

## Res. Asst. MURAT ÇOLAK

### Personal Information

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### International Researcher IDs

ORCID: 0000-0001-8226-8067

Publons / Web Of Science ResearcherID: F-5165-2018

Yoksis Researcher ID: 224262

### Education Information

Postgraduate, Yıldız Technical University, Graduate School Of Natural And Applied Sciences, Endüstri Mühendisliği Anabilim Dalı, Turkey 2013 - 2015

Undergraduate, Yıldız Technical University, Faculty Of Mechanical Engineering, Department Of Industry Engineering, Turkey 2009 - 2013

### Dissertations

Postgraduate, Bütünleşik bir bulanık karar modeli ile Türkiye için yenilenebilir enerji alternatiflerinin değerlendirilmesi, Yıldız Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Endüstri Mühendisliği Anabilim Dalı, 2015

### Research Areas

Industrial Engineering , Production Planning and Control, Scheduling, Multi Criteria Decision Making, Engineering and Technology

### Academic Titles / Tasks

Research Assistant, Kocaeli University, Mühendislik Fakültesi, Endüstri Mühendisliği, 2014 - Continues

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

#### I. An integrated decision-making methodology based on Pythagorean fuzzy sets for social robot evaluation

KAYA İ., KARAŞAN A., ÖZKAN B., ÇOLAK M.

SOFT COMPUTING, vol.26, no.19, pp.9831-9858, 2022 (SCI-Expanded)

#### II. Two-phase multi-expert knowledge approach by using fuzzy clustering and rule-based system for technology evaluation of unmanned aerial vehicles

ÇOLAK M., KAYA İ., Karasan A., Erdogan M.

NEURAL COMPUTING & APPLICATIONS, vol.34, no.7, pp.5479-5495, 2022 (SCI-Expanded)

#### III. A combined methodology based on Z-fuzzy numbers for sustainability assessment of hydrogen

- energy storage systems**  
 İLBAHAR E., ÇOLAK M., KARAŞAN A., KAYA İ.  
 INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.34, pp.15528-15546, 2022 (SCI-Expanded)
- IV. An extensive and systematic literature review for hybrid flowshop scheduling problems**  
 ÇOLAK M., Keskin G. A.  
 INTERNATIONAL JOURNAL OF INDUSTRIAL ENGINEERING COMPUTATIONS, vol.13, no.2, pp.185-222, 2022 (SCI-Expanded)
- V. A multicriteria decision making methodology based on two-dimensional uncertainty by hesitant Z-fuzzy linguistic terms with an application for blockchain risk evaluation**  
 KARAŞAN A., KAYA İ., ERDOĞAN M., ÇOLAK M.  
 APPLIED SOFT COMPUTING, vol.113, 2021 (SCI-Expanded)
- VI. Evaluation of autonomous vehicle driving systems for risk assessment based on three-dimensional uncertain linguistic variables**  
 Erdoğan M., KAYA İ., Karaşan A., ÇOLAK M.  
 Applied Soft Computing, vol.113, 2021 (SCI-Expanded)
- VII. A Literature Review on Fuzzy Process Capability Analysis**  
 KAYA İ., ÇOLAK M.  
 JOURNAL OF TESTING AND EVALUATION, vol.48, no.5, pp.3963-3985, 2020 (SCI-Expanded)
- VIII. Multi-criteria evaluation of energy storage technologies based on hesitant fuzzy information: A case study for Turkey**  
 ÇOLAK M., Kayab I.  
 JOURNAL OF ENERGY STORAGE, vol.28, 2020 (SCI-Expanded)
- IX. A multi-criteria evaluation model based on hesitant fuzzy sets for blockchain technology in supply chain management**  
 Colaka M., KAYA İ., ÖZKAN B., Budakc A., KARAŞAN A.  
 JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.38, no.1, pp.935-946, 2020 (SCI-Expanded)
- X. A comprehensive review of fuzzy multi criteria decision making methodologies for energy policy making**  
 KAYA İ., ÇOLAK M., Terzi F.  
 ENERGY STRATEGY REVIEWS, vol.24, pp.207-228, 2019 (SCI-Expanded)
- XI. Use of MCDM techniques for energy policy and decision-making problems: A review**  
 KAYA İ., ÇOLAK M., Terzi F.  
 INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.42, no.7, pp.2344-2372, 2018 (SCI-Expanded)
- XII. Prioritization of renewable energy alternatives by using an integrated fuzzy MCDM model: A real case application for Turkey**  
 ÇOLAK M., KAYA İ.  
 RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.80, pp.840-853, 2017 (SCI-Expanded)

