Erfan Babaee Tirkolaee

Associate Professor

Affiliation
Department of Industrial Engineering, Istinye University, Istanbul, Turkey

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Educational Data

2015 - 2019; Mazandaran University of Science and Technology, Iran
Ph.D., Industrial Engineering

2012 - 2014; Isfahan University of Technology, Iran
M.Sc., Industrial Engineering

2008 - 2012; Isfahan University of Technology, Iran
B.Sc., Industrial Engineering

Teaching Experiences

Oct 2020 - Present; Istinye University, Turkey
- Multi-Criteria Decision-Making
- Operations Research
- Modeling and Optimization
- Production Planning and Control
- Supply Chain Management
- Quality and Reliability Engineering
- Facilities Design and Planning
- Stochastic Models

Jan 2020 - Jul 2020; Damghan University, Iran
- Facility Layout Planning and Design
- Operations Research
- Engineering Economics

Jan 2016 - Jul 2020; University of Science & Technology of Mazandaran, Iran
- Probability Theory
- Operations Research
- Advanced Operations Research
- Facility Layout Planning and Design
- Engineering Economics

Jan 2019 - Jan 2020; Mazandaran University of Science & Technology, Iran
- Maintenance Planning
- Engineering Economics

Jan 2016 - Jul 2016; University College of Rouzbahan, Iran
- Maintenance Planning

Jan 2014 - Jan 2018; Payam Noor University, Iran
- Time and Motion Study
- Quality Control
- Industrial Engineering English
- Engineering Economics
- Management Information Systems

Sep 2012 - Jul 2014; Isfahan University of Technology, Iran (TA)
- Supply Chain Management
- Engineering Economics

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Work Experiences

Sep 2016 - Jul 2018; Farasanat Shomal Company, Iran
- Quality Assurance & Training Expert

Jul 2012 - Jul 2014; Sardsaz Novin Industries, Iran
- Production Planning Expert

Completed Training Courses

- Knowledge Management, *IMQ*, Iran (2016)
- SPC, *IMQ*, Iran (2017)
- Principles of Management and Supervision, *IMQ*, Iran (2016)
- ISO 9001:2015, *Sapco- Iran Khodro*, Iran (2016)
- IATF 16949:2016, *Sapco- Iran Khodro*, Iran (2017)
- TPM, IMQ, Iran (2016)
- PSA requirements (Peugeot-Citroën), *Saipa*, Iran (2017)
- Process Audit, *Sapco- Iran Khodro*, Iran (2016)
- Logistic Requirements, *Sapco- Iran Khodro*, Iran (2017)
- Customer Requirements, *Sapco- Iran Khodro*, Iran (2017)

Administrative Tasks

March 2022 - present; Istinye University, Turkey
- Erasmus Coordinator of the department
- Capstone Project Coordinator of the faculty

Postdoc Fellowship

July 2023 - July 2024; Lebanese American University, Lebanon
- Department of Industrial and Mechanical Engineering

Honorary Research Fellowship

June 2023 - present; Yuan Ze University, Taiwan
- Department of Industrial Engineering and Management

Erasmus Staff Mobility for Teaching

Feb 2022 - March 2022; Politehnica University of Bucharest, Romania
- Department of Industrial Engineering and Robotics

Research Interests

- Supply Chain Management
- Production Planning and Scheduling
- Mathematical Modeling
- Waste Management
- Transportation and Routing
- Artificial Intelligence

Languages

- Persian & Mazandarani (Native)
- English
- Turkish

Computer Skills

- LINGO
- Minitab
- MSP
- GAMS
- SPSS
- Corel
- MATLAB
- Catia
- Adobe Audition
- Office
- Photoshop

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Personal Interests

- Electronic keyboard
- Piano
- Iranian Tar and Setar
- Singing
- Swimming
- Bodybuilding
- Taekwondo
- Gymnastics
- Fishing

Editorial Memberships - WoS

1. Associate Editor of *IEEE Transactions on Fuzzy Systems* (ISSN: 1063-6706), IEEE (Q1),
2. Associate Editor of *Artificial Intelligence Review* (ISSN: 1573-7462), Springer (Q1),
3. Associate Editor of *Facta Universitatis, Series: Mechanical Engineering* (ISSN: 2335-0164), University of Niš (Q1),
4. Academic Editor of *PLOS ONE* (ISSN: 1932-6203), PLOS (Q1),
5. Associate Editor of *Journal of Dynamics and Games* (ISSN: 2164-6066), AIMS (Q3),
6. Editorial Advisory Board member of *Management Decision* (MD) (ISSN: 0025-1747), emerald (Q2).

