

# TAMER AKAN

## PROF.

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26040 Meselik Campus, Odunpazarı/ESKİSEHIR/TÜRKİYE

### International Researcher IDs

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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.

### Learning Knowledge

Doctorate  
1997 - 2003

Eskişehir Osmangazi University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey

Postgraduate  
1994 - 1997

Eskişehir Osmangazi University, Fen Bilimleri Enstitüsü, 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

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 Bilimleri Enstitüsü, 2003

Postgraduate, Multi Channel Thermal Microscope, Eskişehir Osmangazi University, Fen Bilimleri Enstitüsü, 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

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Professor 2014 - Continues	Eskişehir Osmangazi University, Fen Fakültesi, Fizik Bölümü
Associate Professor 2008 - 2014	Eskişehir Osmangazi University, Fen Fakültesi, Fizik Bölümü
Assistant Professor 2008 - 2008	Eskişehir Osmangazi University, Fen Fakültesi, Fizik Bölümü
Researcher 2006 - 2007	Old Dominion University, Engineering And Technology, Center For Bioelectric
Research Assistant PhD 2003 - 2007	Eskişehir Osmangazi University, Fen Fakültesi, Fizik Bölümü
Researcher 2003 - 2003	"Costanta-Ovidius Üniversitesi", Plasma Spectroscopy Laboratory
Research Assistant 1994 - 2003	Eskişehir Osmangazi University, Fen Fakültesi, Fizik Bölümü
Researcher 1998 - 1998	National Institute for Laser Plasma and Radiation Physics, National Institute for Laser Plasma and Radiation Physics

## Supported Projects

1. 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
2. Akan T., Durmuş Ç., Project Supported by Higher Education Institutions, Termiyonik Vakum Ark Yöntemi ile Camı İnce Filmlerin Üretilmesi ve Bazı Özelliklerinin İncelenmesi , 2023 - 2023
3. Şahin Z., Özer N. E., Akan T., TUBITAK Project, Dijital ve Konvansiyonel Yöntemlerle Üretilen Protez Kaidelerinin Tamir Edilebilirliğine Çeşitli Yüzey İşlemlerinin Etkisi, 2022 - 2023
4. 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
5. Kartal S., Akan T., Project Supported by Higher Education Institutions, Argon Atmospheric Pressure Cold Plasma Jet Generation and Modeling, 2021 - 2023
6. 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
7. 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
8. Akan T., Durmuş Ç., Project Supported by Higher Education Institutions, Production of Thin Films of TeO<sub>2</sub>-ZnO Binary Glass Composition Synthesis by Thermionic Vacuum Arc (TVA), 2021 - 2022
9. Akan T., İlik E., Project Supported by Higher Education Institutions, Production and Investigation of Spectroscopic Characteristics of Nitrogen Cold Plasmas, 2017 - 2019
10. Akan T., İlik E., Tanışlı M., Project Supported by Higher Education Institutions, Investigation of Cold Flowing Radio Frequency Post Discharges, 2014 - 2016
11. AKAN T., İLİK E., Project Supported by Higher Education Institutions, Düşük Basıncıta Soğuk-Akan-Post-Deşarj Plazmaların Etkileşiminin İncelenmesi, 2014 - 2015
12. Akan T., İlik E., Project Supported by Higher Education Institutions, Investigation of Interaction of Cold Flowing Post-Discharge Plasmas at Low Pressure, 2014 - 2015
13. 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
14. 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
15. 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
16. Akan T., Laroussi M., Project Supported by Public Organizations in Other Countries, Effects of Non-Equilibrium Plasmas on Eukaryotic Cells, 2006 - 2007
17. 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
18. 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., 2023 TÜRK FİZİK DERNEĞİ ONUR ÖDÜLÜ, Türk Fizik Derneği, August 2023
2. Akan T., 30. Uğur Mumcu Anma Ödülleri Yılın Sağlık Ödülü, Çağdaş Gazeteciler Derneği Ve Tepebaşı Belediyesi, January 2023
3. Akan T., EN BAŞARILI ÇALIŞMA, Türk Fizik Derneği, September 2002

