

TAMER AKAN

PROF.

Email : akan@ogu.edu.tr

Other Email : tamerakan@gmail.com

Office Phone : [+90 222 239 3750](tel:+902222393750) Extension: 2121-2824

Address : TR: Eskişehir Osmangazi Üniversitesi, Fen Fakültesi,
Fizik Bölümü, 26040 Meşelik Kampüsü,

Odunpazarı/ESKİŞEHİR/TÜRKİYE ENG: Eskisehir

Osmangazi University, Science Faculty, Physics Department,

26040 Meselik Campus, Odunpazarı/ESKİSEHIR/TÜRKİYE

International Researcher IDs

ScholarID: 1263477692106564221

ORCID: 0000-0003-0907-2724

Publons / Web Of Science ResearcherID: GXV-8310-2022

ScopusID: 9274843700

Yoksis Researcher ID: 22458



Biography

Tamer Akan received the B.S. degree in physics from the Istanbul University in 1994 and the Ph.D. degree in Plasma Physics from the Eskişehir Osmangazi University (ESOGU) in 2003 in Turkey. He also worked at the cooperation project between ESOGU and National Institute for Laser, Plasma & Radiation Physics (INFLPR), Bucharest, in Romania and he is co-founder of the Plasma Physics Laboratory of ESOGU. He is also founder and the Director of Cold Plasma Laboratory of ESOGU. He was a Visiting Scientist in INFLPR in 1998. He worked at the Plasma & Spectroscopy Laboratory of Constanta Ovidius University in 2003 in Romania. He was a Post-doctoral Researcher at Old Dominion University's Applied Plasma Technology Laboratory, Frank Reidy Research Center for Bioelectrics in 2006 in USA. He is currently a professor with the Physics. Dr. Akan's research interests are vacuum arcs, applications of non-equilibrium gaseous discharges, cold plasmas, plasma medicine and sterilization process with non-thermal plasmas.

Education

Doctorate
1997 - 2003

Eskişehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Fizik (Dr), Turkey

Postgraduate
1994 - 1997

Eskişehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Fizik (YI) (Tezli),
Turkey

Undergraduate
1990 - 1994

Istanbul University, Faculty Of Science, Department Of Physics, Turkey

Foreign Languages

English, C1 Advanced

Certificates, Courses and Trainings

Education Management and Planning, TYMM TASLAK DERS KİTABI İNCELEME VE DEĞERLENDİRME EĞİTİMİ (2025 AKADEMİSYEN), TALİM VE TERBİYE KURULU BAŞKANLIĞI, 2025

Foreign Language, Yabancı Diller Eğitimi, Eskişehir Osmangazi Üniversitesi, 1998

Vocational Training, Summer School (Quantum Optoelectronic), Bilkent Üniversitesi, 1995

Education Management and Planning, Öğretmenlik Pedagojik Formasyon Eğitimi, İstanbul Üniversitesi, 1993

Dissertations

Doctorate, Investigation of the Basic Properties of the Thermionic Vacuum Arc (TVA), Eskişehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, 2003

Postgraduate, Multi Channel Thermal Microscope, Eskişehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Fizik (YI) (Tezli), 1997

Postgraduate, Investigation of the Change of Conductivity with Temperature of Aluminum and Germanium Thin Films Stored by Vacuum Evaporation Technique, Istanbul University, 1994

Academic Titles / Tasks

Professor 2014 - Continues	Eskişehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ
Associate Professor 2008 - 2014	Eskişehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ
Assistant Professor 2008 - 2008	Eskişehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ
Researcher 2006 - 2007	Old Dominion University, Engineering And Technology, Center For Bioelectric
Research Assistant PhD 2003 - 2007	Eskişehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ
Researcher 2003 - 2003	"Costanta-Ovidius Üniversitesi", Plasma Spectroscopy Laboratory
Research Assistant 1994 - 2003	Eskişehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ

Researcher
1998 - 1998

National Institute for Laser Plasma and Radiation Physics, National Institute for
Laser Plasma and Radiation Physics

Supported Projects

1. TURHAN E., GÖZÜKARA Ö., AKAN T., ÜNAL F., AYDOĞAN Ç., ERGİN S., AVCI U., ÖNDER S., ELİBOL İLERİ C., Project Supported by Higher Education Institutions, Mısır Tohumlarında Plazmalanmış Su Ön Uygulamasının Çimlenme Kapasitesi, Tuz Stresine Tolerans ve Fusarium Hastalık Etmenine Etkilerinin İncelenmesi, 2024 - Continues
2. KARADUMAN Y., KAYHAN K., AKAN T., Project Supported by Higher Education Institutions, Soğuk Atmosferik Plasma Uygulamasının Triticale Unlarının Gluten Kalitesi İle Bazı Biyoaktif Bileşenleri Üzerine Etkisi, 2023 - Continues
3. Akan T., Demirkol U., Project Supported by Higher Education Institutions, Plazma Teknolojileri Kullanılarak Molibden Tabanlı Yapıların Üretilmesi ve İncelenmesi, 2025 - 2026
4. Akan T., Kütük E. C., Project Supported by Higher Education Institutions, Yüzey Dielektrik Bariyer Deşarj Plazmanın Bazı Mikroorganizmalara ve Gıda Küflenmesine Etkisinin İncelenmesi, 2024 - 2025
5. Önal E., Akan T., Şahin Z., Karaağaçloğlu L., TUBITAK Project, Farklı Yüzey İşlemlerinin Eklemeli Yöntemle Üretilen Daimi Kompozit Rezin Materyallerinin Bağlanma Dayanımına Etkilerinin Değerlendirilmesi, 2024 - 2025
6. Kışla D., Akan T., Gündüz G., Gökmen G. G., Project Supported by Higher Education Institutions, Farklı Metal Nanopartikülleri Kullanarak Yüzeylerin Antimikrobiyal Özellikli İnce Film İle Kaplanması ve Karakterizasyonu, 2023 - 2025
7. AKAN T., DURMUŞ Ç., Project Supported by Higher Education Institutions, Termiyonik Vakum Ark (TVA) ile Depolanan Katkısız ve P2O5, CdO ve ZnO katkılı V2O5 İnce Filmlerin Bazı Özelliklerinin İncelenmesi, 2023 - 2024
8. Şahin Z., Özer N. E., Akan T., TUBITAK Project, Dijital ve Konvansiyonel Yöntemlerle Üretilen Protez Kaidelerinin Tamir Edilebilirliğine Çeşitli Yüzey İşlemlerinin Etkisi, 2022 - 2023
9. Usta Kutlu İ., Akan T., Project Supported by Higher Education Institutions, Surface Analysis of Zirconium and Lithium Disilicate Ceramics Following Different Surface Treatments and Non-Thermal Atmospheric Plasma Application, and Investigation of the Shear Bond Strength, 2022 - 2023
10. Kartal S., Akan T., Project Supported by Higher Education Institutions, Argon Atmospheric Pressure Cold Plasma Jet Generation and Modeling, 2021 - 2023
11. Mol Tokay S., Akan T., Kartal S., Coşansu Akdemir S., Tosun Ş. Y., Üçok Alakavuk D., Ulusoy Ş., Doğruyol Bayar H., Bostan K., TUBITAK Project, Effect of Atmospheric Pressure Cold Plasma on Quality of Sea Bass (*Dicentrarchus Labrax*, Linnaeus, 1758), 2020 - 2023
12. Akan T., Yavaş E. S., Çabuk A., Project Supported by Higher Education Institutions, Effect of Atmospheric Cold Plasma on Some Virulence Characteristics of *Staphylococcus aureus*, a Pathogen of ESKAPE, 2022 - 2022
13. Akan T., Durmuş Ç., Project Supported by Higher Education Institutions, Production of Thin Films of TeO₂-ZnO Binary Glass Composition Synthesis by Thermionic Vacuum Arc (TVA), 2021 - 2022
14. Akan T., İlik E., Project Supported by Higher Education Institutions, Production and Investigation of Spectroscopic Characteristics of Nitrogen Cold Plasmas, 2017 - 2019
15. Akan T., İlik E., Tanişlı M., Project Supported by Higher Education Institutions, Investigation of Cold Flowing Radio Frequency Post Discharges, 2014 - 2016
16. AKAN T., İLİK E., Project Supported by Higher Education Institutions, Düşük Basıncıta Soğuk-Akan-Post-Deşarj Plazmaların Etkileşiminin İncelenmesi, 2014 - 2015
17. Akan T., İlik E., Project Supported by Higher Education Institutions, Investigation of Interaction of Cold Flowing Post-Discharge Plasmas at Low Pressure, 2014 - 2015
18. Akan T., Ekem N., Project Supported by Higher Education Institutions, Plasma Processing of High Melting Temperature Materials and Development of Surface Coating Technology, 2005 - 2008
19. Akan T., Laroussi M., Civil Society Organizations of Other Countries Supported Project, Bactericidal Effects of Cold

