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### Research Areas

Linear Programming, Heuristic Methods, Integer and Mixed Integer Programming, Production Planning and Control, Decision Support Systems, Supply Chain and Logistics Management

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

- I. **Eco-efficiency maturity model: a practical assessment tool for managers**  
Gungor B., FELEKOĞLU B., TAŞAN A. S.  
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- II. **An integrated fleet planning model with empty vehicle repositioning for an intermodal transportation system**  
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OPERATIONAL RESEARCH, vol.22, no.3, pp.2063-2098, 2022 (SCI-Expanded)
- III. **Genetic algorithm based approaches to solve the order batching problem and a case study in a distribution center**  
CERGİBOZAN Ç., TAŞAN A. S.  
JOURNAL OF INTELLIGENT MANUFACTURING, vol.33, no.1, pp.137-149, 2022 (SCI-Expanded)
- IV. **Order batching operations: an overview of classification, solution techniques, and future research**  
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JOURNAL OF INTELLIGENT MANUFACTURING, vol.30, no.1, pp.335-349, 2019 (SCI-Expanded)
- V. **A review of fleet planning problems in single and multimodal transportation systems**  
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TRANSPORTMETRICA A-TRANSPORT SCIENCE, vol.15, no.2, pp.631-697, 2019 (SCI-Expanded)
- VI. **Modeling and solving assembly line design problems by considering human factors with a real-life application**  
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- VII. **A fuzzy goal programming model to strategic planning problem of a lead/acid battery closed-loop supply chain**  
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JOURNAL OF MANUFACTURING SYSTEMS, vol.37, pp.243-264, 2015 (SCI-Expanded)
- VIII. **A case-oriented approach to a lead/acid battery closed-loop supply chain network design under risk**

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- IX. **Designing an environmentally conscious tire closed-loop supply chain network with multiple recovery options using interactive fuzzy goal programming**  
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Applied Mathematical Modelling, vol.39, no.9, pp.2661-2702, 2015 (SCI-Expanded)
- X. **Evaluating the bond strength between concrete substrate and repair mortars with full-factorial analysis**  
TOSUN FELEKOĞLU K., FELEKOĞLU B., TAŞAN A. S., FELEKOĞLU B.  
COMPUTERS AND CONCRETE, vol.12, no.5, pp.651-668, 2013 (SCI-Expanded)
- XI. **Taguchi method for analyzing the tactical planning model in a closed-loop supply chain considering remanufacturing option**  
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INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.66, pp.251-269, 2013 (SCI-Expanded)
- XII. **REALIZING ARTIFICIAL IMMUNE SYSTEM IN A MULTI AGENT SIMULATION ENVIRONMENT AND AN APPLICATION TO TRAVELLING SALESMEN PROBLEM**  
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- XIII. **A genetic algorithm based approach to vehicle routing problem with simultaneous pick-up and deliveries**  
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- XIV. **Fuzzy mixed integer programming model for medium-term planning in a closed-loop supply chain with remanufacturing option**  
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JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.23, no.6, pp.345-368, 2012 (SCI-Expanded)

### **Articles Published in Other Journals**

- I. **A Hybrid Approach for Delivery Operations: Special Case of Biobjective TRP Considering Environmental Constraints**  
Cergibozan Ç., Taşan A. S.  
PROELIUM, vol.8, no.3, pp.31-41, 2019 (Peer-Reviewed Journal)

### **Books & Book Chapters**

- I. **Solving the Linear Ordering Problem Using a Genetic Algorithm with Local Search**  
CERGİBOZAN Ç., TAŞAN A. S.  
in: New Global Perspectives on Industrial Engineering and Management, Josefa Mula, Rafael Barbastefano, Manuel Díaz-Madroñero, Raúl Poler, Editor, Springer International Publishing, pp.135-141, 2019
- II. **Tourist Route Planning with a Metaheuristic Approach**  
CERGİBOZAN Ç., TAŞAN A. S.  
in: Closing the Gap Between Practice and Research in Industrial Engineering, Elisabeth Viles, Marta Ormazábal, Alvaro Lleó, Editor, Springer International Publishing, Cham, pp.193-199, 2018

