

## Res. Asst. PhD ATALAY KOCAKUŞAK

### Personal Information

**Office Phone:** [+90 242 227 4400](tel:+902422274400) Extension: 4313

**Email:** [atalaykocakusak@akdeniz.edu.tr](mailto:atalaykocakusak@akdeniz.edu.tr)

**Web:** <https://avesis.akdeniz.edu.tr/atalaykocakusak>

**Address:** Akdeniz Üniversitesi Mühendislik Fakültesi Elektrik-Elektronik Müh. Bölümü.

### International Researcher IDs

ScholarID: MvVvd8wAAAAJ

ORCID: 0000-0002-2457-4426

Publons / Web Of Science ResearcherID: I-7676-2017

ScopusID: 56419865900

Yoksis Researcher ID: 267953

### Education Information

Doctorate, Akdeniz University, Institute of Science, Elektrik Elektronik Mühendisliği Anabilimdalı, Turkey 2017 - Continues

Postgraduate, Akdeniz University, Institute of Science, Elektrik Elektronik Mühendisliği Anabilimdalı, Turkey 2014 - 2017

Undergraduate, Akdeniz University, Faculty Of Engineering, Elektrik Elektronik Mühendisliği Bölümü, Turkey 2010 - 2014

### Foreign Languages

English, C1 Advanced

### Dissertations

Postgraduate, Harmanlanmış kapalı mekan konum tespit sistemi tasarımı, Akdeniz University, 2017

### Research Areas

Electrical and Electronics Engineering, Electromagnetic, Physics of Plasmas, Engineering and Technology

### Academic Titles / Tasks

Research Assistant, Akdeniz University, Institute of Science, Institute of Science, 2017 - Continues

Researcher, Università Degli Studi di Padova, Department of Information Engineering, 2021 - 2022

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

1. Investigation of the Radiated Emission of Honeycomb Structured Aluminum Foam/Cellular Heatsinks at 1-10 GHz

Genç A., Doğan H., Turhan L., Kocakuşak A., Helhel S.

MATERIALS CHEMISTRY AND PHYSICS, vol.1, pp.1-10, 2024 (SCI-Expanded)

- II. **Experimental investigation of electromagnetic interference behavior of PCB heatsinks according to feeding point in 1-10 GHz band PCB soğutucuların besleme noktasına göre elektromanyetik girişim davranışlarının 1-10 GHz bandında deneysel olarak incelenmesi**  
Karaman A. B., Başyığıt İ. B., Doğan H., Genç A., Kocakuşak A., Çolak B., Helhel S.  
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.38, no.2, pp.733-742, 2023 (SCI-Expanded)
- III. **Marble Pre-selection Chart to Suppress EMF in S-Band and SAR Reduction Capabilities of Them at 2.45 GHz**  
Kocakusak A., Helhel S.  
IETE JOURNAL OF RESEARCH, vol.69, no.8, pp.5681-5690, 2023 (SCI-Expanded)
- IV. **Heatsinks as quasi-antennas and frog forming: frequency and feeding point effect**  
HELHEL S., KARAMAN A. B., KOCAKUŞAK A.  
JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS, vol.35, no.16, pp.2153-2162, 2021 (SCI-Expanded)
- V. **Determining loss tangent values of dry granite for potential S-band applications**  
HELHEL S., KOCAKUŞAK A., Sunel M.  
MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol.62, no.11, pp.3476-3484, 2020 (SCI-Expanded)
- VI. **Investigation of electromagnetic shielding and absorbing capabilities of cementitious composites with waste metallic chips**  
Cakir M., KOÇKAL N. U., ÖZEN Ş., KOCAKUŞAK A., HELHEL S.  
JOURNAL OF MICROWAVE POWER AND ELECTROMAGNETIC ENERGY, vol.51, no.1, pp.31-42, 2017 (SCI-Expanded)
- VII. **Frequency dependent complex dielectric permittivity of rubber and magnolia leaves and leaf water content relation**  
KOCAKUŞAK A., Colak B., HELHEL S.  
JOURNAL OF MICROWAVE POWER AND ELECTROMAGNETIC ENERGY, vol.50, no.4, pp.294-307, 2016 (SCI-Expanded)

## Articles Published in Other Journals

- I. **DETERMINATION OF OLIVE OIL PURITY BY S PARAMETER**  
Irmak G., Sapmaz E., Kocakuşak A., Helhel S.  
Mühendislik Bilimleri ve Tasarım Dergisi, vol.13, no.1, pp.177-184, 2025 (Peer-Reviewed Journal)
- II. **THE EFFECT OF MOISTURE CONTENT ON ELECTRICAL PROPERTIES OF SELECTED SOFTWOODS; CEDAR, JUNIPER, AND PINE**  
Alsaadi S. S. J., KOCAKUŞAK A., HELHEL S.  
Journal of Engineering and Sustainable Development, vol.28, no.1, pp.35-54, 2024 (Scopus)
- III. **Improved indoor location systems in a controlled environments**  
HELHEL S., KOCAKUŞAK A.  
Telkomnika (Telecommunication Computing Electronics and Control), vol.14, no.2, pp.748-756, 2016 (Scopus)

