

## Prof.Dr. Emre Akyüz

### Kişisel Bilgiler

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### Uluslararası Araştırmacı ID'leri

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Publons / Web Of Science ResearcherID: L-9543-2018

ScopusID: 56136095500

Yoksis Araştırmacı ID: 14423

### Eğitim Bilgileri

Doktora, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Türkiye 2012 - 2015

Yüksek Lisans, State University of New York-Maritime College, Amerika Birleşik Devletleri 2007 - 2008

Lisans, İstanbul Teknik Üniversitesi, Türkiye 2001 - 2005

### Araştırma Alanları

Deniz Bilimleri ve Teknolojisi

### Akademik Unvanlar / Görevler

Doç.Dr., İstanbul Teknik Üniversitesi, 2018 - Devam Ediyor

### SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayımlanan Makaleler

- I. **Prediction of human-machine interface (HMI) operational errors for maritime autonomous surface ships (MASS)**  
Liu J., AYDIN M., Akyüz E., Arslan Ö., Uflaz E., Kurt R. E., Turan O.  
JOURNAL OF MARINE SCIENCE AND TECHNOLOGY, cilt.27, sa.1, ss.293-306, 2022 (SCI-Expanded)
- II. **A fuzzy best-worst method (BWM) to assess the potential environmental impacts of the process of ship recycling**  
Söner Ö., Celik E., Akyüz E.  
MARITIME POLICY & MANAGEMENT, cilt.49, ss.396-409, 2022 (SSCI)
- III. **Application of data-mining techniques to predict and rank maritime non-conformities in tanker shipping companies using accident inspection reports**  
Navas de Maya B., Arslan Ö., Akyüz E., Kurt R. E., Turan O.  
SHIPS AND OFFSHORE STRUCTURES, cilt.17, sa.3, ss.687-694, 2022 (SCI-Expanded)
- IV. **Validation of risk analysis for ship collision in narrow waters by using fuzzy Bayesian networks approach**  
AYDIN M., Akyüz E., Turan O., Arslan Ö.

- OCEAN ENGINEERING, cilt.231, 2021 (SCI-Expanded)
- V. **An interval type-2 fuzzy SLIM approach to predict human error in maritime transportation**  
Erdem P., Akyüz E.  
OCEAN ENGINEERING, cilt.232, 2021 (SCI-Expanded)
- VI. **Analyzing human error contributions to maritime environmental risk in oil/chemical tanker ship**  
AYDIN M., Camliyurt G., Akyüz E., Arslan Ö.  
HUMAN AND ECOLOGICAL RISK ASSESSMENT, cilt.27, ss.1838-1859, 2021 (SCI-Expanded)
- VII. **Application of fuzzy bow-tie risk analysis to maritime transportation: The case of ship collision during the STS operation**  
Arıcı S. S., Akyüz E., Arslan Ö.  
OCEAN ENGINEERING, cilt.217, 2020 (SCI-Expanded)
- VIII. **Application of fuzzy logic to fault tree and event tree analysis of the risk for cargo liquefaction on board ship**  
Akyüz E., Arslan Ö., Turan O.  
APPLIED OCEAN RESEARCH, cilt.101, 2020 (SCI-Expanded)
- IX. **Analysis of performance influence factors on shipboard drills to improve ship emergency preparedness at sea**  
Tac B. O., Akyüz E., Çelik M.  
INTERNATIONAL JOURNAL OF SHIPPING AND TRANSPORT LOGISTICS, cilt.12, ss.92-116, 2020 (SSCI)
- X. **An interval type-2 fuzzy QUALIFLEX approach to measure performance effectiveness of ballast water treatment (BWT) system on-board ship**  
DEMİREL H., Akyüz E., ÇELİK E., ALARÇİN F.  
SHIPS AND OFFSHORE STRUCTURES, cilt.14, sa.7, ss.675-683, 2019 (SCI-Expanded)
- XI. **Application of human reliability analysis to repair & maintenance operations on-board ships: The case of HFO purifier overhauling**  
Kandemir Ç., Çelik M., Akyüz E., Aydın O.  
APPLIED OCEAN RESEARCH, cilt.88, ss.317-325, 2019 (SCI-Expanded)
- XII. **Statistical modelling of ship operational performance monitoring problem**  
Söner Ö., Akyüz E., Çelik M.  
JOURNAL OF MARINE SCIENCE AND TECHNOLOGY, cilt.24, sa.2, ss.543-552, 2019 (SCI-Expanded)
- XIII. **Application of Fuzzy Fault Tree Analysis (FFTA) to maritime industry: A risk analysing of ship mooring operation**  
Kuzu A. C., Akyüz E., Arslan Ö.  
OCEAN ENGINEERING, cilt.179, ss.128-134, 2019 (SCI-Expanded)
- XIV. **Prediction of human error probabilities in a critical marine engineering operation on-board chemical tanker ship: The case of ship bunkering**  
Akyüz E., Çelik M., Akgun I., Çiçek K.  
SAFETY SCIENCE, cilt.110, ss.102-109, 2018 (SCI-Expanded)
- XV. **A quantitative risk analysis by using interval type-2 fuzzy FMEA approach: the case of oil spill**  
Akyüz E., ÇELİK E.  
MARITIME POLICY & MANAGEMENT, cilt.45, sa.8, ss.979-994, 2018 (SSCI)
- XVI. **Use of tree based methods in ship performance monitoring under operating conditions**  
Söner Ö., Akyüz E., Çelik M.  
OCEAN ENGINEERING, cilt.166, ss.302-310, 2018 (SCI-Expanded)
- XVII. **An interval type-2 fuzzy AHP and TOPSIS methods for decision-making problems in maritime transportation engineering: The case of ship loader**  
ÇELİK E., Akyüz E.  
OCEAN ENGINEERING, cilt.155, ss.371-381, 2018 (SCI-Expanded)
- XVIII. **APPLICATIONS OF MARPOL RELATED WITH OIL SPILL IN TURKEY**  
Akyüz E., Arslan Ö., İNCAZ S.  
OIL SPILL ALONG THE TURKISH STRAITS SEA AREA; ACCIDENTS, ENVIRONMENTAL POLLUTION, SOCIO-

