

# Dilber UZUN OZSAHİN

**Address:** College of Health Sciences, Department of Medical Diagnostic Imaging, University of Sharjah

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**Scopus:** [Uzun Ozsahin, Dilber- Author details – Scopus](#)

**Google Scholar:** [Dilber Uzun Ozsahin - Google Scholar](#)

**Research gate:** [Dilber Uzun Ozsahin \(researchgate.net\)](#)

## Language:

- Arabic (medium)
- Turkish (native)
- English (fluent in speaking, writing)
- Spanish (basic in speaking, writing)

## Education

- **Bachelor Science**, Physics, 2002-2006. Cukurova University, Faculty of Science and Letters, Physics Department 01330, Adana, Turkey.
- **Master of Natural and Applied Science**, High Energy Physics, 2006-2010. Cukurova University, Faculty of Science and Letters, Physics Department 01330, Adana, Turkey. Masters' thesis title: "CMS-CASTOR Forward Detector 2008 Test Beam Data Analysis and 2008-2009 RADDAM data Analysis".
- **Ph.D with honors in Physics**, Programa Oficial de Doctorado en Fisica, 2010-2014, Universitat Autònoma de Barcelona, Barcelona, Spain, thesis title: "Modeling, simulation, and evaluation of a high resolution VIP positron emission mammography scanner based on pixelated semiconductor detector".
- **Postdoctoral Research Fellow**, 2015-2016 Gordon Center for Medical Imaging, NMMI Radiology Department, Massachusetts General Hospital & Harvard Medical School
- **Asst. Prof. Dr.**, 2016-2018, Near East University, Faculty of Engineering, Department of Biomedical Engineering
- **Visiting Prof. Dr.**, 15/06/2017-15/09/2017 Gordon Center for Medical Imaging, NMMI Radiology Department, Massachusetts General Hospital & Harvard Medical School
- **Assoc. Prof. Dr.**, 2018-2021, Near East University, Faculty of Engineering, Department of Biomedical Engineering

## Current Position

- **Assoc. Prof. Dr.**, October 2021-Present, College of Health Sciences, Department of Medical Diagnostic Imaging, University of Sharjah
- **Research Center Director:** 2021-Present, Operational Research and Integrated Artificial Intelligence in Healthcare, Near East University
- **Research Group Coordinator:** 2022-Present, Research Institute for Medical and Health Sciences, Operational Research and Integrated Artificial Intelligence in Healthcare, University of Sharjah
- **Advisor of Chancellor,** 2023-Present, Near East University

## Computer Skills

- OS: LINUX, WINDOWS, MAC
- PROGRAMMING LANGUAGE: C++, CMSSW, ROOT, GAMOS, LATEX, GATE, Neural Network
- Image Reconstruction (FBP, OSEM, SOE, LM-OSEM), Machine Learning, Multicriteria Decision Analysis

## Teaching Experience

- AI and Informatic in Radiology Fall 2023-2024
- Introduction to Research- 75 Spring 2023-2024
- Hospital Lab Rotation Spring 2023- 2024
- Introduction to Research- 75 Fall 2022-2023
- Introduction to Research- 75 Spring 2022-2023
- AI in Radiology Fall 2022-2023
- Hospital Lab Rotation Spring 2022- 2023
- Hospital Lab Rotation Spring 2021- 2022
- Introduction to Research- 75 Fall 2021-2022
- Introduction to Research- 72 Fall 2021-2022
- Introduction to Research- 72 Spring 2021-2022
- Research Project 76 Spring 2021-2022
- Research Project 74 Spring 2021-2022
- Research Project 73 Spring 2021-2022
- Research Project 71 Spring 2021-2022
- Electromagnetic Theory, Cukurova University (Fall-Spring 2008), NEU
- Nuclear Medicine, Massachusetts Institute of Technology (November 2014- April 2015), NEU

- Modeling of biological systems, Near East University (Summer-Spring-Fall 2016-2017), NEU
- Physics in Nuclear Medicine, Near East University (Fall 2016), NEU
- Simulation of nuclear medicine imaging devices, Near East University (Fall 2016-2017) (Postgraduate), NEU
- Electromagnetic Theories, Near East University (Fall-Spring 2016-2017), NEU
- Designing biomedical imaging systems, Near East University (Spring 2016-2017) (Postgraduate), NEU
- Radiology physics, Near East University (Spring-Fall 2016-2017), NEU
- Fuzzy Applications to Radiology (Fall-2017-2018) (Postgraduate), NEU
- Statistical Multi Criteria Evaluation for Medical Imaging, Near East University (Fall-Spring 2017-2018) (Postgraduate), NEU
- Decision Making Theories for Biomedical Engineering, Near East University (Fall-Spring 2017-2018) (Postgraduate), NEU
- Graduation Project I, II Near East University (Fall 2017-2018), NEU
- Graduation Project I, II , Near East University (Spring 2017-2018), NEU
- Graduation Project I,II Near East University (Fall 2018-2019), NEU
- Applications od Decision Theories in Healthcare (Fall 2018-2019) (Postgraduate), NEU
- Multi Criteria Decision Making Theories for Engineers (Fall 2019-2019) (Postgraduate), NEU
- Graduation Project I, II , Near East University (Spring 2018-2019), NEU
- Applications od Decision Theories in Healthcare (Spring 2018-2019) (Postgraduate), NEU
- Multi Criteria Decision Making Theories for Engineers (Spring 2018-2019) (Postgraduate), NEU
- Graduation Project I,II Near East University (Fall 2019-2020), NEU
- Applications od Decision Theories in Healthcare (Fall 2019-2020) (Postgraduate), NEU
- Multi Criteria Decision Making Theories for Engineers (Fall 2019-2020) (Postgraduate), NEU
- Graduation Project I, II , Near East University (Spring 2019-2020), NEU
- Applications od Decision Theories in Healthcare (Spring 2019-2020) (Postgraduate), NEU
- Multi Criteria Decision Making Theories for Engineers (Spring 2019-2020) (Postgraduate), NEU
- Graduation Project I, II , Near East University (Fall 2020-2021), NEU
- Applications od Decision Theories in Healthcare (Fall 2020-2021) (Postgraduate), NEU
- Multi Criteria Decision Making Theories for Engineers (Fall 2020-2021) (Postgraduate), NEU
- Itroduction to research (Fall 2020-2021), UOS

#### Other Experience

- Research Center Director: 2021-Present, Operational Research and Integrated Artificial Intelligence in Healthcare, Near East University
- Research Group Coordinator: 2022-Present, Research Institute for Medical and Health Sciences, Operational Research and Integrated Artificial Intelligence in Healthcare, University of Sharjah
- Advisor of Chancellor, 2023-Present, Near East University
- Vice Dean in Innovation (Faculty Engineering) (2016-2017)
- Board Member of Scientific Research Project, Near East University (2018-Present)
- Board Member of DESAM Research Institute, Near East University (2018-2021)
- Head of Artificial Iintelligence Research Group, Near East University (2018-2021)
- Head of Fuzzy Logic Research Group, Near East University (2018-2021)
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#### Editorial Boards

- Guest Editor: MDPI, Diagnostics, Intelligent Imaging in Nuclear Medicine
- Guest Editor: Journal of Healthcare Engineering, Fuzzy-Based Multi-Criteria Decision-Making Methods in Healthcare
- Section Editor: Fuzzy Based Multi Criteria Decision Analysis for Engineering, Bentham Science
- Book Editor, Springer, Professional Practice in Earth Sciences, Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering
- Book Editor, Elsevier, Modern Practical Healthcare Issues in Biomedical Instrumentation
- Book Editor, Bentham books, Applied Machine Learning and Multi-Criteria Decision-making in Healthcare
- Book Editor, IET, Institution of Engineering and Technology, Practical Applications Of Biomedical Instrumentation Using Artificial Intelligence

#### Courses

- HMS-CTSC Medical device development
- Plagiarism
- Authorship
- Collaborative Research
- Data Management
- Financial Responsibility
- Mentoring
- Peer Review
- Research Misconduct
- Radiation Safety
- PET-MR Safety

## Directed Ms.C and Ph.D

### • 25 Ms.C student (completed)

1. DEEP PARKINSON 's DISEASE DIAGNOSIS USING STACKED AUTO-ENCODER (Esam Alshareef), 2018
2. WHITE BLOOD CELLS IDENTIFICATION USING TRANSFER LEARNING:GOOGLNET (Anas Habash), 2018
3. PROMETHEE ANALYSIS OF RETINOBLASTOMA TREATMENT TECHNIQUES (Mordecai Maisaini), 2018
4. CLASSIFICATION OF SEGMENTED CHEST X-RAY IMAGES USING NEURAL NETWORK (Sepideh Rostami), 2018
5. SIMULATION AND EVALUATION OF A COST-EFFECTIVE HIGH-PERFORMANCE BRAIN PET SCANNER (Musa Sani Musa), 2018
6. SIMULATION AND EVALUATION OF LOW STAGES OF BRAIN CANCER TREATMENT TECHNIQUES (Ali Jaber), 2019
7. EVALUATION OF MIGRAINE DRUGS USING MULTI-CRITERIA DECISION METHOD (Lafi Hamidat), 2019
8. A CRITICAL EVALUATION OF CANCER CARE IN NIGERIA, COMPARATIVE ANALYSIS TO OTHER COUNTRIES, AND CUSTOMIZATION OF STANDARD CANCER CARE SYSTEM FOR NIGERIA (Nuhu Abdulhaq Isa), 2019
9. ASSESSING THE EFFECTIVENESS OF POINT-OF- CARE DEVICES AND AUTOMATED CHEMISTRY ANALYZERS IN THE MANAGEMENT OF DIABETES MELLITUS (Mubarak Taiwa), 2019
10. PROMETHEE ANALYSIS OF CERVICAL DISC DEVICES (Rukayat Salawu), 2019
11. SIMULATION AND EVALUATION OF THE IMPACT OF AUNPS IN TARGETING, APOPTOTIC, NECROTIC PROCESS ON SEVERAL TYPES OF CANCER CELL (SAFA ANMAR AMEEN), 2019
12. PROMETHEE ANALYSIS OF BREAST CANCER IMAGING DEVICES (Hasan erdagli), 2019
13. Simulation and Evaluation of Optical Transparent Ceramic Scintillators Based High-Performance Brain PET Scanner (Samuel T. Abebe), 2019
14. ANALYSIS OF ARTIFICIAL LIMBS SYNTHETIC MATERIALS USING FUZZY LOGIC TECHNOLOGY, AHMAD A. N. DALLOUL, 2020
15. EVALUATION OF HEPATITIS C DIRECT ACTING ANTIVIRAL TREATMENTS USING FUZZY PROMETHEE, (FUNSHO DAVID ALIM), 2020
16. HEMORRHOIDS TREATMENT TECHNIQUES ANALYSIS USING FUZZY LOGIC TECHNOLOGY, ABDULAZIZ TABBAKHA, 2020
17. Evaluating the different treatment methods for Osteoporosis using the Fuzzy PROMETHEE, Sharmain Dube, 2021
18. Asthma and its medical devices, Sabareela Victory Moro, 2021
19. COMPARATIVE ANALYSIS AND THE APPLICATION OF NON-CONTACT TEMPERATURE READING DEVICES IN THE CONTROL OF COVID-19 USING FUZZY PROMETHEE, Basil Barth Duwa, 2021
20. EVALUATING TREATMENT ALTERNATIVES FOR VARICOSE VEINS IN THE LEG, (MOHAMMED ABUDAQQA), 2021
21. THE ROLE OF ARTIFICIAL INTELLIGENCE IN THE PREDICTION OF LUNG CANCER (Natacha USANASE), 2022
22. EVALUATION OF THE NONPHARMACOLOGIC METHODS OF CONTROLLING PAIN DURING CHILDBIRTH; USING ANALYTICAL EVALUATION MODELS (EFE PRECIOUS ONAKPOJERUO), 2022
23. EVALUATION OF CARCINOID TUMOR TREATMENT OPTIONS USING MULTI-CRITERIA DECISION MAKING(MCDM) (DECLAN IKECHUKWU EMEGANO), 2022
24. MACHINE LEARNING APPROACHES FOR PREDICTING MALARIA AND MONKEYPOX DISEASES, AMAR SAAD ZINELABDIN MOHAMED, 2023
25. EVALUATION OF BIOMATERIALS USED IN ORTHOPEDIC IMPLANTS, ESTHER CHIFURUMNANYA ANYANWU, 2023

