

# ORKUN YILMAZ

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### International Researcher IDs

ScholarID: QZ\_ni\_kAAAAJ

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Publons / Web Of Science ResearcherID: AAZ-6731-2020

ScopusID: 57213505189

Yoksis Researcher ID: 194117

### Learning Knowledge

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Doctorate 2015 - 2022	Yildiz Technical University, Graduate School Of Natural And Applied Sciences, İnşaat Mühendisliği - Yapı, Turkey
Postgraduate 2012 - 2015	Yildiz Technical University, Graduate School Of Natural And Applied Sciences, İnşaat Mühendisliği - Yapı, Turkey
Undergraduate 2007 - 2012	Yildiz Technical University, Faculty Of Civil Engineering, İnşaat Mühendisliği, Turkey

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### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Development of Damaged or Non-damaged High Energy Dissipative Moment Connections In Seismic Resistant Steel Frames, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, 2022

Postgraduate, DBYBHY-2007'DEKİ MOMENT AKTARAN ÇELİK BİRLEŞİMLERİN SONLU ELEMEN ANALİZLERİ, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, İnşaat Mühendisliği Anabilim Dalı, 2015

### Academic Titles / Tasks

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Assistant Professor 2023 - Continues	Yildiz Technical University, Faculty Of Civil Engineering, Civil Engineering Department
Research Assistant PhD 2022 - 2023	Yildiz Technical University, Faculty Of Civil Engineering, Civil Engineering Department

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Research Assistant  
2013 - 2022

Yildiz Technical University, Faculty Of Civil Engineering, Civil Engineering  
Department

## Supported Projects

1. BEKİROĞLU S., AYVAZ Y., ARSLAN G., SEVİM B., YILMAZ O., YILMAZ M. O., FIRAT ALEMDAR Z., ALEMDAR F., Project Supported by Higher Education Institutions, Similasyon Ortamında Geliştirilen Sürtünlü ve Elastomerli Sismik Birleşim Aparatının Kısmi Prototip Testleri, 2022 - Continues
2. BEKİROĞLU S., ALEMDAR F., ARSLAN G., AYVAZ Y., SEVİM B., YILMAZ O., Project Supported by Higher Education Institutions, Alın Levhalı Bulonlu ve Alın Levhasız Bulonlu Çelik Kolon-Kiriş Birleşimlerinin Deneysel ve Sonlu Elemanlar Analizleri ile Karşılaştırılması, 2015 - 2018

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

1. **Biaxial cyclic behavior of bolted end-plate connection to I-column reformed by box-plates**  
Yılmaz O., Bekiroğlu S.  
Engineering Structures, vol.255, 2022 (SCI-Expanded)
2. **Experimental investigation of bolted stiffened end-plate and bolted flange-plate connections**  
Yılmaz O., Bekiroğlu S., Alemdar F., Arslan G., Sevim B., Ayvaz Y.  
LATIN AMERICAN JOURNAL OF SOLIDS AND STRUCTURES, vol.16, no.3, 2019 (SCI-Expanded)
3. **Seismic Performance of Post-Northridge Welded Connections**  
Yılmaz O., Bekiroğlu S.  
LATIN AMERICAN JOURNAL OF SOLIDS AND STRUCTURES, vol.15, 2018 (SCI-Expanded)
4. **THE EFFECT OF REINFORCING PANEL ZONE OF BOLTED END PLATE COLUMN BEAM CONNECTIONS**  
Yılmaz O., Bekiroğlu S.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.31, no.2, pp.241-253, 2016 (SCI-Expanded)

## Articles Published in Other Journals

1. **A Study on Effect of Sizing Bolt Hole in Single-Lap Connection Using FEA**  
Zafer A., YILMAZ O., BEKİROĞLU S.  
Journal of Scientific Research and Reports, vol.19, no.1, pp.1-14, 2018 (Peer-Reviewed Journal)
2. **A NOVEL APPROACH FOR STATIC ANALYSIS OF PLANE FRAME SYSTEMS**  
YILMAZ O., Sahin A.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.33, no.2, pp.129-143, 2015 (ESCI)
3. **EDUCATIONAL SOFTWARE DEVELOPMENT FOR DESIGN OF STEEL STRUCTURES LESSON**  
YILMAZ O., Sahin A.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.31, no.4, pp.571-581, 2013 (ESCI)

## Books & Book Chapters

1. **Birleşimler**

Yılmaz O.