## Refereed Congress / Symposium Publications in Proceedings

- I. **A FUZZY-STOCHASTIC MATHEMATICAL PROGRAMMING APPROACH FOR AN INTEGRATED LOT-SIZING AND SUPPLIER SELECTION PROBLEM WITH QUANTITY DISCOUNTS AND BACKORDERING OPTIONS**  
VAROL B., SUBULAN K., TAŞAN A. S.  
5th International Conference on Computational Mathematics and Engineering Sciences, Van, Turkey, 08 June 2021
- II. **A VIKOR-based Approach for Detergent Selection Problem from Sustainability Perspective**  
GÜNGÖR B., TAŞAN A. S.  
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- III. **Factors Affecting the Adoption of Technological Service Innovation**  
DÜZENLİ Ö., FELEKOĞLU B., TAŞAN A. S.  
25th IJCIEOM - International Joint Conference on Industrial Engineering and Operations Management, 15 - 17 July 2019
- IV. **Data Analysis for Prediction of Forest Fire**  
GÜLEL M., TAŞAN A. S.  
25th IJCIEOM - International Joint Conference on Industrial Engineering and Operations Management, 15 - 17 July 2019
- V. **Vehicle Routing Problem in Bicycle Sharing System**  
ÖSKEN Ö., TAŞAN A. S.  
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- VI. **Solving the Linear Ordering Problem Using a Genetic Algorithm with Local Search**  
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- VII. **Choosing the most effective networking strategy and practice for open innovation**  
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24th International Joint Conference on Industrial Engineering and Operations Management, IJCIEOM 2018, Lisbon, Portugal, 18 - 20 July 2018, vol.280, pp.101-113
- VIII. **Hybrid approach for delivery operations: Special case of biobjective trp considering environmental constraints**  
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- IX. **Local search based strategies to solve the order batching problem**  
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- X. **Tourist Route Planning with a Metaheuristic Approach**  
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- XI. **An ant colony optimization algorithm with dynamic local search for the traveling salesman problem**  
CERGİBOZAN Ç., TAŞAN A. S.  
The 5th International Symposium on Engineering, Artificial Intelligence Applications (ISEAIA 2017), 1 - 03 November 2017, pp.32
- XII. **A Decision Support System Based on a Fuzzy-Stochastic Mathematical Program for Intermodal Fleet Planning Problems**  
BAYKASOĞLU A., SUBULAN K., TAŞAN A. S., DUDAKLI N., TURAN M., ÇELİK E., ÜLKER Ö.  
The 5th International Fuzzy Systems Symposium (FUZZYSS'17), Ankara, Turkey, 14 - 15 October 2017, pp.94
- XIII. **Trafik Etkisini Dikkate Alan Bir Araç Rotalama Problemi**  
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18. Uluslararası Ekonometri Yöneylem Araştırması ve İstatistik Sempozyumu, 5 - 07 October 2017, pp.229

- XIV. **Performance Evaluation of Ant Colony Optimization Techniques for Tsp**  
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- XV. **Variable Neighborhood Search Algorithm for Examining Input-Output Tables in Linear Ordering Problem**  
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18. Uluslararası Ekonometri Yöneylem Araştırması ve İstatistik Sempozyumu, Trabzon, Turkey, 5 - 07 October 2017, pp.206
- XVI. **Hybridization of max min ant system and variable neighbourhood search for the single row facility layout problem**  
CERGİBOZAN Ç., TAŞAN A. S.  
29th Conference of the European Chapter on Combinatorial Optimization, Budapest, Hungary, 26 - 28 May 2016
- XVII. **Performance Measurement of Total Productive Maintenance in a Production Company**  
TAŞAN A. S., BOZTUĞ U. A.  
9th International Conference on Industrial Engineering and Industrial Management, XXII International Conference on Industrial Engineering and Operations Management, International IIE Conference 2015, Aveiro, Portugal, 6 - 08 July 2015
- XVIII. **A New Mixed Integer Programming Model for Strategic and Tactical Fleet Planning Problems in Intermodal Transportation Networks with a Real Life Application**  
BAYKASOĞLU A., SUBULAN K., DUDAKLI N., TAŞAN A. S., Kaplan M. C., Turan M.  
XIII. International Logistics and Supply Chain Congress, İzmir, Turkey, 22 - 23 October 2015, pp.637-648
- XIX. **Dağıtıcı rotalama problemi için melez bir metasezgisel algoritma ve örnek bir uygulama**  
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- XX. **A Mathematical Model Proposal for Fleet Planning Problem of a Real Life Intermodal Transportation Network**  
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- XXI. **Bi objective TSP with Nature Inspired Metaheuristics**  
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- XXII. **Stratejik ve Taktiksel Filo Yönetimi Üzerine Literatür Araştırması ve Bir Lojistik Firmasından Uygulama Örnekleri**  
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- XXIII. **A Mathematical Programming Model for Multi Mode Load Planning**  
DUDAKLI N., SUBULAN K., BAYKASOĞLU A., TAŞAN A. S.  
XVI. International Symposium on Econometrics, Operations Research and Statistics, Turkey, 7 - 12 May 2015
- XXIV. **A Genetic Algorithm Based Approach for the Order Batching Problem**  
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8th International Conference on Industrial Engineering and Industrial Management, XX International Conference on Industrial Engineering and Operations Management, International IIE Conference 2014, Malaga, Spain, 23 - 25 July 2014, pp.161
- XXV. **Hybrid Genetic Algorithm for the Single Row Facility Layout Problem**  
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- XXVI. **OTOMOBİL KABLO DEMETİ ÜRETİMİNDE ERGONOMİK RİSK FAKTÖRLERİNİ DİKKATE ALAN MONTAJ**