### 5 Ph.D (completed)

- MOTION CORRECTION STRATEGIES IN PET/MRI SCANNERS AND DEVELOPMENT OF A DEEP LEARNING BASED COMPUTER AIDED DETECTION SYSTEM (Ali Işın), 2018
- Simulation and Evaluation of a Cost-Effective High-Performance Positron Emission Mammography (PEM) Scanner (Musa Sani Musa), 2021
- CT DOSE REDUCTION: PROPOSED TO ESTABLISH DIAGNOSTIC REFERENCE LEVELs IN ADDIS ABABA, ETHIOPIA (Jemal Edris), 2022
- THE APPLICATION OF MACHINE LEARNING TO MEDICAL DISEASE DIAGNOSIS, (Mubarak Taiwo Mustapha), 2022
- MACHINE LEARNING APPROACHES FOR PREDICTING MALARIA AND MONKEYPOX DISEASES (Basil Duwa), 2023

- 4 Ph.D student (present)
- 3 Ms.C student (present)

### Awards and Grant

- The best Academician of University Award, Near East University, 2021
- The most efficient academician of University Award, Near East University, 2021
- The best Academician of University Award, Near East University, 2022
- The most efficient academician of University Award, Near East University, 2022
- European Biotechnology Congress, Best Oral Presentation award 1. place, Ranking of diagnostic SARS-COV-2 IgG antibody tests by using multi-criteria decision-making theory, 2021

- Near East University, Research Project “Meme Kanseri Goruntulemede Kullanilacak Yüksek Performanslı ve Düşük Maliyetli Yakın Doğu Üniversitesi Pozitron Emisyon Mamografisi (YDÜ-PEM) Cihazının Tasarlanması, Simülasyonu ve YDÜ-PEM cihazından görüntü oluşturma algoritmaları”, March 2017- March 2020
- Recipient of the International Postdoctoral Research Scholarship from The Scientific and Technological Research Council of Turkey (TUBITAK) for Harvard Medical School and Massachusetts General Hospital, Jun 2015 – Jun 2016.
- Employment from the ERC grant for PhD study at IFAE, UAB, Barcelona, Spain, May 2011– June 2014
- Turkish Atomic Energy Authority (TAEK) Research Scholarship for CERN, Aug 2008 – Dec 2009

## References

- **Georges El Fakhri** ([elfakhri@pet.mgh.harvard.edu](mailto:elfakhri@pet.mgh.harvard.edu))  
Director, MGH PET Core Co-Director, Division of Nuclear Medicine & Molecular Imaging (Research) Director, Gordon Center for Medical Imaging Professor of Radiology, Harvard Medical School  
**Phone:** (617) 726-9640
- **Yasar Onel** ([yasar.onel@cern.ch](mailto:yasar.onel@cern.ch))  
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**Phone:** (319) 3351853, (319) 3351686
- **Hamid Sabet** ([hsabet@mgh.harvard.edu](mailto:hsabet@mgh.harvard.edu))  
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**Phone:** +90 (232) 750 7704
- **Isa Dumanoglu** ([isa.dumanoglu@cern.ch](mailto:isa.dumanoglu@cern.ch))  
Cukurova University Science and High Energy Physics Department Saricam, Adana, 01130 Turkey  
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- **Kerem Cankocak** ([kerem.cankocak@cern.ch](mailto:kerem.cankocak@cern.ch))  
Istanbul Technical University Physics Department Maslak, Istanbul, 34367 Turkey  
**Phone:** +90 (212) 2853213

## Other Interest and Hobbies

- ✓ Web designer
- ✓ Writing (popular science, human psychology)
- ✓ Any kind of sport (mainly running, cycling, tennis, volleyball)

## PUBLISHED PAPERS (2019-2024):

1. Farooq, M., Ahmad, H., Ozsahin, D.U., Khan, A., Nawaz, R., Almohsen, B. A study of heat and mass transfer flow of a variable viscosity couple stress fluid between inclined plates (2024) *Modern Physics Letters B*, 38 (9)
2. A Ahmad, QM Farooq, H Ahmad, DU Ozsahin, F Tchier, A Ghaffar, Ghulam Mustafa Study on symptomatic and asymptomatic transmissions of COVID-19 including flip bifurcation, 2024, *International Journal of Biomathematics*
3. Jibril, M.M., Malami, S.I., Jibrin, H.B., Muhammad, U.J., Duhu, M.A., Usman, A.G., Ibrahim, A.G., Ozsahin, D.U., Lawal, Z.K., Abba, S.I. New random intelligent chemometric techniques for sustainable geopolymer concrete: low-energy and carbonfootprint initiatives (2024) *Asian Journal of Civil Engineering*, 25 (2), pp. 2287-2305.
4. Ozsahin, D.U., Jalili, B., Asadi, Z., Shateri, A., Jalili, P., Ganji, D.D., Ahmad, H., Nofal, T.A. Investigation of turbine cooling using semi-analytical methods in non-Newtonian fluid flow with porous wall (2024) *Case Studies in Thermal Engineering*, 53
5. Ibrahim, S., Sulaiman, T.A., Yusuf, A., Ozsahin, D.U., Baleanu, D. Wave propagation to the doubly dispersive equation and the improved Boussinesq equation (2024) *Optical and Quantum Electronics*, 56 (1)
6. Umar, H., Aliyu, M.R., Usman, A.G., Ghali, U.M., Abba, S.I., Ozsahin, D.U. Prediction of cell migration potential on human breast cancer cells treated with Albizia lebeck ethanolic extract using extreme machine learning (2023) *Scientific Reports*, 13 (1)
7. Yassin, M.A., Usman, A.G., Abba, S.I., Ozsahin, D.U., Aljundi, I.H. Intelligent learning algorithms integrated with feature engineering for sustainable groundwater salinization modelling: Eastern Province of Saudi Arabia (2023) *Results in Engineering*, 20
8. Mukhtar, M., Adun, H., Cai, D., Obiora, S., Taiwo, M., Ni, T., Ozsahin, D.U., Bamisile, O. Juxtaposing Sub-Sahara Africa’s energy poverty and renewable energy potential (2023) *Scientific Reports*, 13 (1)
9. Latha, K.B.S., Reddy, M.G., Tripathi, D., Bég, O.A., Kuharat, S., Ahmad, H., Ozsahin, D.U., Askar, S. Computation of stagnation coating flow of electro-conductive ternary Williamson hybrid GO - AU - Co 3O 4/ EO nanofluid with a Cattaneo–Christov heat flux model and magnetic induction (2023) *Scientific Reports*, 13 (1)
10. Abobakr, M., Uzun, B., Uzun Ozsahin, D., Sanlidag, T., Arikan, A. Assessment of UTI Diagnostic Techniques Using the Fuzzy–PROMETHEE Model (2023) *Diagnostics*, 13 (22)
11. Butt, A.R., Saqib, A.A., Bakar, A., Ozsahin, D.U., Ahmad, H., Almohsen, B. Investigating the fractional dynamics and sensitivity of an epidemic model with nonlinear convex rate (2023) *Results in Physics*, 54

