

Assoc. Prof. Erkan ÇELİK

Personal Information

Office Phone: [+90 212 473 7000](tel:+902124737000) Extension: 19254

Email: erkancelik@istanbul.edu.tr

Web: <https://avesis.istanbul.edu.tr/erkancelik>

Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Endüstri Mühendisliği, Turkey
2011 - 2015

Post Graduate, Selcuk University, Institute Of Science, Endüstri Mühendisliği, Turkey 2008 - 2011

Under Graduate, Selcuk University, Faculty Of Engineering And Architecture, Department of Industrial Engineering,
Turkey 2004 - 2008

Research Areas

Industrial Engineering , Decision Theory, Supply Chain and Logistics Management

Academic Titles / Tasks

Associate Professor, Istanbul University, School of Transportation and Logistics, Department of Transportation and
Logistics, 2020 - Continues

Associate Professor, Munzur University, Faculty Of Engineering, Department Of Industrial Engineering, 2018 - 2020

Assistant Professor, Munzur University, Faculty Of Engineering, Department Of Industrial Engineering, 2016 - 2018

Research Assistant, Munzur University, Faculty Of Engineering, Department Of Industrial Engineering, 2009 - 2016

Research Assistant, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Industry Engineering,
2012 - 2015

Professional Experience

Head of Department, Munzur University, Institute Of Science, Engineering Management(Interdisciplinary), 2019 - 2020

Head of Department, Munzur University, Faculty Of Engineering, Department Of Industrial Engineering, 2019 - 2020

Assistant Director of the Institute, Munzur University, Institute Of Science, 2016 - 2019

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **A manufacturing failure mode and effect analysis based on fuzzy and probabilistic risk analysis**
Gul M., Yucesan M., ÇELİK E.
- **Applied Soft Computing Journal, vol.96, 2020 (Journal Indexed in SCI Expanded)**
- **An integrated approach of best-worst method (bwm) and triangular fuzzy sets for evaluating driver behavior factors related to road safety**
Moslem S., Gul M., Farooq D., Celik E., Ghorbanzadeh O., Blaschke T.
Mathematics, vol.8, 2020 (Journal Indexed in SCI)