ECONOMIC IMPACTS AND PROTECTION, cilt.47, ss.356-362, 2018 (SCI-Expanded)

**XIX. INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION OF THE SEA BY OIL (OILPOL), 1954 AND ITS SITUATION RELATED WITH TURKEY**

Akyüz E., Çelik M., Söner Ö.

OIL SPILL ALONG THE TURKISH STRAITS SEA AREA; ACCIDENTS, ENVIRONMENTAL POLLUTION, SOCIO-ECONOMIC IMPACTS AND PROTECTION, cilt.47, ss.334-341, 2018 (SCI-Expanded)

## **Diğer Dergilerde Yayınlanan Makaleler**

- I. **A Comparative Research of Machine Learning Impact to Future of Maritime Transportation**  
AKYÜZ E., ÇİÇEK K., ÇELİK M.  
Procedia Computer Science, cilt.158, ss.275-280, 2019 (Scopus)
- II. **Gemi Operasyonlarında Acil Durum Yönetimi Etkinliğini Değerlendirme ve İyileştirme Üzerine Uygulamalı Bir Araştırma Yaklaşımı Önerisi**  
ÖZTÜRK TAÇ B., AKYÜZ E., ÇELİK M.  
Journal of Transportation and Logistics, cilt.3, ss.93-108, 2018 (Hakemli Dergi)

## **Kitap & Kitap Bölümleri**

- I. **International convention for the prevention of pollution of the sea by oil (OILPOL), 1954 and its situation related with Turkey**  
AKYÜZ E., ÇELİK M., SÖNER Ö.  
Oil spill along the Turkish straits sea area: accidents, environmental pollution, Ünlü, S., Alpar, B., Öztürk, B., Editör, Turkish Marine Research Foundation, ss.334-341, 2018
- II. **Maritime Environmental Disaster Management Using Intelligent Techniques.**  
AKYÜZ E., İLBAHAR E., ÇEBİ S., ÇELİK M.  
Intelligence Systems in Environmental Management Theory and Applications, Kahraman, C., Ucal, Sarı, I., Editör, Springer, ss.135-159, 2016

## **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **Future Skills Requirements Analysis in Maritime Industry**  
ÇİÇEK K., AKYÜZ E., ÇELİK M.  
3rd World Conference on Technology, Innovation and Entrepreneurship (WOCTINE), İstanbul, Türkiye, 21 - 23 Haziran 2019, ss.270-274
- II. **A Comparative Research of Machine Learning Impact to Future of Maritime Transportation**  
AKYÜZ E., ÇİÇEK K., ÇELİK M.  
3rd World Conference on Technology, Innovation and Entrepreneurship (WOCTINE), İstanbul, Türkiye, 21 - 23 Haziran 2019, ss.275-280
- III. **Using Weka Data-Mining Analysis To Determine Ship Emergency Preparedness Level In Case Of Fire**  
Ozturk Tac B., ÇELİK M., AKYÜZ E.  
Future Learning 2018 (7th International Conference on "Innovations in Learning for the Future": Digital Transformation in Education), İstanbul, Türkiye, 11 Eylül 2019 - 24 Eylül 2018
- IV. **Using WEKA data-mining analysis to determine ship emergency preparedness in case of fire**  
ÖZTÜRK TAÇ B., ÇELİK M., AKYÜZ E.  
7th International Conference on Innovations in Learning for the Future 2018: Digital Transformation in Education, 11 - 14 Eylül 2018
- V. **Developing a maritime course on human reliability assessment in shipboard operations via problem-**

**based gaming practices.**

AKYÜZ E., ÇELİK M., ÇİÇEK K.

