yılları arasında Araştırma Görevlisi, 2006-2009 yılları arasında Yardımcı Doçent, 2009-2014 yılları arasında Doçent olarak görev yapmış ve 2014 yılından beri Profesör olarak görevini sürdürmektedir.

Prof.Dr. Yasin ÜST, Yıldız Teknik Üniversitesi'nde 2008-2009 yılları arasında Bölüm Başkan Yardımcılığı, 2009-2016 yılları arasında Dekan Yardımcılığı, 2016-2020 yılları arasında Bölüm Başkanlığı ve 2009 yılından itibaren Fakülte Bilimsel Araştırma Projeleri Koordinatörlüğü ve 2014 yılından itibaren Gemi Makinaları Ana Bilim dalı başkanlığı görevlerini yürütmektedir.

Termodinamik, Enerji Üretim Sistemleri, Enerji Teknolojileri, Termal Sistemlerin Dizaynı ve Optimizasyonu ve Enerji Ekonomisi alanlarında çok sayıda uluslararası çalışmaları bulunan Prof.Dr. Yasin ÜST, 2015 yılında Türkiye Bilimler Akademisi (TÜBA) GEBİP Mühendislik Ödülünü kazanmıştır. Prof.Dr. Yasin ÜST evli ve üç çocuk babasıdır.

### Learning Knowledge

Doctorate 2001 - 2005	Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği, Turkey
1999 - 2001	Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği, Turkey
Undergraduate 1994 - 1999	Yildiz Technical University, Faculty Of Mechanical Engineering, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği, Turkey

### Dissertations

Doctorate, ENERJİ ÜRETİM SİSTEMLERİNİN EKOLOJİK PERFORMANS ANALİZİ VE OPTİMİZASYONU, Yıldız Teknik Üniversitesi, Naval Architecture and Maritime Faculty, Gemi İnşaatı Ve Gemi Makineleri, 2005

Postgraduate, KOMBİNE ISI VE GÜÇ SİSTEMLERİNİN PERFORMANS VE EKOLOJİK YÖNDE ETÜDÜ, Yıldız Teknik

## Academic Titles / Tasks

Professor 2014 - Continues	Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Naval Architecture And Marine Engineering
Associate Professor 2009 - 2014	Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Naval Architecture And Marine Engineering
Assistant Professor 2006 - 2009	Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Naval Architecture And Marine Engineering
Research Assistant PhD 2005 - 2006	Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Naval Architecture And Marine Engineering
Research Assistant 1999 - 2005	Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Naval Architecture And Marine Engineering

## Supported Projects

1. ÜST Y., BAŞHAN V., Project Supported by Higher Education Institutions, Perovskit Katalizörlerde Metan Yanmasının Deneysel Olarak İncelenmesi, 2018 - 2021
2. ÇAKIR M., SÖNMEZ H. İ., ÜST Y., BAŞHAN V., Project Supported by Higher Education Institutions, Doğal Gaz Yakıtlı Tek Silindirli Bir Motorun İdeal Sıcaklık Çalışma Koşullarının Belirlenmesi, 2018 - 2021
3. ÜST Y., BAŞAK M. E., BAŞHAN V., PALACI Y., KARAKURT A. S., ARSLAN F., Project Supported by Higher Education Institutions, Karbondioksitin perovskit katalist kullanılan sCO<sub>2</sub> güç çevrimlerinde metan yanmasına etkilerinin incelenmesi, 2018 - 2021
4. ÜST Y., ÇOŞGUN T., Project Supported by Higher Education Institutions, Miller &#8211; Dizel Çevrimiyle Çalışan Bir Motorun Performans Karakteristiklerinin Araştırılması, 2011 - 2013
5. ÜST Y., TUBITAK Project, Egzoz enerjisinden elde edilen buharın bir Dizel motoruna emme periyodunda enjeksiyonunun NO<sub>x</sub> emisyonlarına ve performansa etkilerinin araştırılması, 2008 - 2010