- Plasma Technology on Geobacillus Stearothermophilus and Bacillus Atrophaeus Spores, 2006 - 2007
20. Akan T., Laroussi M., Project Supported by Public Organizations in Other Countries, Effects of Non-Equilibrium Plasmas on Eukaryotic Cells, 2006 - 2007
 21. Akan T., Laroussi M., Project Supported by Public Organizations in Other Countries, Large Volume Non-Equilibrium Air Plasma at Atmospheric Pressure: A Novel Method with Low Power Requirements, 2006 - 2007
 22. Akan T., Ekem N., Project Supported by Higher Education Institutions, Determination of Plasma Characteristics of RF Gas Discharges and Thermionic Vacuum Arc (TVA) Copper Metal Plasmas Using an Optical Multi-Channel Analyzer (OMA), 2003 - 2006
 23. Akan T., Ekem N., Project Supported by Higher Education Institutions, Investigation of Low Temperature and Low Pressure Plasma Parameters, 1999 - 2002

Awards

1. Akan T., TRUSTED REVIEWER, Institute Of Physics, March 2025
2. Akan T., 2023 TÜRK FİZİK DERNEĞİ ONUR ÖDÜLÜ, Türk Fizik Derneği, August 2023
3. Akan T., 30. Uğur Mumcu Anma Ödülleri Yılın Sağlık Ödülü, Çağdaş Gazeteciler Derneği Ve Tepebaşı Belediyesi, January 2023
4. Akan T., Hizmet Teşekkürü, Esogü Fen Edebiyat Fakültesi, January 2005
5. Akan T., EN BAŞARILI ÇALIŞMA, Türk Fizik Derneği, September 2002

Scholarships

2219 Yurt Dışı Doktora Sonrası Araştırma Bursu, TÜBİTAK, 2006 - 2007

Jury Memberships

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, İstanbul Üniversitesi, March, 2025

Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, İstanbul Üniversitesi, March, 2025

Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Eskişehir Osmangazi Üniversitesi, February, 2025

Post Graduate, Post Graduate, Eskişehir Osmangazi Üniversitesi, January, 2025

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, January, 2025

Doctorate, Doctorate, Eskişehir Osmangazi Üniversitesi, July, 2024

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, June, 2024

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Süleyman Demirel Üniversitesi, June, 2024

Doctorate, Doctorate, Eskişehir Osmangazi Üniversitesi, June, 2024

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ege Üniversitesi, June, 2024

Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Eskişehir Osmangazi Üniversitesi, May, 2024

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, İstanbul Üniversitesi, July, 2023

Associate Professor Exam, Associate Professor Exam, ÜAK, May, 2022

Associate Professor Exam, Associate Professor Exam, Uşak Üniversitesi, December, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, December, 2021
Post Graduate, Post Graduate, Eskişehir Teknik Üniversitesi, June, 2021
Associate Professor Exam, Associate Professor Exam, September, 2020
Appointment to Academic Staff-Professorship, Appointment Academic Staff, Eskişehir Teknik Üniversitesi, January, 2020
Appointment to Academic Staff-Professorship, Appointment Academic Staff, Eskişehir Teknik Üniversitesi, June, 2019
Doctoral Examination, Doctoral Examination, Eskişehir Osmangazi Üniversitesi, May, 2019
Award, ESOGÜ FEN BİLİMLERİ ENSTİTÜSÜ EN BAŞARILI DOKTORA TEZİ ÖDÜLÜ , Eskişehir Osmangazi Üniversitesi, May, 2016
Associate Professor Exam, Associate Professor Exam, ÜAK, April, 2016
Associate Professor Exam, Associate Professor Exam, ÜAK, April, 2015
Associate Professor Exam, Associate Professor Exam, ÜAK, December, 2014
Associate Professor Exam, Associate Professor Exam, ÜAK, December, 2014
Competition, ODTU-OSA ve TFD Fotoğraf Yarışması, Orta Doğu Teknik Üniversitesi, July, 2007
Competition, 2005 Dünya Fizik Yılı Fotoğraf Yarışması, July, 2005

