

Assoc. Prof. Suzi Dilara MANGAN

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: IXW-8115-2023

ScopusID: 56487500000

Yoksis Researcher ID: 236511

Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Mimarlık, Turkey 2007 - 2015

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Mimarlık, Turkey 2004 - 2006

Undergraduate, Yildiz Technical University, Faculty Of Architecture, Department Of Architecture, Turkey 1998 - 2004

Certificates, Courses and Trainings

Innovation Management, ISO 56002:2021 Yenilikçilik (İnovasyon) Yönetim Sistemi Temel Eğitimi, Turkish Standart Institution , 2024

Occupational Health and Safety, Temel İş Sağlığı ve Güvenliği, 2024

Environment and Sustainability, NZEB Basics Training for Trainers, Ege Üniversitesi, 2017

Environment and Sustainability, High Performance Building Design: Applications and Future Trends, ASHRAE, 2013

Environment and Sustainability, Isı Kaybı/Kazancı Hesabında Enerji Bazlı Yeni Yaklaşımlar: Yarının Binalarının Ekserjetik ve Eksergoekonomik Bakımdan Optimum Tasarımı Kursu, TTMD, 2013

Environment and Sustainability, Enerji Kimlik Belgesi (EKB) Uzmanlığı Eğitimi, TMMOB, 2013

Environment and Sustainability, Enerji Verimliliği Teknolojileri ve Mevzuatı, BMI, İTÜ, 2011

Environment and Sustainability, Yenilenebilir Enerji Teknolojileri, BMI, İTÜ, 2011

Environment and Sustainability, Green Building Principles, ÇEDBİK, 2011

Environment and Sustainability, DesignBuilder Simulation and CFD Training Course, DesignBuilder Software Ltd., 2010

Environment and Sustainability, BRE Global Assessor Training Course, BRE, 2009

Dissertations

Doctorate, An approach for the evaluation of the residential buildings' performances in terms of life cycle energy and cost efficiency, Istanbul Technical University, Fen Bilimleri Enstitüsü, Mimarlık, 2015

Postgraduate, Evaluation of intelligent building subsystems: Istanbul case, Istanbul Technical University, Fen Bilimleri Enstitüsü, Mimarlık, 2006

Research Areas

Architecture, Physical Urban Protection, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Faculty Of Architecture, Department Of Architecture, 2023 - Continues
Assistant Professor, Yildiz Technical University, Faculty Of Architecture, Department Of Architecture, 2021 - 2023
Lecturer PhD, Istanbul Bilgi University, Faculty Of Architecture, Department Of Architecture, 2020 - 2021
Researcher, Technische Universiteit Eindhoven, Department of the Built Environment/Unit Building Physics and Services, 2019 - 2020
Assistant Professor, Kocaeli University, Mimarlık Ve Tasarım Fakültesi, Mimarlık, 2018 - 2018
Assistant Professor, Istanbul Aydin University, Faculty Of Architecture And Design, Department Of Architecture, 2015 - 2018

Academic and Administrative Experience

Staj Başkanı, Yildiz Technical University, Faculty Of Architecture, Department Of Architecture, 2023 - Continues
Department Administrative Coordinator (Quality), Yildiz Technical University, Faculty Of Architecture, Department Of Architecture, 2023 - Continues
Member of Bureau / Research Internship Committee , Yildiz Technical University, Faculty Of Architecture, Department Of Architecture, 2021 - Continues
Member of Vertical Transfer Committee, Yildiz Technical University, Faculty Of Architecture, Department Of Architecture, 2021 - 2023
Member of Inter-Institutional Horizontal Transfer Committee, Yildiz Technical University, Faculty Of Architecture, Department Of Architecture, 2021 - 2021
YTU GreenStars Program, Project Development Committee Member, Yildiz Technical University, Faculty Of Architecture, Department Of Architecture, 2021 - 2021
Vice Dean, Istanbul Aydin University, Faculty Of Architecture And Design, 2016 - 2018
Deputy Head of Department, Istanbul Aydin University, Faculty Of Architecture And Design, Department Of Architecture, 2016 - 2018

Courses

Architectural Design 4, Undergraduate, 2023 - 2024
Climate Responsive Design, Undergraduate, 2023 - 2024, 2022 - 2023
Building Physics 1, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Architectural Design I, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021
Seminar , Postgraduate, 2023 - 2024
Building Physics Application Critics, Doctorate, 2023 - 2024, 2022 - 2023, 2021 - 2022
İklimle Dengeli Tasarım, Undergraduate, 2023 - 2024, 2022 - 2023
Research Methods and Scientific Ethics, Postgraduate, 2021 - 2022