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

1. **Thermodynamic performance analysis of state of the art gas turbine cycles with inter-stage turbine reheat and steam injection**  
Kayadelen H. K., Üst Y., Başhan V.  
Energy, vol.222, pp.1-14, 2021 (SCI-Expanded)
2. **Comparative Energy and Emission Analysis of Oxy-Combustion and Conventional Air Combustion**  
Özsarı İ., Üst Y., Kayadelen H. K.  
Arabian Journal For Science And Engineering, vol.46, no.1, pp.2477-2492, 2021 (SCI-Expanded)
3. **Thermodynamic Analysis and Multi-Objective Optimization of Solar Heat Engines**  
ÜST Y., ÖZSARI İ., ARSLAN F., SAFA A.  
Arabian Journal for Science and Engineering, vol.45, no.11, pp.9669-9684, 2020 (SCI-Expanded)
4. **A mixed algorithm for investigation the effects of the preparation processes during the catalyst**

**synthesis with sol-gel method and coating**

Başhan V., Üst Y., Balkanlı E., Figen H. E.

JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY, vol.96, no.1, pp.131-142, 2020 (SCI-Expanded)

5. **Environmental impact and cost analysis of gas turbine cycles with steam injection and inter-stage turbine reheat**  
KAYADELEN H. K., ÜST Y., BAŞHAN V.  
INTERNATIONAL JOURNAL OF GLOBAL WARMING, vol.21, no.4, pp.356-372, 2020 (SCI-Expanded)
6. **Effect of varying fuel types on oxy-combustion performance**  
Özsarı İ., Üst Y.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.43, no.14, pp.8684-8696, 2019 (SCI-Expanded)
7. **Perovskite catalysts for methane combustion: applications, design, effects for reactivity and partial oxidation**  
Başhan V., Üst Y.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.43, no.14, pp.7755-7789, 2019 (SCI-Expanded)
8. **Application of fuzzy dematel method to analyse s-CO<sub>2</sub> Brayton power systems**  
Başhan V., Üst Y.  
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.37, pp.8483-8498, 2019 (SCI-Expanded)
9. **Thermoenvironomic evaluation of simple, intercooled, STIG, and ISTIG cycles**  
Kayadelen H. K., Üst Y.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.42, pp.3780-3802, 2018 (SCI-Expanded)
10. **A comparative thermo-ecological performance analysis of generalized irreversible solar-driven heat engines**  
ÜST Y., ARSLAN F., ÖZSARI İ.  
RENEWABLE ENERGY, vol.113, pp.1242-1249, 2017 (SCI-Expanded)
11. **Thermoeconomic Optimization and Performance Analysis of a Regenerative Closed Brayton Cycle with Internal Irreversibilities and Pressure Losses**  
Durmuşoğlu Y., Üst Y., Kayadelen H. K.  
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF MECHANICAL ENGINEERING, vol.41, pp.61-70, 2017 (SCI-Expanded)
12. **Thermodynamic, environmental and economic performance optimization of simple, regenerative, STIG and RSTIG gas turbine cycles**  
Kayadelen H. K., Üst Y.  
ENERGY, vol.121, pp.751-771, 2017 (SCI-Expanded)
13. **Performance analysis of Multipurpose Refrigeration System (MRS) on fishing vessel**  
ÜST Y., Karakurt A. S., Gunes Ü.  
Polish Maritime Research, vol.23, no.2, pp.48-56, 2016 (SCI-Expanded)
14. **Ecological coefficient of performance analysis and optimisation of gas turbines by using exergy analysis approach**  
Üst Y., Şahin B., Çakır M.  
INTERNATIONAL JOURNAL OF EXERGY, vol.21, pp.39-69, 2016 (SCI-Expanded)
15. **Investigation of Heat Transfer Influences on Performance of Air-Standard Irreversible Dual-Miller Cycle**  
GONCA G., ŞAHİN B., Ust Y.  
JOURNAL OF THERMOPHYSICS AND HEAT TRANSFER, vol.29, no.4, pp.678-683, 2015 (SCI-Expanded)
16. **Thermodynamic performance analysis and optimization of DMC (Dual Miller Cycle) cogeneration system by considering exergetic performance coefficient and total exergy output criteria**  
ÜST Y., ARSLAN F., ÖZSARI İ., ÇAKIR M.  
ENERGY, vol.90, pp.552-559, 2015 (SCI-Expanded)
17. **Comprehensive performance analyses and optimization of the irreversible thermodynamic cycle engines (TCE) under maximum power (MP) and maximum power density (MPD) conditions**  
GONCA G., ŞAHİN B., ÜST Y., Parlak A.