Published journal articles indexed by SCI, SSCI, and AHCI

- Deposition of zinc oxide/vanadium pentoxide composite thin films by thermionic vacuum arc plasma**
Durmuş Ç., DEMİRKOL U., AKAN T.
Thin Solid Films, vol.814, 2025 (SCI-Expanded)
- Zinc oxide nanomaterials: Safeguarding food quality and sustainability**
Gökmen G. G., Mirsafi F. S., Akan T., Leifşner T., Mishra Y. K., Kışla D.
COMPREHENSIVE REVIEWS IN FOOD SCIENCE AND FOOD SAFETY, vol.23, no.6, pp.1-45, 2024 (SCI-Expanded)
- Innovative Pathogen Reduction in Exported Sea Bass through Atmospheric Cold Plasma Technology**
Tosun Ş. Y., Kartal S., Akan T., Mol S., Coşansu S., Üçok D., Ulusoy Ş., Doğruyol H., Bostan K.
FOODS, vol.13, no.20, pp.1-16, 2024 (SCI-Expanded)
- Atmospheric cold plasma to maintain sea bass quality: an opportunity for international fish trade**
Ulusoy Ş., Akan T., Kartal S., Üçok D., Tosun Ş. Y., Doğruyol H., Coşansu S., Bostan K., Mol S.
Processes, vol.12, no.11, pp.1-14, 2024 (SCI-Expanded)
- The impact of different surface treatments on repair bond strength of conventionally, subtractive-, and additive-manufactured denture bases**
ŞAHİN Z., ÖZER N. E., AKAN T., KILIÇARSLAN M. A., KARAAĞAÇLIOĞLU L.
Journal of Esthetic and Restorative Dentistry, vol.36, no.9, pp.1337-1347, 2024 (SCI-Expanded)
- Impact on microbiology and product quality of plasma-activated water treatment on fresh green leafy vegetables**
Gülenç B., Özdemir E., Başaran P., Kartal S., Akan T.
POSTHARVEST BIOLOGY AND TECHNOLOGY, vol.217, pp.1-13, 2024 (SCI-Expanded)
- Antibiofilm Efficacies of Direct and Remote Plasmas and Plasma-Treated Water on Extremophile Halomonas caseinilytica**
Akan T., Çabuk A., Aytar Çelik P., Yavaş E. S., Durmuş Ç.
IEEE TRANSACTIONS ON RADIATION AND PLASMA MEDICAL SCIENCES, vol.8, no.5, pp.571-578, 2024 (SCI-Expanded)
- An opportunity for post-harvest seafood safety: atmospheric pressure air or helium cold plasma to control Salmonella Enteritidis in sea bass**
Üçok D., Akan T., Kartal S., Tosun Ş. Y., Mol S., Coşansu S., Doğruyol H., Ulusoy Ş., Bostan K.
INTERNATIONAL JOURNAL OF FOOD SCIENCE AND TECHNOLOGY, vol.59, pp.3773-3780, 2024 (SCI-Expanded)
- Novel antibacterial nanoscale glass surfaces coated with vanadium pentoxide/phosphorus pentoxide (V2O5-P2O5) thin film by the thermionic vacuum arc plasma**
Kışla D., Akan T., Gökmen G. G., Durmuş Ç.

Journal of Non-Crystalline Solids: X, vol.625, pp.1-11, 2024 (SCI-Expanded)

10. **The effect of various surface treatments on the repair bond strength of denture bases produced by digital and conventional methods**
Şahin Z., Özer N. E., Akan T., Kılıçarslan M. A., Karaağaçhoğlu L.
ODONTOLOGY / THE SOCIETY OF THE NIPPON DENTAL UNIVERSITY, vol.112, no.3, pp.782-797, 2024 (SCI-Expanded)
11. **Current approaches in water-assisted systems for foodborne microbial inactivation: A review**
Gökmen G. G., Rathod N. B., Guzik P., Kulawik P., Akan T., Kışla D., Ozogul F.
TRENDS IN FOOD SCIENCE AND TECHNOLOGY, vol.143, no.1, pp.1-26, 2024 (SCI-Expanded)
12. **Oxygen plasma treatment of TeO₂—B₂O₃ (boro-tellurite) thin films**
Demirkol U., Durmuş Ç., Akan T.
JOURNAL OF VACUUM SCIENCE AND TECHNOLOGY A, vol.41, no.6, pp.1-12, 2023 (SCI-Expanded)
13. **A surface dielectric barrier discharge reactor for biological treatments**
Akan T., Durmuş Ç.
JOURNAL OF ELECTROSTATICS, vol.126, pp.1-7, 2023 (SCI-Expanded)
14. **Cold plasma application to fresh green leafy vegetables: Impact on microbiology and product quality**
Özdemir E., Başaran P., Kartal S., Akan T.
COMPREHENSIVE REVIEWS IN FOOD SCIENCE AND FOOD SAFETY, vol.22, no.1, pp.4484-4515, 2023 (SCI-Expanded)
15. **Recent developments in antimicrobial surface coatings: Various deposition techniques with nanosized particles, their application and environmental concerns**
Kışla D., Gökmen G. G., Akdemir Evrendilek G., AKAN T., Vičko T., Kulawik P., Režek Jambrak A., ÖZOĞUL F.
Trends in Food Science and Technology, vol.135, pp.144-172, 2023 (SCI-Expanded)
16. **Vanadium pentoxide thin films deposited by the thermionic vacuum arc plasma**
Durmuş Ç., AKAN T.
Thin Solid Films, vol.770, 2023 (SCI-Expanded)
17. **TeO₂–ZnO (tellurium oxide – Zinc oxide) thin film deposition by the thermionic vacuum arc plasma**
Akan T., Demirkol U., Durmuş Ç.
PHYSICA B: CONDENSED MATTER, vol.654, no.414694, pp.1-8, 2023 (SCI-Expanded)
18. **Antibacterial Efficiency of Cadmium Thin Films Deposited by the Thermionic Vacuum Arc**
Akan T., Kışla D., Gökmen G. G., Durmuş Ç.
SURFACE AND COATINGS TECHNOLOGY, vol.456, pp.1-8, 2023 (SCI-Expanded)
19. **Effects of Air and Helium Cold Plasma on Sensory Acceptability and Quality of Fresh Sea Bass (*Dicentrarchus labrax*)**
Mol S., AKAN T., KARTAL S., Coşansu S., TOSUN Ş. Y., Alakavuk D. Ü., ULUSOY Ş., DOĞRUYOL BAYAR H., Bostan K.
Food and Bioprocess Technology, vol.16, no.3, pp.537-548, 2023 (SCI-Expanded)
20. **Effect of nonthermal argon plasma treatment on the surface properties and phase transformation of zirconia**
Etibarlı N., ÜSTÜN Ö., AKAN T.
Journal of oral science, vol.65, no.2, pp.136-140, 2023 (SCI-Expanded)
21. **Direct-Contact and Contact-free Treatment of a DBD-like Non-thermal Atmospheric Pressure Plasma Jet on *Pseudomonas aeruginosa***
Akan T., Çabuk A., Aytar Çelik P., Yavaş E. S., Durmuş Ç.
ROMANIAN BIOTECHNOLOGICAL LETTERS, vol.27, no.3, pp.3498-3506, 2022 (SCI-Expanded)
22. **kHz Plasma Pencil**
Akan A., Şahin E.
TECHNICAL PHYSICS LETTERS, vol.48, no.4, pp.1-4, 2022 (SCI-Expanded)
23. **The effect of nonthermal argon plasma surface treatment on the fracture resistance of monolithic zirconia restorations containing tetragonal and cubic grains**
Bozogullari H. N., Yucel H. C., ÜSTÜN Ö., AKAN T., Ozer F.
Journal of Oral Science, vol.64, no.2, pp.124-128, 2022 (SCI-Expanded)