## Articles Published in Other Journals

- I. EVALUATION OF MENTAL WORKLOAD BY USING INTERVAL TYPE-2 FUZZYBASED NASA-TLX METHOD: A CASE STUDY IN AUTOMOTIVE INDUSTRY**  
 Çolak M., Esen H.  
 Ergonomi (Online), vol.6, no.3, pp.157-169, 2023 (Peer-Reviewed Journal)
- II. Wind farm location determination by using a two-phased fuzzy decision-making methodology based on fused data with a real case application**  
 KARAŞAN A., ÇOLAK M., Budak A., KAYA İ.  
 INTERNATIONAL JOURNAL OF SUSTAINABLE ENERGY, vol.41, no.11, pp.1694-1720, 2022 (ESCI)
- III. A SAFETY STOCK MODEL BASED ON ORDER CHANGE-TO-DELIVERY RESPONSE TIME: A CASE STUDY FOR AUTOMOTIVE INDUSTRY**

- ÇOLAK M., HATİPOĞLU T., Aydin Keskin G., FIĞLALI A.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BİLİMLERİ DERGİSİ,  
vol.37, no.3, pp.841-853, 2019 (ESCI)
- IV. A Simulation Based Approach for Efficient Yard Planning in a Container Port**  
ÇOLAK M., AYDIN KESKİN G., ESEN H., BEKTAS C.  
Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.22, pp.1157-1164, 2018 (Peer-Reviewed Journal)
- V. A Fuzzy Logic Based Green Performance Evaluation Model for Automotive Industry**  
ÇOLAK M., BOYACI A. İ.  
Avrupa Bilim ve Teknoloji Dergisi, no.13, pp.39-44, 2018 (Peer-Reviewed Journal)
- VI. Bir Çağrı Merkezindeki Bekleme Sürelerinin Kuyruk Modelleri ile İyileştirilmesi**  
AYDIN KESKİN G., ÇOLAK M., KARANFİL KOSTAK G.  
Balıkesir Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.20, pp.55-68, 2018 (Peer-Reviewed Journal)
- VII. A Project Management Model for Assessment of a Construction Project**  
ÇOLAK M., KESİK Ş., MUTMAN U., AYDIN KESKİN G.  
International Journal of Computational and Experimental Science and Engineering, vol.4, pp.32-36, 2018 (Peer-Reviewed Journal)
- VIII. Bir Kimya Firmasında Hammadde Deposunun Etkin Yerleşimi için Bir Model Önerisi**  
ÇOLAK M., AYDIN KESKİN G., GÜNEL G., AKKAYA D.  
BEYKENT ÜNİVERSİTESİ FEN VE MÜHENDİSLİK BİLİMLERİ DERGİSİ, vol.9, pp.55-76, 2016 (Peer-Reviewed Journal)
- IX. MULTI CRITERIA DECISION MAKING APPLICATIONS IN GREEN GROWTH A SYSTEMATIC LITERATURE REVIEW**  
Çelik C., Boyacı A. İ., Hatipoğlu T., Çolak M.  
EURASIAN BUSINESS & ECONOMICS JOURNAL, vol.2, pp.252-268, 2016 (Peer-Reviewed Journal)
- X. Metot Zaman Ölçümü MZÖ yöntemi ile üretim süresinin iyileştirilmesi beyaz eşya yan sanayisinde bir uygulama**  
ÇOLAK M., AYDIN KESKİN G., ÇELİK B., AVCI S.  
Sakarya Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.20, pp.417-424, 2016 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. A Fuzzy Based Risk Evaluation Model for Industry 4.0 Transition Process**  
ÇOLAK M., KAYA İ., ERDOĞAN M.  
in: Industrial Engineering in the Big Data Era Lecture Notes in Management and Industrial Engineering, Fethi Çalışır, Emre Çevikcan, Hatice Camgöz Akdağ, Editor, Springer, pp.201-205, 2019
- II. Lojistik ve Tedarik Zinciri Yönetiminde Endüstri 4.0 Uygulamaları**  
EKİZ M. K., ÇOLAK M., FIĞLALI A.  
in: Mühendislikte Yapay Zeka ve Uygulamaları 2, GÜLSEÇEN SEVİNÇ, FIĞLALI ALPASLAN, TORKUL ORHAN, SELVİ İHSAN HAKAN, ÇAĞIL GÜLTEKİN, UÇAR MUHAMMED KÜRŞAD, Editor, Sakarya Üniversitesi Kütüphanesi Yayınevi, Sakarya, pp.125-138, 2018

## Refereed Congress / Symposium Publications in Proceedings

- I. A Model Proposal for Smart Campus Investment Prioritization by Using Data Envelopment Analysis**  
ÇOLAK M., KUTLU GÜNDÖĞDU F., BOZKUŞ E., İŞIK G., KARAŞAN A., KAYA İ.  
2022 International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT), Sakheer, Bahrain, 20 - 21 November 2022, pp.572-575
- II. Application of Statistical Process Control in Production Process: A Case Study in Cleaning Products**

**Sector**

AYDIN KESKİN G., ÇOLAK M., GÜNGÖR B.