- APPLIED THERMAL ENGINEERING, vol.85, pp.9-20, 2015 (SCI-Expanded)
18. **Comparison of steam injected diesel engine and Miller cycled diesel engine by using two zone combustion model**  
GONCA G., ŞAHİN B., ÜST Y., Parlak A., SAFA A.  
JOURNAL OF THE ENERGY INSTITUTE, vol.88, no.1, pp.43-52, 2015 (SCI-Expanded)
  19. **Theoretical and experimental investigation of the Miller cycle diesel engine in terms of performance and emission parameters**  
GONCA G., ŞAHİN B., Parlak A., ÜST Y., Ayhan V., Cesur I., Boru B.  
APPLIED ENERGY, vol.138, pp.11-20, 2015 (SCI-Expanded)
  20. **The effects of steam injection on the performance and emission parameters of a Miller cycle diesel engine**  
Gonca G., ŞAHİN B., Parlak A., ÜST Y., Ayhan V., Cesur I., Boru B.  
ENERGY, vol.78, pp.266-275, 2014 (SCI-Expanded)
  21. **Thermodynamic optimization of an irreversible regenerative closed Brayton cycle based on thermoeconomic performance criterion**  
Durmuşoğlu Y., ÜST Y.  
APPLIED MATHEMATICAL MODELLING, vol.38, pp.5174-5186, 2014 (SCI-Expanded)
  22. **Analysis of a Cascade Refrigeration System (CRS) by Using Different Refrigerant Couples Based on the Exergetic Performance Coefficient (EPC) Criterion**  
ÜST Y., KARAKURT A. S.  
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.39, no.11, pp.8147-8156, 2014 (SCI-Expanded)
  23. **Performance and environment as objectives in multi-criterion optimization of steam injected gas turbine cycles**  
Kayadelen H. K., Üst Y.  
APPLIED THERMAL ENGINEERING, vol.71, pp.184-196, 2014 (SCI-Expanded)
  24. **An Approach for Economic Analysis of Intermodal Transportation**  
SAHİN B., YILMAZ H., UST Y., GUNERI A. F., Gulsun B., TURAN E.  
SCIENTIFIC WORLD JOURNAL, 2014 (SCI-Expanded)
  25. **Prediction of equilibrium products and thermodynamic properties in H<sub>2</sub>O injected combustion for C<sub>α</sub>H<sub>β</sub>O<sub>γ</sub>N<sub>δ</sub> type fuels**  
Kayadelen H. K., Ust Y.  
FUEL, vol.113, pp.389-401, 2013 (SCI-Expanded)
  26. **Performance maps for an air-standard irreversible Dual-Miller cycle (DMC) with late inlet valve closing (LIVC) version**  
GONCA G., ŞAHİN B., ÜST Y.  
ENERGY, vol.54, pp.285-290, 2013 (SCI-Expanded)
  27. **Determination of the optimum temperatures and mass ratios of steam injected into turbocharged internal combustion engines**  
GONCA G., ŞAHİN B., ÜST Y., Parlak A.  
JOURNAL OF RENEWABLE AND SUSTAINABLE ENERGY, vol.5, no.2, 2013 (SCI-Expanded)
  28. **A Study on Late Intake Valve Closing Miller Cycled Diesel Engine**  
Gonca G., Şahin B., Üst Y., Parlak A.  
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.38, pp.383-393, 2013 (SCI-Expanded)
  29. **Heat transfer effects on the performance of an air-standard irreversible dual cycle**  
ÜST Y., ŞAHİN B., KAYADELEN H. K., GONCA G.  
INTERNATIONAL JOURNAL OF VEHICLE DESIGN, vol.63, no.1, pp.102-116, 2013 (SCI-Expanded)
  30. **New method to reduce NO<sub>x</sub> emissions of diesel engines: electronically controlled steam injection system**  
Parlak A., Ayhan V., ÜST Y., ŞAHİN B., Cesur I., Boru B., KÖKKÜLÜNK G.  
JOURNAL OF THE ENERGY INSTITUTE, vol.85, no.3, pp.135-139, 2012 (SCI-Expanded)
  31. **Determination of the optimum reheat pressures for single and double reheat irreversible Rankine**