in: Çelik Yapılar: Tasarım ve Davranış, Prof. Dr. İlker Kalkan, Doç. Dr. Fatih Alemdar, Editor, Palme Yayın Dağıtım, Ankara, pp.655-747, 2024

## Refereed Congress / Symposium Publications in Proceedings

1. **Partial Prototype Tests of a Developed Seismic Connection Apparatus**  
Yılmaz O., Bekiroğlu S., Alemdar F., Yılmaz M. O., Fırat Alemdar Z., Sevim B., Arslan G., Ayvaz Y.  
9. Yapı Mekaniği Laboratuvarları Çalıştayı, Düzce, Turkey, 18 - 19 October 2024, pp.155-160
2. **Evaluation of Friction Behaviour in Metal-Metal Contact Surfaces under Cyclic Motions for Seismic Damping**  
Koyuncu T., Bekiroğlu S., Yılmaz O., Alemdar F., Yılmaz M. O., Fırat Alemdar Z., Sevim B., Arslan G., Ayvaz Y.  
XXIV International Scientific Conference VSU'2024, Sofija, Bulgaria, 10 - 12 October 2024, pp.1-10
3. **Betonarme Bir Binanın İki Farklı Fiber Plastik Mafsallı Durumu için Performansının İncelenmesi**  
Kaya N., Yılmaz O.  
4. Uluslararası Lisansüstü Çalışmalar Kongresi, İstanbul, Turkey, 5 - 08 June 2024, pp.655-668
4. **Cost Comparison of Construction of a Steel Structure with Traditional Methods and Lead Rubber Bearing Isolator System**  
Bayar B., Yılmaz O.  
5. Uluslararası Mühendislik Araştırmaları Sempozyumu, Düzce, Turkey, 7 - 09 March 2024, pp.172-182
5. **The frictional and elastomeric seismic joint apparatus and its usage as a steel beam-to-column connection**  
Yılmaz O., Bekiroğlu S.  
Proceedings of 3rd International Civil Engineering and Architecture Congress (ICEARC'23), Trabzon, Turkey, 12 - 14 October 2023, vol.1, pp.970-979
6. **Şubat 2023 Depremlerinin Bölgede Oluşturduğu Etkiler ve Yapay Zeka ile Afet Yönetim Planlaması**  
Doğan U., Yüzer N., Acar U., Akbaba M. F., Akbulut M. T., Akgün C., Akın O., Akkaya H. C., Akpınar B., Aktaş Z., et al.  
Türkiye Ulusal Jeodezi Komisyonu (TUJK) XXII. Sempozyumu 2023, Trabzon, Turkey, 29 November - 01 December 2023, pp.5-6
7. **Development of a Frictional and Elastomeric Seismic Joint Apparatus for Use in Buildings**  
Yılmaz O., Bekiroğlu S.  
14th International Congress on Advances in Civil Engineering (ACE2020-21), İstanbul, Turkey, 6 - 08 September 2021, pp.260-267
8. **Suggesting Box-plates for I-column around Weak-axis in the Bolted End-plate Connection**  
Yılmaz O., Bekiroğlu S.  
14th International Congress on Advances in Civil Engineering (ACE2020-21), İstanbul, Turkey, 6 - 08 September 2021, pp.1032-1039
9. **Thermal Effect on Buckling of Micro Beams Using Modified Couple-Stress Theory**  
Besseghier A., Yılmaz O.  
4th International Conference on Advances in Mechanical Engineering (ICAME2018), İstanbul, Turkey, 19 December 2018, pp.569-573
10. **ALIN LEVHALI BULONLU KOLON-KİRİŞ BİRLEŞİMİNİN ÇEVİRİMSSEL YÜKLEME ALTINDA DENEYSEL ÇALIŞMASI**  
Yılmaz O., Bekiroğlu S., Alemdar F., Arslan G., Sevim B., Ayvaz Y.  
4. Uluslararası Deprem Mühendisliği ve Sismoloji Konferansı, Eskişehir, Turkey, 11 - 13 October 2017
11. **Investigation of Reinforcing Beam-Web on Bolted Unstiffened End-Plate Connections**  
Yılmaz O., Bekiroğlu S.  
XVII International Scientific Conference VSU'2017, Sofija, Bulgaria, 8 - 09 June 2017, pp.142-149
12. **Performance Evaluation of Weak-Axis Steel Moment Connections**  
Yılmaz O., Bekiroğlu S.