- **An efficient algorithm for U-type assembly line re-balancing problem with stochastic task times**
Serin F., Mete S., Çelik E.
Assembly Automation, vol.39, pp.581-595, 2019 (Journal Indexed in SCI)
- **ANN and ANFIS Approaches to Calculate the Heating and Cooling Degree Day Values: The Case of Provinces in Turkey**
Işık E., İnallı M., Celik E.
Arabian Journal for Science and Engineering, vol.44, pp.7581-7597, 2019 (Journal Indexed in SCI)
- **Supply-driven rebalancing of disassembly lines: A novel mathematical model approach**
Mete S., Çil Z. A. , Celik E., Ozceylan E.
Journal of Cleaner Production, vol.213, pp.1157-1164, 2019 (Journal Indexed in SCI)
- **An integrated best-worst and interval type-2 fuzzy TOPSIS methodology for green supplier selection**
Yucesan M., Mete S., Serin F., Celik E., Gul M.
Mathematics, vol.7, 2019 (Journal Indexed in SCI)
- **An interval type-2 fuzzy QUALIFLEX approach to measure performance effectiveness of ballast water treatment (BWT) system on-board ship**
Demirel H., Akyüz E., Celik E., ALARÇİN F.
Ships and Offshore Structures, vol.14, pp.675-683, 2019 (Journal Indexed in SCI)
- **Performance comparison between ARIMAX, ANN and ARIMAX-ANN hybridization in sales forecasting for furniture industry** *Usporedba performansi modela ARIMAX, ANN i hibridizacije ARIMAX-ANN u predviđanju prodaje za industriju namještaja*
Yucesan M., Gul M., Celik E.
Drvna Industrija, vol.69, pp.357-370, 2018 (Journal Indexed in SCI)
- **A quantitative risk analysis by using interval type-2 fuzzy FMEA approach: the case of oil spill**
Akyüz E., Celik E.
Maritime Policy and Management, vol.45, pp.979-994, 2018 (Journal Indexed in SSCI)
- **Fuzzy rule-based Fine-Kinney risk assessment approach for rail transportation systems**
Gul M., Celik E.
Human and Ecological Risk Assessment, vol.24, pp.1786-1812, 2018 (Journal Indexed in SCI)
- **An interval type-2 fuzzy AHP and TOPSIS methods for decision-making problems in maritime transportation engineering: The case of ship loader**
Celik E., Akyüz E.
Ocean Engineering, vol.155, pp.371-381, 2018 (Journal Indexed in SCI)
- **The role of human factor in maritime environment risk assessment: A practical application on Ballast Water Treatment (BWT) system in ship**
Akyuz E., Celik E.
Human and Ecological Risk Assessment, vol.24, pp.653-666, 2018 (Journal Indexed in SCI)
- **A practical application of human reliability assessment for operating procedures of the emergency fire pump at ship**
Akyuz E., Celik E., Çelik M.
Ships and Offshore Structures, vol.13, pp.208-216, 2018 (Journal Indexed in SCI)
- **A fuzzy dematel model proposal for the cause and effect of the fault occurring in the auxiliary systems of the ships' main engine**
BALIN A., Demirel H., CELIK E., ALARÇİN F.
Transactions of the Royal Institution of Naval Architects Part A: International Journal of Maritime Engineering, vol.160, pp.141-153, 2018 (Journal Indexed in SCI Expanded)
- **An assessment approach for non-governmental organizations in humanitarian relief logistics and an application in Turkey**
Celik E., TAŞKIN GÜMÜŞ A.
Technological and Economic Development of Economy, vol.24, pp.1-26, 2018 (Journal Indexed in SSCI)
- **Application of artificial neural networks using bayesian training rule in sales forecasting for furniture industry** *Primjena umjetnih neuronskih mreža uz pomoć Bayesova pravila učenja u*

predviđanju prodaje za industriju namještaja

Yucesan M., Gul M., Celik E.

Drvena Industrija, vol.68, pp.219-228, 2017 (Journal Indexed in SCI)

A hybrid risk-based approach for maritime applications: The case of ballast tank maintenance

Gul M., Celik E., Akyuz E.

Human and Ecological Risk Assessment, vol.23, pp.1389-1403, 2017 (Journal Indexed in SCI)

A cause and effect relationship model for location of temporary shelters in disaster operations management

Celik E.

International Journal of Disaster Risk Reduction, vol.22, pp.257-268, 2017 (Journal Indexed in SCI)

Assessment of occupational hazards and associated risks in fuzzy environment: A case study of a university chemical laboratory

Ozdemir Y., Gul M., Celik E.

Human and Ecological Risk Assessment, vol.23, pp.895-924, 2017 (Journal Indexed in SCI)

An integral based fuzzy approach to evaluate waste materials for concrete

Onat O., Celik E.

Smart Structures and Systems, vol.19, pp.323-333, 2017 (Journal Indexed in SCI)

Identifying key factors of rail transit service quality: An empirical analysis for Istanbul

Işıklı E., AYDIN N., Celik E., Gumus A. T.

Journal of Public Transportation, vol.20, pp.63-90, 2017 (Journal Indexed in SSCI)

Application of AHP and VIKOR methods under interval type 2 fuzzy environment in maritime transportation

Söner Ö., Celik E., Akyuz E.

Ocean Engineering, vol.129, pp.107-116, 2017 (Journal Indexed in SCI)

An outranking approach based on interval type-2 fuzzy sets to evaluate preparedness and response ability of non-governmental humanitarian relief organizations

Celik E., TAŞKIN GÜMÜŞ A.