cycle

Üst Y., Gonca G., Kayadelen H. K.

Journal Of The Energy Institute, vol.84, no.4, pp.215-219, 2011 (SCI-Expanded)

32. **The Effects of Cycle Temperature and Cycle Pressure Ratios on the Performance of an Irreversible Otto Cycle**  
ÜST Y., ŞAHİN B., Safa A.  
ACTA PHYSICA POLONICA A, vol.120, no.3, pp.412-416, 2011 (SCI-Expanded)
33. **Analysis of a vapour compression refrigeration system via exergetic performance coefficient criterion**  
ÜST Y., AKKAYA A. V., SAFA A.  
JOURNAL OF THE ENERGY INSTITUTE, vol.84, no.2, pp.66-72, 2011 (SCI-Expanded)
34. **Effect of regeneration on the thermo-ecological performance analysis and optimization of irreversible air refrigerators**  
Üst Y.  
HEAT AND MASS TRANSFER, vol.46, pp.469-478, 2010 (SCI-Expanded)
35. **Performance analysis and optimization of heat exchangers: a new thermoeconomic approach**  
ŞAHİN B., ÜST Y., Teke I., ERDEM H. H.  
APPLIED THERMAL ENGINEERING, vol.30, pp.104-109, 2010 (SCI-Expanded)
36. **A Comparative Performance Analysis and Optimization of the Irreversible Atkinson Cycle Under Maximum Power Density and Maximum Power Conditions**  
ÜST Y.  
INTERNATIONAL JOURNAL OF THERMOPHYSICS, vol.30, no.3, pp.1001-1013, 2009 (SCI-Expanded)
37. **Performance optimisation of irreversible cogeneration systems based on a new exergetic performance criterion: exergy density**  
ÜST Y., ŞAHİN B., Kodal A.  
JOURNAL OF THE ENERGY INSTITUTE, vol.82, no.1, pp.48-52, 2009 (SCI-Expanded)
38. **An approach for analysing transportation costs and a case study**  
ŞAHİN B., YILMAZ H., ÜST Y., GÜNERİ A. F., GÜLSÜN B.  
EUROPEAN JOURNAL OF OPERATIONAL RESEARCH, vol.193, no.1, pp.1-11, 2009 (SCI-Expanded)
39. **Performance analysis and optimization of irreversible air refrigeration cycles based on ecological coefficient of performance criterion**  
ÜST Y.  
APPLIED THERMAL ENGINEERING, vol.29, no.1, pp.47-55, 2009 (SCI-Expanded)
40. **Optimization of a dual cycle cogeneration system based on a new exergetic performance criterion**  
Ust Y., Sahin B., Kodal A.  
APPLIED ENERGY, vol.84, no.11, pp.1079-1091, 2007 (SCI-Expanded)
41. **Effects of combined heat transfer on the thermo-economic performance of irreversible solar-driven heat engines**  
ÜST Y.  
RENEWABLE ENERGY, vol.32, no.12, pp.2085-2095, 2007 (SCI-Expanded)
42. **Optimization of a regenerative gas-turbine cogeneration system based on a new exergetic performance criterion: exergetic performance coefficient**  
Ust Y., Sahin B., Yilmaz T.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART A-JOURNAL OF POWER AND ENERGY, vol.221, pp.447-457, 2007 (SCI-Expanded)
43. **Performance optimization of irreversible refrigerators based on a new thermo-ecological criterion**  
Ust Y., Sahin B.  
INTERNATIONAL JOURNAL OF REFRIGERATION-REVUE INTERNATIONALE DU FROID, vol.30, pp.527-534, 2007 (SCI-Expanded)
44. **The effects of intercooling and regeneration on the thermo-ecological performance analysis of an irreversible-closed Brayton heat engine with variable-temperature thermal reservoirs**

