

Res. Asst. MURAT ÇOLAK

Personal Information

Office Phone: [+90 262 303 3317](tel:+902623033317) Extension: 3317

Email: colak.murat@kocaeli.edu.tr

Web: <https://avesis.kocaeli.edu.tr/colak.murat/>

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

Citation (WoS): 632

Citation (Scopus): 733

H-Index (WoS): 9

H-Index (Scopus): 9