12. Adun, H., Adedeji, M., Ampah, J.D., Olusola, B., Ozsahin, D.U., Hu, Y. Novel heat transfer fluid for maximum recovery of heat of compression: A steady state analysis on improving the performance of liquid air energy storage (2023) *Journal of the Taiwan Institute of Chemical Engineers*, 152
13. Amur, A.A., Memon, K.N., Shah, S.F., Amur, M., Ahmad, H., Siddiqui, A.M., Ozsahin, D.U., Askar, S. The hydrodynamics of gravity-driven vessel drainage of third order fluid using perturbation method (2023) *Heliyon*, 9 (10)
14. Zahran, E.H.M., Ibrahim, R.A., Ozsahin, D.U., Ahmad, H., Shehata, M.S.M. New diverse exact optical solutions of the three dimensional Zakharov–Kuznetsov equation (2023) *Optical and Quantum Electronics*, 55 (9)
15. Zil-E-Huma, Butt, A.R., Raza, N., Ahmad, H., Ozsahin, D.U., Tchier, F. Different solitary wave solutions and bilinear form for modified mixed-KDV equation (2023) *Optik*, 287
16. Eze, M.C., Vafaei, L.E., Eze, C.T., Tursoy, T., Ozsahin, D.U., Mustapha, M.T. Development of a Novel Multi-Modal Contextual Fusion Model for Early Detection of Varicella Zoster Virus Skin Lesions in Human Subjects (2023) *Processes*, 11 (8)
17. Ahmad, H., Ozsahin, D.U., Farooq, U., Fahmy, M.A., Albalwi, M.D., Abu-Zinadah, H. Comparative analysis of new approximate analytical method and Mohand variational transform method for the solution of wave-like equations with variable coefficients (2023) *Results in Physics*, 51
18. Zahran, E.H.M., Ahmad, H., Askar, S., Uzun Ozsahin, D. New impressive performances for the analytical solutions to the (1 + 1)-dimensional van der-waals gas system against its numerical solutions (2023) *Results in Physics*, 51
19. Umar, H., Rizaner, N., Usman, A.G., Aliyu, M.R., Adun, H., Ghali, U.M., Uzun Ozsahin, D., Abba, S.I. Prediction of Cell Migration in MDA-MB 231 and MCF-7 Human Breast Cancer Cells Treated with Albizia Lebbeck Methanolic Extract Using Multilinear Regression and Artificial Intelligence-Based Models (2023) *Pharmaceuticals*, 16 (6)
20. Ameen, Z.S., Mostafa, H., Ozsahin, D.U., Mubarak, A.S. Accelerating SARS-CoV-2 Vaccine Development: Leveraging Novel Hybrid Deep Learning Models and Bioinformatics Analysis for Epitope Selection and Classification (2023) *Processes*, 11 (6)
21. Ozsahin, I., Onakpojeruo, E.P., Uzun, B., Uzun Ozsahin, D., Butler, T.A. A Multi-Criteria Decision Aid Tool for Radiopharmaceutical Selection in Tau PET Imaging (2023) *Pharmaceuticals*, 15 (4)
22. Uzun Ozsahin, D., Precious Onakpojeruo, E., Bartholomew Duwa, B., Usman, A.G., Isah Abba, S., Uzun, B. COVID-19 Prediction Using Black-Box Based Pearson Correlation Approach (2023) *Diagnostics*, 13 (7)
23. Dawd, J.E., Uzun Ozsahin, D., Ozsahin, I. DEVELOPING DIAGNOSTIC REFERENCE LEVELS FOR CT EXAMINATIONS IN ADDIS ABABA, ETHIOPIA (2023) *Radiation protection dosimetry*, 199 (3), pp. 245-245.
24. Uzun Ozsahin, D., Onakpojeruo, E.P., Uzun, B., Mustapha, M.T., Ozsahin, I. Mathematical Assessment of Machine Learning Models Used for Brain Tumor Diagnosis (2023) *Diagnostics*, 13 (4)
25. Abba, S.I., Benaafi, M., Usman, A.G., Ozsahin, D.U., Tawabini, B., Aljundi, I.H. Mapping of groundwater salinization and modelling using meta-heuristic algorithms for the coastal aquifer of eastern Saudi Arabia (2023) *Science of the Total Environment*, 858
26. Sancar, N., Onakpojeruo, E.P., Inan, D., Uzun Ozsahin, D. Adaptive Elastic Net Based on Modified PSO for Variable Selection in Cox Model with High-Dimensional Data: A Comprehensive Simulation Study (2023) *IEEE Access*, 11, pp. 127302-127316.
27. Jalili, P., Mirzaei, A., Jalili, B., Shateri, A., Ganji, D.D., Ozsahin, D.U., Ahmad, H. Thermal analysis of transverse fluid flow in a gradient porous media with the exponentially boundary conditions (2023) *Modern Physics Letters B*
28. Balcioglu, O., Usanase, N., Uzun, B., Ozsahin, I., Ozsahin, D.U. A comparative analysis of DOACs vs warfarin for venous thromboembolism treatment in renal insufficiency (2023) *Turkish Journal of Vascular Surgery*, 32 (1), pp. 42-50.
29. Shehata, M.S.M., Ahmad, H., Zahran, E.H.M., Askar, S., Ozsahin, D.U. Isomorphic shut form valuation for quantum field theory and biological population models (2023) *Open Physics*, 21 (1)
30. Almutairi, B., Ahmad, I., Almohsen, B., Ahmad, H., Ozsahin, D.U. NUMERICAL SIMULATIONS OF TIME-FRACTIONAL PDES ARISING IN MATHEMATICS AND PHYSICS USING THE LOCAL MESHLESS DIFFERENTIAL QUADRATURE METHOD (2023) *Thermal Science*, 27 (Special Issue 1), pp. 263-272.
31. Uzun Ozsahin, D., Mustapha, M.T., Uzun, B., Duwa, B., Ozsahin, I. Computer-Aided Detection and Classification of Monkeypox and Chickenpox Lesion in Human Subjects Using Deep Learning Framework (2023) *Diagnostics*, 13 (2)
32. Seyer Cagatan, A., Taiwo Mustapha, M., Bagkur, C., Sanlidag, T., Ozsahin, D.U. An Alternative Diagnostic Method for C. neoformans: Preliminary Results of Deep-Learning Based Detection Model (2023) *Diagnostics*, 13 (1)
33. Rao, S., Sharan, K., Sukumar, S., Chandraguthi, S.G., Nisha Dsouza, R., David, L.R., Ravichandran, S., Uzun, B., Kadavigere, R., Uzun Ozsahin, D. Systematic Review on Diagnostic Reference Levels for Computed Tomography Examinations in Radiation Therapy Planning (2023) *Diagnostics*, 13 (6)
34. Usanase, N., Uzun, B., Ozsahin, D.U., Ozsahin, I. A look at radiation detectors and their applications in medical imaging (2023) *Japanese Journal of Radiology*

35. Uzun Ozsahin, D., Ikechukwu Emegano, D., Uzun, B., Ozsahin, I. The Systematic Review of Artificial Intelligence Applications in Breast Cancer Diagnosis (2023) *Diagnostics*, 13 (1)
36. Uzun Ozsahin, D., Balcioglu, O., Usman, A.G., Ikechukwu Emegano, D., Uzun, B., Abba, S.I., Ozsahin, I., Yagdi, T., Engin, C. Clinical Modelling of RVHF Using Pre-Operative Variables: A Direct and Inverse Feature Extraction Technique (2022) *Diagnostics*, 12 (12)
37. (2022) *Diagnostics*, 12 (12)
38. Tuncyurek, O., Kadam, K., Uzun, B., Uzun Ozsahin, D. Applicability of American College of Radiology Appropriateness Criteria Decision-Making Model for Acute Appendicitis Diagnosis in Children (2022) *Diagnostics*, 12 (12)
39. Arikan, A., Sanlidag, T., Sayan, M., Uzun, B., Ozsahin, D.U. Fuzzy-Based PROMETHEE Method for Performance Ranking of SARS-CoV-2 IgM Antibody Tests (2022) *Diagnostics*, 12 (11)
40. Uzun Ozsahin, D., Mustapha, M.T., Bartholomew Duwa, B., Ozsahin, I. Evaluating the Performance of Deep Learning Frameworks for Malaria Parasite Detection Using Microscopic Images of Peripheral Blood Smears (2022) *Diagnostics*, 12 (11)
41. Mustapha, M.T., Ozsahin, D.U., Ozsahin, I., Uzun, B. Breast Cancer Screening Based on Supervised Learning and Multi-Criteria Decision-Making (2022) *Diagnostics*, 12 (6)
42. Uzun Ozsahin, D., Ozgocmen, C., Balcioglu, O., Ozsahin, I., Uzun, B. Diagnostic AI and Cardiac Diseases (2022) *Diagnostics*, 12 (12)
43. Ozsahin, D.U., Isa, N.A., Uzun, B. The Capacity of Artificial Intelligence in COVID-19 Response: A Review in Context of COVID-19 Screening and Diagnosis (2022) *Diagnostics*, 12 (12)
44. Dawd, J.E., Ozsahin, D.U., Ozsahin, I. A Review of Diagnostic Reference Levels in Computed Tomography (2022) *Current Medical Imaging*, 18 (6), pp. 623-632.
45. Ozsahin, I., Uzun, B., Ozsahin, D.U. Selection of photodetectors in nuclear medical imaging using MCDM methods (2022) *Journal of Instrumentation*, 17 (6)
46. Ozsahin, D.U., Gelisen, M.I., Taiwo, M., Agachan, Y., Rahi, D., Uzun, B. Decision Analysis of the COVID-19 Vaccines (2021) *Eurobiotech Journal*, 5 (S1), pp. 20-25.
47. Ozsahin, I., Mustapha, M.T., Albarwary, S., Sanlidag, B., Ozsahin, D.U., Butler, T.A. An investigation to choose the proper therapy technique in the management of autism spectrum disorder (2021) *Journal of Comparative Effectiveness Research*, 10 (5), pp. 423-437.
48. Albarwary, S.A., Kibarar, A.G., Mustapha, M.T., Hamdan, H., Ozsahin, D.U. The Efficiency of AuNPs in Cancer Cell Targeting Compared to Other Nanomedicine Technologies Using Fuzzy PROMETHEE (2021) *Journal of Healthcare Engineering*
49. Uzun, B., Ozsahin, D.U., Hamdan, H., Charafeddine, J., Ünsal, G., Özyer, D. Optimization of Dental Devices and Tools Used on Teeth (2021) *BioMed Research International*
50. Helwan, A., Ma'Aitah, M.K.S., Hamdan, H., Ozsahin, D.U., Tuncyurek, O. Radiologists versus Deep Convolutional Neural Networks: A Comparative Study for Diagnosing COVID-19 (2021) *Computational and Mathematical Methods in Medicine*
51. Gökçekuş, H., Ozsahin, D.U., Eini, N., Uzun, B. Evaluating and selecting the best domestic water standards (2021) *Desalination and Water Treatment*
52. Yildirim, F.S., Sayan, M., Sanlidag, T., Uzun, B., Ozsahin, D.U., Ozsahin, I. Comparative Evaluation of the Treatment of COVID-19 with Multicriteria Decision-Making Techniques (2021) *Journal of Healthcare Engineering*
53. Baddal, B., Sanlidag, T., Uzun, B., Uzun Ozsahin, D. The use of double border-screening strategy in the surveillance and prevention of COVID-19 (2021) *Journal of Infection and Public Health*, 14 (6), pp. 757-758.
54. Gelete, G., Gokcekus, H., Ozsahin, D.U., Uzun, B., Gichamo, T. Evaluating disinfection techniques of water treatment (2020) *Desalination and Water Treatment*, 177, pp. 408-415.
55. Gichamo, T., Gökçekuş, H., Ozsahin, D.U., Gelete, G., Uzun, B. Evaluation of different natural wastewater treatment alternatives by fuzzy promethee method (2020) *Desalination and Water Treatment*, 177, pp. 400-407.
56. Gokcekus, H., Ozsahin, D.U., Mustapha, M.T. Simulation and evaluation of water sterilization devices (2020) *Desalination and Water Treatment*, 177, pp. 431-436.
57. Yahya, M.N., Gökçekuş, H., Ozsahin, D.U., Uzun, B. Evaluation of wastewater treatment technologies using topsis (2020) *Desalination and Water Treatment*, 177, pp. 416-422.
58. Sayan, M., Sarigul Yildirim, F., Sanlidag, T., Uzun, B., Uzun Ozsahin, D., Ozsahin, I. Capacity Evaluation of Diagnostic Tests for COVID-19 Using Multicriteria Decision-Making Techniques (2020) *Computational and Mathematical Methods in Medicine*
59. Erdagli, H., Uzun Ozsahin, D., Uzun, B. Evaluation and simulation of breast cancer imaging devices using multi-criteria decision theory (2020) *Journal of Instrumentation*, 15 (5), art. no. C05029
60. Ozsahin, I., Uzun Ozsahin, D., Makarov, P.A., Musa, M.S., Mok, G.S.P. Simulation of novel scintillator crystals for brain PET (2020) *Journal of Instrumentation*, 15 (5)