## Scholarships

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

## Jury Memberships

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

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, December, 2021

Associate Professor Exam, Associate Professor Exam, Uşak 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

- 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.1, no.1, pp.1-32, 2023 (SCI-Expanded)
- 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., Vlčko T., Kulawik P., Režek Jambrak A., ÖZOĞUL F.  
Trends in Food Science and Technology, vol.135, pp.144-172, 2023 (SCI-Expanded)
- Vanadium pentoxide thin films deposited by the thermionic vacuum arc plasma**  
Durmuş Ç., AKAN T.  
Thin Solid Films, vol.770, 2023 (SCI-Expanded)
- TeO<sub>2</sub>-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)
- 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)
- 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)
- 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)

8. **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)
9. **kHz Plasma Pencil**  
Akan A., Şahin E.  
TECHNICAL PHYSICS LETTERS, vol.48, no.4, pp.1-4, 2022 (SCI-Expanded)
10. **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)
11. **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)
12. **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)
13. **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)
14. **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)
15. **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)
16. **Boron processes using thermionic vacuum arc**  
AKAN T., Karakas E.  
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.8, pp.480-482, 2014 (SCI-Expanded)
17. **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)
18. **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)
19. **Titanium oxidation by pulsed oxygen plasma**  
Balbag M. Z., Pat S., Cenic 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)
20. **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)
21. **MgB<sub>2</sub> 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)

22. **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)

23. **Carbon synthesis in methane plasma**

Musa G., Ekem N., Pat S., Balbag M. Z., Cenik M. I., AKAN T., Ciupina V., Vladoiu R., Tanisli M., Ozen O.

JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.9, no.4, pp.871-874, 2007 (SCI-Expanded)

24. **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)

25. **Investigation of carbon produced by methane pulsed discharge**

Musa G., Ekem N., Akan T., Pat S., Balbağ M. Z., Cenik M. İ., Vladoiu 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)

26. **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., Vladoiu R., Musa G.

MATERIALS LETTERS, vol.61, no.1, pp.23-26, 2007 (SCI-Expanded)

27. **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)

28. **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)

29. **Characteristics of boron thin films obtained by TVA technology**

Musa G., Vladoiu 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)

30. **SURFACE CHARGE INFLUENCE ON THE BREAKDOWN VOLTAGE IN HE**

Akan T., Ciupina V., Vladoiu R., Musa G.

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.24, no.2, pp.45-49, 2006 (SCI-Expanded)

31. **Studies on the thermionic vacuum arc discharges in the vapors of Cu-Ag and Cu-Sn alloys**

AKAN T., Ekem N., Pat S., Vladoiu R., Musa G.

JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.7, no.5, pp.2489-2494, 2005 (SCI-Expanded)

32. **Al<sub>2</sub>O<sub>3</sub> THIN FILM DEPOSITION USING THERMIONIC VACUUM ARC**

Akan T., Karakaş E., Musa G.

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.23, no.3, pp.18-23, 2005 (SCI-Expanded)

33. **Study on Termionic Vacuum ARC- A novel and advanced technology for surface coating**

PAT S., Ekem N., AKAN T., Küsmüş Ö., Demirkol S., Vladoiu R., Lungu C., Musa G.

Journal of Optoelectronics and Advanced Materials, vol.7, no.5, pp.2495-2499, 2005 (SCI-Expanded)

34. **Variation in thickness of copper films deposited at various distances and angles using the thermionic vacuum arc**

AKAN T., Ekem N.

Turkish Journal of Physics, vol.27, no.3, pp.219-224, 2003 (SCI-Expanded)

35. **Operation parameters of the thermionic vacuum arc discharge**

AKAN T.

