

## Personal Information

**Email:** eilbahar@yildiz.edu.tr

**Web:** <https://avesis.yildiz.edu.tr/eilbahar>

## International Researcher IDs

ORCID: 0000-0002-4917-0022

Publons / Web Of Science ResearcherID: ABA-1833-2020

Yoksis Researcher ID: 227874

## Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Endüstri Mühendisliği, Turkey 2017 - 2022

Postgraduate, Bogazici University, Institute Of Science, Endüstri Mühendisliği, Turkey 2014 - 2017

Undergraduate, Bilkent Üniversitesi, Mühendislik Fakültesi, Endüstri Mühendisliği, Turkey 2009 - 2014

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

- I. **Design of attribute control charts under uncertainty with normality analyses: Impact of operator hesitancy during inspection processes in manufacturing industry with a real case application**  
KAYA İ., İLBAHAR E., Gündoğdu F. K., KARAŞAN A., YAZIR K., OLGAÇ E.  
Applied Soft Computing, vol.170, 2025 (SCI-Expanded)
- II. **Convenient Site Selection of a Floating PV Power Plant in Türkiye by using GIS-Fuzzy Analytical Hierarchy Process**  
Karipoğlu F., KOCA K., İLBAHAR E.  
Environmental Science and Pollution Research, vol.31, no.15, pp.23193-23210, 2024 (SCI-Expanded)
- III. **Assessment of governmental strategies for sustainable environment regarding greenhouse gas emission reduction under uncertainty**  
KARAŞAN A., Gündoğdu F. K., Işık G., KAYA İ., İLBAHAR E.  
Journal of Environmental Management, vol.349, 2024 (SCI-Expanded)
- IV. **An integrated Pythagorean fuzzy-based methodology for sectoral prioritization of industry 4.0 with lean supply chain perspective**  
KAYA İ., KARAŞAN A., İLBAHAR E., Cebeci B.  
International Journal of Computer Integrated Manufacturing, vol.37, no.12, pp.1582-1611, 2024 (SCI-Expanded)
- V. **A design methodology based on two dimensional fuzzy linguistic variables for attribute control charts with real case applications**  
KAYA İ., İLBAHAR E., KARAŞAN A.  
Engineering Applications of Artificial Intelligence, vol.126, 2023 (SCI-Expanded)
- VI. **Evaluation of sustainable energy planning scenarios with a new approach based on FCM, WASPAS and impact effort matrix**  
İLBAHAR E., Kahraman C., ÇEBİ S.  
ENVIRONMENT DEVELOPMENT AND SUSTAINABILITY, vol.25, no.10, pp.11931-11955, 2023 (SCI-Expanded)
- VII. **Appraisal of smart factory design for advance manufacturing plants based on transition strategies by using an integrated fuzzy decision-making methodology**  
KAYA İ., KARAŞAN A., Güvercin Ö., İLBAHAR E., BARAÇLI H.

International Journal of Computer Integrated Manufacturing, vol.36, no.8, pp.1153-1177, 2023 (SCI-Expanded)

