

## **Asst. Prof. VELİ TAYFUN KILIÇ**

### **Personal Information**

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### **International Researcher IDs**

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Publons / Web Of Science ResearcherID: ABA-5804-2021

Yoksis Researcher ID: 277886

### **Research Areas**

Communication Engineering, Micro and Nano Communication, Sattelite Communication, Electrical and Electronics Engineering, Electronic, Electromagnetic, Energy, Electrical and Magnetic Properties, Avionics, Engineering and Technology

### **Courses**

ANTENNAS, Postgraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

SENIOR DESIGN PROJECT CAPSULE I, Undergraduate, 2021 - 2022, 2020 - 2021

BIOMEDICAL ELECTRONICS AND MEASUREMENT, Undergraduate, 2021 - 2022

MSC THESIS, Postgraduate, 2021 - 2022, 2019 - 2020, 2018 - 2019

UNDERGRADUATE RESEARCH PROJECT II, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

INTRODUCTION TO PROGRAMMING, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

PHD SPECIAL TOPICS, Doctorate, 2021 - 2022

PHD THESIS, Doctorate, 2021 - 2022

MSC SPECIAL TOPICS, Postgraduate, 2021 - 2022, 2019 - 2020, 2018 - 2019

ANTENNAS, Undergraduate, 2020 - 2021, 2019 - 2020, 2017 - 2018

WORKPLACE EXPERIENCE, Undergraduate, 2020 - 2021, 2019 - 2020

UNDERGRADUATE RESEARCH PROJECT III, Undergraduate, 2021 - 2022, 2020 - 2021

MICROWAVE ENGINEERING, Postgraduate, 2021 - 2022

HIGH-FREQUENCY SYSTEM DESIGN CAPSULE, Undergraduate, 2021 - 2022

SENIOR DESIGN PROJECT CAPSULE II, Undergraduate, 2021 - 2022, 2020 - 2021

PERSONAL AND PROFESSIONAL DEVELOPMENT I, Undergraduate, 2020 - 2021

UNDERGRADUATE RESEARCH PROJECT I, Undergraduate, 2021 - 2022

UNDERGRADUATE RESEARCH PROJECT IV, Undergraduate, 2020 - 2021

SUSTAINABILITY, Undergraduate, 2020 - 2021

SENIOR PROJECT II, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019

SENIOR PROJECT I, Undergraduate, 2019 - 2020, 2018 - 2019

ENGINEERING ELECTROMAGNETICS, Undergraduate, 2019 - 2020, 2018 - 2019

PERSONAL AND PROFESSIONAL DEVELOPMENT II, Undergraduate, 2019 - 2020

COMPUTER TOOLS FOR ELECTRICAL-ELECTRONICS ENGINEERING, Undergraduate, 2018 - 2019

CALCULUS II FOR ELECTRICAL-ELECTRONICS ENGINEERING, Undergraduate, 2018 - 2019

ELECTRONICS II, Undergraduate, 2018 - 2019

ELECTRONICS II, Undergraduate, 2017 - 2018

ELECTRONICS II LAB., Undergraduate, 2018 - 2019

## **Jury Memberships**

Doctorate, Doctorate, Erciyes Üniversitesi, June, 2021

Post Graduate, Post Graduate, Erciyes Üniversitesi, February, 2021

Post Graduate, Post Graduate, Abdullah Gül Üniversitesi, December, 2019

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

- I. **Crown shaped edge multiband antenna design for 5G and X-Band applications**  
Hakanoglu B. G., KILIÇ V. T., ALTINDIŞ F., TÜRKMEN M.  
Wireless Networks, vol.29, no.7, pp.3255-3270, 2023 (SCI-Expanded)
- II. **Study of helical antenna endowing short wire length and compact structure for high-frequency operations and its exclusive manufacturing process**  
Aslan M., Şik K., Güzelkara I., Özdür I. T., Kiliç V. T.  
Turkish Journal of Electrical Engineering and Computer Sciences, vol.31, no.2, pp.396-411, 2023 (SCI-Expanded)
- III. **Design and analysis of low profile and low SAR full-textile UWB wearable antenna with metamaterial for WBAN applications**  
Yalduz H., TABARU T. E., Kilic V. T., TÜRKMEN M.  
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.126, 2020 (SCI-Expanded)
- IV. **High-efficiency flow-through induction heating**  
KILIÇ V. T., Unal E., DEMİR H. V.  
IET POWER ELECTRONICS, vol.13, no.10, pp.2119-2126, 2020 (SCI-Expanded)
- V. **All-Surface Induction Heating With High Efficiency and Space Invariance Enabled by Arraying Squirrel Coils in Square Lattice**  
Kilic V. T., Unal E., Yilmaz N., DEMİR H. V.  
IEEE TRANSACTIONS ON CONSUMER ELECTRONICS, vol.64, no.3, pp.339-347, 2018 (SCI-Expanded)
