

## Asst. Prof. Zehra Gülrü ÇAM TAŞKIRAN

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: ABH-8373-2020

ScopusID: 57200858397

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### Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Elektronik Ve Haberleşme Mühendisliği, Turkey 2013 - 2018

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Elektronik Ve Haberleşme Mühendisliği, Turkey 2011 - 2013

Undergraduate, Istanbul Technical University, Elektrik-Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği, Turkey 2006 - 2011

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Memristor Simulator and Its Applications, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, 2018

Postgraduate, Input-Output Matched, High Dynamic Range, Si-Ge RF Mixer Design, Istanbul Technical University, Fen Bilimleri Enstitüsü, 2013

### Research Areas

Electrical and Electronics Engineering, Electronic, Circuit Theory, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty Of Electrical & Electronics, Electronics And Communication Engineering, 2018 - Continues

Research Assistant PhD, Yildiz Technical University, Faculty Of Electrical & Electronics, Electronics And Communication Engineering, 2018 - 2018

Research Assistant, Yildiz Technical University, Faculty Of Electrical & Electronics, Electronics And Communication

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

- I. **CC-CBTA-Based Floating Inductance Simulator with CM/VM PID Controllers**  
Sagbas M., ÇAM TAŞKIRAN Z. G., AYTEN U. E.  
Journal of Circuits, Systems and Computers, vol.33, no.8, 2024 (SCI-Expanded)
- II. **Temporal Convolutional Networks with RNN approach for chaotic time series prediction**  
Dudukcu H. V., Taskiran M., Taskiran Z. G. C., Yildirim T.  
Applied Soft Computing, vol.133, 2023 (SCI-Expanded)
- III. **A New Dynamical Circuit Based on CCII+, Physical Implementation and Synchronization**  
Özçelik A. C., Taşkıran Z. G.  
Journal of Circuits, Systems and Computers, vol.30, 2021 (SCI-Expanded)
- IV. **A New PID Controller Circuit Design Using CFOAs**  
ÇAM TAŞKIRAN Z. G., SEDEF H., Anday F.  
CIRCUITS SYSTEMS AND SIGNAL PROCESSING, vol.40, no.3, pp.1166-1182, 2021 (SCI-Expanded)
- V. **Application and Modeling of a Novel 4D Memristive Chaotic System for Communication Systems**  
ŞAHİN M. E., ÇAM TAŞKIRAN Z. G., GÜLER H., HAMAMCI S. E.  
CIRCUITS SYSTEMS AND SIGNAL PROCESSING, vol.39, no.7, pp.3320-3349, 2020 (SCI-Expanded)
- VI. **A new universal mutator circuit for memcapacitor and meminductor elements**  
Çam Taşkıran Z. G., Sağbaş M., Ayten U. E., Sedef H.  
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.119, 2020 (SCI-Expanded)
- VII. **Realization of memristor-based chaotic rossler circuit**  
Taskiran Z. G., Sedef H.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.35, no.2, pp.765-774, 2020 (SCI-Expanded)
- VIII. **A novel memristive true random number generator design**  
Çam Z. G., Taşkıran M., Killoğlu M., Kahraman N., Sedef H.  
COMPEL-THE INTERNATIONAL JOURNAL FOR COMPUTATION AND MATHEMATICS IN ELECTRICAL AND ELECTRONIC ENGINEERING, vol.38, no.6, pp.1931-1947, 2019 (SCI-Expanded)
- IX. **Simulation and implementation of memristive chaotic system and its application for communication systems**  
Sahin M. E., Taskiran Z. G., Guler H., HAMAMCI S. E.  
SENSORS AND ACTUATORS A-PHYSICAL, vol.290, pp.107-118, 2019 (SCI-Expanded)
- X. **Dual-Output Operational Transconductance Amplifier-Based Electronically Controllable Memristance Simulator Circuit**  
Taskiran Z. G., Ayten U. E., Sedef H.  
CIRCUITS SYSTEMS AND SIGNAL PROCESSING, vol.38, pp.26-40, 2019 (SCI-Expanded)
- XI. **Voltage Differencing Gain Amplifier-Based nth-Order Low-Pass Voltage-Mode Filter**  
Taskiran Z. G., SEDEF H., Anday F.  
JOURNAL OF CIRCUITS SYSTEMS AND COMPUTERS, vol.27, no.6, 2018 (SCI-Expanded)
- XII. **Novel Feature Extraction Methodology with Evaluation in Artificial Neural Networks Based Fingerprint Recognition System**  
KAHRAMAN N., ÇAM TAŞKIRAN Z. G., TAŞKIRAN M.  
TEHNICKI VJESNIK-TECHNICAL GAZETTE, vol.25, pp.112-119, 2018 (SCI-Expanded)
- XIII. **A New Floating Memristance Simulator Circuit Based on Second Generation Current Conveyor**  
Cam Z. G., Sedef H.  
JOURNAL OF CIRCUITS SYSTEMS AND COMPUTERS, vol.26, no.2, 2017 (SCI-Expanded)

