

## Res. Asst. ÇAĞATAY TAKVA

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: GSN-9088-2022

ScopusID: 58353320300

Yoksis Researcher ID: 355499

### Education Information

Doctorate, Gazi University, Mimarlık Fakültesi, Mimarlık, Turkey 2022 - Continues

Postgraduate, Gazi University, Mimarlık Fakültesi, Mimarlık, Turkey 2019 - 2021

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Other, Uluslararası Akdeniz Uygulamalı Bilimler Kongresi, İKSAD-INSTITUTE OF ECONOMIC DEVELOPMENT AND SOCIAL RESEARCH, 2022

Vocational Training, Afet Farkındalık Eğitimi, Disaster and Emergency Management Presidency, 2021

### Research Areas

Architecture, Building Information, Carrier Systems, Structural elements, Building materials, Engineering and Technology

### Academic Titles / Tasks

Research Assistant, Gazi University, Mimarlık Fakültesi, Mimarlık, 2023 - Continues

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

- I. **Applicability of 3D concrete printing technology in building construction with different architectural design decisions in housing**  
Takva Ç., Top S. M., Gökgöz B. İ., Gebel Ş., İlerisoy Z. Y., İlcan H., Şahmaran M.  
JOURNAL OF BUILDING ENGINEERING, vol.98, 2024 (SCI-Expanded)
- II. **Accessibility analysis of public buildings with graph theory and the space syntax method:**

### **government houses**

Keleş B. N., Takva Ç., Çakıcı F. Z.

JOURNAL OF ASIAN ARCHITECTURE AND BUILDING ENGINEERING, 2023 (SCI-Expanded)

### **III. Structural analysis of steel load-bearing systems using tessellation method in geometric architectural design**

Takva Ç., İlerisoy Z. Y.

SADHANA-ACADEMY PROCEEDINGS IN ENGINEERING SCIENCES, vol.48, no.3, 2023 (SCI-Expanded)

### **IV. Effect of outrigger system in high-rise buildings on structural behavior and cost**

Takva Y., Takva Ç., İlerisoy Z. Y.

REVISTA DE LA CONSTRUCCION, no.2, pp.337-347, 2023 (SCI-Expanded)

## **Articles Published in Other Journals**

- I. **Exploring the role of 3D concrete printing in AEC: Construction, design, and performance**  
GEBEL Ş., TOP S. M., TAKVA Ç., GÖKGÖZ B. İ., İLERİSOY Z. Y., ŞAHMARAN M.  
Journal of Construction Engineering, Management & Innovation (Online), vol.7, no.3, pp.229-246, 2024 (Peer-Reviewed Journal)
- II. **Post-earthquake fires: risk assessment and precautions**  
Gökşen F., Takva Ç., Takva Y., İlerisoy Z. Y.  
MEHRAN UNIVERSITY RESEARCH: JOURNAL OF ENGINEERING AND TECHNOLOGY, vol.43, no.1, pp.1-16, 2024 (ESCI)
- III. **A BIBLIOMETRIC ANALYSIS OF THE CONCEPTS AND METHODS USED IN THE ADAPTIVE REUSE**  
Takva Ç., Özkan Yazgan E.  
International Journal of Conservation Science, vol.15, no.1, pp.479-496, 2024 (ESCI)
- IV. **Post-earthquake Disasters: A Systematic Review of the Classification and Evaluation of the Analysis Methods**  
Takva Ç., Soyluk A., İlerisoy Z. Y.  
GEOCONSERVATION RESEARCH, no.2, pp.427-449, 2023 (ESCI)
- V. **Geometric Design in Architecture: Examination of Tessellation Configurations in Structural Systems**  
Takva Ç., Gökşen F., Takva Y.  
PERIODICA POLYTECHNICA. ARCHITECTURE, vol.54, no.3, pp.167-176, 2023 (Peer-Reviewed Journal)
- VI. **Digitalization of Building Site Management in the Construction Industry**  
Takva Ç., Cudzik J., İlerisoy Z. Y.  
International Journal of Sustainable Construction Engineering and Technology, vol.14, no.4, pp.171-193, 2023 (ESCI)
- VII. **Examination of Contemporary Additions Made with Adaptive Reuse of Historic Building Heritage**  
Takva Y., Takva Ç., Gökşen F., İlerisoy Z. Y.  
ONLINE JOURNAL OF ART AND DESIGN, vol.11, no.4, pp.124-136, 2023 (Peer-Reviewed Journal)
- VIII. **Geometric Design in Islamic Architecture: Examination of Tessellation Configurations in Mosques**  
Takva Ç., Takva Y.  
Journal of History Culture and Art Research, vol.12, no.2, pp.1-20, 2023 (Peer-Reviewed Journal)
- IX. **Designing for Designers: The Campus and Building of Atatürk University Faculty of Architecture and Design**  
Takva Ç., Akçay F. Ç.  
Gazi University Journal of Science Part B: Art Humanities Design and Planning, vol.11, no.2, pp.297-306, 2023 (Peer-Reviewed Journal)
- X. **A Contemporary House Proposal: Structural Analysis of Wood and Steel Bungalows**  
Takva Y., Takva Ç., Gökşen Takva F.  
ENGINEERING TECHNOLOGY & APPLIED SCIENCE RESEARCH, vol.13, no.3, pp.11032-11035, 2023 (ESCI)
- XI. **Flying Robot Technology (Drone) Trends: A Review in the Building and Construction Industry**