- Proceedings 7VI International Scientific Conference VSU'2016, Sofija, Bulgaria, 9 - 10 June 2016, pp.352-358
13. **DBYBHY-2007'deki Moment Aktaran Kaynaklı Birleşimlerin Monotonik Yükleme Altındaki Davranışı**  
Yılmaz O., Bekiroğlu S.  
6. Çelik Yapılar Sempozyumu, Eskişehir, Turkey, 15 - 17 October 2015, pp.117-126
14. **DBYBHY-2007'ye Göre Moment Aktaran Bulonlu Birleşimlerin Sonlu Elemanlar Yöntemi ile Analizi**  
Yılmaz O., Bekiroğlu S.  
Sekizinci Ulusal Deprem Mühendisliği Konferansı, İstanbul, Turkey, 11 - 15 May 2015, pp.383-394
15. **The Development of Educational Tool for Analysis and Design of Plane Truss Systems**  
Yılmaz O., Şahin A.  
International Conference on Engineering Education, Instructional Technology, Assessment, and E-learning, İstanbul, Turkey, 01 December 2014
16. **Numerical Simulations of Bolted Steel Connections in Single and Double Shear Under Pretension Effect**  
Bekiroğlu S., Yılmaz O.  
11th International Congress on Advances in Civil Engineering (ACE 2014), İstanbul, Turkey, 21 - 25 October 2014, pp.1-7
17. **Behaviour of Pretensioned Bolted Steel Column – Beam Connections Subjected to Monotonic Loading**  
Yılmaz O., Bekiroğlu S.  
11th International Congress on Advances in Civil Engineering (ACE 2014), İstanbul, Turkey, 21 - 25 October 2014, pp.1-8
18. **Çelik Endüstri Yapılarının Tasarımı için Bilgisayar Programı Geliştirilmesi**  
Yılmaz O., Şahin A.  
5. Çelik Yapılar Sempozyumu, İstanbul, Turkey, 13 - 15 November 2013, pp.141-150

## Courses

Steel Structures 2, Undergraduate, 2023 - 2024, 2022 - 2023

Steel Structures 1, Undergraduate, 2024 - 2025, 2023 - 2024

Sonlu Elemanlar Yöntemi İle Bilgisayar Uygulamaları, Doctorate, 2023 - 2024

Advanced Computer Programming for Structural and Earthquake Engineering, Postgraduate, 2024 - 2025, 2023 - 2024

Steel Beams, Undergraduate, 2024 - 2025

Structural Analysis 3, Undergraduate, 2023 - 2024

Numerical Analysis, Undergraduate, 2022 - 2023

## Patent

Bekiroğlu S., Yılmaz O., BİLHASSA BİNALARDA KULLANILMAK ÜZERE SÜRTÜNME Lİ VE ELASTOMER Lİ SİSMİK BİRLEŞİM APARATI, Patent, CHAPTER E Constructed Constructions (Construction), The Invention Registration Number: 2020 18195 , Standard Registration, 2024

Yılmaz O., Bekiroğlu S., BURKULMA LEVHALI DEĞİŞTİRİLEBİLİR KİRİŞ-KOLON BİRLEŞİM APARATI, Patent, CHAPTER E Constructed Constructions (Construction), The Invention Recourse Number: 2022/017103 , Standard Registration, 2022

## Scientific Refereeing

IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY - TRANSACTIONS OF CIVIL ENGINEERING, Journal Indexed in SCI-E, September 2024

AIN SHAMS ENGINEERING JOURNAL, Journal Indexed in SCI-E, September 2024

AIN SHAMS ENGINEERING JOURNAL, Journal Indexed in SCI-E, June 2024

IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY - TRANSACTIONS OF CIVIL ENGINEERING, Journal Indexed in SCI-E, June 2024

Project Supported by Higher Education Institutions, BAP Research Project, Eskisehir Osmangazi University, Turkey, June 2024

Sigma Journal of Engineering and Natural Sciences, Journal Indexed in ESCI, July 2022

Journal Of The Brazilian Society Of Mechanical Sciences And Engineering, Journal Indexed in SCI-E, July 2022

JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, Journal Indexed in SCI-E, June 2020

JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, Journal Indexed in SCI-E, April 2020

Computer Applications In Engineering Education, Journal Indexed in SCI-E, November 2017

## Metrics

Publication: 27

Citation (WoS): 9

Citation (Scopus): 11

H-Index (WoS): 2

H-Index (Scopus): 3

## Research Areas

Civil Engineering, Structure, Structural Engineering, Steel Structures, Engineering and Technology