Editorial Memberships - Scopus

1. Editorial Board member of *Journal of Fuzzy Extension & Applications* (*JFEA*), (ISSN: 2717-3453), Ayandegan Institute of Higher Education (Q1),
2. Editorial Board Member of *Intelligent Automation and Soft Computing: An International Journal* (ISSN: 1079-8587), Tech Science Press (Q2),
3. Editorial Board member of *International Journal of Supply and Operations Management (IJSOM)* (ISSN: 2383-2525). Kharazmi University (Q3),
4. Editorial Board member of *International Journal of Industrial Engineering and Production Research (IJIEPR)* (ISSN: 2008-4889). Iran University of Science and Technology (Q3).

Chief Editorial Memberships

- Co-Editor-in-Chief of *International Journal of Applied Optimization Studies* (*IJAOS*), (ISSN: 2645-4327).

Previous Editorial Memberships

1. Associate Editor of *Expert Systems with Applications* (ISSN: 0957-4174), Elsevier (WoS, Q1, 2022-2024).

Guest Editorial Activities - WoS

1. Tirkolaee, E.B., Weber, G. W., and Ranjbarzadeh, R.(2024). Advancing Knowledge-Based Economies and Societies through AI and Optimization: Innovations, Challenges, and Implications. *Frontiers in Artificial Intelligence*, frontiers (open),
2. Tirkolaee, E.B., Goli, A., and Weber, G. W. (2024). AI-driven Smart Infrastructures and Buildings for Sustainable Development in the Era of Industry 4.0. *Journal of Infrastructure, Policy and Development*, EnPress (open),

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3. Tirkolaee, E.B., Shokouhyar, S., Tanveer, M., and Siarry, P. (2023-2024). Advances of Optimization and Artificial Intelligence in Municipal Waste Management Systems. *Engineering Applications of Artificial Intelligence*, Elsevier (closed),

4. Garza-Reyes, J. A., Özceylan, E., Goli, A., Tirkolaee, E. B., and Liao, H. (2023-2024). Smart Fuzzy Optimization in Sustainable Manufacturing and Supply Chain Management. *IEEE Transactions on Fuzzy Systems*, IEEE (closed),

5. Tirkolaee, E. B., Azadnia, A. H., Ghadimi, P., Paydar, M. M., Leung, J., and Mirzazadeh, A. (2022-2023). Resilient, Sustainable and Smart Supply Chain Management in the Healthcare Industry: Application of Data Analytics and Optimization Techniques. *Operations Research Perspectives*, Elsevier (closed),

6. Tirkolaee, E. B. (2022-2023). Advances of Artificial Intelligence for Sustainable Engineering and Medical Applications: Machine Learning and Optimization. *Bioengineering,* MDPI (open),

7. Ali, S. S., Weber, G. W., Tirkolaee, E. B., and Goli, A. (2022-2023). Circular Economy Practices in the Context of Emerging Economies. *Sustainability*, MDPI (closed),

8. Erdibili, B., and Tirkolaee, E. B. (2022-2023). Sustainable Development of Industrial Engineering With the Application of Intelligent Systems. *Sustainability*, MDPI (closed),

9. Weber, G. W., Goli, A., and Tirkolaee, E. B. (2022-2023). Logistics and Operations Modelling and Optimisation for Sustainable Supply Chain. *Sustainability*, MDPI (closed),

10. Lotfi, R., Weber, G. W., and Tirkolaee, E. B. (2022). Recent advances in viable and sustainable supply chain management. *Environmental Science and Pollution Research*, Springer (closed),