Turkish Journal of Physics, vol.27, no.1, pp.69-75, 2003 (SCI-Expanded)

### **Articles Published in Other Journals**

1. **Development of A New Device For Applying Atmospheric Pressure Cold Plasma on Foods**  
Akan T., Kartal S., Mol Tokay S., Coşansu Akdemir S., Tosun Ş. Y., Üçok Alakavuk D., Ulusoy Ş., Doğruyol H., Bostan K.  
Food and Environment Safety, vol.21, no.4, pp.321-332, 2022 (Peer-Reviewed Journal)
2. **AL YAZMALIM**  
Akan T.  
ÇINARALTI Dergisi, vol.7, no.17, pp.12-14, 2022 (Non Peer-Reviewed Journal)
3. **DUMAN**  
Akan T.  
ÇINARALTI, no.16, pp.10-12, 2021 (Non Peer-Reviewed Journal)
4. **Investigation on Optical Properties of Atmospheric Pressure Plasma Jets of N2 Gas**  
İlik E., Durmuş Ç., Akan T.  
Adıyaman Üniversitesi Fen Bilimleri Dergisi, vol.10, no.1, pp.326-338, 2020 (Peer-Reviewed Journal)
5. **Zamanın Ruhü: Çağımızın Fiziki Ne Söylüyor**  
Akan T.  
ÇINARALTI, no.13, pp.8-10, 2019 (Non Peer-Reviewed Journal)
6. **Çağımızın Bilgi Düzeyi ve İnançlarımız/Düşüncelerimiz**  
Akan T.  
ÇINARALTI, no.12, pp.4-6, 2018 (Non Peer-Reviewed Journal)
7. **Düşünmek-Düşlemek**  
Akan T.  
ÇINARALTI, no.11, pp.8-10, 2018 (Non Peer-Reviewed Journal)
8. **Gerçek ve Hayal**  
Akan T.  
ÇINARALTI, no.9, pp.8-10, 2018 (Non Peer-Reviewed Journal)
9. **Applying on Bacillus cereus of Low-Pressure and Low-Temperature Plasma Jet in a Postdischarge Chamber**  
İlik E., Aytar Çelik P., Toptas Y., Çabuk A., Akan T.  
IEEE TRANSACTIONS ON RADIATION AND PLASMA MEDICAL SCIENCES, vol.1, no.5, pp.468-471, 2017 (ESCI)
10. **He Gaz Deşarjlarında Yüzey Polarizasyon Yüklerinin İncelenmesi**  
Akan T., Ciupina V., Vladoiu R., Musa G.  
Afyon Kocatepe Üniversitesi Fen Bilimleri Dergisi, vol.7, no.1, pp.81-88, 2008 (Peer-Reviewed Journal)
11. **Biyolojik Tehlikelere Karşı Soğuk Plazma**  
Akan T.  
Bilim ve Teknik, no.478, pp.62-64, 2007 (Non Peer-Reviewed Journal)
12. **Thermal Image of Copper-Sepiolite Surface Using Multi Channel Thermal Microscope**  
Akan T.  
Balkan Physics Letters, vol.15, no.2, pp.51-58, 2007 (Peer-Reviewed Journal)
13. **Emission Spectra of Two Interacting Plasmas**  
Musa G., Bob C. S., Vladoiu R., Ekem N., Cenik İ., PAT S., BALBAĞ M. Z., AKAN T.  
Sixth International Conference of the Balkan Physical Union, vol.899, no.1, pp.693, 2007 (Peer-Reviewed Journal)
14. **Optical Emission Spectra of Plasma Display Panel**  
PAT S., Musa G., Ekem N., Bob C. s., BALBAĞ M. Z., İlker C., AKAN T., Aydın O.  
Sixth International Conference of the Balkan Physical Union, vol.899, no.1, pp.691, 2007 (Peer-Reviewed Journal)
15. **Investigation of the Carbon Produced by Methane Pulsed Discharge**  
Musa G., Ekem N., AKAN T., PAT S., BALBAĞ M. Z., Cenik İ., Victor C., Vladoiu R., Özen Ö.  
Sixth International Conference of the Balkan Physical Union, vol.899, pp.692, 2007 (Peer-Reviewed Journal)
16. **Analysis of Sterilization Effect of Atmospheric Pressure Pulsed Plasma**  
Ekem N., AKGÜN Y., KİREMİTÇİ A., AKAN T., PAT S., Musa G.  
Sixth International Conference of the Balkan Physical Union, vol.899, pp.702, 2007 (Peer-Reviewed Journal)
17. **Investigation of Properties of Boron Thin Film Deposited By Thermionic Vacuum Arc Technology**  
EKEM N., AKAN T., PAT S., BALBAĞ M. Z., Cenik İ., Erdinç K., Vladoiu R., Musa G.

