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#### International Researcher IDs

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Publons / Web Of Science ResearcherID: AEK-8209-2022

Yoksis Researcher ID: 29393

#### Biography

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1999 yılında İTÜ Elektrik-Elektronik Fakültesi, Elektronik ve Haberleşme Mühendisliği Bölümünden mezun oldu. 2002 yılında İTÜ Fen Bilimleri Enstitüsü, Elektronik ve Haberleşme Mühendisliği Yüksek Lisans Programından mezun oldu. 2011 yılında İTÜ Fen Bilimleri Enstitüsü, Elektronik Mühendisliği Doktora Programından mezun oldu.

#### Education Information

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- I. Doctorate, Istanbul Technical University, Elektrik-Elektronik Fakültesi, Elektronik Mühendisliği Bölümü, Turkey 2002 - 2011
- II. Postgraduate, Istanbul Technical University, Elektrik-Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, Turkey 1999 - 2002
- III. Undergraduate, Istanbul Technical University, Elektrik-Elektronik, Elektronik Ve Haberleşme Mühendisliği, Turkey 1995 - 1999

#### Foreign Languages

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- I. English, C1 Advanced

#### Dissertations

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- I. Doctorate, Tümlleştirilmeye Uygun Rastgele Sayı Üreteçleri, Istanbul Technical University, Elektrik-Elektronik Fakültesi, Elektronik Mühendisliği Bölümü, 2011
- II. Postgraduate, OFDM alıcı tasarımı, Istanbul Technical University, Elektrik-Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, 2002

#### Research Areas

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Printed Circuits, Thin Film, Thick Film and Hybrid ICs, Circuit Theory, Electronic Circuits

#### Academic Titles / Tasks

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- I. Assistant Professor, Istanbul Commerce University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2011 - Continues
- II. Research Assistant, Istanbul Technical University, Elektronik Ve Haberleşme Mühendisliği Bölümü, 1999 - 2011

## Academic and Administrative Experience

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- I. Vice Dean, Istanbul Commerce University, Mühendislik Fakültesi, 2012 - 2016

## Courses

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- I. Sistem Teorisi, Postgraduate, 2023 - 2024
- II. Electronic Circuits Laboratory 2, Undergraduate, 2023 - 2024
- III. Design Project, Undergraduate, 2023 - 2024
- IV. Electronic Circuits 2, Undergraduate, 2023 - 2024
- V. Electronic Circuits, Undergraduate, 2023 - 2024
- VI. Numeric Analysis, Undergraduate, 2023 - 2024
- VII. Graduation Project, Undergraduate, 2022 - 2023, 2021 - 2022, 2015 - 2016
- VIII. Hardware Description Languages, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021
- IX. Numeric Analysis, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021
- X. Electronic Circuits 2 Laboratory, Undergraduate, 2022 - 2023, 2021 - 2022
- XI. Electronic Circuits 2, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2015 - 2016, 2014 - 2015
- XII. Sistem Teorisi, Postgraduate, 2022 - 2023, 2021 - 2022
- XIII. Design Project, Undergraduate, 2022 - 2023, 2021 - 2022, 2015 - 2016
- XIV. Electronic Circuits, Undergraduate, 2022 - 2023, 2021 - 2022, 2015 - 2016, 2014 - 2015, 2013 - 2014
- XV. FPGA Based Design and Applications, Postgraduate, 2022 - 2023
- XVI. Circuit Analysis, Undergraduate, 2021 - 2022
- XVII. Electronic Circuits 1, Undergraduate, 2021 - 2022, 2014 - 2015, 2013 - 2014
- XVIII. Electronic Circuits 1 Laboratory, Undergraduate, 2021 - 2022
- XIX. Active Filter Design, Undergraduate, 2020 - 2021
- XX. Sayısal Çözümleme, Undergraduate, 2020 - 2021, 2011 - 2012
- XXI. Circuit Theory, Undergraduate, 2020 - 2021, 2015 - 2016, 2014 - 2015, 2013 - 2014
- XXII. Analog Electronics Laboratory, Undergraduate, 2015 - 2016
- XXIII. Kaotik Sistemler, Doctorate, 2014 - 2015
- XXIV. Lineer Olmayan Sistemler ve Kaos, Postgraduate, 2014 - 2015
- XXV. Sinyaller ve Sistemler, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012
- XXVI. Otomatik Kontrol, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012
- XXVII. Introduction to Electrical Engineering, Undergraduate, 2012 - 2013

## Advising Theses

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- I. Tavas V., Tipik bir güneş panelinde verimin iyileştirilmesi için yeni yaklaşımlar, Postgraduate, B.KARADUMAN(Student), 2023
- II. VEDAT T., Verilog ile tausworthe denkleminde dayanan yeni bir rastgele sayı üretici tasarımı, Postgraduate, M.HASANBAYLI(Student), 2021
- III. VEDAT T., NB-IOT ve LORA haberleşme teknolojilerinin karşılaştırmalı performans analizi, Postgraduate, S.YASİNTİMUR(Student), 2021