- VIII. **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)
- IX. **Customer-oriented product design using an integrated neutrosophic AHP & DEMATEL & QFD methodology**  
KARAŞAN A., İLBAHAR E., ÇEBİ S., Kahraman C.  
Applied Soft Computing, vol.118, 2022 (SCI-Expanded)
- X. **Risk assessment of R&D projects: a new approach based on IVIF AHP and fuzzy axiomatic design**  
İLBAHAR E., ÇEBİ S., Kahraman C.  
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.42, no.1, pp.605-614, 2022 (SCI-Expanded)
- XI. **Risk assessment of renewable energy investments: A modified failure mode and effect analysis based on prospect theory and intuitionistic fuzzy AHP**  
İLBAHAR E., Kahraman C., ÇEBİ S.  
ENERGY, vol.239, 2022 (SCI-Expanded)
- XII. **Location selection for waste-to-energy plants by using fuzzy linear programming**  
İLBAHAR E., Kahraman C., ÇEBİ S.  
ENERGY, vol.234, 2021 (SCI-Expanded)
- XIII. **A Multi-criteria Assessment of Biomass Conversion Technologies with Pythagorean Fuzzy Axiomatic Design Approach**  
İLBAHAR E., ÇEBİ S., Kahraman C.  
JOURNAL OF MULTIPLE-VALUED LOGIC AND SOFT COMPUTING, vol.37, no.3-4, pp.317-334, 2021 (SCI-Expanded)
- XIV. **Prioritization of renewable energy sources using multi-experts Pythagorean fuzzy WASPAS**  
İLBAHAR E., ÇEBİ S., Kahraman C.  
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.39, no.5, pp.6407-6417, 2020 (SCI-Expanded)
- XV. **A novel pythagorean fuzzy AHP and its application to landfill site selection problem**  
KARAŞAN A., İLBAHAR E., KAHRAMAN C.  
SOFT COMPUTING, vol.23, no.21, pp.10953-10968, 2019 (SCI-Expanded)
- XVI. **A state-of-the-art review on multi-attribute renewable energy decision making**  
İLBAHAR E., ÇEBİ S., Kahraman C.  
ENERGY STRATEGY REVIEWS, vol.25, pp.18-33, 2019 (SCI-Expanded)
- XVII. **Selection Among GSM Operators Using Pythagorean Fuzzy WASPAS Method**  
Kahraman C., Çevik Onar S., Öztayşi B., İLBAHAR E.  
JOURNAL OF MULTIPLE-VALUED LOGIC AND SOFT COMPUTING, vol.33, pp.459-469, 2019 (SCI-Expanded)
- XVIII. **A new risk assessment approach: Safety and Critical Effect Analysis (SCEA) and its extension with Pythagorean fuzzy sets**  
KARAŞAN A., İLBAHAR E., ÇEBİ S., Kahraman C.  
SAFETY SCIENCE, vol.108, pp.173-187, 2018 (SCI-Expanded)
- XIX. **A novel approach to risk assessment for occupational health and safety using Pythagorean fuzzy AHP & fuzzy inference system**  
İLBAHAR E., KARAŞAN A., ÇEBİ S., Kahraman C.  
SAFETY SCIENCE, vol.103, pp.124-136, 2018 (SCI-Expanded)
- XX. **Prioritization of production strategies of a manufacturing plant by using an integrated intuitionistic fuzzy AHP & TOPSIS approach**  
KARAŞAN A., Erdogan M., İLBAHAR E.  
JOURNAL OF ENTERPRISE INFORMATION MANAGEMENT, vol.31, no.4, pp.510-528, 2018 (SSCI)
- XXI. **Retail store performance measurement using a novel interval-valued Pythagorean fuzzy WASPAS method**  
İLBAHAR E., Kahraman C.  
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.35, no.3, pp.3835-3846, 2018 (SCI-Expanded)

- XXII. **Classification of design parameters for E-commerce websites: A novel fuzzy Kano approach**  
İLBAHAR E., ÇEBİ S.  
TELEMATICS AND INFORMATICS, vol.34, no.8, pp.1814-1825, 2017 (SSCI)
- XXIII. **A fuzzy information axiom based method to determine the optimal location for a biomass power plant: A case study in Aegean Region of Turkey**  
ÇEBİ S., İLBAHAR E., ATASOY A.  
Energy, vol.116, pp.894-907, 2016 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Analysis of Parameters Affecting The Smart Phone Design By Using Fuzzy Kano Model**  
Çebi S., İlbarhar E.  
Alphanumeric Journal, vol.6, pp.83-92, 2018 (Peer-Reviewed Journal)
- II. **Tersanelerde Yaşanan Mesleki Risklerin Analizi için Bulanık PapyonModel Önerisi**  
Çebi S., İlbarhar E.  
Journal of Eta Maritime Science, vol.6, pp.141-157, 2018 (Peer-Reviewed Journal)
- III. **Warehouse risk assessment using interval valued intuitionistic fuzzy AHP**  
ÇEBİ S., İlbarhar E.  
International Journal of the Analytic Hierarchy Process, vol.10, no.2, pp.243-253, 2018 (Scopus)