Computers and Industrial Engineering, vol.101, pp.21-34, 2016 (Journal Indexed in SCI)

A new extension of the ELECTRE method based upon interval type-2 fuzzy sets for green logistic service providers evaluation <http://compass.astm.org/download/JTE20140046.33601.pdf>

Celik E., Gumus A. T., Erdogan M.

Journal of Testing and Evaluation, vol.44, pp.1813-1827, 2016 (Journal Indexed in SCI)

A state of the art literature review of VIKOR and its fuzzy extensions on applications

Gul M., Celik E., AYDIN N., TAŞKIN GÜMÜŞ A., GÜNERİ A. F.

Applied Soft Computing Journal, vol.46, pp.60-89, 2016 (Journal Indexed in SCI)

A modified human reliability analysis for cargo operation in single point mooring (SPM) off-shore units

Akyuz E., Celik E.

Applied Ocean Research, vol.58, pp.11-20, 2016 (Journal Indexed in SCI)

An extended fuzzy TOPSIS–GRA method based on different separation measures for green logistics service provider selection

Celik E., ERDOĞAN M., GÜMÜŞ A.

International Journal of Environmental Science and Technology, vol.13, pp.1377-1392, 2016 (Journal Indexed in SCI)

Emergency department performance evaluation by an integrated simulation and interval type-2 fuzzy MCDM-based scenario analysis

Gul M., Celik E., Gumus A. T., GÜNERİ A. F.

European Journal of Industrial Engineering, vol.10, pp.196-223, 2016 (Journal Indexed in SCI)

Application of interval type-2 fuzzy sets DEMATEL methods in maritime transportation: The case of ship collision

Celik E., Akyuz E.

Transactions of the Royal Institution of Naval Architects Part A: International Journal of Maritime Engineering, vol.158, pp.359-371, 2016 (Journal Indexed in SCI)

● **A fuzzy DEMATEL method to evaluate critical operational hazards during gas freeing process in crude oil tankers**

Akyuz E., Celik E.

Journal of Loss Prevention in the Process Industries, vol.38, pp.243-253, 2015 (Journal Indexed in SCI)

● **A hierarchical customer satisfaction framework for evaluating rail transit systems of Istanbul**

AYDIN N., Celik E., Gumus A. T.

Transportation Research Part A: Policy and Practice, vol.77, pp.61-81, 2015 (Journal Indexed in SCI)

● **A comprehensive review of multi criteria decision making approaches based on interval type-2 fuzzy sets**

Celik E., Gul M., AYDIN N., Gumus A. T. , GÜNERİ A. F.

Knowledge-Based Systems, vol.85, pp.329-341, 2015 (Journal Indexed in SCI)

● **A multiattribute customer satisfaction evaluation approach for rail transit network: A real case study for Istanbul, Turkey**

Celik E., AYDIN N., Gumus A. T.

Transport Policy, vol.36, pp.283-293, 2014 (Journal Indexed in SSCI)

● **A new approach for rebalancing of U-lines with stochastic task times using ant colony optimisation algorithm**

Celik E., Kara Y., Atasagun Y.

International Journal of Production Research, vol.52, pp.7262-7275, 2014 (Journal Indexed in SCI)

● **A trapezoidal type-2 fuzzy MCDM method to identify and evaluate critical success factors for humanitarian relief logistics management**

Celik E., Gumus A. T. , Alegoz M.

Journal of Intelligent and Fuzzy Systems, vol.27, pp.2847-2855, 2014 (Journal Indexed in SCI)

● **An integrated novel interval type-2 fuzzy MCDM method to improve customer satisfaction in public transportation for Istanbul**

Celik E., BİLİŞİK Ö. N. , Erdogan M., Gumus A. T. , BARAÇLI H.

Transportation Research Part E: Logistics and Transportation Review, vol.58, pp.28-51, 2013 (Journal Indexed in SCI)

● **A combined fuzzy-AHP and fuzzy-GRA methodology for hydrogen energy storage method selection in Turkey**

Gumus A. T. , Yesim Yayla A., Çelik E., Yildiz A.