24. **Deposition of cadmium (II) oxide-reinforced VP glassy thin films by thermionic vacuum arc (TVA) and structural characterization**
İLİK E., Durmus C., KILIÇ G., Gokhan Issever U. G., AKAN T.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.12, pp.16311-16323, 2021 (SCI-Expanded)
25. **Adding Water Droplets Into Atmospheric Pressure Plasma Jet of Helium**
İlik E., Durmus C., Akan T.
IEEE TRANSACTIONS ON PLASMA SCIENCE, vol.47, pp.5000-5005, 2019 (SCI-Expanded)
26. **Applying on Bacillus cereus of Low-Pressure and Low-Temperature Plasma Jet in a Postdischarge Chamber**
Akan T.
IEEE TRANSACTIONS ON RADIATION AND PLASMA MEDICAL SCIENCES, vol.1, no.5, pp.468-471, 2017 (SCI-Expanded)
27. **Optical properties of the atmospheric pressure helium plasma jet generated by alternative current (a.c.) power supply**
İlik E., Akan T.
PHYSICS OF PLASMAS, vol.23, 2016 (SCI-Expanded)
28. **Indirect plasma inactivation by a low temperature atmospheric pressure plasma (LTAPP) system**
AKAN T., ÇABUK A.
JOURNAL OF ELECTROSTATICS, vol.72, no.3, pp.218-221, 2014 (SCI-Expanded)
29. **Boron processes using thermionic vacuum arc**
AKAN T., Karakas E.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.8, pp.480-482, 2014 (SCI-Expanded)
30. **Cold Plasma Technology Bactericidal Effects On Geobacillus Stearothermophilus And Bacillus Cereus Microorganisms**
Morris A. D., McCombs G. B., Akan T., Hynes W. L., Laroussi M., Tolle S. L.
JOURNAL OF DENTAL HYGIENE : JDH / AMERICAN DENTAL HYGIENISTS' ASSOCIATION, vol.83, no.2, pp.55-61, 2009 (SCI-Expanded)
31. **The plasma pencil: A source of hypersonic cold plasma bullets for biomedical applications**
Laroussi M., Hynes W., AKAN T., Lu X., Tendero C.
IEEE TRANSACTIONS ON PLASMA SCIENCE, vol.36, no.4, pp.1298-1299, 2008 (SCI-Expanded)
32. **Titanium oxidation by pulsed oxygen plasma**
Balbag M. Z., Pat S., Cenik I., Ekem N., AKAN T., BAKSAN B., Vladioiu R., Musa G.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.10, no.3, pp.680-682, 2008 (SCI-Expanded)
33. **MgB₂ superconducting thin films sequentially fabricated using DC magnetron sputtering and thermionic vacuum arc method**
Okur S., Kalkanci M., Pat S., Ekem N., Akan T., Balbag Z., Musa G., Tanoglu M.
PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.466, pp.205-208, 2007 (SCI-Expanded)
34. **Arc-free atmospheric pressure cold plasma jets: A review**
Laroussi M., AKAN T.
PLASMA PROCESSES AND POLYMERS, vol.4, no.9, pp.777-788, 2007 (SCI-Expanded)
35. **Study of metal and ceramic thermionic vacuum arc discharges**
AKAN T., Demirkol S., Ekem N., Pat S., Musa G.
PLASMA SCIENCE & TECHNOLOGY, vol.9, no.3, pp.280-283, 2007 (SCI-Expanded)
36. **Carbon synthesis in methane plasma**
Musa G., Ekem N., Pat S., Balbag M. Z., Cenik M. I., AKAN T., Ciupina V., Vladioiu R., Tanisli M., Ozen O.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.9, no.4, pp.871-874, 2007 (SCI-Expanded)
37. **Boron evaporation and related difficulties**
Balbag M. Z., Pat S., Cenik M. I., AKAN T., Ekem N., Musa G.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.9, no.4, pp.858-861, 2007 (SCI-Expanded)

38. **Investigation of carbon produced by methane pulsed discharge**
Musa G., Ekem N., Akan T., Pat S., Balbağ M. Z., Cenik M. İ., Vladioiu R., Tanışlı M., Özen Ö.
PHYSICA STATUS SOLIDI C: CURRENT TOPICS IN SOLID STATE PHYSICS, VOL 14 NO 5, vol.4, no.2, pp.521-523,
2007 (SCI-Expanded)
39. **Boron thin film deposition by using Thermionic Vacuum Arc (TVA) technology**
AKAN T., Ekem N., Pat S., İŞSEVER U. G., Balbag M. Z., Cenik M. I., Vladioiu R., Musa G.
MATERIALS LETTERS, vol.61, no.1, pp.23-26, 2007 (SCI-Expanded)
40. **Sterilization of Staphylococcus aureus by atmospheric pressure pulsed plasma**
Ekem N., AKAN T., Akgun Y., Kiremitci A., Pat S., Musa G.
SURFACE & COATINGS TECHNOLOGY, vol.201, pp.993-997, 2006 (SCI-Expanded)
41. **Plasma Sterilization Using the High Voltage Pulsed Discharge at Atmospheric Pressure**
Akan T., Naci E., Akgün Y., Kiremitçi A., Çabuk A., Pat S., Musa G.
JOURNAL OF APPLIED SCIENCES, vol.6, no.7, pp.1566-1570, 2006 (SCI-Expanded)
42. **Characteristics of boron thin films obtained by TVA technology**
Musa G., Vladioiu R., Ciupina V., Lungu C., Mustata I., Pat S., AKAN T., Ekem N.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.8, no.2, pp.617-620, 2006 (SCI-Expanded)
43. **SURFACE CHARGE INFLUENCE ON THE BREAKDOWN VOLTAGE IN HE**
Akan T., Ciupina V., Vladioiu R., Musa G.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.24, no.2, pp.45-49, 2006 (SCI-Expanded)
44. **Studies on the thermionic vacuum arc discharges in the vapors of Cu-Ag and Cu-Sn alloys**
AKAN T., Ekem N., Pat S., Vladioiu R., Musa G.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.7, no.5, pp.2489-2494, 2005 (SCI-Expanded)
45. **Al₂O₃ THIN FILM DEPOSITION USING THERMIONIC VACUUM ARC**
Akan T., Karakas E., Musa G.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.23, no.3, pp.18-23, 2005 (SCI-Expanded)
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75. **Effect of the Stored Charges on the Dielectric Walls of the Discharge Devices on the Breakdown Voltage in Helium**
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76. **Studies on Cu-Ag and Cu-Sn Thermionic Vacuum Arc (TVA) Discharges**
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77. **Bakır Buharlarında Termiyonik Vakum Ark(TVA) Deşarjının Akım-Voltaj Karakteristiklerinin İncelenmesi**
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80. **Çok Kanallı Termal Mikroskop İle Sepiolitin Isıl İletkenlik Katsayısının ve Bakır-Sepiolit Yüzeyinin Termal Görüntüsü**
BAYKUL M. C., IŞIK İ., SAĞDIÇ F., AKAN T.
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81. **Multi-Channel Thermal Microscopy**
Baykul M. C., Akan T.
3rd General Conference of the Balkan Physical Union, Cluj, Romania, 2 - 05 September 1997, pp.336
82. **Malzeme Analiz Tekniklerinden Elektron Mikroskopları ve Çok Kanallı Termal Mikroskop**
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Other Publications