Advising Theses

Mangan S. D., Surrogate Model Approaches For Predicting Building Energy Performance , Postgraduate, A.Rüya(Student), 2024

Jury Memberships

Post Graduate, Post Graduate, İstanbul Teknik Üniversitesi, July, 2024
Doctoral Examination, Doctoral Examination, İstanbul Teknik Üniversitesi, May, 2024

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Yıldız Teknik Üniversitesi, May, 2024

Doctoral Examination, Doctoral Examination, Yıldız Teknik Üniversitesi, May, 2024

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Yıldız Teknik Üniversitesi, March, 2024

Post Graduate, Post Graduate, Yıldız Teknik Üniversitesi, March, 2024

Doctorate, Doctorate, Yıldız Teknik Üniversitesi, March, 2024

Doctorate, Doctorate, İstanbul Teknik Üniversitesi, March, 2024

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Yıldız Teknik Üniversitesi, March, 2024

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A Performance-Based Decision Support Workflow for Retrofitting Residential Buildings**
MANGAN S. D.
Sustainability (Switzerland), vol.15, no.3, 2023 (SCI-Expanded)
- II. **The impact of urban form on building energy and cost efficiency in temperate-humid zones**
Mangan S. D., Koçlar Oral G., Erdemir Kocagil I., Sozen I.
JOURNAL OF BUILDING ENGINEERING, vol.33, 2021 (SCI-Expanded)
- III. **Development of a web-based decision support tool for sustainable residential building design and retrofit**
MANGAN S. D.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.36, no.4, pp.1785-1800, 2021 (SCI-Expanded)
- IV. **Evaluation of settlement textures in terms of building energy, economic performance, and outdoor thermal comfort**
Mangan S. D., Koçlar Oral G., Sozen I., Erdemir Kocagil I.
SUSTAINABLE CITIES AND SOCIETY, vol.56, 2020 (SCI-Expanded)
- V. **Assessment of residential building performances for the different climate zones of Turkey in terms of life cycle energy and cost efficiency**
Mangan S. D., Koçlar Oral G.
ENERGY AND BUILDINGS, vol.110, pp.362-376, 2016 (SCI-Expanded)

Articles Published in Other Journals

- I. **Impacts of future weather data on the energy performance of buildings in the context of urban geometry**
Mangan S. D., Koçlar Oral G.
COGENT ENGINEERING, vol.7, no.1, 2020 (ESCI)
- II. **Life cycle assessment of energy retrofit strategies for an existing residential building in Turkey**
Mangan S. D., Koçlar Oral G.
A|Z ITU Journal of Faculty of Architecture, vol.13, no.2, pp.143-156, 2016 (Scopus)
- III. **Energy, economic and environmental analyses of photovoltaic systems in the energy renovation of residential buildings in Turkey**
Mangan S. D., Koçlar Oral G.
A|Z ITU Journal of Faculty of Architecture, vol.13, no.2, pp.5-22, 2016 (Scopus)
- IV. **Energy and Cost Analyses of Solar Photovoltaic (PV) Microgeneration Systems for Different Climate Zones of Turkey**
Mangan S. D., Koçlar Oral G.

Energy and Power Engineering, vol.8, no.3, pp.117-129, 2016 (Peer-Reviewed Journal)

- V. **Evaluation of the Impact of Photovoltaic Systems on Energy and Economic Performances of a Residential Building**
Mangan S. D., Koçlar Oral G.
International Journal of Engineering Science and Innovative Technology (IJESIT), vol.4, no.6, pp.100-107, 2015 (Peer-Reviewed Journal)
- VI. **A Study on the Evaluation of Heating and Cooling Energy Efficiency in Residential Buildings for Climatic Zones of Turkey**
Mangan S. D., Koçlar Oral G.
Journal of Energy and Power Engineering, vol.8, no.12, pp.2045-2052, 2014 (Peer-Reviewed Journal)
- VII. **A Study on Determining the Optimal Energy Retrofit Strategies for an Existing Residential Building in Turkey**
Mangan S. D., Koçlar Oral G.
A|Z ITU Journal of Faculty of Architecture, vol.11, no.2, pp.307-333, 2014 (Scopus)