- Sogut O. S., Ust Y., Sahin B.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.39, pp.4713-4721, 2006 (SCI-Expanded)
45. **Optimum operating conditions of irreversible solar driven heat engines**  
Yilmaz T., Ust Y., Erdil A.  
RENEWABLE ENERGY, vol.31, no.9, pp.1333-1342, 2006 (SCI-Expanded)
46. **Ecological coefficient of performance analysis and optimization of an irreversible regenerative-Brayton heat engine**  
Ust Y., Şahin B., Kodal A., Akçay İ. H.  
APPLIED ENERGY, vol.83, pp.558-572, 2006 (SCI-Expanded)
47. **Thermoeconomic analysis of a solar driven heat engine**  
Sahin B., Üst Y., Yilmaz T., Akçay İ. H.  
RENEWABLE ENERGY, vol.31, no.7, pp.1033-1042, 2006 (SCI-Expanded)
48. **Ecological coefficient of performance (ECOP) optimization for an irreversible Brayton heat engine with variable-temperature thermal reservoirs**  
Ust Y., Söğüt O. S., Şahin B., Durmayaz A.  
JOURNAL OF THE ENERGY INSTITUTE, vol.79, pp.47-52, 2006 (SCI-Expanded)
49. **Performance analysis of an irreversible Brayton heat engine based on ecological coefficient of performance criterion**  
Ust Y., Sahin B., Kodal A.  
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.45, pp.94-101, 2006 (SCI-Expanded)
50. **Performance analysis and optimization of an irreversible dual-cycle based on an ecological coefficient of performance criterion**  
Ust Y., Sahin B., Sogut O.  
APPLIED ENERGY, vol.82, no.1, pp.23-39, 2005 (SCI-Expanded)
51. **Ecological coefficient of performance (ECOP) optimization for generalized irreversible Carnot heat engines**  
Ust Y., Sahin B., Kodal A.  
JOURNAL OF THE ENERGY INSTITUTE, vol.78, pp.145-151, 2005 (SCI-Expanded)
52. **Ecological performance analysis of an endoreversible regenerative Brayton heat-engine**  
Ust Y., Safa A., Sahin B.  
APPLIED ENERGY, vol.80, pp.247-260, 2005 (SCI-Expanded)
53. **Analysis of an unconventional cycle as a new comparison standard for practical heat engines: the circular/elliptical cycle in T-S diagram**  
Sahin B., Üst Y., Kodal A., Yilmaz T.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.28, no.13, pp.1159-1175, 2004 (SCI-Expanded)

## Articles Published in Other Journals

1. **Exergetic Performance Analysis and Comparison of Oxy-Combustion and Conventional Gas Turbine Power Cycles**  
ÖZSARI İ., ÜST Y., KARAKURT A. S.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.41, no.3, 2023 (ESCI)
2. **Investigation of Waste Heat Energy in a Marine Engine with Transcritical Organic Rankine Cycle**  
Kaya İ., Karakurt A. S., Üst Y.  
Journal of Thermal Engineering, vol.6, no.3, pp.282-296, 2020 (ESCI)
3. **A THEORETICAL PERFORMANCE INVESTIGATION OF IRREVERSIBLE INTERNAL COMBUSTION ENGINE NAMED AS DUAL-MILLER CYCLE**  
Üst Y., Özşarı İ., Arslan F., Safa A.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.38, no.1, pp.459-473, 2020 (ESCI)