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

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- I. **An ADC based random bit generator based on a double scroll chaotic circuit**  
Tavas V., Demirkol A. S., Özoğuz İ. S., Zeki A., Toker A.  
Journal of Circuits, Systems and Computers, vol.19, no.7, pp.1621-1639, 2010 (SCI-Expanded)
- II. **Integrated cross-coupled chaos oscillator applied to random number generation**  
Tavas V., Demirkol A., Özoğuz İ. S., Zeki A., Toker A.  
IET Circuits, Devices and Systems, vol.3, no.1, pp.1-11, 2009 (SCI-Expanded)

## Articles Published in Other Journals

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- I. **COMPARATIVE PERFORMANCE ANALYSIS OF NB-IOT AND LORACOMMUNICATION TECHNOLOGIES**  
YASİNTİMUR S., TAVAS V.  
İstanbul Ticaret Üniversitesi Fen Bilimleri Dergisi, vol.20, no.40, pp.297-313, 2021 (Peer-Reviewed Journal)
- II. **A NEW RANDOM NUMBER GENERATOR DESIGN BASED ON TAUSWORTHE EQUATION WITH VERILOG**  
HASANBAYLI M., TAVAS V.  
İstanbul Ticaret Üniversitesi Fen Bilimleri Dergisi, vol.20, no.39, pp.112-126, 2021 (Peer-Reviewed Journal)

## Books & Book Chapters

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- I. **Excel ve Matlab Uygulamalı Mühendisler için Sayısal Çözümleme**  
TAVAS V., YAZICIOĞLU O., BORAT O.  
Seçkin, Ankara, 2015

## Refereed Congress / Symposium Publications in Proceedings

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- I. **A GROUNDED INDUCTANCE SYNTHESIS USING AD844 AND HIGH-PASS FILTER APPLICATION**  
TAVAS V.  
11th International Zeugma Congress on Scientific Research, Gaziantep, Turkey, 18 - 20 March 2024, pp.235-239
- II. **Prevention Methods of Microcracks on Solar Module**  
Karaduman B., Tavas V.  
6th Pak-Turk Conference on Emerging Technologies in the Field of Sciences and Engineering, Karabük, Turkey, 04 May 2023, pp.52-56
- III. **Effect of Microcracks on Solar Module Efficiency**  
Karaduman B., Tavas V.  
6th Pak-Turk Conference on Emerging Technologies in the Field of Sciences and Engineering, Karabük, Turkey, 04 May 2023, pp.48-51
- IV. **INCREASING THE EFFICIENCY OF BIFACIAL HALF CELL SOLAR PANELS WITH REFLECTIVE BACKSIDE MATERIALS**  
Karaduman B., TAVAS V.  
2nd International Conference on Engineering, Natural and Social Science, Konya, Turkey, 04 April 2023, vol.1, pp.680-691
- V. **An IC random number generator based on Chaos**  
Tavas V., Demirkol A. S., Özoğuz İ. S., KILINÇ S., Toker A., Zeki A.  
2010 International Conference on Applied Electronics, AE 2010, Pilsen, Czech Republic, 8 - 09 September 2010, pp.347-350

- VI. **Tümleştirmeye Uygun Kaotik Osilatör Tabanlı Rastgele Sayı Üretici**  
Tavas V.  
Elektrik-Elektronik-Bilgisayar Müh. Sempozyumu , Bursa, Turkey, 26 - 30 November 2008, pp.8-12
- VII. **A CMOS realization of double-scroll chaotic circuit and its application to random number generation**  
Demirkol A. Ş., Özoğuz İ. S., Tavas V., KILINÇ S.  
2008 IEEE International Symposium on Circuits and Systems, ISCAS 2008, Seattle, WA, United States Of America, 18 - 21 May 2008, pp.2374-2377
- VIII. **High frequency chaos oscillators with applications**  
Demirkol A., Tavas V., Özoğuz İ. S., Toker A.  
European Conference on Circuit Theory and Design 2007, ECCTD 2007, Sevilla, Spain, 26 - 30 August 2007, pp.1026-1029

## Supported Projects

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- I. TAVAS V., TUBITAK Project, Geniş Bantlı Güç Uygulamaları İçin Yeni Dağılmış Parametrelili Kuvvetlendirici Yapıları, 2008 - 2011
- II. TAVAS V., TUBITAK Project, Sürekli Zamanlı Kaotik Sistemlerin Tümleşik Olarak Gerçeklenmesi ve Rastgele Sayı Üretiminde Kullanılması, 2006 - 2008

## Activities in Scientific Journals

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- I. İstanbul Ticaret Üniversitesi Fen Bilimleri Dergisi, Assistant Editor/Section Editor, 2024 - Continues
- II. İstanbul Ticaret Üniversitesi Fen Bilimleri Dergisi, First Editor, 2013 - 2015

## Scientific Consultations

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- I. Teknopark İstanbul, Scientific Consultancy, Istanbul Commerce University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Turkey, 2022 - Continues