Books & Book Chapters

- I. **A study of the impact of climate change on the energy consumption of buildings for heating and cooling**
Mangan S. D.
in: İklim Değişikliği ve Kentler Yapısal Çevre ve Yeşil Alanlar, YILDIZ AKSOY, Editor, DAKAM Yayınevi, İstanbul, pp.366-384, 2019

Refereed Congress / Symposium Publications in Proceedings

- I. **İklim Ve Afet Dirençliliğinin Yes-Tr Sertifika Sistemi Aracılığıyla Mahalle Ölçeğinde İrdelenmesi**
Başer Türkmenoğlu E. D., MANGAN S. D.
Uluslararası Avrasya İklim Değişikliği Kongresi EURACLI'2024, Van, Turkey, 27 - 28 September 2024
- II. **Adopting Circular Economy in the Building Sector in the Transition to Zero Carbon: Barriers and Drivers**
Sevindik S., Mangan S. D.
4.Ulusal Yapı Fiziği ve Çevre Kontrolü Kongresi, İstanbul, Turkey, 2 - 03 May 2024, vol.1, pp.205-214
- III. **Examining The Effectiveness Levels Of Three Different Surrogate Models In Design Space Exploration**
Efe A. R., Mangan S. D.
4. Ulusal Yapı Fiziği Ve Çevre Kontrolü Kongresi, İstanbul, Turkey, 2 - 03 May 2024, vol.1, pp.196-204
- IV. **Early Design Support to Enhance the Performance of Residential Buildings in the Transition to a Low-carbon Economy**
Mangan S. D.
XV TTMD International HVAC&R Technologies Symposium, 20 - 23 September 2022, vol.1, pp.184-191
- V. **A performance-based decision support workflow for retrofitting residential buildings**
MANGAN S. D.
5th South East European Conference on Sustainable Development of Energy, Water and Environment Systems (5th SEE SDEWES), Avlonya, Albania, 22 - 26 May 2022, pp.86
- VI. **Impact of urban textures on residential building performances in terms of energy and cost efficiency**
Mangan S. D., Koçlar Oral G., Erdemir Kocagil İ.
CLIMA 2019- REHVA 13th HVAC World Congress, Bucuresti, Romania, 26 - 29 May 2019, vol.111, no.6025, pp.1-5
- VII. **The effect of urban textures on buildings' solar gains and energy performances in the context of climate change**

Mangan S. D., Koçlar Oral G.

SOLARTR2018, İstanbul, Turkey, 29 - 30 November 2018, pp.176-181

VIII. Effect of urban texture on building energy performance

Mangan S. D., Koçlar Oral G., Erdemir Kocagil İ.

7th International Building Physics Conference, IBPC 2018, New York, United States Of America, 23 - 26 September 2018, pp.577-582

IX. Evaluation of the impact of settlement textures on building energy performance within the framework of climate change

Mangan S. D., Koçlar Oral G.

3. Ulusal Yapı Fiziği ve Çevre Kontrolü Kongresi, İstanbul, Turkey, 10 - 11 May 2018, pp.33-40

X. Evaluating the performance of building envelope in terms of life cycle energy and cost efficiency

Mangan S. D., Koçlar Oral G.

International Conference on Building Envelope Systems and Technologies, ICBEST Istanbul 2017, İstanbul, Turkey, 15 - 18 May 2017, pp.660-671

XI. Evaluation of the PV systems in energy renovation of residential buildings in Turkey

Mangan S. D., Koçlar Oral G.

2. Ulusal Yapı Fiziği ve Çevre Kontrolü Kongresi, İstanbul, Turkey, 4 - 06 May 2016, vol.1, pp.263-272

XII. Assessment of energy performance of a residential building in terms of life cycle energy consumption and CO2 emission

Mangan S. D., Koçlar Oral G.

12. Ulusal Tesisat Mühendisliği Kongresi, İzmir, Turkey, 8 - 11 April 2015, vol.2, pp.1453-1468

XIII. A Study on Life Cycle Assessment of Energy Retrofit Strategies for Residential Buildings in Turkey

Mangan S. D., Koçlar Oral G.

6th International Building Physics Conference (IBPC), Torino, Italy, 14 - 17 June 2015, vol.78, pp.842-847

XIV. Calculation of energy performance indicators of PV systems in a residential building case

Mangan S. D., Koçlar Oral G.