4. **COMPARATIVE MAXIMUM POWER DENSITY ANALYSIS OF A SUPERCRITICAL CO<sub>2</sub> BRAYTON POWER CYCLE**  
Karakurt A. S., Başhan V., Üst Y.  
JOURNAL OF THERMAL ENGINEERING, vol.6, pp.50-57, 2020 (ESCI)
5. **Utilization of shipboard as a heat exchanger in ship central cooling system: a numerical analysis**  
Üst Y., Yurtseven A., Sener B., Kinaci O. K.  
Sigma Journal Engineering and Natural Sciences, vol.34, no.3, pp.297-306, 2016 (Non Peer-Reviewed Journal)
6. **EEDI Assessment of Recently Built Tankers in Turkey**  
TURAN E., ÜST Y.  
SPOUDAI -Journal of Economics and Business, 2013 (Peer-Reviewed Journal)
7. **Performance Analysis of an Endoreversible Braysson Cycle Based on Ecological Criterion**  
ÜST Y.  
TURKISH JOURNAL OF ENGINEERING AND ENVIRONMENTAL SCIENCES, vol.29, no.5, pp.271-278, 2005 (Peer-Reviewed Journal)
8. **Ecological Performance Analysis of Irreversible OTTO Cycle**  
ÜST Y.  
Journal of Engineering and Natural Sciences, vol.29, no.5, pp.106-117, 2005 (Peer-Reviewed Journal)
9. **Power Density Analysis of An Endoreversible Braysson Cycle**  
ÜST Y.  
Journal of Naval Science and Engineering, vol.1, no.1, pp.119-132, 2003 (Peer-Reviewed Journal)

### Books & Book Chapters

1. **Chapter 19 - Thermodynamic properties of engine exhaust gas for different kind of fuels**  
KAYADELEN H. K., Ust Y.  
in: Computational Problems in Engineering, Nikos Mastorakis, Valeri Mladenov, Editor, Springer, London, pp.247-260, 2014
2. **19 - Thermodynamic Properties of Engine Exhaust Gas for Different Kind of Fuels**  
KAYADELEN H. K., ÜST Y.  
in: Computational Problems in Science and Engineering, Nikos Mastorakis, Valeri Mladenov, Editor, Springer, pp.247-260, 2014

### Refereed Congress / Symposium Publications in Proceedings

1. **Exergetic Performance Analysis To Compare Of Two Different Oxy Fuel Combustion Power Plant**  
ÜST Y., ÖZSARI İ.  
International Conference on Engineering and Natural Sciences (ICENS), Prague, Czech Republic, 12 - 16 June 2019, pp.281-293
2. **Optimal Design of Shell and Tube Heat Exchanger by Using Net Saving and Saving Cost Ratio Objectives in Waste Heat Recovery System**  
ÜST Y., KAYA İ.  
International Conference on Engineering and Natural Sciences (ICENS), Prague, Czech Republic, 12 - 16 June 2019, pp.267-280
3. **Evaluation of Supercritical Carbon dioxide (sCO<sub>2</sub>) Brayton Power Cycle with Catalytic Combustion in Marine Applications**  
ÜST Y., BAŞHAN V.  
International Conference on Engineering and Natural Sciences (ICENS), Kiev, Ukraine, 02 May 2018, pp.367
4. **Recovery of Ship Waste Exhaust Gas Energy by Transcritical Organic Rankine Cycle**  
ÜST Y., KAYA İ.