- Sixth International Conference of the Balkan Physical Union., vol.899, no.1, pp.699, 2007 (Peer-Reviewed Journal)
18. **Virüslere Karşı Soğuk Savaş Dönemi**  
Akan T.  
Aktüel Dergisi, no.115, pp.30-32, 2007 (Non Peer-Reviewed Journal)
  19. **Anot Metali Buharlarında Plazma Üreten Yeni Teknik Termiyonik Vakum Ark (TVA)**  
Akan T., Ekem N.  
Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.8, no.3, pp.109-118, 2006 (Peer-Reviewed Journal)
  20. **The Plasma Pencil: A Novel Pulsed Plasma Source**  
Akan T., Laroussi M.  
Bulletin of The American Physical Society, vol.51, no.5, pp.33, 2006 (Non Peer-Reviewed Journal)
  21. **Cu-Ag Alloy Process Using the Thermionic Vacuum Arc System**  
Akan T., Musa G.  
Balkan Physics Letters, vol.13, no.2, pp.57-64, 2005 (Peer-Reviewed Journal)
  22. **Maddenin 4. Hali Plazma ve Temel Özellikleri**  
Akan T.  
Elektronik Çağdaş Fizik Dergisi, no.4, pp.1-11, 2005 (Non Peer-Reviewed Journal)
  23. **Bakır Buharı Termiyonik Vakum Ark Deşarjın Karakteristikleri**  
Akan T.  
İTÜ Dergisi Seri C: Fen Bilimleri, vol.1, no.1, pp.65-69, 2002 (Peer-Reviewed Journal)
  24. **Dependence of Film Thickness on the Deposition Angle in The Thermionic Vacuum Arc Method,**  
Akan T., Ekem N., Pat S., Musa G.  
Balkan Physics Letters, vol.10, no.2, pp.79-86, 2002 (Peer-Reviewed Journal)

## Books & Book Chapters

1. **Plazma TIP**  
Akan T.  
in: Plazma Teknolojileri, Prof. Dr. Beycan İBRAHİMOĞLU, Editor, Ürün Yayıncılık, Ankara, pp.199-213, 2014

## Refereed Congress / Symposium Publications in Proceedings

1. **CADMIUM OXIDE (CDO) THIN FILM DEPOSITION BY THE THERMIONIC VACUUM ARC**  
Demirkol U., Durmuş Ç., Akan T.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Turkey, 31 August - 04 September 2023, vol.1, no.1, pp.162
2. **MOLYBDENUM (MO) THIN FILM DEPOSITION BY THE THERMIONIC VACUUM ARC**  
Demirkol U., Durmuş Ç., Akan T.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Turkey, 31 August - 04 September 2023, vol.1, no.1, pp.163
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## Academic and Administrative Experience