## Papers Published in Refereed Scientific Meetings

- I. **Estimation of The Level of Corrosion in Columns in Buildings by Using Wide Band Microwave Systems**  
Irmak G., Sapmaz E., Akgün E., KOCAKUŞAK A., Başyığıt İ. B., ALBAYRAK Y., HELHEL S.  
14th International Conference on Electrical and Electronics Engineering, ELECO 2023, Virtual, Bursa, Turkey, 30 November - 02 December 2023

- II. **An Empiric Mathematical Models to Predict Electrical Properties of Natural Juniper Wood Samples by Using Non-Distractive Methods**  
Alsaadi S. S. J., KOCAKUŞAK A., ALBAYRAK Y., HELHEL S.  
2023 Photonics and Electromagnetics Research Symposium, PIERS 2023, Prague, Czech Republic, 3 - 06 July 2023, pp.707-713
- III. **Preliminary Results of Near Field Microwave Imaging System for Dielectric Material**  
Menguc E., Eren M., KOCAKUŞAK A., HELHEL S.  
2023 Photonics and Electromagnetics Research Symposium, PIERS 2023, Prague, Czech Republic, 3 - 06 July 2023, pp.960-967
- IV. **S Band Monopole Plasma Antenna Design and Beam Forming Application by Plasma Columns**  
KOCAKUŞAK A., HELHEL S.  
2023 Photonics and Electromagnetics Research Symposium, PIERS 2023, Prague, Czech Republic, 3 - 06 July 2023, pp.1881-1886
- V. **Investigation of Usage Possibility FMCW Radar for Non-Destructive Corrosion Detection in Building Structures**  
Eren M., Menguc E., KOCAKUŞAK A., HELHEL S.  
2023 Photonics and Electromagnetics Research Symposium, PIERS 2023, Prague, Czech Republic, 3 - 06 July 2023, pp.978-985
- VI. **Floresan Tüpler Kullanarak Plazma Anten Dizisi Tasarımı**  
Çiflik M., Kocakuşak A., Helhel S.  
X. URSI-TÜRKİYE 2021 BİLİMSEL KONGRESİ, Kocaeli, Turkey, 7 - 09 September 2021, pp.1-3
- VII. **Investigation of Dielectric and Microwave Heating Properties of Bricks**  
SÜNEL M., KOCAKUŞAK A., HELHEL S.  
PIERS Photonics & Electromagnetics Research Symposium, Roma, Italy, 17 - 20 June 2019, vol.77, no.77, pp.223
- VIII. **The Effect of Feeding Point on Electromagnetic Emission Due to Heat Sink**  
Karaman A. B., KOCAKUŞAK A., Genc A., HELHEL S.  
Photonics and Electromagnetics Research Symposium - Spring (PIERS-Spring), Rome, Italy, 17 - 20 June 2019, pp.368-371
- IX. **C bandı Hava Durumu Radarları İçin U şeklinde Metamateryal Tabanlı Radar Soğurucu Malzeme Tasarımı**  
KOCAMAN Z., KOCAKUŞAK A., KARAMAN A. B., HELHEL S.  
URSI 2018 Türkiye, Konya, Turkey, 6 - 08 September 2018, vol.1, no.1, pp.1
- X. **2 Tabakalı Asfalt Yol Katman Kalınlıklarının 3GHz'de Çalışan YGR ve 2-Boyutlu FDTD Kullanılarak Belirlenmesi**  
YALIN B., KOCAKUŞAK A., ÖZEN Ş., HELHEL S.  
IX.URSI-TÜRKİYE 2018 BİLİMSEL KONGRESİ ULUSAL GENEL KURUL TOPLANTISI,, Konya, Turkey, 6 - 08 September 2018, vol.9, no.1, pp.1-4
- XI. **Design of A Triple Band Absorber Metamaterial for C-Band Radars with Golden Ratio Approaches**  
KOCAMAN Z., KOCAKUŞAK A., BAŞYIĞİT B., ÖZEN Ş., HELHEL S.  
International Conference on Advanced Technologies, Computer Engineering and Science (ICATCES), Karabük, Turkey, 11 - 13 May 2018, vol.1, no.1, pp.8-11
- XII. **Yapı Malzemelerinin Mikrodalga Frekans Bölgesi için Dielektrik Özelliklerinin Belirlenmesi ve Ekran Etkinliğinin Analizi**  
ÇAKIR M., KOÇKAL N. U., ÖZEN Ş., HELHEL S., KOCAKUŞAK A.  
VIII. URSI-TÜRKİYE'2016 BİLİMSEL KONGRESİ ve ULUSAL GENEL KURUL TOPLANTISI, Ankara, Turkey, 1 - 03 September 2016
- XIII. **Evaluation of Electromagnetic Interference Emitted from Compact Fluorescent Lamps According to CISPR-15 and Filter Design**  
KOCAKUŞAK A., ÇAKIR M., ÖZEN Ş., HELHEL S.  
36 th Progress in Electromagnetic Research, Prag, Czech Republic, 5 - 09 June 2015, vol.1, no.1, pp.1-4
- XIV. **WLAN Based Indoor Locating Systems Enhanced by Ultrasonic Sensors; Hybrid Indoor Locating**

## **Systems (HILOs)**

HELHEL S., KOCAKUŞAK A., ALBAYRAK Y., ÖZEN Ş.