## Books

- I. **Bulanık Analitik Hiyerarşi Prosesi: Buckley AHP ve Proje Risk Yönetimine Uygulanması**  
İLBAHAR E., ÇEBİ S.  
in: BULANIK ÇOK KRİTERLİ KARAR VERME YÖNTEMLERİ - MS EXCEL VE SOFTWARE ÇÖZÜMLÜ UYGULAMALAR, Mehmet Kabak, Babek Erdebili, Editor, NOBEL AKADEMİK YAYINCILIK EĞİTİM DANIŞMANLIK, pp.28-47, 2021
- II. **Integration of Quality FunctionDeployment with IVIF-AHP and Kano Model for Customer Oriented Product Design**  
Özalp M., Kucukbas D., İLBAHAR E., ÇEBİ S.  
in: Customer Oriented Product DesignIntelligent and Fuzzy Techniques, Cengiz Kahraman, Selcuk Cebi, Editor, Springer, pp.93-106, 2020
- III. **Classification of Laptop DesignAttributes Using Fuzzy Kano Model**  
İLBAHAR E., ÇEBİ S., KAHRAMAN C.  
in: Customer Oriented Product DesignIntelligent and Fuzzy Techniques, Cengiz Kahraman, Selcuk Cebi, Editor, Springer, pp.239-250, 2020
- IV. **Website Design Using Pythagorean FuzzyAxiomatic Design**  
İLBAHAR E., ÇEBİ S., KAHRAMAN C.  
in: Customer Oriented Product DesignIntelligent and Fuzzy Techniques, Cengiz Kahraman, Selcuk Cebi, Editor, Springer, pp.169-183, 2020
- V. **Wind Energy Investment Analyses Based on Fuzzy Sets**  
Kahraman C., Çevik Onar S., Öztayşi B., Uçal Sarı İ., İlbarhar E.  
in: Energy Management—Collective and Computational Intelligence with Theory and Applications, Kahraman C., Kayakutlu G., Editor, Springer, Cham, pp.141-166, 2018
- VI. **Maritime Environmental Disaster Management Using Intelligent Techniques**  
AKYÜZ E., İLBAHAR E., ÇEBİ S., ÇELİK M.  
in: Intelligence Systems in Environmental Management Theory and Applications, Kahraman Cengiz, Ucal Sari Irem, Editor, Springer, pp.135-155, 2017

## Papers Published in Refereed Scientific Meetings

- I. **Mobil Uygulama Arayüz Tasarım Etkinliğini Ölçen Bir Model Önerisi**  
ÇEBİ S., KARAKURT N. F., ŞAHİN G., BÖLÜKBAŞI İ. B., İLBAHAR E.  
Yöneylem Araştırması ve Endüstri Mühendisliği (YA/EM) 43. Ulusal Kongresi, Trabzon, Turkey, 2 - 04 October 2024, pp.131
- II. **Measuring the Variation of an Industrial Staple Manufacturing Process under 3-Dimensional Uncertainty Functions**  
Gundogdu F. K., İLBAHAR E., Kaya I., KARAŞAN A., YAZIR K., OLGAÇ E.  
2024 International Conference on Decision Aid Sciences and Applications, DASA 2024, Manama, Bahrain, 11 - 12 December 2024
- III. **Monitoring Packaging Defects in a Logistic Company for the Determination of Type-II Errors**  
Gundogdu F. K., İLBAHAR E., Kaya I., KARAŞAN A., OLGAÇ E., YAZIR K.  
2024 International Conference on Decision Aid Sciences and Applications, DASA 2024, Manama, Bahrain, 11 - 12 December 2024
- IV. **Use of Fuzzy Sets in Process Capability Analysis: A Comparative Literature Analysis**  
Gündoğdu F. K., İLBAHAR E., YAZIR K., KARAŞAN A., KAYA İ.  
International Conference on Intelligent and Fuzzy Systems, INFUS 2024, Çanakkale, Turkey, 16 - 18 July 2024, vol.1089 LNNS, pp.260-268
- V. **Analysis of Defectives in a Call-Center Process Quality under 2-Dimensional Uncertain Linguistic Data by Attribute Control Charts**  
KARAŞAN A., İLBAHAR E., Gundogdu F. K., YAZIR K., OLGAÇ E., Kaya I.  
2024 International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies, 3ICT 2024, Virtual, Online, 17 - 19 November 2024, pp.470-474
- VI. **Use of Linguistic Variables in Control Charts: A Comparative Literature Analysis**  
YAZIR K., Gündoğdu F. K., İLBAHAR E., KARAŞAN A., KAYA İ.  
International Conference on Intelligent and Fuzzy Systems, INFUS 2024, Çanakkale, Turkey, 16 - 18 July 2024, vol.1089 LNNS, pp.269-276
- VII. **Prioritization of the Potential Sectors for CO2 Emission Reduction based on International Policies: A Case of Turkey**  
Gundogdu F. K., İLBAHAR E., KARAŞAN A., KAYA İ., ÖZKAYA B.  
International Conference on Decision Aid Sciences and Applications (DASA), Chiang-Rai, Thailand, 23 - 25 March 2022, pp.1544-1548
- VIII. **Risk Assessment of WtE Plants by Using a Modified Fuzzy SCEA Approach**  
İLBAHAR E., ÇEBİ S., Kahraman C.  
4th International Conference on Intelligent and Fuzzy Systems (INFUS), Bornova, Turkey, 19 - 21 July 2022, vol.505, pp.225-232
- IX. **Social Acceptability Assessment of Renewable Energy Policies: An Integrated Approach Based on IVPF BOCR and IVIF AHP**  
İLBAHAR E., ÇEBİ S., Kahraman C.  
International Conference on Intelligent and Fuzzy Systems, INFUS 2021, İstanbul, Turkey, 24 - 26 August 2021, vol.308, pp.93-100
- X. **Social Acceptability Assessment of Renewable Energy Policies: An Integrated Approach Based on Fuzzy BOCR**  
İLBAHAR E., ÇEBİ S., KAHRAMAN C.  
International Conference on Intelligent and Fuzzy Systems (INFUS2021), İstanbul, Turkey, 24 August 2021, pp.93-100
- XI. **Sectoral Prioritization of Industry 4.0 under Lean Supply Chain with an Integrated Fuzzy Decision-Making Approach: The Case of Turkey**  
KARAŞAN A., İLBAHAR E., KAYA İ., Cebeci B.  
6th International Forum on Research and Technology for Society and Industry, RTSI 2021, Virtual, Online, Italy, 6 -