61. Ozsahin, I., Sekeroglu, B., Musa, M.S., Mustapha, M.T., Uzun Ozsahin, D. Review on Diagnosis of COVID-19 from Chest CT Images Using Artificial Intelligence (2020) *Computational and Mathematical Methods in Medicine*
62. Gökçekuş, H., Ozsahin, D.U., Al-Othman, D. Evaluation of the impact of sustainable transportation alternatives on environment using fuzzy PROMETHEE method (2019) *International Journal of Innovative Technology and Exploring Engineering*, 8 (8), pp. 3254-3259.
63. Almuhsen, M., Gökçekuş, H., Ozsahin, D.U. The most common factors effecting ground water quality (2019) *International Journal of Innovative Technology and Exploring Engineering*, 8 (3), pp. 79-83.
64. Ozsahin, I., Sharif, T., Ozsahin, D.U., Uzun, B. Evaluation of solid-state detectors in medical imaging with fuzzy PROMETHEE (2019) *Journal of Instrumentation*, 14 (1),

#### BOOK EDITOR:

- 1- Ozsahin, D.U. and Ozsahin, I. (2022) *Modern Practical Healthcare Issues in Biomedical Instrumentation*. London, England: Elsevier.
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- 4- Ozsahin, D. U., Gökçekuş, H., Uzun, B., & LaMoreaux, J. W. (Eds.). (2021). *Application of multi-criteria decision analysis in environmental and civil engineering* (pp. 37-41). Cham, Switzerland: Springer.
- 5- Ozsahin, I., Ozsahin, D. U., & Uzun, B. (Eds.). (2021). *Applications of multi-criteria decision-making theories in healthcare and biomedical engineering*.
- 6- Ilker Ozsahin, Dilber Uzun Ozsahin; *Applied Machine Learning and Multi-Criteria Decision-Making in Healthcare* (2021) <https://doi.org/10.2174/9781681088716121010004>
- 7- Walid A Zgallai, Dilber Uzun Ozsahin, *Artificial Intelligence and Image Processing in Medical Imaging* (2024), Elsevier

#### BOOK CHAPTERS:

- 1- Mubarak Taiwo Mustapha, Ilker Ozsahin and Dilber Uzun Ozsahin, Introduction to machine learning and artificial intelligence, *Artificial Intelligence and Image Processing in Medical Imaging* (2024), Elsevier
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- 6- Ozsahin, D. U., Duwa, B. B., Idoko, J. B., Tirah, G., Alchoib, A., Abuedia, A. M., ... & Ozsahin, I. (2024). Design of interactive neural input device for arm prosthesis, *Practical Design and Applications of Medical Devices*
- 7- Ozsahin, D. U., Duwa, B. B., Idoko, J. B., Rwiyerika, A., Ishimwe, D., Hassan, S., & Ozsahin, I. (2024). Internet of things-based patient well-being monitoring system, *Practical Design and Applications of Medical Devices*
- 8- Ozsahin, D. U., Duwa, B. B., Idoko, J. B., Hamdan, M.K., Aljammal, G., Elsafdy, K. & Ozsahin, I. (2024). IoT-based infant monitoring device, *Practical Design and Applications of Medical Devices*
- 9- Ozsahin, D. U., Emegano, D. I., Haider, O., Ibrahim, I., Duwa, B. B., Alayouti, F., & Ozsahin, I. (2024). Construction of a miniaturized Covid-19 medical kit, *Practical Design and Applications of Medical Devices*
- 10- Ozsahin, D. U., Emegano, D. I., Skaik, M., Al Obied, M., Abid, O., Duwa, B. B., & Ozsahin, I. (2024). Development of a polymerase chain reaction device, *Practical Design and Applications of Medical Devices*

- 11- Ozsahin, D. U., Duwa, B.B., Shoaib, E., Hashi, I., Ismail, M., & Ozsahin, I. (2024). Construction of an electrophysiotherapy device, *Practical Design and Applications of Medical Devices*
- 12- Ozsahin, D. U., Duwa, B. B., Idoko, J. B., Edward, D., Khorzom, L., Hussein, O. H., ... & Ozsahin, I. (2024). Voice-controlled prosthetic hand, *Practical Design and Applications of Medical Devices*
- 13- Ozsahin, D. U., Duwa, B. B., Idoko, J. B., Subedar, W. A. U. R., Edward, D., Barot, J. D., & Ozsahin, I. (2024). 3D Bioprinting of prosthetic legs, *Practical Design and Applications of Medical Devices*
- 14- Ozsahin, D. U., Duwa, B. B., Idoko, J. B., Gambu, J., Günasti, C.Y., Yavuz, T. & Ozsahin, I. (2024). Face recognition application in healthcare using computer web camera, *Practical Design and Applications of Medical Devices*
- 15- Ozsahin, D. U., Duwa, B. B., Idoko, J. B., Eddin, M. S., & Ozsahin, I. (2024). Detection of retinal blood clots in the eye using laser doppler technology, *Practical Design and Applications of Medical Devices*
- 16- Ozsahin, D. U., Duwa, B. B., Idoko, B., Aleter, A., Idoko, J. B., & Ozsahin, I. (2024). Sleep apnea detection device, *Practical Design and Applications of Medical Devices*
- 17- Ozsahin, D. U., Duwa, B. B., Idoko, J. B., Eldasougi, N.E., Naesa, M. Mustapha, M.T., Attili & Ozsahin, S.I. (2024). Design considerations for diagnostic radiology department, *Practical Design and Applications of Medical Devices*
- 18- Ozsahin, D. U., Duwa, B. B., Emegano, D. I., Mustapha, M. T., Usanase, N., Onakpojeruo, E. P., & Ozsahin, I. (2024). Construction of an automated hand sanitizer dispenser used against transmissible diseases, *Practical Design and Applications of Medical Devices*
- 19- Ozsahin, D. U., Duwa, B. B., Edward, D., Ali, M. I., Idoko, J. B., & Ozsahin, I. (2024). Design and modeling of a novel blood sampling (Phlebotomy) chair, *Practical Design and Applications of Medical Devices*
- 20- Ozsahin, D. U., Emegano, D. I., Hassan, A., Aldakhil, M., Banat, A. M., Duwa, B. B., & Ozsahin, I. (2024). A speech recognition system using technologies of audio signal processing, *Practical Design and Applications of Medical Devices*
- 21- Ozsahin, D. U., Emegano, D. I., Bader, B. A., Duwa, B. B., & Ozsahin, I. (2024). Blood circuit in hemodialysis, *Practical Design and Applications of Medical Devices*
- 22- Ozsahin, D. U., Emegano, D. I., Alsabbagh, R., Duwa, B.B. & Ozsahin, I. (2024). Temperature reducer machine, *Practical Design and Applications of Medical Devices*
- 23- Ozsahin, D. U., Duwa, B. B., Himaid, A., Emegano, D. I., & Ozsahin, I. (2024). Development of a brain-computer interface device converting brain signals to audio and written words, *Practical Design and Applications of Medical Devices*
- 24- Ozsahin, D. U., Duwa, B. B., Edward, D., Cham, D., Idoko, J. B., & Ozsahin, I. (2024). A dual biventricular resynchronized pacemaker with a remote monitoring system, *Practical Design and Applications of Medical Devices*
- 25- Ozsahin, D. U., Emegano, D.I., Abuamsha, B.J.N., Duwa, B.B. & Ozsahin, I. (2024). The design of a noninvasive blood pressure measurement device, *Practical Design and Applications of Medical Devices*
- 26- Ozsahin, D. U., Emegano, D. I., Altartoor, S. M., Yousef, M. E. O., Duwa, B. B., & Ozsahin, I. (2024). Electromechanical hand-driven electromyogram signal, *Practical Design and Applications of Medical Devices*
- 27- Ozsahin, D. U., Emegano, D. I., Hassan, A., Aldakhil, M., Banat, A. M., Duwa, B. B., & Ozsahin, I. (2024). Design of endoscopic medical device, *Practical Design and Applications of Medical Devices*
- 28- Ozsahin, I., Ozsahin, D. U., & Mubarak, M. T. (2022). Introduction to biomedical instrumentation. In *Modern Practical Healthcare Issues in Biomedical Instrumentation* (pp. 1-2). Academic Press.
- 29- Ozsahin, D. U., Hejazi, M., Adnan, O. S., Alloush, H., Khabbaz, A., Idoko, J. B., ... & Ozsahin, I. (2022). Designing a 3D printed artificial hand. In *Modern Practical Healthcare Issues in Biomedical Instrumentation* (pp. 3-18). Academic Press.
- 30- Ozsahin, D. U., Idoko, J. B., Jarwah, A., Badran, H., Wajid, N. A., & Ozsahin, I. (2022). Construction of smart assistive gloves for paralytic people. In *Modern Practical Healthcare Issues in Biomedical Instrumentation* (pp. 19-29). Academic Press.
- 31- Ozsahin, D. U., Almoqayad, A. S., Ghader, A., Alkahlout, H., Idoko, J. B., Duwa, B. B., & Ozsahin, I. (2022). Development of smart jacket for disc. In *Modern Practical Healthcare Issues in Biomedical Instrumentation* (pp. 31-46). Academic Press.
- 32- Ozsahin, D. U., Idoko, J. B., Almagharby, B., Merdhah, M. B., & Ozsahin, I. (2022). Evaluation of a finite element laminectomy. In *Modern Practical Healthcare Issues in Biomedical Instrumentation* (pp. 47-68). Academic Press.
- 33- Ozsahin, D. U., Idoko, J. B., Usman, A. A., Namatovu, R., Ibrahim, K. A., & Ozsahin, I. (2022). Construction of an ultrasonic sight device for visually impaired people. In *Modern Practical Healthcare Issues in Biomedical Instrumentation* (pp. 69-76). Academic Press.
- 34- Salama, R. M., Idoko, J. B., Meck, K., Halimani, S. T., & Ozsahin, D. U. (2022). Design and implementation of a smart stick for visually impaired people. In *Modern Practical Healthcare Issues in Biomedical Instrumentation* (pp. 77-85). Academic Press.