2020 - Continues	<b>Danışma Kurulu Üyesi</b>	Eskisehir Osmangazi University, Rektörlük
2018 - Continues	<b>Bölüm Tanıtım ve Mezunlarla İlişkiler Komisyonu Başkanı</b>	Eskisehir Osmangazi University, Fen Fakültesi, Fizik Bölümü
2009 - Continues	<b>Farabi Program Institutional Coordinator</b>	Eskisehir Osmangazi University, Fen Fakültesi, Fizik Bölümü
2021 - 2022	<b>Head of Department</b>	Eskisehir Osmangazi University, Fen Fakültesi, Fizik Bölümü
2018 - 2021	<b>Head of Department</b>	Eskisehir Osmangazi University, Fen Fakültesi, Fizik Bölümü
2013 - 2016	<b>Head of Department</b>	Eskisehir Osmangazi University, Fen Fakültesi, Fizik Bölümü
2010 - 2013	<b>Fakülte Kurulu Üyesi</b>	Eskisehir Osmangazi University, Ziraat Fakültesi

2010 - 2013	<b>Head of Department</b>	Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Fizik Bölümü
2010 - 2013	<b>Program Değerlendirme Kurulu Üyesi</b>	Eskisehir Osmangazi University, Fen Fakültesi, Fizik Bölümü
2010 - 2013	<b>Fakülte Yönetim Kurulu Üyesi</b>	Eskisehir Osmangazi University, Ziraat Fakültesi
2010 - 2011	<b>Deputy Head of Department</b>	Eskisehir Osmangazi University, Fen Fakültesi, Fizik Bölümü

## Courses

YÜKSEK LİSANS TEZ ÇALIŞMASI (D), Postgraduate, 2023 - 2024, 2022 - 2023  
ATMOSFER FİZİĞİNE GİRİŞ, Undergraduate, 2022 - 2023  
DOKTORA TEZ ÇALIŞMASI (D), Doctorate, 2022 - 2023  
ATMOSFERİK BASINÇ PLAZMALARI II, Undergraduate, 2022 - 2023  
UZMANLIK ALAN DERSİ (D) (DR), Doctorate, 2022 - 2023  
UZMANLIK ALAN DERSİ (YL) (D), Postgraduate, 2022 - 2023  
PHYSICS II, Undergraduate, 2022 - 2023, 2021 - 2022, 2015 - 2016, 2014 - 2015  
PHYSICS II LAB, Undergraduate, 2022 - 2023, 2009 - 2010  
İSTATİSTİKSEL MEKANİK VE UYGULAMALARI, Doctorate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018  
PHYSICS I (A), Undergraduate, 2022 - 2023, 2021 - 2022  
ATMOSFERİK BASINÇ PLAZMALARI I (A), Undergraduate, 2022 - 2023  
UZMANLIK ALAN DERSİ, Doctorate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015  
PHYSICS II, Undergraduate, 2021 - 2022, 2015 - 2016  
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  
Physics I, Undergraduate, 2021 - 2022  
PLAZMA MATERYAL İŞLEME II, Doctorate, 2019 - 2020, 2018 - 2019, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011  
SOĞUK PLAZMALAR I, Postgraduate, 2020 - 2021, 2016 - 2017, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012  
FİZİKTE BİLİM TARİHİ I, Undergraduate, 2020 - 2021  
SOĞUK PLAZMALAR II, Postgraduate, 2019 - 2020, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011  
PLAZMA MATERYAL İŞLEME I, Doctorate, 2019 - 2020, 2018 - 2019, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012  
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  
UZMANLIK ALAN DERSİ (YL), Postgraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013  
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

## Advising Theses

Akan T., Yeni Bir Yüzey Dielektrik Bariyer Deşarj Plazma Üretim Cihazı , Postgraduate, K.YUDAR(Student), Continues  
Akan T., Yenilikçi Malzemelerin Plazma Destekli Teknolojilerle Üretilmesi, Doctorate, U.DEMİRKOL(Student), Continues  
Çabuk A., Akan T., Investigation of Inactivation Mechanisms of Atmospheric Cold Plasma Application on Bacterial Biofilms, Doctorate, S.Yavaş(Student), Continues  
Kışla D., Akan T., Investigation of Antimicrobial Characteristics of the Surfaces Coated with Amorphous Metal Alloy (BAISi) Synthesized by Boron (B), Aluminum (Al) and Silicon (Si) Nanoparticles, Doctorate, G.Gurur(Student), Continues  
Akan T., Production of Thin Films of Vanadium Compounds by Thermionic Vacuum Arc and Investigation of Some Properties, Doctorate, Ç.DURMUŞ(Student), Continues  
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

