

## Dilber UZUN OZSAHİN

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**Date of Birth:** 21 May, 1984

### 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**, Radiology, Modeling novel computed tomography (CT) systems using Monte Carlo simulation codes, simulation and image reconstruction of expected performance of a novel cost-effective scintillator-based photon counting detector systems and compare its performance characteristics with CZT-based detector systems, new concept and designs of other imaging modalities such as PET and SPECT and instrumentation aspects of radiation detectors, 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

### Current Position

- **Assoc. Prof. Dr.**, September 2018-Present, Faculty of Engineering, Department of Biomedical Engineering
- **Assoc. Prof. Dr.**, October 2021- Present, College of Health Sciences, Department of Medical Diagnostic Imaging, University of Sharjah

### 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

- Electromagnetic Theory, Cukurova University (Fall-Spring 2008)
- Nuclear Medicine, Massachusetts Institute of Technology (November 2014- April 2015)
- Modeling of biological systems, Near East University (Summer-Spring-Fall 2016-2017)
- Physics in Nuclear Medicine, Near East University (Fall 2016)
- Simulation of nuclear medicine imaging devices, Near East University (Fall 2016-2017) (Postgraduate)
- Electromagnetic Theories, Near East University (Fall-Spring 2016-2017)
- Designing biomedical imaging systems, Near East University (Spring 2016-2017) (Postgraduate)
- Radiology physics, Near East University (Spring-Fall 2016-2017)
- Fuzzy Applications to Radiology (Fall-2017-2018) (Postgraduate)
- Statistical Multi Criteria Evaluation for Medical Imaging, Near East University (Fall-Spring 2017-2018) (Postgraduate)
- Decision Making Theories for Biomedical Engineering, Near East University (Fall-Spring 2017-2018) (Postgraduate)
- Graduation Project I, II Near East University (Fall 2017-2018)
- Graduation Project I, II , Near East University (Spring 2017-2018)
- Graduation Project I,II Near East University (Fall 2018-2019)
- Applications od Decision Theories in Healthcare (Fall 2018-2019) (Postgraduate)
- Multi Criteria Decision Making Theories for Engineers (Fall 2019-2019) (Postgraduate)
- Graduation Project I, II , Near East University (Spring 2018-2019)
- Applications od Decision Theories in Healthcare (Spring 2018-2019) (Postgraduate)
- Multi Criteria Decision Making Theories for Engineers (Spring 2018-2019) (Postgraduate)
- Graduation Project I,II Near East University (Fall 2019-2020)
- Applications od Decision Theories in Healthcare (Fall 2019-2020) (Postgraduate)
- Multi Criteria Decision Making Theories for Engineers (Fall 2019-2020) (Postgraduate)
- Graduation Project I, II , Near East University (Spring 2019-2020)
- Applications od Decision Theories in Healthcare (Spring 2019-2020) (Postgraduate)
- Multi Criteria Decision Making Theories for Engineers (Spring 2019-2020) (Postgraduate)

- Graduation Project I, II , Near East University (Fall 2020-2021)
- Applications of Decision Theories in Healthcare (Fall 2020-2021) (Postgraduate)
- Multi Criteria Decision Making Theories for Engineers (Fall 2020-2021) (Postgraduate)

#### Other Experience

- 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-Present)
- Head of Artificial Intelligence Research Group, Near East University (2018-Present)
- Head of Fuzzy Logic Research Group, Near East University (2018-Present)

#### Courses

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

#### Clinical Research Training

- Hospital Clinic de Barcelona (PET/CT, SPECT, MRI) (June 2014-September 2014)

#### Directed Ms.C and Ph.D

- 20 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 erdagh), 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
- 2 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

- 4 Ph.D student (present)
- 6 Ms.C student (present)
- Advisor: 80 undergraduate students
- 60 Graduation Project students

#### Awards and Grant

- 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))