- 35- Salama, R. M., Idoko, J. B., Halimani, S. T., Meck, K., & Ozsahin, D. U. (2022). Mobile application development for hearing assistance. In *Modern Practical Healthcare Issues in Biomedical Instrumentation* (pp. 87-95). Academic Press.
- 36- Ozsahin, D. U., Idoko, J. B., Mpofu, M. S., Swalehe, I. R., & Ozsahin, I. (2022). Development of medical dispatcher: A robot that delivers medicine. In *Modern Practical Healthcare Issues in Biomedical Instrumentation* (pp. 97-103). Academic Press.
- 37- Ozsahin, D. U., Idoko, J. B., Hejazi, M., Allaia, R., Ahmed, M., Badawi, Z., & Ozsahin, I. (2022). Design and implementation of wireless helmet and mechanical wheelchair. In *Modern Practical Healthcare Issues in Biomedical Instrumentation* (pp. 105-121). Academic Press.
- 38- Ozsahin, D. U., Idoko, J. B., Duwa, B. B., Zeidan, M., & Ozsahin, I. (2022). Construction of vehicle shutdown system to monitor driver's heartbeats. In *Modern Practical Healthcare Issues in Biomedical Instrumentation* (pp. 123-138). Academic Press.
- 39- Ozsahin, D. U., Idoko, J. B., Aderotoye, B. O., Alasais, L. M., Burakah, H., Shaban, J. H. S. A., & Ozsahin, I. (2022). Development of a modern electronic stethoscope. In *Modern Practical Healthcare Issues in Biomedical Instrumentation* (pp. 139-150). Academic Press.
- 40- Ozsahin, D. U., Idoko, J. B., Muriritirwa, N. T., Moro, S., & Ozsahin, I. (2022). Application and impact of phototherapy on infants. In *Modern Practical Healthcare Issues in Biomedical Instrumentation* (pp. 151-165). Academic Press.
- 41- Ozsahin, D.U., Duwa, B.B., Mustapha, M.T., Uzun, B. (2022). Introduction. In: Uzun Ozsahin, D., Uzun, B., Sanlidag, T., LaMoreaux, J. (eds) *Decision Analysis Applied to the Field of Environmental Health*. Professional Practice in Earth Sciences. Springer, Cham. [https://doi.org/10.1007/978-3-030-96682-9\\_1](https://doi.org/10.1007/978-3-030-96682-9_1)
- 42- Ozsahin, D. U., Mustapha, M. T., & Uzun, B. (2022). Theoretical Aspect of Decision Analysis. In *Decision Analysis Applied to the Field of Environmental Health* (pp. 5-9). Cham: Springer International Publishing.
- 43- Iravanian, A., Al-Dubai, S. Y., Uzun, B., & Ozsahin, D. U. (2022). Investigating the Effect of Quarry Dust Enhancement on Engineering Behavior of Expansive Soil Using MCDM. In *Decision Analysis Applied to the Field of Environmental Health* (pp. 11-23). Cham: Springer International Publishing.
- 44- Syidanova, A., Gokcekus, H., Uzun, B., & Ozsahin, D. U. (2022). Superior Types of Bamboo in Healthcare Using with Fuzzy PROMETHEE. In *Decision Analysis Applied to the Field of Environmental Health* (pp. 25-36). Cham: Springer International Publishing.
- 45- Syidanova, A., Çağnan, Ç., & Ozsahin, D. U. (2022). Evaluation of the Green Campus and Sustainable Campus: Green Building Rating System and Sustainability Approach in Higher Education. In *Decision Analysis Applied to the Field of Environmental Health* (pp. 37-46). Cham: Springer International Publishing.
- 46- Syidanova, A., Çağnan, Ç., & Ozsahin, D. U. (2022). Green Campus Improvement: Using Green Building Rating Systems in Universities. In *Decision Analysis Applied to the Field of Environmental Health* (pp. 47-52). Cham: Springer International Publishing.
- 47- Alas, M., Ozsahin, D. U., Gokcekus, H., Uzun, B., & Albrka, S. I. (2022). Environmental Impact Assessment for the Production of Aggregates Used in the Construction Industry by Using MCDA. In *Decision Analysis Applied to the Field of Environmental Health* (pp. 53-63). Cham: Springer International Publishing.
- 48- Muriel, F. F. Y., Ozsahin, D. U., & Uzun, B. (2022). Performance Evaluation of the Petrol Production Methods in Bakken Reservoirs. In *Decision Analysis Applied to the Field of Environmental Health* (pp. 113-123). Cham: Springer International Publishing.
- 49- Altamimi, S., Onur, Z. Ü., Ozsahin, D. U., & Uzun, B. (2022). Socio-spatial Interactions Within Modern Workspace Interiors Post Covid-19. In *Decision analysis applied to the field of environmental health* (pp. 125-134). Cham: Springer International Publishing.
- 50- Uzun Ozsahin, D., Uzun, B., Syidanova, A., & Mustapha, M. T. (2021). Introduction. In *Application of multi-criteria decision analysis in environmental and civil engineering* (pp. 1-6). Academic Press.
- 51- Uzun, B., Uzun Ozsahin, D., & Duwa, B. (2021). Theoretical aspects of multi-criteria decision-making (MCDM) methods. In *Application of multi-criteria decision analysis in environmental and civil engineering* (pp. 7-16). Academic Press.
- 52- Uzun Ozsahin, D., Ahmed, M., & Uzun, B. (2021). Analytical Hierarchy Process (AHP). *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 17-24.
- 53- Uzun, B., Taiwo, M., Syidanova, A. & Uzun Ozsahin, D. (2021). The Technique For Order of Preference by Similarity to Ideal Solution (TOPSIS). *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 25-30.
- 54- Uzun, B., Bwiza, R. A., & Uzun Ozsahin, D. (2021). ELimination Et Choix Traduisant La REalité (ELECTRE). *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 31-36.

- 55- Uzun, B., Almasri, A., & Uzun Ozsahin, D. (2021). Preference ranking organization method for enrichment evaluation (Promethee). *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 37-42.
- 56- Uzun, B., & Uzun Ozsahin, D. (2021). Vlse criterion optimization and compromise solution in serbian (VIKOR). *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 43-46.
- 57- Uzun, B., Uzun Ozsahin, D., & Duwa, B. (2021). Fuzzy Logic and Fuzzy Based Multi Criteria Decision Analysis. *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 47-56.
- 58- Altıparmak, H., Salama, R., Gökçekuş, H., & Uzun Ozsahin, D. (2021). Predict future climate change using artificial neural networks. *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 57-64.
- 59- Syidanova, A., Gokcekus, H., & Uzun Ozsahin, D. (2021). Superior types of bamboo as a construction material with MCDM methods. *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 65-86.
- 60- Gichamo, T., Gökçekuş, H., Uzun Ozsahin, D., Gelete, G., & Uzun, B. (2021). Ranking of natural wastewater treatment techniques by Multi-criteria Decision Making (MCDM) methods. *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 87-100.
- 61- Gelete, G., Gökçekuş, H., Uzun, B., Uzun Ozsahin, D., & Gichamo, T. (2021). Evaluating Disinfection Techniques of Water Treatment Using Multi-criteria Decision-Making Method. *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 101-112.
- 62- Aşıksoy, G., Uzun, B., & Uzun Ozsahin, D. (2021). Evaluation of the Learning Models Using Multi-criteria Decision Making Theory. *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 113-126.
- 63- Al Muhisen, M., Gökçekuş, H., & Uzun Ozsahin, D. (2021). The Most Common Factors Effecting Ground Water Quality. *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 127-140.
- 64- Almuhisen, M., Gökçekuş, H., Uzun, B., & Uzun Ozsahin, D. (2021). Selecting the Best Public–Private Partnership Contract by Using the Fuzzy Method. *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 141-155.
- 65- Yahya, M. N., Usman, I. M. T., Gökçekuş, H., Uzun Ozsahin, D., & Uzun, B. (2021). Comparative Analysis for Irrigation Water Application Methods Using TOPSIS. *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 157-171.
- 66- Umar, I. K., Gökçekuş, H., & Uzun Ozsahin, D. (2021). Comparative Analysis of Flexible Pavement Design Methods Using Fuzzy PROMETHEE. *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 173-182.
- 67- Sözen, S., Duba, S., Uzun Ozsahin, D., Aslanova, F., Gökçekuş, H., & Orhon, D. (2021). Evaluation and Optimization of the Treatment Scheme for the Paint Industry Effluents Using Multi-criteria Decision Theory. *Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering*, 197-209.
- 68- Ozsahin, I., Ozsahin, D. U., Uzun, B., & Mustapha, M.T. (2021). Introduction. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 1-2). Academic Press.
- 69- Uzun, B., Ozsahin, I., Agbor, V. O., & Ozsahin, D. U. (2021). Theoretical aspects of multi-criteria decision-making (MCDM) methods. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 3-40). Academic Press.
- 70- Ozsahin, D. U., Meck, K., Halimani, S. T., Uzun, B., & Ozsahin, I. (2021). Fuzzy PROMETHEE-based evaluation of brain cancer treatment techniques. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 41-58). Academic Press.
- 71- Ozsahin, D. U., Denker, A., Kibarar, A. G., & Kaba, S. (2021). Evaluation of stage IV brain cancer treatment techniques. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 59-69). Academic Press.
- 72- Ozsahin, D. U., Sheshakli, S., Kibarar, A. G., Denker, A., & Duwa, B. B. (2021). Analysis of early stage breast cancer treatment techniques. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 71-80). Academic Press.
- 73- Ozsahin, I., Ozsahin, D. U., Meck, K., Halimani, S. T., & Uzun, B. (2021). Fuzzy PROMETHEE–based evaluation of skin cancer treatment techniques. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 81-98). Academic Press.
- 74- Ozsahin, I., Isa, N. A., Meck, K., Halimani, S. T., Uzun, B., & Ozsahin, D. U. (2021). Fuzzy PROMETHEE–based evaluation of prostate cancer treatment techniques. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 99-116). Academic Press.