11. International Statistics Congress (ISC2019), 4 - 08 October 2019

**III. BİR OTOMOTİV FİRMASINDA MÜŞTERİ STRATEJİLERİNİN SİPARİŞ DEĞİŞKENLİKLERİNİN ANALİZİ İLE BELİRLENMESİ**

ÇOLAK M., FIĞLALI A.

International Marmara Sciences Congress (Autumn 2019), 1 - 03 November 2019

**IV. ZİHİNSEL İŞ YÜKÜNÜN NASA-TLX YÖNTEMİ İLE DEĞERLENDİRİLMESİ: GIDA SEKTÖRÜNDE BİR UYGULAMA**

ESEN H., ÇOLAK M.

International Marmara Sciences Congress (Autumn) 2019, 1 - 03 November 2019, pp.992-999

**V. BİR OTOMOTİV YAN SANAYİ FİRMASINDA TAŞIMA MALİYETLERİNİ AZALTARAK TESİS YERLEŞİMİNİN İYİLEŞTİRİLMESİ**

ÇOLAK M., ESEN H.

International Marmara Sciences Congress (Autumn) 2019, Kocaeli, Turkey, 1 - 03 November 2019, pp.969-976

**VI. A Fuzzy Based MCDM Methodology for Risk Evaluation of Cyber Security Technologies**

ERDOĞAN M., KARAŞAN A., KAYA İ., BUDAK A., ÇOLAK M.

INFUS 2019: Intelligent and Fuzzy Techniques in Big Data Analytics and Decision Making, İstanbul, Turkey, 23 - 25 July 2019

**VII. Evaluation of Defense Strategies by Using a MCDM Methodology Based on Neutrosophic Sets: A Case Study for Turkey**

KARAŞAN A., KAYA İ., ERDOĞAN M., ÖZKAN B., ÇOLAK M.

INFUS 2019: Intelligent and Fuzzy Techniques in Big Data Analytics and Decision Making, İstanbul, Turkey, 23 - 25 July 2019

**VIII. BİR LASTİK ÜRETİM FİRMASINDA ÇALIŞMA DURUŞLARININ REBA YÖNTEMİ İLE ERGONOMİK ANALİZİ**

Çakmak G., ÇOLAK M., ESEN H.

Uluslararası Marmara Fen ve Sosyal Bilimler Kongresi (BAHAR 2019), Kocaeli, Turkey, 26 - 28 April 2019, vol.2, pp.2125-2133

**IX. Sustainability Assessment of Energy Storage Alternatives Through An Integrated Fuzzy-Based MCDM Methodology**

ÇOLAK M., KAYA İ.

3rd International Energy Engineering Congress, 18 - 19 October 2018, pp.654-663

**X. Bir Montaj Hattında İstasyon Sayısını Azaltarak Operatörlerin İş Yükünü Dengelenmesi**

ÇOLAK M., AYDIN KESKİN G., ALYANAK G. H., DALKİÇ G.

3rd International Conference on Engineering Technology and Applied Sciences (ICETAS 2018), ÜSKÜP, Macedonia, 17 - 21 July 2018, pp.148-154

**XI. Determination of Outliers for Effective Forecasting of Production Amounts: A Case Study for Automotive Industry**

ÇOLAK M., AYDIN KESKİN G., CANLISOY S., TOPGÜLOĞLU G., AKMAN G.

3rd International Conference on Engineering Technology and Applied Sciences (ICETAS 2018), ÜSKÜP, Macedonia, 17 - 21 July 2018, pp.196-200

**XII. Statistical Assessment of Air Pollutant Concentration In Alikahya Region of Kocaeli Province**

AYDIN KESKİN G., ÇOLAK M., ÇETİN DOĞRUPARMAK Ş., ESEN H.

4th International Researchers, Statisticians and Young Statisticians Congress, 28 - 30 April 2018

**XIII. Classification Of Air Quality Monitoring Stations Via Statistical Methods: A Case Study For Kocaeli**

ÇOLAK M., AYDIN KESKİN G., ÇETİN DOĞRUPARMAK Ş., ESEN H.

4th International Researchers, Statisticians and Young Statisticians Congress, 28 - 30 April 2018

**XIV. A Lean Production Study In An Automotive Company**

ESEN H., ÇOLAK M., AYDIN KESKİN G.