- International Conference on Engineering and Natural Sciences (ICENS), Kiev, Ukraine, 02 May 2018, pp.366
5. **Levelized Cost Analysis of Solar Energy Plants**  
ÜST Y., DEDE S.  
International Conference on Engineering and Natural Sciences (ICENS), Budapest, Hungary, 3 - 07 May 2017
  6. **Cappuccino Effect on Intermediate Fuel Oil (IFO) Bunkering Operations**  
ÜST Y., BAŞHAN V.  
III. International Conference on Engineering and Natural Science (ICENS), Budapeşte, Hungary, 03 May 2017, pp.100-108
  7. **CFD Analysis of a Divided Combustion Chamber of Single Cylinder Spark Ignition CNG Engine**  
ARSLAN F., ÜST Y.  
ICENS, Saraybosna, Bosnia And Herzegovina, 24 - 28 May 2016, pp.1067-1074
  8. **PERFORMANCE ANALYSIS OF A SINGLE CYLINDER SPARK IGNITION CNGENGINE BY USING CFD ANALYSIS AND TWO ZONE COMBUSTION MODEL**  
ARSLAN F., ÜST Y., GONCA G.  
CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING ISTANBUL 2016, 11 - 13 May 2016
  9. **PERFORMANCE ANALYSIS OF A SINGLE CYLINDER SPARK IGNITION CNG ENGINE BY USING CFD ANALYSIS AND TWO ZONE COMBUSTION MODEL**  
ARSLAN F., ÜST Y.  
2ND INTERNATIONAL CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING, 10 - 13 May 2016, pp.396-403
  10. **Exergetic and economic analysis of subcooling & superheating effect on vapor compression refrigeration system**  
KARAKURT A. S., GÜNEŞ Ü., ÜST Y.  
ASME 2016 Power Conference, POWER 2016, collocated with the ASME 2016 10th International Conference on Energy Sustainability and the ASME 2016 14th International Conference on Fuel Cell Science, Engineering and Technology, North-Carolina, United States Of America, 26 - 30 June 2016
  11. **Performance Analysis of Turbocharged 2 Stroke Diesel Engine**  
GÜNEŞ Ü., ÜST Y., KARAKURT A. S.  
1st International Conference on Engineering and Natural Sciences, 15 - 19 May 2015
  12. **Performance Analysis of Turbocharged 2-Stroke Diesel Engine**  
Güneş Ü., Üst Y., Karakurt A. S.  
1st International Conference on Engineering and Natural Sciences, Skopje, Macedonia, 15 - 19 May 2015, vol.1, pp.656-664
  13. **Performance Analysis of Turbocharged Two-Stroke Diesel**  
ÜST Y., Karakurt A. S.  
International Conference on Engineering and Natural Sciences (ICENS), 01 May 2015
  14. **Exergetic Performance Analyses of Natural Gas Liquefaction**  
KARAKURT A. S., GÜNEŞ Ü., ARDA M., ÜST Y.  
2nd International Symposium on Naval Architecture and Maritime. 2nd International Symposium on Naval Architecture and Maritime, 22 - 24 October 2014
  15. **Exergetic Performance Analyses of Natural Gas Liquefaction Processes**  
KARAKURT A. S., GÜNEŞ Ü., ÜST Y.  
INT-NAM 2014 2st International Symposium on Naval Architecture and Maritime, İstanbul, Turkey, 23 - 24 October 2014, vol.1, pp.235-247
  16. **Exergetic Performance Analyses of Natural Gas Liquefaction Processes**  
ÜST Y., Güneş Ü., Arda M., UST Y.  
2nd International Symposium on Naval Architecture and Maritime, 01 October 2014
  17. **Investigation of The Effects of Steam Injection Into The Supercharged Diesel Engine with Running Miller Cycle on Performance And Emissions**  
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19. **Computer Simulation Of Steam/Water Injected Gas Turbine Engines**  
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Üst Y.  
01 September 2004
31. **Ecologic Performance of Combined Heat and Power Systems**  
ÜST Y.  
01 July 2002