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Other, pp.1-100, 2005
2. **Studies on Multiple Gas Mixture Radiation in Low Temperatures Plasmas**
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Other, pp.1-100, 2005
3. **DC Glow Deşarj Deneyleri I**
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Experiment, pp.1-50, 2001
4. **Plazma Fiziği I**
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Lecture Note, pp.1-143, 2001
5. **Metal Buharlarında Isıtılmış Katotlu Deşarj Çalışmalarının İncelenmesi**
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Other, pp.1-100, 2000
6. **Contribution to the Studies of the Discharge with Heated Cathode in Metal Vapors**
Akan T., Musa G.
Other, pp.1-100, 2000
7. **Physics Laboratory Manual (Electric and Optic Experiments)**
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Experiment, pp.1-24, 1997
8. **Physics Laboratory Manual (Mechanic and Heat Experiments)**
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Expert Reports

1. **2024/45624**
Akan T.
ESKİŞEHİR CUMHURİYET BAŞSAVCILIĞI, pp.40, Eskişehir, 2025
2. **2024/173**
Akan T.
ESKİŞEHİR CUMHURİYET BAŞSAVCILIĞI, pp.40, Eskişehir, 2024
3. **2024/37993**
Akan T.
ESKİŞEHİR CUMHURİYET SAVCILIĞI, pp.20, Eskişehir, 2024

4. 2023/37709

Akan T.

ESKİŞEHİR CUMHURİYET BAŞSAVCILIĞI, pp.21, Eskişehir, 2023

Academic and Administrative Experience

2024 - Continues	Faculty Board Member	Eskisehir Osmangazi University, FEN FAKÜLTESİ
2024 - Continues	Head of Department	Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Fen Bil.Enst.Md.Lüğü
2024 - Continues	Head of Department	Eskisehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ
2020 - Continues	Danışma Kurulu Üyesi	Eskisehir Osmangazi University, REKTÖRLÜK
2018 - Continues	Chairperson of Department Promotion and Alumni Relations Commission	Eskisehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ
2009 - Continues	Farabi Program Institutional Coordinator	Eskisehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ
2021 - 2022	Head of Department	Eskisehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ
2018 - 2021	Head of Department	Eskisehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ
2013 - 2016	Head of Department	Eskisehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ
2010 - 2013	Faculty Management Board Member	Eskisehir Osmangazi University, ZİRAAT FAKÜLTESİ
2010 - 2013	Head of Department	Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Fizik Bölümü
2010 - 2013	Program Evaluation Board Member	Eskisehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ
2010 - 2013	Faculty Board Member	Eskisehir Osmangazi University, ZİRAAT FAKÜLTESİ
2010 - 2011	Deputy Head of Department	Eskisehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ

Courses

Doctorate

UZMANLIK ALAN DERSİ (DR), Doctorate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

DOKTORA TEZ ÇALIŞMASI, Doctorate, 2024 - 2025, 2023 - 2024, 2022 - 2023

PLAZMA MATERYAL İŞLEME I, Doctorate, 2023 - 2024, 2019 - 2020, 2018 - 2019, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012

İSTATİSTİKSEL MEKANİK VE UYGULAMALARI, Doctorate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

PLAZMA MATERYAL İŞLEME II, Doctorate, 2019 - 2020, 2018 - 2019, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011

Postgraduate

SOĞUK PLAZMALAR II, Postgraduate, 2024 - 2025, 2019 - 2020, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011

SOĞUK PLAZMALAR I, Postgraduate, 2024 - 2025, 2020 - 2021, 2016 - 2017, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012

YÜKSEK LİSANS TEZ ÇALIŞMASI, Postgraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023

UZMANLIK ALAN DERSİ (YL), Postgraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013

Undergraduate

İŞLETMEDE MESLEKİ EĞİTİM, Undergraduate, 2024 - 2025

PHYSICS II (B), Undergraduate, 2024 - 2025

UYGULAMALI ELEKTROMANYETİZMA, Undergraduate, 2024 - 2025

ATMOSFERİK BASINÇ PLAZMA, Undergraduate, 2024 - 2025, 2023 - 2024

PLAZMA FİZİĞİNE GİRİŞ II, Undergraduate, 2023 - 2024

ATMOSFERİK BASINÇ PLAZMALAR I II, Undergraduate, 2023 - 2024, 2022 - 2023

ÖĞRETMENLİK UYGULAMASI, Undergraduate, 2024 - 2025

FİZİKTE NOBEL ÖDÜLLERİ, Undergraduate, 2023 - 2024

Physics I, Undergraduate, 2024 - 2025, 2021 - 2022

FİZİK I LAB, Undergraduate, 2024 - 2025

PLAZMA FİZİĞİNE GİRİŞ I, Undergraduate, 2024 - 2025

ATMOSFER FİZİĞİNE GİRİŞ, Undergraduate, 2022 - 2023

PHYSICS I LAB, Undergraduate, 2023 - 2024

FİZİK, Undergraduate, 2023 - 2024

ELEKTROMANYETİK TEORİ, Undergraduate, 2023 - 2024

PHYSICS II, Undergraduate, 2022 - 2023, 2021 - 2022, 2015 - 2016, 2014 - 2015

PHYSICS II LAB, Undergraduate, 2022 - 2023, 2009 - 2010

PHYSICS I (A), Undergraduate, 2022 - 2023, 2021 - 2022

ATMOSFERİK BASINÇ PLAZMALAR I (A), Undergraduate, 2022 - 2023

NÜKLEER FİZİK II, Undergraduate, 2021 - 2022

PHYSICS I (B), Undergraduate, 2021 - 2022, 2014 - 2015

Physics I, Undergraduate, 2021 - 2022

Nükleer Fizik I, Undergraduate, 2021 - 2022

FİZİKTE BİLİM TARİHİ I, Undergraduate, 2020 - 2021

ELEKTROMANYETİK TEORİ I, Undergraduate, 2018 - 2019, 2014 - 2015, 2013 - 2014, 2012 - 2013