The University of Iowa 203 Van Allen Hal IA 52242-1479 U Iowa USA

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- **Hamid Sabet** ([hsabet@mgh.harvard.edu](mailto:hsabet@mgh.harvard.edu))

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- **Durmus Ali Demir** ([durmus.demir@gmail.com](mailto:durmus.demir@gmail.com))

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- **Isa Dumanoglu** ([isa.dumanoglu@cern.ch](mailto:isa.dumanoglu@cern.ch))

Cukurova University Science and High Energy Physics Department Saricam, Adana, 01130 Turkey

Phone: +90 (322) 3386084

- **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

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

#### Publications

##### Talks And Posters

1. 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)
2. 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)
3. 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)
4. Selecting And Evaluating The Best Public Private Partnership Contract, Second International Conference on The Environment Survival and Sustainability 7-11 October 2019 (plenary talk)
5. Comparative Analysis Of Flexible Pavement Design Methods, Second International Conference on The Environment Survival and Sustainability 7-11 October 2019 (plenary talk)
6. 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)
7. 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)
8. 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)
9. 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)
10. 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)
11. 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)

12. 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)
13. 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)
14. 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)
15. Comparative Analysis of Wastewater Treatment Technologies, 2nd International Conference on Water Problems in the Mediterranean Countries 2019 (plenary talk)
16. Effective Analysis of Different Natural Wastewater Treatment Alternatives, 2nd International Conference on Water Problems in the Mediterranean Countries 2019 (plenary talk)
17. Analysis of Disinfection techniques of water treatment, 2nd International Conference on Water Problems in the Mediterranean Countries 2019 (plenary talk)
18. Applying Fuzzy PROMETHEE Multicriteria Method for Water Sterilization Devices, 2nd International Conference on Water Problems in the Mediterranean Countries 2019 (plenary talk)
19. Evaluating and Selecting the Best Domestic Water Standards, 2nd International Conference on Water Problems in the Mediterranean Countries 2019 (plenary talk)
20. 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)
21. 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)
22. Simulation of New Scintillation Crystals for Brain PET, The International Workshops on Radiation Imaging Detectors, Sundsvall, Sweden June 2018 (poster)
23. 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)
24. 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
25. 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
26. GATE simulation of a High Performance Stationary SPECT System for Cardiac Imaging (poster) (29 October- 6 November IEEE NSS/MIC, 2016, Strasbourg, France)
27. Scintillator-Based Photon Counting Detector: Is It Feasible? (talk) (29 October- 6 November IEEE NSS/MIC, 2016, Strasbourg, France)
28. Light Transport in PET Scintillator Detectors Fabricated Using Laser Induced Optical Barriers (poster) (29 October- 6 November IEEE NSS/MIC, 2016, Strasbourg, France)
29. 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)
30. PET SCANNER SIMULATION and MOTION COMPENSATION, 14th Topical Seminar on Innovative Particle and Radiation Detectors (IPRD16) (3-6 October, Siena, Italy, 2016), (plenary talk)
31. 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
32. 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)
33. 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)
34. 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)
35. Characterization of CdTe detector for use in PET, IEEE Nuclear Science Symposium and Medical Imaging( 23-29 October 2011, Valencia, Spain)
36. 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)
37. 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)
38. 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

1. 15th Topical Seminar on Innovative Particle and Radiation Detectors (IPRD19) 14-17 October 2019 Siena, Italy
2. Second International Conference on The Environment Survival and Sustainability, 7-11 October 2019, Near East University, TRNC, Mersin 10 Turkey (plenary talk)
3. Advances in Science and Engineering Technology (ASET) Engineering Innovations in Healthcare International Conference, Sharjah - UAE 21st March 2019