11. Weber, G. W., Arabnia, H., Aydin, N. S., and Tirkolaee, E. B. and Goli, A. (2021). Advances of Machine Learning and Optimization in Healthcare Systems and Medicine. *Annals of Operations Research*, Springer (closed),

12. Tirkolaee, E. B., Goli, A., and Mirjalili, S. (2021). Circular Economy Application in Designing Sustainable Medical Waste Management Systems. *Environmental Science and Pollution Research*, Springer (closed),

13. Tirkolaee, E. B., Goli, A., Golpîra, H., and Gonzalez, E. S. (2021). Sustainable Global Supply Chain Management: From an International Perspective. *Sustainability*, MDPI (closed),

14. Goli, A., Tirkolaee, E. B., and Gonzalez, E. S. (2021). Machine Learning in Sustainable Industrial Development. *Mathematical Problems in Engineering*, Hindawi (closed),

15. Weber, G. W., Goli, A., and Tirkolaee, E. B. (2021). Computational Performance Analysis based on Novel Intelligent Methods: Exploration and Future Directions in Production and Logistics. *Foundations of Computing and Decision Sciences*, Poznań University of Technology (closed),

16. Tirkolaee, E. B., Goli, A. and Malmir, B. (2021). Recent advances of solutions algorithms for logistics routing problems. *Logistics*, MDPI (closed).

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Conference Chairmanships

○ Chair of the "*1st International Conference on Optimization and Data Science in Industrial Engineering* (ODSIE 2023)", November 16-17, 2023, Istinye University, Istanbul, Turkey,

○ Chair of the "*2nd International Conference on Optimization and Data Science in Industrial Engineering* (ODSIE 2024)", November 7-8, 2024, Istinye University, Istanbul, Turkey.

Scientific Panel Chairmanships/Memberships

○ Chair of the panel "Multi-Criteria Decision-Making in Logistics and Supply Chain Management" at *22nd International Logistics and Supply Chain Congress* (*LMSCM*2024), Istinye University, Istanbul, Turkey,

○ Chair of the panel "Machine Learning Algorithms" at *International Conference on Optimization and Data Science in Industrial Engineering* (*ODSIE*2023), Istanbul, Turkey,

○ International Program Committee Member of the *International Conference on Industrial Engineering, Intelligent Manufacturing, and Automation* (ICIEIMA 2023), Tashkent, Uzbekistan,

○ Chair of the panel "Optimization, Decision making and support systems" at *3rd International conference on science, engineering management and information technology* (*SEMIT*2023), Ankara, Turkey,

○ Chair of the "Special Session: Advances of Optimization and Artificial Intelligence in Municipal Waste Management Systems" at *The 5-th International Conference on Intelligent Decision Science- IDS*-2022, Istanbul, Turkey,

○ Chair of the panel "Recent Advances of Circular Economy and Sustainable Development in Supply Chain Management" at *2nd International conference on science, engineering management and information technology* (*SEMIT*2022-Sep), Ankara, Turkey,

○ Chair of the panel "Artificial intelligence and expert systems" at *1st International conference on science, engineering management and information technology* (*SEMIT* 2022-Feb), Ankara, Turkey,

○ Member of the "Special Session: Human Factors and their Keys into Logistics and Production Planning, Development and Research" at *MANUFACTURING Conference* 2022, Poznan, Poland,

○ Member of the "Special Session: Robust and stochastic modeling in logistics, production and warehouse planning in stream Specific Applications of Stochastic Modeling and Simulation in Engineering, Management and Science" and Organizing Committee at 31st *European Conference on Operational Research-EURO ATHENS* 2021, Athens, Greece,

Org./Tech./Sci. Committee Memberships

- "Information Technology 2025", Dubai, UAE (Feb 25-26, 2025),
- "The 6th International Conference on Supply Chain Management (ICSCM2025)", Hosei University, Tokyo, Japan (Feb 21-23, 2025),
- "International Conference on Recent Advances in Operations Research & Business Analytics (RAORBA-2024)", Bharatiya Vidya Bhavan Institute of Management Science, In association with Operational Research Society of India (ORSI), West Bengal, India,
- "22nd International Logistics and Supply Chain Congress (LMSCM2024), Istinye University, Turkey",
- "The UCN International Conference of Industrial Engineering (2024), Universidad Catolica del Norte, Chile",