ELEKTROMANYETİK TEORİ II, Undergraduate, 2018 - 2019, 2014 - 2015, 2013 - 2014, 2012 - 2013

FİZİK I(İ.Ö.), Undergraduate, 2017 - 2018

FİZİK II, Undergraduate, 2017 - 2018

KLASİK MEKANİK I, Undergraduate, 2017 - 2018

KLASİK MEKANİK II, Undergraduate, 2017 - 2018

MODERN FİZİK, Undergraduate, 2017 - 2018

FİZİK II(İ.Ö.), Undergraduate, 2017 - 2018

MODERN FİZİK LAB, Undergraduate, 2017 - 2018

FİZİK I (B), Undergraduate, 2018 - 2019, 2014 - 2015

FİZİK I, Undergraduate, 2017 - 2018, 2016 - 2017

FİZİK I (B), Undergraduate, 2018 - 2019, 2015 - 2016

FİZİK A, Undergraduate, 2017 - 2018

ATMOSFERİK BASINÇ PLAZMALAR II, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010

ATMOSFERİK BASINÇ PLAZMALAR I, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012,

2010 - 2011, 2009 - 2010

ATMOSFER FİZİĞİ, Undergraduate, 2014 - 2015, 2013 - 2014, 2011 - 2012, 2010 - 2011

ATMOSFERİK BASINÇ PLAZMALAR II, Undergraduate, 2013 - 2014, 2011 - 2012, 2010 - 2011, 2009 - 2010

FİZİK I LAB (B), Undergraduate, 2013 - 2014

ELEKTROMANYETİK TEORİ II, Undergraduate, 2012 - 2013

İSTATİSTİK FİZİK, Undergraduate, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009

ELEKTRO MANYETİK TEORİ I, Undergraduate, 2012 - 2013

ATMOSFERİK BASINÇ PLAZMALAR I, Undergraduate, 2012 - 2013, 2010 - 2011, 2009 - 2010

TERMODİNAMİK, Undergraduate, 2011 - 2012, 2010 - 2011, 2009 - 2010

İSTATİSTİK FİZİK, Undergraduate, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009

ÖĞRETMENLİK UYGULAMASI, Undergraduate, 2011 - 2012

FİZİK I LAB (A), Undergraduate, 2011 - 2012

FİZİK I (B), Undergraduate, 2011 - 2012, 2010 - 2011

TERMODİNAMİK, Undergraduate, 2011 - 2012, 2010 - 2011, 2009 - 2010

FİZİK I LAB (B), Undergraduate, 2011 - 2012, 2010 - 2011

FİZİK (A), Undergraduate, 2010 - 2011, 2009 - 2010

PHYSICS I LAB (A), Undergraduate, 2009 - 2010

Supervised Theses

Akan T., Düşük Basınç Soğuk Plazma ile Bakır Sülfat Yapıların Üretimi ve İncelenmesi, Postgraduate, E.AYDIN(Student), Continues

Akan T., Plazma Teknolojileri Kullanılarak Molibden Tabanlı Yapıların Üretilmesi ve İncelenmesi, Doctorate, U.DEMİRKOL(Student), Continues

Karaduman Y., Akan T., Soğuk Atmosferik Plazma Uygulamasının Triticale Unlarının Gluten Kalitesi ile Bazı Biyoaktif Bileşenleri Üzerine Etkisi, Postgraduate, K.KAYHAN(Student), Continues

Akan T., Investigation of the Effect of Surface Dielectric Barrier Discharge Plasma on Some Microorganisms and Mold Growth of Foods, Postgraduate, E.Ceren(Student), 2025

Kışla D., Akan T., Nanotechnological Approaches in Food Safety: Investigation of Antimicrobial and Structural Properties of Thin Films Synthesized with Boron, Aluminum and Silicon Nanoparticles, Doctorate, G.Gurur(Student), 2025

Akan T., Investigation of some properties of undoped and P2O5, CdO, and ZnO doped V2O5 thin films deposited by the Thermionic Vacuum Arc (TVA), Doctorate, Ç.DURMUŞ(Student), 2024

Çabuk A., Akan T., Investigation of the Effects of Atmospheric Cold Plasmas on Different Types of Planktonic Bacteria and Biofilms, Doctorate, S.Yavaş(Student), 2024

Akan T., Kilohertz Plasma Pencil, Doctorate, E.ŞAHİN(Student), 2022

Akan T., Production and Investigation of Nitrogen Gas Discharges, Postgraduate, Ç.DURMUŞ(Student), 2018

Akan T., Argon Plasma Jet Generation, Postgraduate, O.KESKİN(Student), 2017

Akan T., Production of Cold Flowing Post-Discharge Plasma Reactors and Investigation on Their Some Properties, Doctorate, E.İLİK(Student), 2017

Akan T., The Investigation of Luminescent Discharge Characteristics, Postgraduate, E.FURKAN(Student), 2016

Akan T., The Investigation of Plasmas Flowed to Another Post-Discharge Chamber at Low Pressure, Postgraduate, Y.YUNUS(Student), 2015

Akan T., Application On Bacteria of Air DC Post-Discharge Plasma at Low Pressure and Temperature, Postgraduate, K.KOLBAY(Student), 2014

Akan T., Atmospheric pressure plasma jets, Postgraduate, E.DALLI(Student), 2013

Memberships / Tasks in Scientific Organizations

ESOGÜ Translasyonel Tıp Uygulama ve Araştırma Merkezi, Member of Science Committee, 2021 - Continues, Turkey

Türk Fizik Derneği Eskişehir Temsilciliği, Chairman, 2016 - Continues, Turkey
Türk Fizik Derneği, Member, 1994 - Continues, Turkey
Türk Fizik Derneği, Executive Board Member, 2013 - 2019, Turkey
Türk Fizik Derneği Ankara Şubesi, Chairman, 2014 - 2016, Turkey
Balkan Fizik Birliği, Member, 1994 - 1996, Turkey