## Academic and Administrative Experience

2014 - Continues	<b>Fakülte Yönetim Kurulu Üyesi</b>	Yıldız Teknik Üniversitesi, Naval Architecture and Maritime Faculty
2014 - Continues	<b>Head of Department</b>	Yıldız Teknik Üniversitesi, Gemi Makineleri, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği
2009 - Continues	<b>BAP Coordinator</b>	Yıldız Teknik Üniversitesi, Naval Architecture and Maritime Faculty
2016 - 2020	<b>Head of Department</b>	Yıldız Teknik Üniversitesi, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations
2009 - 2020	<b>Fakülte Akademik Kurul Üyesi</b>	Yıldız Teknik Üniversitesi, Naval Architecture And Maritime Faculty
2009 - 2016	<b>Vice Dean</b>	Yıldız Teknik Üniversitesi, Naval Architecture and Maritime Faculty
2009 - 2014	<b>Fakülte Yönetim Kurulu Üyesi</b>	Yıldız Teknik Üniversitesi, Naval Architecture and Maritime Faculty
2008 - 2009	<b>Deputy Head of Department</b>	Yıldız Teknik Üniversitesi, Naval Architecture and Maritime Faculty, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği

## Advising Theses

- ÜST Y., Gemilerde atk enerjinin Transkritik Organik Rankine Çevrimi ile geri kazanımı, Postgraduate, İ.Kaya(Student), 2017
- ÜST Y., Bir OTTO motorunda bölünmüş yanma odasının performans üzerindeki etkisinin iki bölgeli yanma modeli ve HAD ile incelenmesi, Postgraduate, F.Arslan(Student), 2015
- ÜST Y., Gaz Türbinlerinde Yanma Odalarının Teorik İncelenmesi ve Nümerik Olarak Modellenmesi, Postgraduate, İ.Özsarı(Student), 2015
- ÜST Y., Gaz Türbinlerinde Su/Buhar Enjeksiyonunun Termo-Ekonomik Performans ve Emisyonlar Üzerindeki Etkilerinin İncelenmesi ve optimizasyonu, Doctorate, H.Kayhan(Student), 2014
- ÜST Y., Gemilerde Enerji Ekonomisi Yöntemlerinin Teknik ve Ekonomik Yönünden İncelenmesi, Postgraduate, Ü.GÜNEŞ(Student), 2013
- ÜST Y., Gaz Türbinlerinin Termoekonomik Performansına Etki Eden Parametrelerin Analizi ve Optimizasyonu, Doctorate, Y.DURMUŞOĞLU(Student), 2013
- ÜST Y., Gemilerde Kullanılan Sandık Tipi Isı Değiştiricilerin Performans Analizi ve Optimizasyonu, Postgraduate, A.ERTAYLAN(Student), 2012
- ÜST Y., Gemi Islak Alanının Isı Değiştirici Olarak Kullanılmasına Yönelik Sayısal ve Analitik İnceleme, Postgraduate, A.YURTSEVEN(Student), 2011
- ÜST Y., Absorpsiyonlu Soğutma Sistemlerinin Performans Analizi ve Optimizasyonu, Postgraduate, A.KAYA(Student), 2011
- ÜST Y., Yeni Nesil Fırkateynler İçin Ana Makine Seçim Kriterlerinin Belirlenmesi ve Sistem Elemanlarının Seçimi, Postgraduate, İ.AKÇA(Student), 2010

## Metrics

- Publication: 104  
Citation (WoS): 1361  
Citation (Scopus): 1716  
H-Index (WoS): 24  
H-Index (Scopus): 26

## Research Areas

Mechanical Engineering, Energy, Conventional Energy Systems and Their Technology, Thermodynamics, Fuels and Combustion, Internal Combustion Engines, Thermal Systems, Thermal machines, Naval Architecture and Marine Engineering, Ship Machines, Engineering and Technology