4th International Researchers, Statisticians and Young Statisticians Congress, 28 - 30 April 2018

- XV. **An Optimization Model for Production Planning in an International Chemical Company**  
DEMİRAY KIRMIZI S., ÇOLAK M., AYDIN KESKİN G.  
2nd INTERNATIONAL CONFERENCE ON ENGINEERING TECHNOLOGY AND INNOVATION (ICETI 2018), 7 - 11 March 2018, pp.145-149
- XVI. **Ergonomik Risk Analizi Yardımıyla Montaj Hattı Dengeleme**  
AYDIN KESKİN G., ÇOLAK M., ESEN H., ERTÜRK E.  
2. Uluslararası İş Güvenliği ve Çalışan Sağlığı Kongresi, 8 - 09 November 2017
- XVII. **Investigation of a Construction Project Using a Project Planning Technique**  
ÇOLAK M., KESİK Ş., MUTMAN U., AYDIN KESKİN G.  
4th International Conference on Computational and Experimental Science and Engineering, 4 - 08 October 2017
- XVIII. **Green Performance Evaluation of Manufacturers Using Fuzzy MCDM Techniques: A Case Study for Automotive Industry**  
Çolak M., Boyacı A. İ.  
4th International Conference on Computational and Experimental Science and Engineering, Antalya, Turkey, 4 - 08 October 2017
- XIX. **Bir İşletmede Eksik Baskı Probleminin Kalite İyileştirme Teknikleri ile İncelenmesi**  
ARSLAN C., İNCE M., ÇOLAK M., AYDIN KESKİN G.  
2. Uluslararası Mühendislik Mimarlık ve Tasarım Kongresi, 12 - 13 May 2017
- XX. **Endüstriyel Üretim Yapılan Bir Firmada Montaj Hattı Dengeleme Çalışması**  
AKIN E., ÇOLAK M., AYDIN KESKİN G.  
2. Uluslararası Mühendislik Mimarlık ve Tasarım Kongresi, 12 - 13 May 2017
- XXI. **Determination of Suitable Equipment Number for Efficient Planning in a Container Terminal**  
BEKTAŞ C., ÇOLAK M., AYDIN KESKİN G.  
International Conference on Mathematics and Engineering, 10 - 12 May 2017
- XXII. **An Integrated Customer Relationship Management and Data Mining Framework for Customer Classification and Risk Analysis in Health Sector**  
ALSAÇ A., ÇOLAK M., AYDIN KESKİN G.  
6th IEEE International Conference on Industrial Technology and Management, 7 March - 10 December 2017
- XXIII. **BİR OTOMOTİV İŞLETMESİNDE ERGONOMİK MONTAJ HATTI DENGELEME VE İŞ GÜCÜ ATAMASI**  
MENEMENCİOĞLU D., TAŞ N., ÇOLAK M., AYDIN KESKİN G.  
Uluslararası Katılımlı 16. Üretim Araştırmaları Sempozyumu, 12 - 14 October 2016
- XXIV. **DETERMINATION OF CRITERIA WEIGHTS FOR RENEWABLE ENERGY ALTERNATIVES BY USING AN INTERVAL TYPE 2 FUZZY AHP METHODOLOGY**  
ÇOLAK M., KAYA İ.  
INTERNATIONAL CONFERENCE ON ENGINEERING AND NATURAL SCIENCE, 24 - 28 May 2016
- XXV. **Kümeleme Analizi Yardımıyla OECD Ülkelerinin Yeşil Büyüme Göstergelerine Göre Değerlendirilmesi**  
Çolak M., Boyacı A. İ., Akman G.  
9. Uluslararası İstatistik Kongresi, Antalya, Turkey, 28 October - 01 November 2015, pp.248-249
- XXVI. **Multi Criteria Decision Making Models for Evaluation of Energy Alternatives: A Literature Survey**  
Çolak M., Kaya İ.  
XVIth INTERNATIONAL SYMPOSIUM ON ECONOMETRICS, OPERATIONS RESEARCH AND STATISTICS, Edirne, Turkey, 7 - 12 May 2015, pp.628-629
- XXVII. **A Decision Model Based Type-2 Fuzzy Sets for Renewable Energy Sources**  
Çolak M., Kaya İ.  
XVIth INTERNATIONAL SYMPOSIUM ON ECONOMETRICS, OPERATIONS RESEARCH AND STATISTICS, Edirne, Turkey, 7 - 12 May 2015, pp.468-469
- XXVIII. **Çok Üyelikli Bulanık Kümeler ile Karar Verme Türkiye için Yenilenebilir Enerji Kaynaklarının Değerlendirilmesi**  
ÇOLAK M., KAYA İ., ENGİN O., FIĞLALI A., SOYSAL A.  
YA-EM'2015, Turkey, 9 - 11 September 2015

## **Supported Projects**

AYDIN KESKİN G., ESEN H., ÇOLAK M., BEKTAŞ C., Project Supported by Higher Education Institutions, DENİZYOLU KONTEYNER TAHLİYE OPERASYONLARI İÇİN ETKİLİ SAHA YERLEŞİMİ ÖNERİSİ, 2017 - 2018

## **Metrics**

Publication: 52

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