## HATTI DENGELME

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19. ULUSAL ERGONOMİ KONGRESİ, Balıkesir, Turkey, 27 - 29 September 2013, pp.801-808

XXVII. **An Ant Colony Optimization Algorithm for Traveling Salesman Problem**

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XXVIII. **Balancing assembly lines by considering ergonomic risk factors a preliminary case study**

BAYKASOĞLU A., DEMİRKOL AKYOL Ş., TAŞAN A. S., ÖZMEHMET TAŞAN S., Aktaş N., Özen B., Boz O., Tarkı G., Çimen T.

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XXIX. **A Multiple Objective Mathematical Programming Model for a Closed Loop Supply Chain Network Design under Uncertainty**

SUBULAN K., BAYKASOĞLU A., ÖZSOYDAN F. B., TAŞAN A. S., SELİM H.

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XXX. **A Hybrid Genetic Algorithm Based Approach for the Economic Lot Scheduling Problem**

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XXXI. **Otomobil Kablo Ağlarının Üretimi için Ergonomik Faktörleri Göz Önünde Bulunduran Montaj İstasyonu Tasarımı**

BAYKASOĞLU A., ÖZMEHMET TAŞAN S., TAŞAN A. S., DEMİRKOL AKYOL Ş., Aktaş N., Özen B., Tarkı G., Boz O.

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XXXII. **Klonal Seçim Algoritmasının Etmen Tabanlı Modelleme ve Benzetim Ortamında Realize Edilerek Oryantiring Problemine Uygulanması**

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XII. Üretim Araştırmaları Sempozyumu (ÜAS2012), İzmir, Turkey, 27 - 29 September 2012, pp.1119-1129

XXXIII. **An Application of Eco-Indicator 99 Methodology for Designing a Dynamic Green Tyre Closed-Loop Supply Chain Network with Multiple Recovery Options**

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OR54 - The Annual Conference of the Operational Research Society, Edinburgh, Saint Helena, 4 - 06 September 2012, pp.57

XXXIV. **A Hybrid Genetic Algorithm for the Traveling Repairman Problem**

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XXXV. **Reverse Logistics Network Design Model for Recycling and Retreading Process of Used Tires**

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IX. International Logistics and Supply Chain Congress, İzmir, Turkey, 27 - 29 October 2011, pp.177-186

XXXVI. **Analyzing the effects of scrap, rework, random machine breakdowns and partial backordering on the economic production quantity model using Taguchi method**

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XXXVII. **Modeling and analyzing of a construction project considering resource allocation through a hybrid methodology: Petri Nets and fuzzy rule based systems**

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XXXVIII. **Modeling Medium Term Planning Problem in a Closed-Loop Supply Chain with Remanufacturing Option via Fuzzy Mixed-Integer Programming**

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**XXXIX. A Reverse Logistics Network Design Model for Lead/Acid Battery Recycling**

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16th Annual Logistics Research Network Conference (LRN2011), Southampton, England, 7 - 09 September 2011, pp.55

**XL. Akü Üretiminde Tersine Lojistik Faaliyetlerini Dikkate Alarak Orta Dönem Planlama Modelinin Geliştirilmesi**

SUBULAN K., TAŞAN A. S.

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**XLI. Warm Up Period Determination for a Storage System Simulation Model Focusing on Material Handling Operations**

SUBULAN K., CERGİBOZAN Ç., TAŞAN A. S.

12. International Symposium on Econometrics Statistics and Operations Research, Denizli, Turkey, 26 - 29 May 2011, pp.220-228

**XLII. A Medium Term Planning Model for a Lead/Acid Battery Closed-Loop Supply Chain**

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**XLIII. A genetic algorithm based approach to vehicle routing problem with simultaneous pick-up and deliveries**

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