1. Ulusal Yapı Fiziği ve Çevre Kontrolü Kongresi, İstanbul, Turkey, 13 - 14 March 2014, vol.1, pp.251-258

XV. A study on the evaluation of heating and cooling energy efficiency in residential buildings for climatic zones of Turkey

Mangan S. D., Koçlar Oral G.

11th REHVA World Congress & 8th International Conference on IAQVEC, CLIMA 2013, Praha, Czech Republic, 16 - 19 June 2013, pp.1-11

XVI. Evaluation of energy performance in residential buildings in the context of sustainability

Mangan S. D., Koçlar Oral G.

8th International Symposium on Architect Sinan, Edirne, Turkey, 25 - 26 April 2013, pp.279-284

XVII. Energy-efficient improving of a residential building in different climate zones of Turkey

Mangan S. D., Koçlar Oral G.

11. Ulusal Tesisat Mühendisliği Kongresi, İzmir, Turkey, 17 - 20 April 2013, vol.1, pp.37-46

Supported Projects

Mangan S. D., TUBITAK Project, Development of a Decision Support Platform (DSP) for the Design of Energy and Cost Efficient Building and Settlement, 2019 - 2020

Mangan S. D., Koçlar Oral G., Manioğlu G., Erdemir Kocagil İ., Project Supported by Higher Education Institutions, Sustainable, Energy and Cost-Efficient Housing and Settlement Design Guide, 2016 - 2019

Mangan S. D., Koçlar Oral G., Project Supported by Higher Education Institutions, An approach for the evaluation of the residential buildings' performances in terms of life cycle energy and cost efficiency, 2013 - 2015

Memberships / Tasks in Scientific Organizations

Turkish Society of HVAC and Sanitary Engineers, Member, 2019 - Continues, Turkey

Building Physics Association, Member, 2018 - Continues, Turkey

International Association of Building Physics , Member, 2015 - Continues, Italy

TMMOB Chamber of Architects-Istanbul, Member, 2004 - Continues, Turkey

Scientific Refereeing

JOURNAL OF CLEANER PRODUCTION, Journal Indexed in SCI-E, May 2024

19th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES), Conference Paper (Full Text), April 2024

4. Ulusal Yapı Fiziği ve Çevre Kontrolü Kongresi, Conference Paper (Full Text), April 2024

JOURNAL OF ASIAN ARCHITECTURE AND BUILDING ENGINEERING, Journal Indexed in SCI-E, March 2024

A|Z : ITU JOURNAL OF FACULTY OF ARCHITECTURE, Other Indexed Journal, March 2024

JOURNAL OF BUILDING ENGINEERING, Journal Indexed in SCI-E, March 2024

4. Ulusal Yapı Fiziği ve Çevre Kontrolü Kongresi, Conference Paper (Abstract), January 2024

ENERGY AND BUILT ENVIRONMENT, Other Indexed Journal, December 2023

MEGARON, Journal Indexed in ESCI, December 2023

CITY AND ENVIRONMENT INTERACTIONS, Journal Indexed in ESCI, October 2023

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, Journal Indexed in SCI-E, September 2023

18th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES), Conference Paper (Full Text), May 2023

TUBITAK Project, 2221 - Sabbatical Science Support P., The Scientific and Technological Research Council of TÜRKİYE, Turkey, April 2023

MEGARON, Journal Indexed in ESCI, March 2023

SUSTAINABLE CITIES AND SOCIETY, Journal Indexed in SCI-E, May 2022

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, Journal Indexed in SCI-E, February 2022

SUSTAINABLE CITIES AND SOCIETY, Journal Indexed in SCI-E, January 2022

MEGARON, Journal Indexed in ESCI, September 2021

ICONARP International Journal of Architecture and Planning, Journal Indexed in ESCI, September 2021

SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, Journal Indexed in SCI-E, August 2021

ENERGY STRATEGY REVIEWS, Journal Indexed in SCI-E, July 2021

Energy And Buildings, Journal Indexed in SCI-E, June 2021

ICONARP International Journal of Architecture and Planning , Journal Indexed in ESCI, April 2021

Metu Journal Of The Faculty Of Architecture, Journal Indexed in AHCI, February 2021

Ege Mimarlık, Other Journals, May 2020

Metu Journal Of The Faculty Of Architecture, Journal Indexed in AHCI, January 2020

Ege Mimarlık, Other Journals, April 2019

7th International Building Physics Conference, IBPC 2018, Conference Paper (Full Text), May 2018