- VI. **Coupling and power transfer efficiency enhancement of modular and array of planar coils using in-plane ring-shaped inner ferrites for inductive heating applications**  
Kilic V. T., Unal E., Demir H. V.  
JOURNAL OF APPLIED PHYSICS, vol.122, no.1, 2017 (SCI-Expanded)
- VII. **Inductance and resistance measurement method for vessel detection and coil powering in all-surface inductive heating systems composed of outer squirrel coils**  
Kilic V. T., Unal E., Demir H. V.  
AIP ADVANCES, vol.7, no.5, 2017 (SCI-Expanded)
- VIII. **Strongly Coupled Outer Squirrel-Inner Circular Coil Architecture for Enhanced Induction Over Large Areas**  
Kilic V. T., Unal E., Gonendik E., Yilmaz N., Demir H. V.  
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, vol.63, no.12, pp.7478-7487, 2016 (SCI-Expanded)
- IX. **Wireless Metal Detection and Surface Coverage Sensing for All-Surface Induction Heating**  
Kilic V. T., Unal E., Demir H. V.  
SENSORS, vol.16, no.3, 2016 (SCI-Expanded)
- X. **Optical antenna of comb-shaped split ring architecture for increased field localization in NIR and MIR**  
Kilic V. T., Erturk V. B., Demir H. V.  
OPTICS EXPRESS, vol.21, no.24, pp.29455-29461, 2013 (SCI-Expanded)
- XI. **Three-dimensional study of planar optical antennas made of split-ring architecture outperforming**

### **dipole antennas for increased field localization**

Kilic V. T., Erturk V. B., Demir H. V.

OPTICS LETTERS, vol.37, no.2, pp.139-141, 2012 (SCI-Expanded)

## **Articles Published in Other Journals**

- I. **Strand wire winding method in a solenoidal coil with limited geometry for good impedance matching**  
KILIÇ V. T.  
Archives of Electrical Engineering, vol.72, no.1, pp.239-252, 2023 (ESCI)
- II. **Design of Wavelength Selectively Metamaterial Antenna for Thermal Camouflage**  
Şanlı A. K., Tabaru T. E., Kılıç V. T.  
The European Journal of Research and Development, vol.2, no.4, pp.90-97, 2022 (Peer-Reviewed Journal)

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

- I. **Comb-Shaped Patch Antenna Design Study with Shifted Arms and Asymmetric Architecture Enabling Controlled Resonance Change and Radiation Pattern**  
Aslan M., Baydar H., KILIÇ V. T.  
2022 IEEE International Conference on Electronics, Computing and Communication Technologies, CONECCT 2022, Bangalore, India, 8 - 10 July 2022
- II. **Design of a Portable DF System with Simple and Compact Structure Operating at 875 Mhz GSM Band**  
Uludag M., Ozoksuzkaya A., KILIÇ V. T.  
2021 International Conference on Circuits, Controls and Communications, CCUBE 2021, Bangalore, India, 23 - 24 December 2021
- III. **Single and Double Side Comb-Shaped Patch Antenna Design Evolved from Rectangular Shape for Reduced Sized Antenna Applications**  
Baydar H., Aslan M., KILIÇ V. T.  
2020 International Conference on Radar, Antenna, Microwave, Electronics, and Telecommunications (ICRAMET), Tangerang, Indonesia, 18 November 2020, pp.28-33
- IV. **Comparative study of solar cell energy harvesting with non-rotating and rotating platforms imitating sun tracking and non-tracking applications**  
Öztürk G., Chintu D., KILIÇ V. T.  
2nd International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2020), Gaziantep, Turkey, 07 October 2020, pp.493-499
- V. **Magnetic Field Calculation of Square Coils Having Rounded Corners**  
Erman M. F., KILIÇ V. T.  
2019 1st Global Power, Energy and Communication Conference (GPECOM), Nevşehir, Turkey, 12 June 2019, pp.212-215
- VI. **An easy method for vessel detection and coil powering in all- surface inductive heating systems**  
Kılıç V. T.  
61st Annual Conference on Magnetism and Magnetic Materials, Louisiana, United States Of America, 31 October - 04 November 2016
- VII. **Novel Optical Antenna Designs of Comb Shaped Split Ring Architecture for NIR and MIR Enhanced Field Localization**  
Kilic V. T., Erturk V. B., Demir H. V.  
27th IEEE Photonics Conference (IPC), California, United States Of America, 12 - 16 October 2014, pp.318-319