## Scientific Refereeing

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  
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, January 2023  
PHYSICS OF PLASMAS, SCI Journal, September 2022  
MATERIALS LETTERS, SCI Journal, May 2022  
IEEE TRANSACTIONS ON PLASMA SCIENCE, Journal Indexed in SCI-E, May 2022  
IEEE Transactions On Plasma Science, SCI Journal, March 2022  
Journal Of Optoelectronics And Advanced Materials, Journal Indexed in SCI-E, March 2022  
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, March 2022  
MATERIALS LETTERS, Journal Indexed in SCI-E, January 2022  
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, November 2021  
TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, DAVİTAP MÜH., Turkey, November 2021  
PARTICULATE SCIENCE AND TECHNOLOGY, SCI Journal, August 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  
MATERIALS LETTERS, SCI Journal, July 2021  
INNOVATIVE FOOD SCIENCE & EMERGING TECHNOLOGIES, SCI Journal, July 2021  
INNOVATIVE FOOD SCIENCE & EMERGING TECHNOLOGIES, SCI Journal, June 2021  
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Turkey, June 2021  
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Turkey, June 2021  
TUBITAK Project, 1005 - National New Ideas and Products Research Support Program, TÜBİTAK, Turkey, June 2021  
Project Supported by Higher Education Institutions, BAP PhD, Ankara University, Turkey, June 2021  
TUBITAK Project, 2236 - Program for Supporting International Researchers, Yildiz Technical University, Turkey, April 2021  
TUBITAK Project, 1501 - Industry R & D Projects Support Program, Turkey, April 2021  
Bursa Uludağ Üniversitesi Ziraat Fakültesi Dergisi (Online), National Scientific Refreed Journal, January 2021  
MATERIALS LETTERS, SCI Journal, January 2021  
INNOVATIVE FOOD SCIENCE & EMERGING TECHNOLOGIES, SCI Journal, January 2021  
TUBITAK Project, 3501 - National Young Researcher Career Development Program, Turkey, September 2020  
TUBITAK Project, 1005 - National New Ideas and Products Research Support Program, Turkey, June 2020  
TUBITAK Project, 1002 - Quick Support Program, Turkey, April 2020  
Scientific Publication, ETİK DEĞERLENDİRME KOMİSYONU, Eskişehir Technical University, Turkey, March 2020  
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Turkey, January 2020  
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Eskişehir Osmangazi University, Turkey, January 2020  
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Turkey, October 2019

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Turkey, May 2019  
TUBITAK Project, 3501 - National Young Researcher Career Development Program, Turkey, March 2019  
IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, September 2018  
INNOVATIVE FOOD SCIENCE & EMERGING TECHNOLOGIES, SCI Journal, August 2018  
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Turkey, July 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  
MATERIALS LETTERS, SCI Journal, January 2013  
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 Consultations

Anadolu Üniversitesi, Project Consultancy, Eskisehir Osmangazi University, Fen Fakültesi, Fizik Bölümü, Turkey, 2014 - 2016

### Tasks In Event Organizations

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., KÜRKCÜOĞLU 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: 152  
Citation (WoS): 780  
Citation (Scopus): 964  
H-Index (WoS): 9  
H-Index (Scopus): 11

## Invited Talks

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

Testing and Control of Materials, Plating, Microbial Biotechnology, Atomic and Molecular Physics, Gases, Plasmas and Electrical Discharges Physics, Natural Sciences

## Non Academic Experience

Public Corporation