## Articles Published in Other Journals

- I. **A Lorenz-like Chaotic OTA-C Circuit and Memristive Synchronization**  
Aydın Ş. Z., Beken G. N., Çam Taşkıran Z. G.  
CHAOS THEORY AND APPLICATIONS, vol.5, no.1, pp.52-58, 2023 (Peer-Reviewed Journal)
- II. **A novel analysis and applications of an introduced hyperchaotic system**  
Telli E., ÇAM TAŞKIRAN Z. G.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.28, no.5, pp.701-709, 2022 (ESCI)
- III. **Random Number Generator and Secure Communication Applications Based on Infinitely Many Coexisting Chaotic Attractors**  
Noor A., Çam Taşkıran Z. G.  
ELECTRICA, vol.21, no.2, pp.180-188, 2021 (Scopus)
- IV. **Second Generation Current Conveyor Based Floating FractionalOrder Memristance Simulator and a New Dynamical System**  
Çam Taşkıran Z. G., Taşkıran M.  
CYBERNETICS AND INFORMATION TECHNOLOGIES, vol.20, no.5, pp.68-80, 2020 (ESCI)
- V. **THE NOVEL METHOD FOR RECOGNITION OF AMERICAN SIGN LANGUAGE WITH RING PROJECTION AND DISCRETE WAVELET TRANSFORM**  
Taşkıran M., Çimen S., Çam Z. G.  
World Journal of Engineering Research and Technology, vol.4, no.1, pp.1-10, 2018 (Peer-Reviewed Journal)
- VI. **A NEW CHAOTIC ATTRACTOR FOR RANDOM NUMBER GENERATION BASED ON MEMRISTIVE CIRCUIT**  
Çam Z. G., Taşkıran M., Kahraman N., Sedef H.  
World Journal Of Engineering Research and Technology, vol.4, pp.1-10, 2018 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Memristör Tabanlı Çok Katmanlı Algılayıcı ve Ağırlık Uyarlaması**  
Günakın S., Çam Taşkıran Z. G.  
2nd International Conference on Innovative Academic Studies, 28 January - 31 March 2023, vol.2, pp.474-480
- II. **Yörünge Farklılıklarının Multimedya Güvenliğine Etkisi**  
CENKER R., ÇAM TAŞKIRAN Z. G.  
8. Uluslararası Marmara Fen Bilimleri Kongresi, Kocaeli, Turkey, 13 - 14 May 2022, pp.437-444
- III. **Comprehensive comparison of LSTM variations for the prediction of chaotic time series**  
DÜDÜKÇÜ H. V., TAŞKIRAN M., ÇAM TAŞKIRAN Z. G.  
2021 International Conference on INnovations in Intelligent SysTems and Applications, INISTA 2021, Kocaeli, Turkey, 25 - 27 August 2021
- IV. **Chaotic oscillator based true random number generator Kaotik osilatör tabanlı gerçek rassal sayı üretici**  
Ozcelik A. C., ÇAM TAŞKIRAN Z. G.  
29th IEEE Conference on Signal Processing and Communications Applications, SIU 2021, Virtual, Istanbul, Turkey, 9 - 11 June 2021
- V. **A New Fractional Order Memristance Simulator Circuit Design**  
ÇAM Z. G., TAŞKIRAN M.  
2019 IEEE International Symposium on INnovations in Intelligent SysTems and Applications (INISTA), Sofia, Bulgaria, 3 - 05 July 2019
- VI. **Chaotic Lorenz Synchronization Circuit Design for Secure Communication**  
Deniz H. İ., ÇAM Z. G., SEDEF H.  
IEEE 6th International Conference on Control Engineering Information Technology CEIT2018, İstanbul, Turkey, 25 - 27 October 2018
- VII. **An Analog Chaotic Lorenz Circuit Based on CCII and Multiplier**

Deniz H. İ., ÇAM Z. G., SEDEF H.