4. 2nd International Conference on Water Problems in the Mediterranean Countries, 2019, Near East University, TRNC, Mersin 10 Turkey
5. The International Workshops on Radiation Imaging Detectors (IWORID), Sundsvall, Sweden, June 2018
6. Advances in Science and Engineering Technology (ASET) Engineering Innovations in Healthcare International Conference, Sharjah - UAE 21st March 2018
7. International Symposium on Industry 4.0 and Applications (ISIA 2017), Karabük, Turkey
8. 9th International Conference on Theory and Application of Soft Computing, Computing with Words and Perception, ICSCCW 2017, 24-25 August 2017, Budapest, Hungary
9. IEEE Nuclear Science Symposium and Medical Imaging Conference (23-29 October 2011) Valencia, Spain.
10. 15th International Workshop on Radiation Imaging Detectors (23-27 June, 2013) Paris, France.
11. 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)
12. SNMMI 2016 Annual Meeting, (11-15, June, 2016) San Diego, California
13. 14th Topical Seminar on Innovative Particle and Radiation Detectors (IPRD16) (3-6 October 2016), Siena, Italy
14. IEEE Nuclear Science Symposium and Medical Imaging Conference (29 October- 6 November 2016) Strasbourg, France.

#### Peer Reviewed Publications in print or other media

##### Research investigations

###### 2022 (SCI/Scopus)

1. Construction of smart assistive gloves for paralytic people, DU Ozsahin, JB Idoko, A Jarwah, H Badran, NA Wajid, I Ozsahin, Modern Practical Healthcare Issues in Biomedical Instrumentation, 19-29
2. Evaluation of a finite element laminectomy, DU Ozsahin, JB Idoko, B Almagharby, MB Merdhah, I Ozsahin, Modern Practical Healthcare Issues in Biomedical Instrumentation, 47-68
3. Construction of an ultrasonic sight device for visually impaired people, DU Ozsahin, JB Idoko, AA Usman, R Namatovu, KA Ibrahim, I Ozsahin, Modern Practical Healthcare Issues in Biomedical Instrumentation, 9-76
4. Development of medical dispatcher: A robot that delivers medicine, DU Ozsahin, JB Idoko, MS Mpofo, IR Swalehe, I, Ozsahin, Modern Practical Healthcare Issues in Biomedical Instrumentation, 97-103
5. Development of smart jacket for disc, DU Ozsahin, ASA Almoqayad, A Ghader, H Alkahlout, JB Idoko, BB Duwa, Modern Practical Healthcare Issues in Biomedical Instrumentation, 31-46
6. Application and impact of phototherapy on infants, DU Ozsahin, JB Idoko, NT Muriritirwa, S Moro, I Ozsahin, Modern Practical Healthcare Issues in Biomedical Instrumentation, 151-165
7. Designing a 3D printed artificial hand, DU Ozsahin, M Hejazi, OS Adnan, H Alloush, A Khabbaz, JB Idoko, Modern Practical Healthcare Issues in Biomedical Instrumentation, 3-18
8. Introduction to biomedical instrumentation, I Ozsahin, DU Ozsahin, MT Mubarak, Modern Practical Healthcare Issues in Biomedical Instrumentation, 1-2
9. Design and implementation of a smart stick for visually impaired people, RM Salama, JB Idoko, K Meck, ST Halimani, DU Ozsahin, Modern Practical Healthcare Issues in Biomedical Instrumentation, 77-85
10. Mobile application development for hearing assistance, RM Salama, JB Idoko, ST Halimani, K Meck, DU Ozsahin Modern Practical Healthcare Issues in Biomedical Instrumentation, 87-95
11. Design and implementation of wireless helmet and mechanical wheelchair, DU Ozsahin, JB Idoko, M Hejazi, R Allaia, M Ahmed, Z Badawi, I Ozsahin, Modern Practical Healthcare Issues in Biomedical Instrumentation, 105-121
12. Construction of vehicle shutdown system to monitor driver's heartbeats, DU Ozsahin, JB Idoko, BB Duwa, M Zeidan, I Ozsahin, Modern Practical Healthcare Issues in Biomedical Instrumentation, 123-138
13. Development of a modern electronic stethoscope, DU Ozsahin, JB Idoko, BO Aderotoye, LM Alasais, H Burakah, Modern Practical Healthcare Issues in Biomedical Instrumentation, 139-150
14. Theoretical Aspect of the Decision Analysis, Springer, Berna Uzun, Mustapha Taiwo Mustapha, Dilber Uzun Ozsahin
15. Investigating The Effect Of Quarry Dust Enhancement On Engineering Behavior Of Expansive Soil Using MCDM, Springer, Anooosheh Iravanian, Salah Yaseen Al-Dubai, Berna Uzun, Dilber Uzun Ozsahin
16. Superior Types of Bamboo in Healthcare Using with Fuzzy PROMETHEE, Springer, Aizhan Syidanova, Hüseyin Gökçekuş, Berna Uzun, Dilber Uzun Ozsahin
17. Evaluation of the Green Campus and Sustainable Campus: Green Building Rating System and Sustainability Approach in Higher Education , Springer, Aizhan Syidanova, Çiğdem Çağnan, Dilber Uzun Ozsahin
18. Green campus improvement: using green building rating systems in universities , Springer, Aizhan Syidanova, Çiğdem Çağnan, Dilber Uzun Ozsahin, Berna Uzun