Metu Journal Of The Faculty Of Architecture, Journal Indexed in AHCI, August 2017

Construction And Building Materials, Journal Indexed in SCI-E, July 2017

Environmental Engineering And Management Journal, Journal Indexed in SCI-E, March 2017

Energy Efficiency, Journal Indexed in SCI-E, June 2016

Energy And Buildings, Journal Indexed in SCI-E, February 2016

Tasks In Event Organizations

Mangan S. D., 19th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES) , Scientific Congress, Rome, Italy, Eylül 2024

Mangan S. D., 4th National Building Physics and Environmental Control Congress, Scientific Congress, İstanbul, Turkey, Mayıs 2024

Mangan S. D., 18th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES), Scientific Congress, Dubrovnik, Croatia, Eylül 2023

Scientific Research / Working Group Memberships

Ytú Yapı Fiziği Araştırma Grubu, Yıldız Technical University, Türkiye, <https://avesis.yildiz.edu.tr/arastirma-grubu/yfag>, 2023 - Continues

Metrics

Publication: 31

Citation (WoS): 113

Citation (Scopus): 150

H-Index (WoS): 5

H-Index (Scopus): 6

Congress and Symposium Activities

4th National Congress on Building Physics and Environmental Control, Session Moderator, İstanbul, Turkey, 2024

Final Evaluation Meeting for Preparation of 2 nd National Energy Efficiency Action Plan, Attendee, İstanbul, Turkey, 2023

Energy Efficiency 2030 Vision, Strategy and 2nd UEVEP (2024-2030) Project, Energy Efficiency in Buildings Workshop, Attendee, Antalya, Turkey, 2022

Strengthening Climate Adaptation Action in Turkey Project City Consultation Meeting, Attendee, Ankara, Turkey, 2022

XV TTMD International HVAC&R Technologies Symposium, Attendee, İstanbul, Turkey, 2022

5th South East European Conference on Sustainable Development of Energy, Water and Environment Systems (5th SEE SDEWES), Attendee, Vlore, Albania, 2022

CLIMA 2019- REHVA 13th HVAC World Congress, Attendee, Bucuresti, Romania, 2019

SOLARTR2018, Attendee, İstanbul, Turkey, 2018

7th International Building Physics Conference, IBPC2018, Attendee, New York, United States Of America, 2018

3rd National Building Physics and Environmental Control Congress, Attendee, İstanbul, Turkey, 2018

International Conference on Building Envelope Systems and Technologies (ICBEST 2017), Attendee, İstanbul, Turkey, 2017

MOBBIG 44, Attendee, İstanbul, Turkey, 2017

2nd National Building Physics and Environmental Control Congress, Attendee, İstanbul, Turkey, 2016

6th International Building Physics Conference (IBPC), Attendee, Turin, Italy, 2015

12th National Installation Engineering Congress, Attendee, İzmir, Turkey, 2015

1st National Building Physics and Environmental Control Congress, Attendee, İstanbul, Turkey, 2014

11th REHVA World Congress & 8th International Conference on IAQVEC,CLIMA 2013, Attendee, Praha, Czech Republic, 2013

8th International Symposium on Sinan, Attendee, Edirne, Turkey, 2013

11th National Installation Engineering Congress, Attendee, İzmir, Turkey, 2013

2nd International Green Buildings Summit, Attendee, İstanbul, Turkey, 2013

1st International Green Buildings Summit, Attendee, İstanbul, Turkey, 2012

Sustainable Buildings Workshop, Attendee, İstanbul, Turkey, 2009

Ninth International Docomomo Conference , Attendee, İstanbul, Turkey, 2006

International Association of Civil Engineering Student Exchange Programme, Attendee, Wuppertal, Germany, 2003

Scholarships

Doctoral Fellowship, Foundation, 2008 - 2012

Awards

Mangan S. D., Certificate of Achievement (Science Incentive), Yildiz Teknik Universitesi , March 2024

Mangan S. D., Certificate of Achievement (Science Incentive), Yildiz Teknik Universitesi, March 2022

Mangan S. D., Turkish Educational Foundation Post-Graduate Achievement Award , Türk Eğitim Vakfı, June 2007

Non Academic Experience

Eindhoven University of Technology

TURKECO Yeşil Bina Danışmanlığı

Company, SYSTEM Construction

Company, ENKA Construction and Industry Inc.

Company, ARIMA Architects

Company, AYDINLIOGLU Construction, Contracting, and Foreign Trade Inc.