Peer Reviews in Scientific Publications

IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, April 2025
JOURNAL OF DISPERSION SCIENCE AND TECHNOLOGY, SCI Journal, April 2025
Brazilian Journal of Food Technology, SCI Journal, April 2025
HIGH TEMPERATURE MATERIALS AND PROCESSES, SCI Journal, April 2025
MATERIALS SCIENCE AND TECHNOLOGY, SCI Journal, March 2025
LASERS IN MEDICAL SCIENCE, SCI Journal, March 2025
Bulletin of the University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Food Science and Technology, Other Indexed Journal, March 2025
POSTHARVEST BIOLOGY AND TECHNOLOGY, SCI Journal, March 2025
PHYSICS OF PLASMAS, SCI Journal, March 2025
CLINICAL AND EXPERIMENTAL DENTAL RESEARCH, Journal Indexed in SCI-E, February 2025
ECS JOURNAL OF SOLID STATE SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, February 2025
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, February 2025
Essentials of Dentistry, Journal Indexed in SCI-E, February 2025
MATERIALS SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, February 2025
PLASMA PROCESSES AND POLYMERS, SCI Journal, February 2025
FOOD AND BIOPROCESS TECHNOLOGY, SCI Journal, February 2025
IEEE TRANSACTIONS ON PLASMA SCIENCE, Journal Indexed in SCI-E, January 2025
OPTICAL MATERIALS, SCI Journal, December 2024
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, December 2024
MATERIALS CHEMISTRY AND PHYSICS, SCI Journal, December 2024
IEEE TRANSACTIONS ON PLASMA SCIENCE, National Scientific Refreed Journal, December 2024
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi , National Scientific Refreed Journal, December 2024
ACS Sustainable Chemistry & Engineering, SCI Journal, November 2024
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SCIENTIFIC REPORTS, SCI Journal, November 2023
INNOVATIVE FOOD SCIENCE AND EMERGING TECHNOLOGIES, SCI Journal, November 2023
JOURNAL OF PROSTHODONTICS, Journal Indexed in SCI-E, September 2023
JOURNAL OF VACUUM SCIENCE AND TECHNOLOGY A, SCI Journal, July 2023
SOLID STATE SCIENCES, Journal Indexed in SCI-E, June 2023
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, May 2023
MATERIALS LETTERS, SCI Journal, May 2023

MATERIALS LETTERS, SCI Journal, March 2023
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PHYSICS OF PLASMAS, SCI Journal, September 2022
IEEE TRANSACTIONS ON PLASMA SCIENCE, Journal Indexed in SCI-E, May 2022
MATERIALS LETTERS, SCI Journal, May 2022
IEEE Transactions On Plasma Science, SCI Journal, March 2022
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, March 2022
Journal Of Optoelectronics And Advanced Materials, Journal Indexed in SCI-E, March 2022
MATERIALS LETTERS, Journal Indexed in SCI-E, January 2022
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, November 2021
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, August 2021
the Open Dentistry Journal, Journal Indexed in ESCI, August 2021
Innovative Food Science & Emerging Technologies, Journal Indexed in SCI-E, August 2021
PARTICULATE SCIENCE AND TECHNOLOGY, SCI Journal, August 2021
MATERIALS LETTERS, SCI Journal, July 2021
INNOVATIVE FOOD SCIENCE & EMERGING TECHNOLOGIES, SCI Journal, July 2021
INNOVATIVE FOOD SCIENCE & EMERGING TECHNOLOGIES, SCI Journal, June 2021
Bursa Uludağ Üniversitesi Ziraat Fakültesi Dergisi (Online), National Scientific Refreed Journal, January 2021
INNOVATIVE FOOD SCIENCE & EMERGING TECHNOLOGIES, SCI Journal, January 2021
MATERIALS LETTERS, SCI Journal, January 2021
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, September 2018
INNOVATIVE FOOD SCIENCE & EMERGING TECHNOLOGIES, SCI Journal, August 2018
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, SCI Journal, June 2018
CANADIAN JOURNAL OF PHYSICS, SCI Journal, February 2018
MATERIALS LETTERS, SCI Journal, January 2018
AFYON KOCATEPE ÜNİVERSİTESİ FEN VE MÜHENDİSLİK BİLİMLERİ DERGİSİ, National Scientific Refreed Journal, December 2017
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, November 2017
CANADIAN JOURNAL OF PHYSICS, SCI Journal, October 2017
PHYSICS OF PLASMAS, SCI Journal, September 2017
PHYSICS OF PLASMAS, SCI Journal, July 2017
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, May 2017
MATERIALS LETTERS, SCI Journal, February 2017
PARTICULATE SCIENCE AND TECHNOLOGY, SCI Journal, October 2016
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, May 2016
JOURNAL OF ELECTROSTATICS, SCI Journal, November 2015
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, October 2015
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, October 2014
JOURNAL OF ELECTROSTATICS, SCI Journal, July 2014
JOURNAL OF ELECTROSTATICS, SCI Journal, July 2014
MATERIALS LETTERS, SCI Journal, January 2014
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, December 2013
JOURNAL OF ELECTROSTATICS, SCI Journal, November 2013
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MATERIALS LETTERS, SCI Journal, November 2012
MATERIALS LETTERS, SCI Journal, September 2012
Journal Of Electrostatics, Journal Indexed in SCI-E, September 2012
MATERIALS LETTERS, SCI Journal, June 2012
MATERIALS LETTERS, SCI Journal, April 2012
JOURNAL OF ELECTROSTATICS, SCI Journal, March 2012
surface and Coatings Technology, Other Indexed Journal, February 2011

MATERIALS LETTERS, SCI Journal, December 2010
MATERIALS LETTERS, SCI Journal, July 2010
JOURNAL OF FOOD ENGINEERING, SCI Journal, March 2008
Surface and Coatings Technology, Other Indexed Journal, July 2007
Sigma Mühendislik ve Fen Bilimleri Dergisi, Other Journals, April 2006

Scientific Project Refereeing

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, February 2025
TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, October 2024
TUBITAK Project, 1501 - Industry R & D Projects Support Program, December 2023
TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, October 2023
TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, November 2021
Project Supported by Higher Education Institutions, BAP PhD, June 2021
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, June 2021
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, June 2021
TUBITAK Project, 1005 - National New Ideas and Products Research Support Program, June 2021
TUBITAK Project, 1501 - Industry R & D Projects Support Program, April 2021
TUBITAK Project, 2236 - Program for Supporting International Researchers, April 2021
TUBITAK Project, 3501 - National Young Researcher Career Development Program, September 2020
TUBITAK Project, 1005 - National New Ideas and Products Research Support Program, June 2020
TUBITAK Project, 1002 - Quick Support Program, April 2020
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, January 2020
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, January 2020
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, October 2019
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, May 2019
TUBITAK Project, 3501 - National Young Researcher Career Development Program, March 2019
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, July 2018