19. Environmental impact assesment for the production of aggregates used in the construction industry by using MCDA, Springer, Mustafa Alas, Dilber Uzun Ozsahin, Huseyin Gokcekus, Berna Uzun, Shaban Ismail Albrka
20. Performance evaluation of the petrol production methods in Bakken reservoirs, Springer Fondjo Fondjo Yann Muriel, Berna Uzun, Dilber Uzun Ozsahin
21. Socio-Spatial interaction within modern workspace interiors, Springer, Shrouq Altamimi, Zeynep Üstün Onur, Dilber Uzun Ozsahin, and Berna Uzun

#### 2020/2021(SCI/Scopus)

1. Optimization of Dental Devices and Tools used on Teeth B Uzun, DU Ozsahin, H Hamdan, J Charafeddine, G Ünsal, D Özyer, BioMed Research International 2021
2. The se of double border-screening strategy in the surveillance and prevention of COVID-19, B Baddal, T Sanlidag, B Uzun, DU Ozsahin, Journal of infection and public health 14 (6), 757-758
3. Radiologists versus Deep Convolutional Neural Networks: A Comparative Study for Diagnosing COVID-19, A Helwan, MKS Ma'aitah, H Hamdan, DU Ozsahin, O Tuncyurek Computational and Mathematical Methods in Medicine 2021
4. An investigation to choose the proper therapy technique in the management of autism spectrum disorder, I Ozsahin, MT Mustapha, S Albarwary, B Sanlidag, DU Ozsahin, TA Butler, Journal of Comparative Effectiveness Research 10 (5), 423-437
5. Applications of Multi-Criteria Decision-Making Theories in Healthcare and Biomedical Engineering, I Ozsahin, DU Ozsahin, B Uzun, Elsevier
6. Evaluation of total artificial heart using multi-criteria decision analysis, A Denker, A Almasri, DU Ozsahin, AIP Conference Proceedings 2325 (1), 020036
7. Comparative evaluation of the treatment of COVID-19 with multicriteria decision-making techniques, FS Yildirim, M Sayan, T Sanlidag, B Uzun, DU Ozsahin, I Ozsahin, Journal of Healthcare Engineering
8. Decision Analysis of the COVID-19 Vaccines, DU Ozsahin, MI Gelisen, M Taiwo, Y Agachan, D Rahi, B Uzun
9. Neural network applications in medicine, I Ozsahin, DU Ozsahin, Biomedical Signal Processing and Artificial Intelligence in Healthcare, 183-206
10. Fuzzy logic in medicine, DU Ozsahin, B Uzun, I Ozsahin, MT Mustapha, MS Musa, Biomedical Signal Processing and Artificial Intelligence in Healthcare, 153-182
11. Comparative analysis of wastewater treatment Technologies, MN Yahya, H Gökçekuş, DU Ozsahin, Jurnal Kejuruteraan 32 (2), 221-230
12. The Efficiency of AuNPs in Cancer Cell Targeting Compared to Other Nanomedicine using Fuzzy PROMETHEE, Safa Anmar Albarwary, Dilber Uzun Ozsahin, Mubarak Taiwo Mustapha, Ayse Gunay Kibarar, Hani Hamdan, Journal of Healthcare Engineering