International Congresses on Education 2018, 28 Haziran - 01 Temmuz 2018

- VI. **A continuing professional development program on designated person ashore (DPA) position in ship management companies.**

AKYÜZ E., ÇİÇEK K., ÇELİK M.

International Congresses on Education 2018, 28 Haziran - 01 Temmuz 2018

- VII. **Investigation the availability of large-scale data sets in existing ships to conduct performance analysis under operational conditions, April 23-25, 2018, Istanbul, Turkey.**

SÖNER Ö., AKYÜZ E., ÇELİK M.

3rd International symposium on naval architecture and maritime (INT-NAM 2018), 23 - 25 Nisan 2018

- VIII. **Investigation the Availability of Large-Scale Data Sets in Existing Ships to Conduct Performance Analysis Under Operational Conditions.**

SÖNER Ö., AKYÜZ E., ÇELİK M.

INT-NAM 2018 ( 3rd International Naval Architectureand Maritime Symposium), İstanbul, Türkiye, 24 - 25 Nisan 2018

- IX. **Gemi İşletmeciliğinde Acil Durum Yönetimi Etkinliğini Değerlendirme Ve İyileştirme Üzerine Uygulamalı Bir Araştırma Yaklaşımı Önerisi**

TAC B., AKYÜZ E., ÇELİK M.

Ulaştırma ve Lojistik Ulusal Kongresi, Türkiye, 26 - 27 Ekim 2017, ss.31

- X. **A Fuzzy SLIM Based Quantitative Risk Analysis in Maritime Transportation Engineering**

ÇELİK E., AKYÜZ E.

The 5th International Fuzzy System Symposium (FUZZYSS'17), Ankara, Türkiye, 14 - 15 Ekim 2017, ss.29

- XI. **An artificial neural network (ANN) model to predict fresh water consumption on-board ship in maritime transportation.**

ÇELİK E., AKYÜZ E.

12th International Silk Road Scientific Conference, Gürcistan, 19 - 20 Mayıs 2017

- XII. **Reviewing of seafarers' rights by adopting cognitive mapping approach under Maritime Labour Convention.**

AKYÜZ E.

12th International Silk Road Scientific Conference, Gürcistan, 19 - 20 Mayıs 2017

- XIII. **User interfaces design to introduce a risk based approach in maritime transportation**

Orhan C., AKYÜZ E.

11th Silk Road International Conference Innovationsin Business, Education and Science, Tbilisi, Gürcistan, 20 Mayıs - 21 Eylül 2016

- XIV. **An analytic assessment of ship energy efficiency in maritime transportation engineering**

AKYÜZ E.

ICAT 16: International Conference on Advanced Technology & Sciences, Konya, Türkiye, 1 - 03 Eylül 2016, ss.258-265

- XV. **Analytic hierarchy process extended with internal type 2 fuzzy sets to assess potential environmental impacts of ship recycling process**

ÇELİK E., AKYÜZ E.

2nd International Conference on Engineering and Natural Sciences (ICENS 2016), Sarajevo, Bosna-Hersek, 24 - 28 Mayıs 2016

- XVI. **An integrated approach for shiploader selection during dry bulk cargo terminal installation in maritime transportation engineering**

AKYÜZ E., ÇELİK E.

International Conference on Modern Trends in Engineering & Technology (MTET-16), İstanbul, Türkiye, 18 - 19 Nisan 2016, ss.129-133

- XVII. **Fuzzy based human reliability assessment upon cargo discharging operation on board chemical tanker ship**

AKYÜZ E., ÇELİK E.

The 4th International Fuzzy Systems Symposium (FUZZYSS'15), İstanbul, Türkiye, 5 - 06 Kasım 2015, ss.178-184

XVIII. **Risk Assessment of Hydraulic Hatch Covers On Board Dry Bulk Cargo Ships by Using FMEA Technique**

AKYÜZ E.

The 5th Multidisciplinary Academic Conference in Prague 2015 (The 5thMAC in Prague 2015), Prag, Çek

Cumhuriyeti, 16 - 17 Ekim 2015, ss.1-9

## **Metrikler**

Yayın: 82

Atıf (WoS): 1200

Atıf (Scopus): 1250

H-İndeks (WoS): 23

H-İndeks (Scopus): 25

## **Akademi Dışı Deneyim**

Bulk Atlantik Inc.

Transatlantik Denizcilik

Metropole Denizcilik

SBB Shipping

Arkas Denizcilik

ZIM Line

İnce Denizcilik