- 75- Fuzzy PROMETHEE-based evaluation of skin cancer treatment techniques, Ozsahin, I., Ozsahin, D.U., Meck, K., Halimani, S.T., Uzun, B. 2021, Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering pp. 81-98
- 76- Mustapha, M. T., Ozsahin, D. U., & Ozsahin, I. (2021). Comparative evaluation of point-of-care glucometer devices in the management of diabetes mellitus. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 117-136). Academic Press.
- 77- Ünsal, G., & Ozsahin, D. U. (2021). Comparison of MRI devices in dentistry. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 137-151). Academic Press.
- 78- Ozsahin, D. U., Salawu, R., Uzun, B., & Ozsahin, I. (2021). Application of fuzzy PROMETHEE on hearing aid. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 153-162). Academic Press.
- 79- Mustapha, M. T., Uzun, B., Ozsahin, D. U., & Ozsahin, I. (2021). A comparative study of X-ray based medical imaging devices. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 163-180)
- 80- Ozsahin, D. U., Ozsahin, I., Nyakuwanikwa, K., Simbanegavi, T. W., & Uzun, B. (2021). Evaluation and simulation of dental instrument sterilization techniques with fuzzy PROMETHEE. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 181-195).
- 81- Mustapha, M. T., Ozsahin, D. U., Uzun, B., & Ozsahin, I. (2021). Application of fuzzy TOPSIS in the sterilization of medical devices. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 197-216).
- 82- Sarigül, F., Hülagü, S., & Ozsahin, D. U. (2021). Evaluation of oral antiviral treatments for chronic Hepatitis B using fuzzy PROMETHEE. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 249-260).
- 83- Ozsahin, D. U., Hamidat, L., Alimi, F. D., Uzun, B., & Ozsahin, I. (2021). Evaluation of migraine drugs using MCDM methods. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 261-275).
- 84- Isa, N. A., Ozsahin, D. U., & Ozsahin, I. (2021). Top cancer treatment destinations: a comparative analysis using fuzzy PROMETHEE. In *Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering* (pp. 277-308). Academic Press.
- 85- Bartholomew, B., Ozsahin, D. U., & Ozsahin, I. (2021). Introduction. *Applied Machine Learning and Multi-Criteria Decision-Making in Healthcare*, 1.
- 86- Bartholomew, B., Ozsahin, D. U., & Ozsahin, I. (2021). Machine Learning in Healthcare. *Applied Machine Learning and Multi-Criteria Decision-Making in Healthcare*, 5.
- 87- Maisaini, M., Taseli, M., Ozsahin, D. U., & Ozsahin, I. (2021). Analysis of Retinoblastoma Treatment Techniques with Fuzzy PROMETHEE. *Applied Machine Learning and Multi-Criteria Decision-Making in Healthcare*, 235.
- 88- Tabbakha, A., Ozsahin, D. U., Uzun, B. & Ozsahin, I. (2021). Selection of Hemorrhoid Treatment Techniques Using a Multi Criteria Decision Making Technique. *Applied Machine Learning and Multi-Criteria Decision-Making in Healthcare*, 245.
- 89- Maisaini, M., Dimililer, K., & Ozsahin, D. U. (2021). Intelligent Learning Systems for the Environmental Factors that Affect the Distribution of Some Leishmaniasis Vectors. *Applied Machine Learning and Multi-Criteria Decision-Making in Healthcare*, 284.
- 90- Fuzzy PROMETHEE-based evaluation of prostate cancer treatment techniques, Ozsahin, I., Isa, N.A., Meck, K., (...), Uzun, B., Ozsahin, D.U. Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering pp. 99-116, 2021
- 91- Smart system for the blind, YE Ismaeel, MB Merdiah, AO Alani, F Al-Turjman, I Ozsahin, DU Ozsahin, Institution of Engineering and Technology (IET), (2020).
- 92- An extraocular muscle stimulation system based on EOG and FES, M Arto, AF Alabboud, F Al-Turjman, I Ozsahin, DU Ozsahin, Institution of Engineering and Technology (IET), (2020).
- 93- A framework for blind people using wireless medical sensors network, M Fakhouri, A Jubran, R Ghaleb, T Adada, F Al-Turjman, I Ozsahin, Institution of Engineering and Technology (IET), (2020).
- 94- Acoustic glass for deaf people: a new device, A Mohammed, S Zahrah, M Al-Bahri, BB Duwa, F Al-Turjman, I Ozsahin, Institution of Engineering and Technology (IET), (2020).
- 95- Toward a smart hospital room and automated systems, MB Alramli, M Dib, MA Dib, HM Alghazalat, M Mustapha, F Al-Turjman, Institution of Engineering and Technology (IET), (2020).
- 96- The development of a blood infusion warmer device: a new device, AE Jundi, O Alkhalidi, M Elamin, S Dube, F Al-Turjman, I Ozsahin, Institution of Engineering and Technology (IET), (2020).

- 97- Evaluation of mobile patient monitoring: a study in practice, SE Abdulaal, A Sawtari, S Akman, H Alhajjibrahim, SV Moro, F Al-Turjman, Institution of Engineering and Technology (IET), (2020).
- 98- Neural network applications in medicine, I Ozsahin, DU Ozsahin, Biomedical Signal Processing and Artificial Intelligence in Healthcare, 183-206, 2020
- 99- Fuzzy logic in medicine, DU Ozsahin, B Uzun, I Ozsahin, MT Mustapha, MS Musa, Biomedical Signal Processing and Artificial Intelligence in Healthcare, 153-182, 2020
- 100- Introduction to Machine Learning- Ilker Ozsahin, Dilber Uzun Ozsahin, Bentham, 2020
- 101- Evaluation of Retinoblastoma Treatment Techniques- Mordecai Maisaini, Dilber Uzun Ozsahin, Ilker Ozsahin, Bentham, 2020
- 102- Analysis of Hemorrhoids Treatment Methods using Multi-Criteria Techniques, Abdulaziz Mohammed, Dilber Uzun Ozsahin, Berna Uzun, Ilker Ozsahin, Bentham, 2020
- 103- Analysis of Ear Hearing Aids using multi-criteria decision theory, Mustapha Taiwo Mubarak, Dilber Uzun Ozsahin, Berna Uzun, Ilker Ozsahin, Bentham, 2020
- 104- Predicting the alterations, they could cause in genetic diseases. by supporting Artificial Intelligence technology, Ramiz Salama, Dilber Uzun Ozsahin, Bentham, 2020

## CONFERENCE

1. Advances in Science & Engineering Technology (ASET), Organizer, Chair, February 20-23, 2023, Dubai, UAE
2. Advances in Science & Engineering Technology (ASET), Organizer, Chair, February 21-24, 2022, Dubai, UAE
3. Global Summit on Public Health and Preventive Medicine (GSPHPM2022), Plenary Speaker, The SCIENTISST, Munich, Germany
4. European Biotechnology Congress September, 23-25 2021, virtual
5. 14th International Conference, DeSE2021, 2021 Sharjah, UAE
6. European Biotechnology Congress September 23-25 2021, virtual
7. 14th International Conference, DeSE2021, 2021 Sharjah, UAE
8. 15th Topical Seminar on Innovative Particle and Radiation Detectors (IPRD19) 14-17 October 2019 Siena, Italy
9. Second International Conference on The Environment Survival and Sustainability, 7-11 October 2019, Near East University, TRNC, Mersin 10 Turkey (plenary talk)
10. Advances in Science and Engineering Technology (ASET) Engineering Innovations in Healthcare International Conference, Sharjah - UAE 21st March 2019
11. 2nd International Conference on Water Problems in the Mediterranean Countries, 2019, Near East University, TRNC, Mersin 10 Turkey
12. The International Workshops on Radiation Imaging Detectors (IWORLD), Sundsvall, Sweden, June 2018
13. Advances in Science and Engineering Technology (ASET) Engineering Innovations in Healthcare International Conference, Sharjah - UAE 21st March 2018
14. International Symposium on Industry 4.0 and Applications (ISIA 2017), Karabük, Turkey
15. 9th International Conference on Theory and Application of Soft Computing, Computing with Words and Perception, ICSCCW 2017, 24-25 August 2017, Budapest, Hungary
16. IEEE Nuclear Science Symposium and Medical Imaging Conference (23-29 October 2011) Valencia, Spain.
17. 15th International Workshop on Radiation Imaging Detectors (23-27 June, 2013) Paris, France.
18. 22<sup>nd</sup> International Symposium on Room-Temperature Semiconductor X-ray and Gamma-ray Detectors, (31 October- 7 November 2015 IEEE Nuclear Science Symposium, San Diego, USA)
19. SNMMI 2016 Annual Meeting, (11-15, June, 2016) San Diego, California
20. 14th Topical Seminar on Innovative Particle and Radiation Detectors (IPRD16) (3-6 October 2016), Siena, Italy
21. IEEE Nuclear Science Symposium and Medical Imaging Conference (29 October- 6 November 2016) Strasbourg, France.