Peer Reviews for Ethical Evaluations

ETİK DEĞERLENDİRME KOMİSYONU, Eskişehir Technical University, Turkey, March 2020

Scientific Consultations

Anadolu Üniversitesi, Project Consultancy, Eskişehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ, Turkey, 2014 - 2016

Tasks In Event Organizations

Akan T., TURKISH PHYSICAL SOCIETY 41st INTERNATIONAL PHYSICS CONGRESS, Scientific Congress, Muğla, Turkey, Eylül 2025
Akan T., 40th International Physics Congress of the Turkish Physical Society , Scientific Congress, Muğla, Turkey, Eylül 2024
Akan T., Turkish Physical Society 36th International Physics Congress, Scientific Congress, İstanbul, Turkey, Eylül 2020
Akan T., Turkish Physical Society 35th International Physics Congress, Scientific Congress, Muğla, Turkey, Eylül 2019
Akan T., Turkish Physical Society 34th International Physics Congress , Scientific Congress, Muğla, Turkey, Eylül 2018
Atay F., KÜRKÇÜOĞLU G. S., AKAN T., VI. ULUSAL GÜNEŞ VE HİDROJEN ENERJİSİ KONGRESİ, Scientific Congress,

Eskişehir, Turkey, Mayıs 2018

Akan T., Turkish Physical Society 33rd International Physics Congress , Scientific Congress, Muğla, Turkey, Eylül 2017

Akan T., Turkish Physical Society 32nd International Physics Congress , Scientific Congress, Muğla, Turkey, Eylül 2016

Atay F., KÜRKCÜOĞLU G. S., AKAN T., KURTARAN S., V. ULUSAL GÜNEŞ VE HİDROJEN ENERJİSİ KONGRESİ, Scientific Congress, Eskişehir, Turkey, Mayıs 2016

Akan T., KURTARAN S., Adım Fizik Günleri V, Scientific Congress, Eskişehir, Turkey, Nisan 2016

Akan T., 9th International Physics Conference of the Balkan Physical Union , Scientific Congress, İstanbul, Turkey, Ağustos 2015

Akan T., The 42nd IEEE International Conference on Plasma Science, Head of Session of High-Pressure and Thermal Plasma Processing, Scientific Congress, Antalya, Turkey, Mayıs 2015

Akan T., 31. Uluslar arası TFD Fizik Kongresi , Scientific Congress, Muğla, Turkey, Temmuz 2014

Atay F., KÜRKCÜOĞLU G. S., AKAN T., IV. ULUSAL GÜNEŞ VE HİDROJEN ENERJİSİ KONGRESİ, Scientific Congress, Eskişehir, Turkey, Mayıs 2014

Akan T., 1. Uluslar arası Plazma Teknolojileri Kongresi , Scientific Congress, Kayseri, Turkey, Nisan 2014

Akan T., First International Middle East Plasma Science Conference , Scientific Congress, Antalya, Turkey, Nisan 2014

Akan T., Adım Fizik Günleri III, Scientific Congress, Isparta, Turkey, Nisan 2014

Akan T., 30. Uluslar arası TFD Fizik Kongresi, Scientific Congress, İstanbul, Turkey, Eylül 2013

Akan T., 29. Uluslar arası TFD Fizik Kongresi, Scientific Congress, Muğla, Turkey, Eylül 2012

Akan T., III. Ulusal Güneş ve Hidrojen Sempozyumu , Scientific Congress, Eskişehir, Turkey, Haziran 2012

Akan T., 28. Uluslar arası TFD Fizik Kongresi, Scientific Congress, Muğla, Turkey, Eylül 2011

Akan T., I. MYOMAT , Scientific Congress, Eskişehir, Turkey, Temmuz 2009

Akan T., II. Ulusal Güneş ve Hidrojen Sempozyumu , Scientific Congress, Eskişehir, Turkey, Temmuz 2008

Akan T., 6. BPU-Uluslar arası Fizik Konferansı , Scientific Congress, İstanbul, Turkey, Ağustos 2006

Akan T., I. Ulusal Güneş ve Hidrojen Sempozyumu, Scientific Congress, Eskişehir, Turkey, Temmuz 2006

Akan T., 2005 Dünya Fizik Yılı ile ilgili ESOGU Basın Toplantısı, Social Activities, Eskişehir, Turkey, Mart 2005

Mobility Activity

Post Doc, Post Doc, Old Dominion University, United States Of America, 2006 - 2007

Bilateral Colloboration Agreement, Guest Researcher, "Costanta-Ovidius Üniversitesi", Romania, 2003 - 2005

Bilateral Colloboration Agreement, Guest Researcher, National Institute for Laser Plasma and Radiation Physics, Romania, 1998 - 2005

Metrics

Publication: 171

Citation (WoS): 940

Citation (Scopus): 1115

H-Index (WoS): 12

H-Index (Scopus): 13

Invited Talks

Soğuk Plazmaların Biyolojik Hücreler, Tıp, Gıda ve Ziraat Uygulamaları, Seminar, FATİH FEN LİSESİ, Turkey, October 2023

Soğuk Plazmaların Biyolojik Hücreler, Tıp, Gıda ve Ziraat Uygulamaları, Seminar, YENİ YOL OKULLARI, Turkey, June 2023

ESOGÜ Tematik Alan 1: Yenilikçi Malzeme, Biyomalzeme Teknolojileri Çalıştayı, Workshop, Eskişehir Osmangazi Üniversitesi, Turkey, January 2023

Soğuk Plazmaların Biyolojik Hücreler, Tıp, Gıda ve Ziraat Uygulamaları, Conference, Eskişehir Osmangazi Üniversitesi, Turkey, December 2020

Eğitim ve Kariyer Yönetimi, Conference, Subaşı Hacı Ali Saruhan Lisesi, Turkey, October 2017

Kariyer Planlama ve Bilim, Conference, Şehit Piyade Astsubay Çavuş Soner ÖZÜBEK İÖO ve OÖO, Turkey, January 2016

Fizik Çözümlenmeleri Poster Sunum Organizasyonu, Conference, Eskişehir Osmangazi Üniversitesi, Turkey, September 2015

Kuantum Fiziği, Conference, Eskişehir Cumhuriyet Lisesi, Turkey, January 2012

Plazma ve Uygulamaları, Conference, Boğaziçi Üniversitesi, Turkey, March 2008

Maddenin 4. Hali, Conference, Eskişehir Fen Lisesi, Turkey, May 2005

Türk Tabipler Birliği 8 Mart Dünya Kadınlar Günü Konferansı Tarihe İsmi Yazdıran Bayan Fizikçiler, Conference, Eskişehir Osmangazi Üniversitesi, Turkey, March 2005

Research Areas

Gases, Plasmas and Electrical Discharges Physics, Natural Sciences

Non Academic Experience

Public Corporation, Sorumlu Baş Öğretmen