## **Supported Projects**

Kılıç V. T., Güngör M. E., Aslan M., TUBITAK Project, 1.9-2.0 GHZ GSM FREKANS BANDINDA ÇALIŞAN ANTEN VE BANT GEÇİREN FİLTRE TASARIMI, 2021 - 2022  
Kılıç V. T., Özöksüzakaya A., Uludağ M., Başer E., TUBITAK Project, GSM Direction Finding, 2020 - 2021

## Patent

Demir H. V., Kılıç V. T., Ünal E., Polat Çakar D., Küçükcoşkun B., Ünlüsoy M., Bayraktar S., İÇTEN AKIŞLI TİPTE BİR İNDÜKTİF ISITICI, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Registration Number: 2019 12644 , Standard Registration, 2023  
Demir H. V., Ünal E., Gönendik E., Oktay U., Yılmaz N., Öztürk M., Kılıç V. T., BİR İNDÜKTİF BOBİN BİRİMİ, Patent, CHAPTER H Electricity, The Invention Registration Number: 2015 15179 , Standard Registration, 2021  
Demir H. V., Kılıç V. T., Ünal E., İLETKEN KATMANLAR İÇEREN İNDÜKTİF BOBİN BİRİMİ, Patent, CHAPTER H Electricity, The Invention Registration Number: EP3536123B1 , Standard Registration, 2020

## Scientific Refereeing

Archives of Electrical Engineering, Journal Indexed in ESCI, January 2023  
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, Journal Indexed in SCI-E, September 2022  
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, Journal Indexed in SCI-E, March 2022  
IEEE JOURNAL OF EMERGING AND SELECTED TOPICS IN POWER ELECTRONICS, SCI Journal, August 2021  
IEEE TRANSACTIONS ON POWER ELECTRONICS, SCI Journal, June 2021  
ACADEMIC PLATFORM-JOURNAL OF ENGINEERING AND SCIENCE, National Scientific Refreed Journal, May 2021  
IEEE TRANSACTIONS ON POWER ELECTRONICS, SCI Journal, October 2020  
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, SCI Journal, July 2020  
PAMUKKALE ÜNİVERSİTESİ MÜHENDİSLİK BİLİMLERİ DERGİSİ, National Scientific Refreed Journal, June 2020  
1st International Conference on Electrical Engineering and Technologies (ElectriTek 2020), Conference Paper (Full Text), March 2020  
IEEE TRANSACTIONS ON POWER ELECTRONICS, SCI Journal, December 2019  
IET POWER ELECTRONICS, SCI Journal, June 2019  
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, SCI Journal, January 2019  
IEEE TRANSACTIONS ON POWER ELECTRONICS, SCI Journal, December 2018  
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, SCI Journal, October 2017  
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, SCI Journal, April 2016

## Tasks In Event Organizations

Kılıç V. T., SIU - 2023 - 31th IEEE CONFERENCE ON SIGNAL PROCESSING AND COMMUNICATIONS APPLICATIONS, Scientific Congress, Turkey, Temmuz 2023  
Kılıç V. T., SIU 2022 - The 30th IEEE CONFERENCE ON SIGNAL PROCESSING AND COMMUNICATIONS APPLICATIONS, Scientific Congress, Turkey, Mayıs 2022

## Metrics

Publication: 20  
Citation (WoS): 59  
Citation (Scopus): 93  
H-Index (WoS): 5  
H-Index (Scopus): 5