## Talks And Posters

1. Comparative evaluation of blood conservation techniques in cardiovascular surgery using multicriteria decision-making Methods, Ozlem Balcioglu, Declan Ikechukwu Emegano, Berna Uzun, Türker Şahin, Ilker, Ozsahin, Dilber Uzun Ozsahin, Advances in Science & Engineering Technology (ASET), Speaker, February 20-23, 2023, Dubai, UAE
2. Comparative Evaluation of 3D Filaments, Used in Additive Manufacturing of Biomedical Tools; Using Fuzzy PROMETHEE, Dilber Uzun Ozsahin, Basil Bartholomew Duwa, Efe Precious Onakpojeruo, Berna Uzun, Ilker Ozsahin, Advances in Science & Engineering Technology (ASET), Invited Speaker, February 20-23, 2023, Dubai, UAE
3. Global Summit on Public Health and Preventive Medicine (GSPHPM2022), Plenary Speaker, Evaluation of the Sickle Cell Treatment Options using Fuzzy Topsis Technique, The SCIENTISST, Munich, Germany
4. Evaluation of Construction Materials Waste Disposal Methods using Multi Criteria Decision Analysis, Huseyin Gokcekus Nivin Ghaboun, Berna Uzun, Dilber Uzun Ozsahin, Advances in Science & Engineering Technology (ASET), 2022
5. Evaluation of the Thyroid Cancer Treatment Techniques with Fuzzy VIKOR, Mubarak Taiwo Mustapha, Dilber Uzun Ozsahin, Berna Uzun, Ilker Ozsahin, Advances in Science & Engineering Technology (ASET), 2022
6. Evaluating electronic blood pressure measurement devices with fuzzy TOPSIS technique, Qasem A Alyazji, Dilber Uzun Ozsahin, Berna Uzun, Ilker Ozsahin, Advances in Science & Engineering Technology (ASET), 2022

7. Evaluation of the Effectiveness of Double Border-Screening Strategy with and without Quarantine in Prevention of COVID-19, Buket Baddal, Dilber Uzun Ozsahin, Berna Uzun, Tamer Sanlidag, Advances in Science & Engineering Technology (ASET), 2022
8. Fuzzy PROMETHEE Method for Evaluating Performance of SARS-CoV-2 IgM Antibody Tests, Ayse Arikan Tamer Sanlidag, Murat Sayan, Berna Uzun, Dilber Uzun Ozsahin, European Biotechnology Congress 2021, (plenary talk)
9. Performance Ranking of Diagnostic SARS-CoV -2 IgG Antibody Tests by Using Multi-Criteria Decision-Making Theory, Dilber Uzun Ozsahin, Ayse Arikan, Tamer Sanlidag, Murat Sayan, Berna Uzun, 14th International Conference, DeSE2021, (plenary talk)
10. Ranking of SARS-CoV-2 Antigen Tests by Evaluating Common Criteria by Multi-criteria Decision-Making Theory, Tamer Sanlidag, Ayse Arikan, Berna Uzun, Murat Sayan, Dilber Uzun Ozsahin, European Biotechnology Congress 2021, (plenary talk)
11. Evaluation of Cement Manufacturing Methods Using Multi Criteria Decision Analysis (MCDA), Hüseyin Gökçekuş, Nivin Ghaboun, Berna Uzun, Dilber Uzun Ozsahin, 14th International Conference, DeSE2021, (plenary talk)
12. Evaluation and Simulation of Breast Cancer Imaging Devices, 15th Topical Seminar on Innovative Particle and Radiation Detectors (IPRD19) 14-17 October 2019 Siena, Italy, (plenary talk)
13. Design and Performance Evaluation of an Adjustable-FOV PET Scanner, 15th Topical Seminar on Innovative Particle and Radiation Detectors (IPRD19) 14-17 October 2019 Siena, Italy, (plenary talk)
14. Evaluation Of The Learning Models Using Multi-Criteria Decision Making Theory, Second International Conference on The Environment Survival and Sustainability 7-11 October 2019 (plenary talk)
15. Selecting And Evaluating The Best Public Private Partnership Contract, Second International Conference on The Environment Survival and Sustainability 7-11 October 2019 (plenary talk)
16. Comparative Analysis Of Flexible Pavement Design Methods, Second International Conference on The Environment Survival and Sustainability 7-11 October 2019 (plenary talk)
17. Decreasing The Bad Effects Of Climate Change On Islands, By Supporting Of Artificial Neural Network Technology, Second International Conference on The Environment Survival and Sustainability 7-11 October 2019 (plenary talk)
18. Intelligent Learning Systems For The Environmental Factors That Affect The Distribution Of Some Leishmaniasis Vectors. Second International Conference on The Environment Survival and Sustainability 7-11 October 2019 (plenary talk)
19. The Use of Fuzzy PROMETHEE Technique in Antiretroviral Combination Decision in Pediatric HIV Treatments, Advances in Science and Engineering Technology (ASET) Engineering Innovations in Healthcare International Conference, Sharjah - UAE March 2019 (plenary talk)
20. Determination of Post-Exposure Prophylaxis Regimen in the Prevention of Potential Pediatric HIV- 1 Infection by the Multi-criteria Decision Making Theory, Advances in Science and Engineering Technology (ASET) Engineering Innovations in Healthcare International Conference, Sharjah - UAE March 2019 (plenary talk)
21. Selection of the Most Appropriate Antiretroviral Medication in Determined Aged Groups ( $\geq 3$  years) of HIV-1 Infected Children, Advances in Science and Engineering Technology (ASET) Engineering Innovations in Healthcare International Conference, Sharjah - UAE March 2019 (plenary talk)
22. Evaluation and Simulation of Colon Cancer Treatment Techniques with Fuzzy PROMETHEE, Advances in Science and Engineering Technology (ASET) Engineering Innovations in Healthcare International Conference, Sharjah - UAE March 2019 (plenary talk)
23. A Comparison for Liver Cancer Treatment Alternatives, Advances in Science and Engineering Technology (ASET) Engineering Innovations in Healthcare International Conference, Sharjah - UAE March 2019 (plenary talk)
24. Evaluation of Sterilization Methods for Medical Devices, Advances in Science and Engineering Technology (ASET) Engineering Innovations in Healthcare International Conference, Sharjah - UAE March 2019 (plenary talk)
25. Fuzzy PROMETHEE for Ranking Pancreatic Cancer Treatment Techniques, Advances in Science and Engineering Technology (ASET) Engineering Innovations in Healthcare International Conference, Sharjah - UAE March 2019 (plenary talk)
26. Comparative Analysis of Wastewater Treatment Technologies, 2nd International Conference on Water Problems in the Mediterranean Countries 2019 (plenary talk)
27. Effective Analysis of Different Natural Wastewater Treatment Alternatives, 2nd International Conference on Water Problems in the Mediterranean Countries 2019 (plenary talk)
28. Analysis of Disinfection techniques of water treatment, 2nd International Conference on Water Problems in the Mediterranean Countries 2019 (plenary talk)
29. Applying Fuzzy PROMETHEE Multicriteria Method for Water Sterilization Devices, 2nd International Conference on Water Problems in the Mediterranean Countries 2019 (plenary talk)
30. Evaluating and Selecting the Best Domestic Water Standards, 2nd International Conference on Water Problems in the Mediterranean Countries 2019 (plenary talk)
31. SIMULATION AND EVALUATION OF HIGH PERFORMANCE COST-EFFECTIVE POSITRON EMISSION MAMMOGRAPHY (PEM) SCANNER WITH LASER INDUCED OPTICAL BARRIER TECHNIQUES, The International Workshops on Radiation Imaging Detectors, Sundsvall, Sweden June 2018 (plenary talk)
32. EVALUATIONS OF COMMON SOLID-STATE DETECTORS WITH MULTI-CRITERIA DECISION-MAKING THEORY FUZZY PROMETHEE, The International Workshops on Radiation Imaging Detectors, Sundsvall, Sweden June 2018 (poster)
33. Simulation of New Scintillation Crystals for Brain PET, The International Workshops on Radiation Imaging Detectors, Sundsvall, Sweden June 2018 (poster)
34. Effective Analysis of Image Reconstruction Algorithms in Nuclear Medicine Using fuzzy PROMETHEE, Advances in Science and Engineering Technology (ASET) Engineering Innovations in Healthcare International Conference, Sharjah - UAE March 2018 (plenary talk)
35. Breast cancer image classification using artificial neural networks (plenary talk) 9th International Conference on Theory and Application of Soft Computing, Computing with Words and Perception, ICSCCW 2017, 24-25 August 2017, Budapest, Hungary
36. Evaluating nuclear medicine imaging devices using fuzzy PROMETHEE method (plenary talk) 9th International Conference on Theory and Application of Soft Computing, Computing with Words and Perception, ICSCCW 2017, 24-25 August 2017, Budapest, Hungary
37. GATE simulation of a High Performance Stationary SPECT System for Cardiac Imaging (poster) (29 October- 6 November IEEE NSS/MIC, 2016, Strasbourg, France)

38. Scintillator-Based Photon Counting Detector: Is It Feasible? (talk) (29 October- 6 November IEEE NSS/MIC, 2016, Strasbourg, France)
39. Light Transport in PET Scintillator Detectors Fabricated Using Laser Induced Optical Barriers (poster) (29 October- 6 November IEEE NSS/MIC, 2016, Strasbourg, France)
40. GATE simulation of a stationary SPECT system for small animal brain imaging, 14th Topical Seminar on Innovative Particle and Radiation Detectors (IPRD16) (3-6 October, Siena, Italy, 2016), (plenary talk)
41. PET SCANNER SIMULATION and MOTION COMPENSATION, 14th Topical Seminar on Innovative Particle and Radiation Detectors (IPRD16) (3-6 October, Siena, Italy, 2016), (plenary talk)
42. Simulation of High-performance cost-effective stationary cardiac DC-SPECT system with dynamic capabilities, (accepted plenary talk) SNMMI 2016 Annual Meeting, 11-15, June, 2016, San Diego, California
43. Development of a Sub-mm Spatial Resolution LYSO:Ce Detector with DOI for Small Animal PET (poster) 22<sup>nd</sup> International Symposium on Room-Temperature Semiconductor X-ray and Gamma-ray Detectors, (31 October- 7 November 2015 IEEE Nuclear Science Symposium, San Diego, USA)
44. Evaluation of A Dedicated LM-OSEM Algorithm for The Reconstruction Of Images With The VIP-PEM System (plenary poster) 15th International Workshop on Radiation Imaging Detectors (IWORID 23-27 June 2013, Paris, France)
45. Evaluation of Origin Ensemble Algorithm for Image Reconstruction for Pixelated Solid-State Detectors with Large Number of Channel, (poster) (IWORID 23-27 June 2013, Paris, France)
46. Characterization of CdTe detector for use in PET, IEEE Nuclear Science Symposium and Medical Imaging( 23-29 October 2011, Valencia, Spain)
47. Modeling, simulation and evaluation of a compton camera based on a pixelated solid-state detector, (plenary poster) 2011 IEEE Nuclear Science Symposium and Medical Imaging Conference (23-29 October 2011, Valencia, Spain)
48. Simulation of pseudo-clinical conditions and image quality evaluation of PET scanner based on pixelated CdTe detector (poster) Spain IEEE Nuclear Science Symposium and Medical Imaging Conference (23-29 October 2011, Valencia, Spain)
49. Forward physics results from CMS experiment: Radiation Damage and Monitoring system in the local runs and in the orbit gap (plenary talk) June 2009