13. Evaluation and simulation of breast cancer imaging devices using multi-criteria decision theory, DUOBU H. Erdagli, Journal of Instrumentation 15, <https://iopscience.iop.org/article/10.10>
14. Simulation and evaluation of water sterilization devices, MTM Huseyin Gokcekus, Dilber Uzun Ozsahin, Desalination and Water Treatment 177, 431-436
15. Evaluation of wastewater treatment technologies using TOPSIS, BU Mukhtar Nuhu Yahya, Hüseyin Gökçekus, Dilber Uzun Ozsahin, Desalination and Water Treatment 177, 416-422
16. Evaluating disinfection techniques of water treatment, TG Gebre Gelete, Huseyin Gokcekus, Dilber Uzun Ozsahin, Berna Uzun, Desalination and Water Treatment 177, 408-415
17. Evaluation of different natural wastewater treatment alternatives by fuzzy PROMETHEE method, BU Tagesse Gichamo, Hüseyin Gökçekus, Dilber Uzun Ozsahin, Gebre Gelete, Desalination and Water Treatment 177, 400-407
18. Multi Criteria Decision Analysis in Healtcare, Berna Uzun, Dilber Uzun Ozsahin, Springer
19. Theoretical Aspect of the Decision Analysis, Berna Uzun, Dilber Uzun Ozsahin, Springer
20. Investigating The Effect Of Quarry Dust Enhancement On Engineering Behavior Of Expansive Soil Using MCDM, Anoosheh Iravanian, Salah Yaseen Al-Dubai, Berna Uzun, Dilber Uzun Ozsahin, Springer
21. Superior types of bamboo for healtcare use: Visual PROMETHEE application for the Bamboo in Medical, Food, and Other Uses, Aizhan Syidanova, Berna Uzun, Hüseyin Gökçekuş, Dilber Uzun Ozsahin, Springer
22. Green campus improvement: using rating systems in architecture field with MCDM application, Aizhan Syidanova, Çiğdem Çağnan, Dilber Uzun Ozsahin, Berna Uzun, Springer
23. Comparison between green university campuses using MCDM application. Aizhan Syidanova, Çiğdem Çağnan, Dilber Uzun Ozsahin, Berna Uzun, Springer
24. Environmental impact assesment for the production of aggregates used in the construction industry by using MCDA, Mustafa Alaz, Berna Uzun, Hüseyin Gökçekuş, Dilber Uzun Ozsahin, Springer
25. Socio-Spatial interaction within modern workspace interiors, Shrouq Altamimi, Zeynep Üstün Onur, Dilber Uzun Ozsahin, Berna Uzun, Springer

26. Introduction to Fuzzy PROMETHEE, Ilker Ozsahin, Mustapha Taiwo Mubarak, Dilber Uzun Ozsahin, Elsevier
27. Designing a Smart 3D Printed Artificial Hand, Majed Hejazi, Omar Sameer Adnan, Hamza Alloush, Ilker Ozsahin, Dilber Uzun Ozsahin, Elsevier
28. Designing a Smart Assistive Gloves for Paralytics, Dilber Uzun Ozsahin, Ahmad Jarwah, Hasan Badran, Noman Abdul Wajid, Ilker Ozsahin, Elsevier
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