2018 41st International Conference on Telecommunications and Signal Processing (TSP), Athens, Greece, 4 - 06 July 2018

- VIII. **Wrist vein recognition by ordinary camera using Phase-Based correspondence matching**  
Niyaz Ö., Çam Z. G., Yıldırım T.  
2017 IASTED International Conference on Modelling, Identification and Control, MIC 2017, Innsbruck, Austria, 20 - 21 February 2017, vol.848, pp.89-93
- IX. **Offline Signature Identification via HOG Features and Artificial Neural Networks**  
Taşkiran M., Cam Z. G.  
15th IEEE International Symposium on Applied Machine Intelligence and Informatics (SAMI), Herlany, Slovakia, 26 - 28 January 2017, pp.83-86
- X. **Generalized regression neural network based efficient memristor modeling**  
Cam Z. G., Cimen S., SEDEF H.  
10th International Conference on Intelligent Systems and Control, ISCO 2016, Coimbatore, India, 7 - 08 January 2016
- XI. **An Efficient Method to Optimize Multi-Layer Perceptron for Classification of Human Activities**  
Taşkiran M., Çam Z. G., Kahraman N.  
2nd International Conference on Computer, Control and Communication Technologies (CCCT'15), Antalya, Turkey, 3 - 04 December 2015, vol.2
- XII. **Çok Katmanlı Algılayıcı Ağının Eğitim Parametrelerinin Yapay Arı Kolonisi ve Genetik Algoritma ile Optimizasyonu**  
ÇAM Z. G., Kartcı A., YILDIRIM T.  
Akıllı Sistemlerde Yenilikler ve Uygulamaları (ASYU) Sempozyumu, İzmir, Turkey, 9 - 10 October 2014, pp.73-76
- XIII. **Learning Parameter Optimization of Multi-Layer Perceptron Using Artificial Bee Colony, Genetic Algorithm and Particle Swarm Optimization**  
Çam Z. G., Cimen S., Yıldırım T.  
IEEE 13th International Symposium on Applied Machine Intelligence and Informatics (SAMI), Herl'any, Slovakia, 22 - 24 January 2015, pp.329-332
- XIV. **Input and output matched SiGe RF mixer with high dynamic range**  
ÇAM Z. G., PALAMUTÇUOĞULLARI O.  
2013 8th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 28 - 30 November 2013
- XV. **Input and output matched SiGe RF Mixer with High Dynamic Range**  
ÇAM Z. G., PALAMUTÇUOĞULLARI O.  
Microwave Symposium (MMS), 2013 13th Mediterranean, 2 - 05 September 2013
- XVI. **Simultaneously matched SiGe transistor RF mixer with high dynamic range**  
ÇAM Z. G., PALAMUTÇUOĞULLARI O.  
2013 21st Signal Processing and Communications Applications Conference (SIU), Haspolat, Turkey, 24 - 26 April 2013
- XVII. **High Gain, Linear, Low Cost Digitally Controlled VHF-UHF Analog Transponder for Nano Satellites**  
Ceylan O., Ozen O. E., Canbey H. H., Cam Z. G., Yağcı H. B.  
3rd Asia-Pacific Microwave Conference Proceedings (APMC), Seoul, South Korea, 5 - 08 November 2013, pp.1027-1029

## Supported Projects

Kahraman N., Çam Taşkiran Z. G., Taşkiran M., Dündükcü H. V., Horizon Europe Project, Smart Building Sensitive to Daily Sentiment (SUSTAIN), 2022 - 2026

İnsan A., Kahraman N., Çam Taşkiran Z. G., Taşkiran M., Çimen S., TUBITAK Project, Fatih Science and Technology Festival, 2022 - 2023

Çam Taşkıran Z. G., Taşkıran M., D d k  H. V., Project Supported by Higher Education Institutions, Decision-Level Fusion of Deep Learning Networks for Prediction of Chaotic Time Series, 2021 - 2022

## **Metrics**

Publication: 37

Citation (WoS): 190

Citation (Scopus): 295

H-Index (WoS): 6

H-Index (Scopus): 9