#### CONFERENCE PAPERS:

1. Helwan, A., Azar, D., Ozsahin, D.U., Medical Reports Summarization Using Text-To-Text Transformer (2023) *2023 Advances in Science and Engineering Technology International Conferences, ASET 2023*
2. Uzun Ozsahin, D., Precious Onakpojeruo, E., Uzun, B., Hydrogel-Based Drug Delivery Nanoparticles with Conventional Treatment Approaches for Cancer Tumors; A Comparative Study Using MCDM Technique (2023) *2023 Advances in Science and Engineering Technology International Conferences, ASET 2023,*
3. Ozsahin, D.U., Onakpojeruo, E.P., Duwa, B.B., Uzun, B., Ozsahin, I., Chioma, E.C., Comparative Evaluation of 3D Filaments Used in Additive Manufacturing of Biomedical Tools; Using Fuzzy, PROMETHEE, (2023) *2023 Advances in Science and Engineering Technology International Conferences, ASET 2023*
4. Ozsahin, D.U., Onakpojeruo, E.P., Uzun, B., Ozsahin, I., Selection Methods for the Treatment of Spinal Cord Tumors Using Analytical Evaluation Models, (2023) *2023 Advances in Science and Engineering Technology International Conferences, ASET 2023*
5. Ozsahin, D.U., Usanase, N., Uzun, B., Ozsahin, I., Balcioglu, O., The Efficacy and Safety of Direct Oral Anticoagulants for The Treatment of Venous Thrombosis in Cancer Using, Fuzzy PROMETHEE, (2023) *2023 Advances in Science and Engineering Technology International Conferences, ASET 2023*
6. Dube, S., Uzun, B., David, L.R., Ozsahin, D.U., Yuvali, M., Evaluating Different Types of Treatment for Osteoporosis Using Fuzzy PROMETHEE, (2023) *2023 Advances in Science and Engineering Technology International Conferences, ASET 2023*
7. Balcioglu, O., Ikechukwu Emegano, D., Uzun, B., Şahin, T., Ozsahin, I., Uzun Ozsahin, D., Comparative evaluation of blood conservation techniques in cardiovascular surgery using multicriteria decision making methods, (2023) *2023 Advances in Science and Engineering Technology International Conferences, ASET 2023*
8. Yuvali, M., Abuzaid, M.M., Ozsahin, D.U., Classification Comparison of Machine Learning Algorithms Using Spectroscopic Breast Tissues Dataset, (2023) *2023 Advances in Science and Engineering Technology International Conferences, ASET 2023*
9. Duwa, B.B., Kibarar, A.G., Uzun, B., Kaba, Ş., Ozsahin, D.U., Evaluation of Techniques Used in Phenol Removal from Wastewater Using Fuzzy PROMETHEE Method (2023) *Lecture Notes in Networks and Systems*, 610 LNNS, pp. 289-296.
10. Balcioglu, O., Ozad, U., Uzun, B., Ozsahin, I., Ozsahin, D.U., A DECISION-MAKING MODEL FOR TREATMENT ALTERNATIVES OF DIFFERENT CLINICAL ABDOMINAL AORTIC ANEURYSM PRESENTATIONS (2022) *IET Conference Proceedings*, 2022 (14), pp. 272-281.
11. Usanase, N., Uzun, B., Ozsahin, I., Ozsahin, D.U., The Preference Ranking of Gold Nanoparticle Synthesis Methods Using a Multi-Criteria Decision-Making Model (2022) *IET Conference Proceedings*, 2022 (14), pp. 314-320.
12. Ozsahin, D.U., Mustapha, M.T., Mubarak, A.S., Ameen, Z.S., Uzun, B. Impact of Outliers and Dimensionality Reduction on the Performance of Predictive Models for Medical Disease, Diagnosis (2022) *Proceedings - 2022 International Conference on Artificial Intelligence in Everything, AIE 2022*, pp. 79-86.

13. Ozsahin, D.U., Taiwo Mustapha, M., Mubarak, A.S., Said Ameen, Z., Uzun, B. Impact of feature scaling on machine learning models for the diagnosis of diabetes (2022) *Proceedings - 2022 International Conference on Artificial Intelligence in Everything, AIE 2022*, pp. 87-94
14. Gokcekus, H., Ghaboun, N., Uzun, B., Ozsahin, D.U. Evaluation of Construction Materials Waste Disposal Methods using Multi Criteria Decision Analysis (2022) *2022 Advances in Science and Engineering Technology International Conferences, ASET 2022*
15. Mustapha, M.T., Uzun Ozsahin, D., Uzun, B., Ozsahin, I. Evaluation of the Thyroid Cancer Treatment Techniques with Fuzzy VIKOR (2022) *2022 Advances in Science and Engineering Technology International Conferences, ASET 2022*
16. Baddal, B., Ozsahin, D.U., Uzun, B., Sanlidag, T. Evaluation of the Effectiveness of Double Border-Screening Strategy with and without Quarantine in the Prevention of COVID-19 (2022) *2022 Advances in Science and Engineering Technology International Conferences, ASET 2022*
17. Alyazji, Q.A., Uzun Ozsahin, D., Uzun, B., Ozsahin, I. Evaluating electronic blood pressure measurement devices with fuzzy TOPSIS technique (2022) *2022 Advances in Science and Engineering Technology International Conferences, ASET 2022*
18. Denker, A., Almasri, A., Ozsahin, D.U. Evaluation of total artificial heart using multi-criteria decision analysis (2021) *AIP Conference Proceedings*, 2325
19. Ozsahin, D.U., Arikan, A., Sanlidag, T., Sayan, M., Uzun, B. Performance Ranking of Diagnostic SARS-CoV2 IgG Antibody Tests by Using Multi-Criteria Decision-Making Theory (2021) *Proceedings - International Conference on Developments in eSystems Engineering, DeSE*, 2021- December, pp. 202-205.
20. Gökçekus, H., Ghaboun, N., Ozsahin, D.U., Uzun, B. Evaluation of Cement Manufacturing Methods Using Multi Criteria Decision Analysis (MCDA) (2021) *Proceedings - International Conference on Developments in eSystems Engineering, DeSE*, 2021- December, pp. 39-43.
21. Ozsahin, I., Ozsahin, D.U., Makarov, P.A., Mok, G.S.P., Senior Boxpect: High Sensitivity Multi-Pinhole Brain SPECT (2020) *2020 IEEE Nuclear Science Symposium and Medical Imaging Conference, NSS/MIC 2020*, .
22. Sayan, M., Ozsahin, D.U., Sanlidag, T., Sultanoglu, N., Yildirim, F.S., Uzun, B. Efficacy evaluation of antiretroviral drug combinations for hiv-1 treatment by using the fuzzy promethea (2020) *Advances in Intelligent Systems and Computing*, 1095 AISC, pp. 183-189.
23. Sayan, M., Sanlidag, T., Sultanoglu, N., Uzun, B., Yildirim, F.S., Ozsahin, D.U. Evaluating the efficacy of adult hiv post exposure prophylaxis regimens in relation to transmission risk factors by multi criteria decision method (2020) *Advances in Intelligent Systems and Computing*, 1095 AISC, pp. 167-174.
24. Ozsahin, D.U., Nyakuwanikwa, K., Wallace, T., Ozsahin, I. Evaluation and Simulation of Colon Cancer Treatment Techniques with Fuzzy PROMETHEE (2019) *2019 Advances in Science and Engineering Technology International Conferences, ASET 2019*
25. Ozsahin, I., Ozsahin, D.U., Nyakuwanikwa, K., Simbanegavi, T.W. Fuzzy PROMETHEE for Ranking Pancreatic Cancer Treatment Techniques (2019) *2019 Advances in Science and Engineering Technology International Conferences, ASET 2019*
26. Musa, M.S., Ozsahin, D.U., Ozsahin, I. A Comparison for Liver Cancer Treatment Alternatives (2019) *2019 Advances in Science and Engineering Technology International Conferences, ASET 2019*
27. Mubarak, M.T., Ozsahin, I., Ozsahin, D.U. Evaluation of Sterilization Methods for Medical Devices (2019) *2019 Advances in Science and Engineering Technology International Conferences, ASET 2019*
28. Uzun, B., Yildirim, F.S., Sayan, M., Şanlidağ, T., Ozsahin, D.U. The Use of Fuzzy PROMETHEE Technique in Antiretroviral Combination Decision in Pediatric HIV Treatments (2019) *2019 Advances in Science and Engineering Technology International Conferences, ASET 2019*
29. Sayan, M., Sultanoglu, N., Uzun, B., Yildirim, F.S., Sanlidag, T., Ozsahin, D.U. Determination of Post-Exposure Prophylaxis Regimen in the Prevention of Potential Pediatric HIV-1 Infection by the Multi-criteria Decision Making Theory (2019) *2019 Advances in Science and Engineering Technology International Conferences, ASET 2019*
30. Sultanoglu, N., Uzun, B., Yildirim, F.S., Sayan, M., Sanlidag, T., Ozsahin, D.U. Selection of the Most Appropriate Antiretroviral Medication in Determined Aged Groups ( $\geq 3$  years) of HIV-1 Infected Children (2019) *2019 Advances in Science and Engineering Technology International Conferences, ASET 2019*
31. Al Shareef, E., Ozsahin, D.U. O Deep parkinson disease diagnosis: Stacked auto-encoder (2019) *Advances in Intelligent Systems and Computing*, 896, pp. 577-585
32. Maisaini, M., Uzun, B., Ozsahin, I., Uzun, D. Evaluating lung cancer treatment techniques using fuzzy promethee approach (2019) *Advances in Intelligent Systems and Computing*, 896, pp. 209-215