- Takva Ç., İlerisoy Z. Y.  
ARCHITECTURE CIVIL ENGINEERING ENVIRONMENT, no.1, pp.47-68, 2023 (ESCI)
- XII. **Climate-sensitive Design in Traditional Residential Architecture: Kars Karakurt Houses**  
Çakıcı F. Z., Takva Ç.  
INTERNATIONAL JOURNAL OF BUILT ENVIRONMENT AND SUSTAINABILITY, no.3, pp.1-11, 2023 (ESCI)
- XIII. **Sustainable Adaptive Reuse Strategy Evaluation for Cultural Heritage Buildings**  
Takva Y., Takva Ç., İlerisoy Z. Y.  
INTERNATIONAL JOURNAL OF BUILT ENVIRONMENT AND SUSTAINABILITY, no.2, pp.25-37, 2023 (ESCI)
- XIV. **Net Positive Energy Buildings in Architectural Context**  
Takva Ç., Çalışkan B. N., Çakıcı F. Z.  
Journal of Asian Scientific Research, vol.12, no.3, pp.135-145, 2022 (Peer-Reviewed Journal)
- XV. **Investigation of Tessellation Patterns in Long-Span Structures**  
Takva Ç., İlerisoy Z. Y.  
Gazi University Journal of Science Part B: Art Humanities Design and Planning, vol.9, no.3, pp.235-249, 2021 (Peer-Reviewed Journal)