Energies, vol.6, pp.3017-3032, 2013 (Journal Indexed in SCI)

Articles Published in Other Journals

● **Preface**

Gul M., Mete S., Serin F., ÇELİK E.

Studies in Fuzziness and Soft Computing, vol.398, 2021 (Journal Indexed in ESCI)

● **An exhaustive review and analysis on applications of statistical forecasting in hospital emergency departments**

Gul M., Celik E.

Health Systems, 2018 (Journal Indexed in ESCI)

Books & Book Chapters

● **Fine-Kinney-Based Fuzzy Multi-criteria Occupational Risk Assessment**

Gül M. (Editor), Mete S. (Editor), Serin F. (Editor), Çelik E. (Editor)

● Springer, London/Berlin , Berlin, 2021

Computational Intelligence and Soft Computing Applications in Healthcare Management Science

Gül M. (Editor), Çelik E. (Editor), Mete S. (Editor), Serin F. (Editor)

IGI Global, Tunceli, 2020

Refereed Congress / Symposium Publications in Proceedings

● **A risk assessment approach using both stochastic data and subjective judgments**

Mete S., Oz N. E. , Gul M., Serin F., Celik E.

International Conference on Intelligent and Fuzzy Systems, INFUS 2019, İstanbul, Turkey, 23 - 25 July 2019, vol.1029, pp.1104-1111

● **An ann and ga approach for demand forecasting and routing for cash management**

Gumus A. T. , Celik E., Ömerustaoğlu F.

14th International Symposium on Operational Research, SOR 2017, Bled, Slovenia, 27 - 29 September 2017, pp.207-213

● **Forecasting daily patient visits in an emergency department by ga-ann hybrid approach**

Pekel E., Gul M., Celik E.

14th International Symposium on Operational Research, SOR 2017, Bled, Slovenia, 27 - 29 September 2017, pp.473-478

● **An intuitionistic fuzzy approach for evaluating service quality of public transportation systems**

Celik E., Gumus A. T. , AYDIN N.

Uncertainty Modelling in Knowledge Engineering and Decision Making - 12th International Fuzzy Logic and Intelligent Technologies in Nuclear Science Conference, FLINS 2016, Roubaix, France, 24 - 26 August 2016, pp.936-942

● **Passenger satisfaction evaluation for rail transit lines in Istanbul using qualiflex approach based on interval type-2 trapezoidal fuzzy numbers**

TAŞKIN GÜMÜŞ A., AYDIN N., Celik E.

Joint International Symposium on "The Social Impacts of Developments in Information, Manufacturing and Service Systems" 44th International Conference on Computers and Industrial Engineering, CIE 2014 and 9th International Symposium on Intelligent Manufacturing and Service Systems, IMSS 2014, İstanbul, Turkey, 14 - 16 October 2014, pp.343-357

● **Performance evaluation of Turkish retail firms using the fuzzy AHP, PROMETHEE, ELECTRE and VIKOR methods**

BÖLÜKBAŞ U., Çelik E., GÜNERİ A. F.

10th International Fuzzy Logic and Intelligent Technologies in Nuclear Science Conference, FLINS 2012, İstanbul, Turkey, 26 - 29 August 2012, vol.7, pp.243-248

Activities in Scientific Journals

International Journal of Pure and Applied Sciences, Committee Member, 2019 - Continues

Scientific Refereeing

HUMAN AND ECOLOGICAL RISK ASSESSMENT, Journal Indexed in SCI-E, July 2020

COMPUTERS & INDUSTRIAL ENGINEERING, Journal Indexed in SCI-E, July 2020

APPLIED SOFT COMPUTING, Journal Indexed in SCI-E, July 2019

Citations

Total Citations (WOS):854

h-index (WOS):16