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- "International Conference on Civil Engineering and Intelligent Construction, *ICCEIC*, China",
- "International conference on science, engineering management and information technology, (*SEMIT* 2022-Feb, *SEMIT* 2022-Sep, *SEMIT* 2023). Ankara, Turkey",
- "International Conference on Advanced Intelligent Systems for Sustainable Development (2019-2023), *AI2SD*. Tangier, Morocco",
- "The 5th International Conference on Intelligent Decision Science (2022), *IDS*-2022. Istanbul, Turkey",
- "*MANUFACTURING Conference* 2022, Poznan, Poland",
- "2nd International Conference on Challenges and New Solutions in Industrial Engineering and Management and Accounting (2021), *ICCNIEMA* 2021. Damghan, Iran",
- "International Conference on Polymeric, Metallic and Composite Materials (2021), *PMCM* 2021. Wuhan, China",
- "1st National Conference on Optimization & New Solution (2021). Nahavand, Iran; Methods (2021), *ONSM* 2021. Nahavand, Iran",
- "1st National Conference on Transportation & Logistic (2021). Babolsar, Iran",
- "7th International Conference on Logistics and Supply Chain Management (2020), *LSCM* 2020. Tehran, Iran",
- "Euro Conference on Catalysis & Chemical Engineering Advancements (2019), *Catalysis* 2019. Rome, Italy",
- "International Conference of Computer Science and Information Technology (2019), *ICoSNIKOM* 2019. Medan, Indonesia".

Research Council Review Panel Memberships

○ *Natural Sciences and Engineering Research Council of Canada (NSERC)*, Funded by the Federal Agency of Canada,
○ *Australian Research Council (ARC)*, Funded by the National Competitive Grants Program (NCGP) of Australia,
○ *Latvian Council of Science (LCS) of the Republic of Latvia*, under the supervision of the Minister for Education and Science,
○ *National Science Centre of Poland*, Funded by Ministry of Science and Higher Education (Poland),
○ *Health Institutes of TÜRKİYE (TÜSEB)*, Funded by Ministry of Health (TÜRKİYE).

Review Panel Memberships

○ Reviewer in more than **250** prestigious WoS journals such as *Computers & Operations Research* (Elsevier), *Annals of Operations Research* (Springer), *Computers & Industrial Engineering* (Elsevier), *Journal of Cleaner Production* (Elsevier), *Science of The Total Environment* (Elsevier), *Swarm and Evolutionary Computation* (Elsevier), *Waste Management* (Elsevier),
○ Reviewer in many international conferences (e.g., IFORS and IEEE),
○ Book proposal reviewer in emerald (2022).

Thesis Supervisions/Co-supervisions

○ 4 Ph.D. theses under co-supervision (Mazandaran University of Science and Technology (2); Poznan University of Technology (1), University of Tehran (1)),
○ 1 co-supervised Ph.D. theses (Mazandaran University),

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○ Supervised 9 master theses (2016-2024) (Mazandaran University of Science and Technology (8); University of Science and Technology of Mazandaran (1)).

PhD Internship Supervisions

○ Artificial Intelligence to Waste Management Systems Design. (Dec 2022). University of Mascara, Algeria (Student: Boualem Sid Ahmed El Mahdi).

International Thesis Examination Experiences

○ M.Sc. theses. (2022-present). UiT The Arctic University of Norway; Qatar University,

○ Ph.D. theses. (2023-present). Anna University, India,

○ Ph.D. theses. (2022-2023). Univerzita Hradec Králové, Czech Republic.