## **Books & Book Chapters**

- I. **WOODEN HIGH-RISE BUILDINGS: EVALUATION OF LOAD-BEARING SYSTEM AND MATERIAL USE**  
Takva Y., Takva Ç.  
in: MİMARLIK ALANINDA ARAŞTIRMALAR VE DEĞERLENDİRMELER, PARLAK BİÇER ZÜBEYDE ÖZLEM, DAL MURAT, Editor, Gece Kitaplığı, Ankara, pp.71-90, 2024
- II. **1970'lerde Düzenlenen Yarışma Projeleriyle Elde Edilen Atatürk Üniversitesi Kampüs Yapıları**  
Çakıcı F. Z., Takva Ç.  
in: Anadolu'nun İmarında Yarışmalar : 1930-1990, Filiz Sönmez, Semra Arslan Selçuk, Editor, İdealkent, Ankara, pp.349-360, 2023
- III. **STRUCTURAL APPLICATION OF GEOMETRIC PATTERNS: RECIPROCAL FRAME SYSTEMS**  
Takva Ç., Takva Y.  
in: CURRENT RESEARCH IN ARCHITECTURE, PLANNING AND DESIGN, GÜNGÖR, Sertaç, Editor, Gece Kitaplığı, Ankara, pp.67-82, 2023
- IV. **TESSELLATION CONFIGURATIONS TRANSFORMING FROM ART TO STRUCTURAL DESIGN OF GRIDSHELL STRUCTURES**  
Takva Ç., Takva Y.  
in: Research & Reviews in Architecture, Planning and Design, Gülbin ÇETİNKALE DEMİRKAN, Sertaç GÜNGÖR, Editor, Gece Kitaplığı, Ankara, pp.1-18, 2022
- V. **TEMPORARY-SHELTERING STRUCTURES AND INVESTIGATION OF THEIR REUSE AFTER DISASTER**  
Takva Ç., Top S. M., Takva Y., İlerisoy Z. Y.  
in: Barınma Kültürü, Yıldız Esra, Büyüksahin Süheyla, Editor, Necmettin Erbakan Üniversitesi Yayınları, Konya, pp.505-522, 2022
- VI. **3 BOYUTLU YAZICI TEKNOLOJİLERİNDE KONUT FONKSİYONU: BİBLİYOMETRİK ANALİZ**  
Top S. M., Takva Ç., İlerisoy Z. Y.  
in: BARINMA KÜLTÜRÜ, YALDIZ Esra, BÜYÜKŞAHİN Süheyla, Editor, Necmettin Erbakan Üniversitesi Yayınları, Konya, pp.497-514, 2022
- VII. **BASIC EXCAVATION METHODS IN BUILDING-FOUNDATION INTERACTION; TOP-DOWN METHOD IN HIGH-RISE BUILDINGS**  
Takva Ç., Takva Y.  
in: ENGINEERING FROM MACHINE LEARNING TO VIRTUAL REALITY, Merivan ŞAŞMAZ, Editor, İKSAD, Ankara, pp.139-161, 2022
- VIII. **2000 YILI VE SONRASI YARIŞMA PROJELERİNDE GENİŞ AÇIKLIK PROBLEMİ: BELEDİYE HİZMET BİNALARI ÜZERİNDEN İNCELENMESİ**

Takva Y., Takva Ç.

in: FEN VE MÜHENDİSLİK UYGULAMALARINDA MALZEME TEMİNİ VE ÜRETİM YÖNTEMLERİ, Serkan GÜLDAL,  
Editor, İKSAD, Ankara, pp.191-205, 2022

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **Investigation of three-dimensional concrete printing (3DCP) technology in AEC industry in the context of construction, performance and design**  
Gebel Ş., Top S. M., Takva Ç., Gökgöz B. İ., İlerisoy Z. Y., Şahmaran M.  
Proceedings of 3rd International Civil Engineering and Architecture Congress (ICEARC'23), Trabzon, Turkey, 12 - 14 October 2023, vol.1, pp.380-394
- II. **MODULAR SYSTEM APPLICATIONS IN HIGH-RISE BUILDINGS**  
Takva Y., İlerisoy Z. Y., Takva Ç.  
Mediterranean International Conference on Research in Applied Sciences, Antalya, Turkey, 22 April 2022, pp.399-409
- III. **INVESTIGATION OF THE SHARD TOWER WITHIN THE SCOPE OF ADVANCED CONSTRUCTION TECHNIQUES**  
Takva Ç., İlerisoy Z. Y., Takva Y.  
Mediterranean International Conference on Research in Applied Sciences, Antalya, Turkey, 22 April 2022, pp.385-398

## **Metrics**

Publication: 30

Citation (WoS): 21

Citation (Scopus): 6

H-Index (WoS): 3

H-Index (Scopus): 1

## **Congress and Symposium Activities**

Mediterranean International Conference on Research in Applied Sciences , Attendee, Antalya, Turkey, 2022

Mediterranean International Conference on Research in Applied Sciences , Attendee, Antalya, Turkey, 2022