09 September 2021, pp.441-445

- XII. **A New Approach to Analyze Perceived Design Quality of Mobile Phone Using Fuzzy Hierarchical Conjoint Analysis**  
Erdem Y., ÇEBİ S., İLBAHAR E.  
International Conference on Intelligent and Fuzzy Systems, INFUS 2020, İstanbul, Turkey, 21 - 23 July 2020, vol.1197 AISC, pp.769-778
- XIII. **Risk Assessment of R&D Activities Using Intuitionistic Fuzzy AHP and FIS**  
İLBAHAR E., ÇEBİ S., Kahraman C.  
International Conference on Intelligent and Fuzzy Systems, INFUS 2020, İstanbul, Turkey, 21 - 23 July 2020, vol.1197 AISC, pp.1327-1335
- XIV. **Prioritization of Smart Factory Transition Strategies for Manufacturing Plants with an Integrated Fuzzy Decision-Making Approach: The Case of Turkey**  
İLBAHAR E., KARAŞAN A., KAYA İ.  
6th International Forum on Research and Technology for Society and Industry, RTSI 2021, Virtual, Online, Italy, 6 - 09 September 2021, pp.435-440
- XV. **An Intuitionistic Fuzzy Axiomatic Design Approach for the Evaluation of Solid Waste Disposal Methods**  
Çebi S., İlbarhar E., Kahraman C.  
INFUS: International Conference on Intelligent and Fuzzy Systems, İstanbul, Turkey, 23 - 25 July 2019, pp.537-545
- XVI. **Assessment of Renewable Energy Alternatives with Pythagorean Fuzzy WASPAS Method: A Case Study of Turkey**  
İlbahar E., Çebi S., Kahraman C.  
INFUS: International Conference on Intelligent and Fuzzy Systems, İstanbul, Turkey, 23 - 25 July 2019, pp.888-895
- XVII. **Tersanelerde Yaşanan Mesleki Risklerin Analizi için Bulanık Papyon Model Önerisi**  
ÇEBİ S., İLBAHAR E.  
37. Yöneylem Araştırması ve Endüstri Mühendisliği, Ulusal kongresi, İstanbul, Turkey, 5 - 07 July 2017
- XVIII. **Using Fuzzy AHP and Conjoint Analysis to Identify Importance Degrees of Parameters on Academic Performance**  
İLBAHAR E., ÇEBİ S., GÜLER M. G.  
The 4th International Fuzzy Systems Symposium, 5 - 06 November 2015
- XIX. **Ege Bölgesi nde Kurulması Planlanan Biyokütle Enerji Tesisi için Tesis Yeri Seçimi**  
ÇEBİ S., ATASOY A., İLBAHAR E.  
YAEM 2015, Turkey, 9 - 11 September 2015

## Metrics

Publication: 54

Citation (WoS): 634

Citation (Scopus): 1287

H-Index (WoS): 9

H-Index (Scopus): 12