Speaking Experiences (Conferences/Seminars)

○ "*22nd International Logistics and Supply Chain Congress* (LMSCM2024)", "Multimodal last-mile e-mobility", Istinye University (Oct 17), Istanbul, Turkey,

○ "*International Conference of Logistics & Lean Engineering for Advanced Healthcare Methodologies Modelling* (LEAHMM2024)", "Integrated design of a sustainable medical waste management system with co-modal transportation network", Department of Chemical, Materials and Industrial Production Engineering of the University of Naples Federico II (Oct 11), Naples, Italy,

○ "*International Conference on Recent Advances in Operations Research & Business Analytics* (RAORBA-2024)", "Integrated design of a sustainable waste management system with co-modal transportation network", Bharatiya Vidya Bhavan Institute of Management Science, In association with Operational Research Society of India (ORSI) (July 26), West Bengal, India,

○ "*The* 17th *International Conference of Iranian Operations Research Society*", "Integrated design of a sustainable waste management system with co-modal transportation network", Kharazmi University (July 4), Tehran, Iran,

○ "*The International Conference on Applied Mathematics* (ICAM-2024)", "Integrated design of a sustainable waste management system with co-modal transportation network", Vidyasagar University (June 28), West Bengal, India,

○ "*The 3rd International Conference on Nonlinear Applied Analysis and Optimization* (ICNAAO-2023)", "Travelling Salesman Problem with Drone and Bicycle", National Institute of Technology (December 10), Durgapur, India,

○ "*The Second International Conference on Optimization of Production and Service Systems* (COPSS 2022)", "Sustainable Fuzzy Multiple-Trip Location-Routing Problem for Medical Waste Management during the COVID-19 Outbreak", University of Guilan (November 16), Guilan, Iran,

○ "*Logistics Systems Seminar Series 2022*", "Sustainable Aggregate Production-Transportation Planning", Yaşar University (November 7), Izmir, Turkey,

○ "*First APORS Youth Forum* 2022", "Sustainable fuzzy multi-trip location-routing problem for medical waste management during the COVID-19 outbreak", Operations Research Society of China (26 April),

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○ *"The 1st International Conference of Business Development and Digital Transformation (ICBDDT 2022)"*, "Sustainable Aggregate Production-Transportation Planning: Towards Digital Transformation", University of Isfahan (November 10), Isfahan, Iran,

○ *"Logistics Winter School 2022"*, "Sustainable fuzzy multi-trip location-routing problem for medical waste management during the COVID-19 outbreak", Amirkabir University of Technology (February 22), Iran,

○ *"International Conference on Logistics and Supply Chain Management (LSCM2020)"*, "Designing an Efficient Optimization System to Maximize the Total Value of Reverse Logistics in Waste Management with cars", Kharazmi University (December 23), Iran,

○ *"Statistics Probability Operational Research seminars (SPOR2021)"*, "Just-in-Time Energy-Aware Flow Shop Scheduling Problem With Outsourcing Option, Human Factors and Stochastic Demand", Atilim University (April 15), Turkey,

○ *"The 5th International Conference on Environment and Disasters (ICED2021)"*, "Sustainable location-allocation-transportation-inventory problem to design an urban waste management system under uncertainty", International Association of Management Science and Engineering Technology (IAMSET) (July 22), China,

○ *"The 2nd International Conference on Challenges and New Solutions in Industrial Engineering and Management and Accounting (ICCNSIEMA2021)"*, "Fuzzy Mathematical Programming and Self-Adaptive Artificial Fish Swarm Algorithm for Just-in-Time Energy-Aware Flow Shop Scheduling Problem with Outsourcing Option", Damghan University (May 6), Iran.

Invited Lectures

○ *"Traveling salesman problem with drone and bicycle: multimodal last-mile e-mobility"*, Department of Industrial Engineering and Management, Yuan Ze University, Taoyuan, Taiwan (October 2023),

○ *"Traveling salesman problem with drone and bicycle: multimodal last-mile e-mobility"*, Department of Industrial Engineering, UiT The Arctic University of Norway, Tromsø, Norway (September 2024),

○ *"Circular–Sustainable–Reliable Waste Management System Design"*, Department of Industrial Engineering and Management, Yuan Ze University, Taoyuan, Taiwan (November 2024).