36 th Progress in Electromagnetic Research, Prag, Czech Republic, 5 - 09 June 2015, vol.1, no.1, pp.1-4

### **XV. WLAN Based Indoor Positioning in Building Halls by Using Trilateral Method**

HELHEL S., KOCAKUŞAK A.

The 31st International Review of Progress in Applied Computational Electromagnetics, Virginia, United States Of America, 21 - 26 March 2015, vol.31, pp.246-247

### **XVI. Evaluation of electromagnetic interference emitted from compact fluorescent lamps according to CISPR-15**

KOCAKUŞAK A., ÇAKIR M., Yalçın S., ÖZEN Ş., HELHEL S.

Progress In Electromagnetics Research Symposium, vol.2015-January, pp.1133-1136

### **XVII. Yol Kaybı İndeks Hesabı ve WiFi Tabanlı Kontrolsüz Gezginlerden Arındırılmış Bina İçi Konum Tespit Sistemi**

HELHEL S., KOCAKUŞAK A.

VII. URSI-Türkiye Bilimsel Kongresi, Elazığ, Turkey, 28 - 30 August 2014, vol.1, no.12, pp.1-4

### **XVIII. Algorithms for Indoor Localization on WLAN Networks Applications**

HELHEL S., KOCAKUŞAK A.

Progress in Electromagnetics Research Symposium (PIERS), Guangzhou, China, 25 - 28 August 2014, pp.2174-2177

## **Supported Projects**

HELHEL S., KOCAKUŞAK A., SÜNEL M., Project Supported by Higher Education Institutions, Mermer Tabanlı Bazı Süs Taşları İçin CBandı Dielektrik Katsayı Kataloğunun Oluşturulması, 2019 - 2020

ÖZEN Ş., ATEŞ K., KOCAKUŞAK A., KESKİN H. İ., Project Supported by Higher Education Institutions, Düzlemsel Malzemelerin Elektromanyetik Ekranlama Etkinliğinin Belirlenebilmesi için Koaksiyel Ölçüm Sistemi Tasarımı ve Üretimi, 2018 - 2020

HELHEL S., KARAMAN A. B., KURT M. B., KOCAKUŞAK A., GENÇ A., Project Supported by Higher Education Institutions, En Çok 200W Güç Harcayan Devreler İçin 30MHz - 230MHz Bandında Minimum Işıma Yapan Metalik Soğutucu Tasarımı ve Tasarım Yönteminin Geliştirilmesi, 2018 - 2019

## **Memberships / Tasks in Scientific Organizations**

Elektrik Mühendisleri Odası, Member, 2014 - Continues, Turkey

## **Peer Reviews in Scientific Publications**

ADVANCED ELECTROMAGNETICS, Journal Indexed in ESCI, February 2022

ADVANCED ELECTROMAGNETICS, Journal Indexed in ESCI, May 2021

ADVANCED ELECTROMAGNETICS, Journal Indexed in ESCI, November 2020

ADVANCED ELECTROMAGNETICS, SCI Journal, December 2019

Journal of Microwave Power and Electromagnetic Energy , SCI Journal, April 2019

## **Scientific Research / Working Group Memberships**

Elektromanyetik Araştırma Grubu , Akdeniz University, Türkiye, <https://avesis.akdeniz.edu.tr/arastirma-grubu/emag>, 2023 - Continues

## **Metrics**

Publication: 28

Citation (WoS): 48

Citation (Scopus): 77

H-Index (WoS): 3

H-Index (Scopus): 4

## **Congress and Symposium Activities**

PIERS 2023, Attendee, Praha, Czech Republic, 2023

URSI 2021, Attendee, Kocaeli, Turkey, 2021

URSI 2018 Türkiye, Attendee, Konya, Turkey, 2018

URSI 2014 Türkiye, Attendee, Elazığ, Turkey, 2014

## **Scholarships**

2224-A Yurt Dışı Bilimsel Etkinliklere Katılımı Destekleme Programı, TUBITAK, 2023 - 2023

2211-C Yurt İçi Öncelikli Alanlar Doktora Burs Programı, TUBITAK, 2020 - 2023

2214 - Yurt Dışı Doktora Sırası Araştırma Burs Prog., TUBITAK, 2021 - 2022