Accomplishments/Awards

○ **Highly Ranked Scholar – Prior 5 Years by ScholarGPS**, *the 2nd best of "Industrial Engineering and Operations Research" in Turkey and the 9th best Worldwide* (2024),

○ **Outstanding Early Career Researcher Award (Runner-up)**, *IEEE Bio-inspired Computing STC Annual Event* (2023),

○ **Top 2% of reviewers for 2023**, *International Journal of Production Research* (IJPR),

○ **WM&R Rising Star Award 2022**: Tirkolaee, E. B., and Aydin, N. S. (2021). A sustainable medical waste collection and transportation model for pandemics. *Waste Management & Research*, 39, 34-44 (Best Paper Award),

○ Featured among the *"World's Top 2% Researchers/Scientists in 2023"* list identified by **Elsevier BV, Stanford University** — ranked 22,163rd out of 223,153 (all fields),

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○ Featured among the "*World's Top 2% Researchers/Scientists* in 2022" list identified by **Elsevier BV, Stanford University** — ranked 38,338th out of 210,199 (all fields),

○ Featured among the "*World's Top 2% Researchers/Scientists* in 2021" list identified by **Elsevier BV, Stanford University** — ranked 77,495th out of 200,409 (all fields),

○ **Best Researcher** of the Faculty of Engineering at *Istinye University* in 2021,

○ *Ph.D. award winner-top doctoral thesis* in **International Conference on Logistics and Supply Chain Management (LSCM2020)**, Kharazmi University, Iran,

○ *Top peer reviewer* and *Excellent reviewer* recognition by **Clarivate WoS**,

○ *Outstanding reviewer* recognition by **Journal of Cleaner Production, Computers and Industrial Engineering**, etc.

Grant Projects

○ Academic Supervisor in "Demand Forecasting in the Automotive Spare Parts Sector using Artificial Intelligence Tools", 2023-2024, *TUBITAK 2209-A University Students Research Projects Support Program*,

○ Researcher in "Sustainable Aggregate Production Planning using Multi-Criteria Decision-Making, Mathematical Modeling and Machine Learning", 2020-2022, *MSRT-TUBITAK joint research projects*.

Book Editorships

○ Mirzazadeh, A., Molamohamadi, Z., Erdebili, B., Tirkolaee, E. B., and Weber, G. W. (2024). Science, Engineering Management and Information Technology: Second International Conference, SEMIT 2023, Part I. *Communications in Computer and Information Science* (CCIS, volume 2198), Springer Cham. ISBN: 978-3-031-72284-4,

○ Mirzazadeh, A., Molamohamadi, Z., Erdebili, B., Tirkolaee, E. B., and Weber, G. W. (2024). Science, Engineering Management and Information Technology: Second International Conference, SEMIT 2023, Part II. *Communications in Computer and Information Science* (CCIS, volume 2199), Springer Cham. ISBN: 978-3-031-72287-5,

○ Mirzazadeh, A., Erdebili, B., Tirkolaee, E. B., Weber, G. W., and Kar, A. K. (2023). Science, Engineering Management and Information Technology: First International Conference, SEMIT 2022, Part I. *Communications in Computer and Information Science* (CCIS, volume 1808), Springer Cham. ISBN: 978-3-031-40395-8,

○ Mirzazadeh, A., Erdebili, B., Tirkolaee, E. B., Weber, G. W., and Kar, A. K. (2023). Science, Engineering Management and Information Technology: First International Conference, SEMIT 2022, Part II. *Communications in Computer and Information Science* (CCIS, volume 1809), Springer Cham. ISBN: 978-3-031-40398-9,

○ Molamohamadi, Z., Tirkolaee, E. B., Mirzazadeh, A., Weber, G. W. (2021). Logistics and Supply Chain Management. *Part of the Communications in Computer and Information Science book series* (CCIS, volume 1458), Springer Cham. ISBN: 978-3-030-89743-7.

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Editorial Notes/Prefaces - WoS

○ Erdebilli, B., and Tirkolaee, E. B. (2024). Sustainable Development of Industrial Engineering with the Application of Intelligent Systems. *Sustainability*, 16(5), 1928,

○ Ali, S. S., Weber, G. W., Tirkolaee, E. B., and Goli, A. (2024). Circular Economy Practices in the Context of Emerging Economies. *Sustainability*, 16(4), 1417,

○ Weber, G. W., Arabnia, H., Aydin, N. S., and Tirkolaee, E. B. (2023). Preface: advances of machine learning and optimization in healthcare systems and medicine. *Annals of Operations Research*, 328(1), 1-2,

○ Lotfi, R., Weber, G. W., and Tirkolaee, E. B. (2023). Recent advances in viable and sustainable supply chain management. *Environmental Science and Pollution Research*, 30(39), 89943-89944,

○ Weber, G. W., Goli, A., and Tirkolaee, E. B. (2023). Logistics and Operations Modelling and Optimization for Sustainable Supply Chain. *Sustainability*, 15(17), 12727,

○ Tirkolaee, E. B., Goli, A., Golpîra, H., and Santibañez Gonzalez, E. D. (2023). Sustainable Global Supply Chain Management from an International Perspective. *Sustainability*, 15(16), 12154,

○ Tirkolaee, E. B., Goli, A., and Malmir, B. (2023). Recent Advances of Solutions Algorithms for Logistics Routing Problems. *Logistics*, 7(3), 51,

○ Goli, A., Tirkolaee, E. B., and Weber, G. W. (2022). Preface to the Special Issue on Computational Performance Analysis based on Novel Intelligent Methods: Exploration and Future Directions in Production and Logistics. *Foundations of Computing and Decision Sciences*, 47(2), 107-110,

○ Tirkolaee, E. B., Goli, A., and Mirjalili, S. (2022). Circular economy application in designing sustainable medical waste management systems. *Environmental Science and Pollution Research*, 29(53), 79667-79668.

Papers - WoS

1. Ganji, S. S., and Tirkolaee, E. B. (2025). Intercity Road Transportation Assessment: Double-Frontier Q-Cross-Efficiency Method. *Transport Policy*, 167, 42-65,

2. Razavian, B., Seyedbeiglou, S. M. H., Tirkolaee, E. B., & Anka, F. (2025). A novel two-stage fuzzy classification method with different weight permutations for optimal GIS-based placement of wellness and sports centers. *Expert Systems with Applications*, 127282,

3. Nayeri, S., Sazvar, Z., and Tirkolaee, E. B. (2025). Viable supplier selection problem based on Industry 5.0 and circular economy aspects: a hybrid decision-making approach. *International Journal of Systems Science: Operations & Logistics*, 12(1), 2469117,

4. Babaei, A., Tirkolaee, E. B., and Ali, S.S. (2025). Assessing the viability of blockchain technology in renewable energy supply chains: A consolidation framework. *Renewable and Sustainable Energy Reviews*, 212, 115444,

5. Jafarian, M., Mahdavi, I., Tajdin, A., and Tirkolaee, E. B. (2025). A Multi-stage Machine Learning Model to Design a Sustainable-Resilient-Digitalized Pharmaceutical Supply Chain. *Socio-Economic Planning Sciences*, 98, 102165,

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6. Gokulachandran, J., Thenarasu, M., Pothkanoori, B., Narassima, M. S., and Tirkolaee, E. B. (2025). Reliability Prediction and Process Parameter Optimization of Welded Joints: Artificial Neural Network and Fuzzy Logic. Facta Universitatis, Series: Mechanical Engineering, 1-26,

7. Ganji, S. S., Tirkolaee, E. B., Jamshidi Bandari, S., and Fathi Ajirlu, S. (2025). Incorporation of prospect theory into double-frontier cross-efficiency: a case study of Iranian airline. International Journal of Systems Science: Operations & Logistics, 12(1), 2438865,

8. Meraji, H., Rahimi, D., Babaei, A., and Tirkolaee, E. B. (2025). Evaluating the Performance of Countries in COVID-19 Management: A Data-Driven Decision-Making and Clustering. *Applied Soft Computing*, 169, 112549,

9. Rani, P., Mishra, A. R., Alshamrani, A. M., Alrasheedi, A. F., and Tirkolaee, E. B. (2025). Picture fuzzy compromise ranking of alternatives using distance-to-ideal-solution approach for selecting blockchain technology platforms in logistics firm. *Engineering Applications of Artificial Intelligence*, 142, 109896,

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