

## Prof. RAMAZAN ESEN

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### International Researcher IDs

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### Education Information

Doctorate, Cukurova University, Fen Bilimleri, Fizik, Turkey 1980 - 1986

Postgraduate, Cukurova University, Fen Edebiyat, Fizik, Turkey 1978 - 1980

Undergraduate, Middle East Technical University, Fen Edebiyat, Fizik, Turkey 1975 - 1978

### Research Areas

Physics, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Natural Sciences

### Academic Titles / Tasks

Professor, Cukurova University, Fen Edebiyat, Fizik, 2001 - Continues

### Advising Theses

ESEN R., Atmalı Vakum Ark ile Üretilen Karbon Filmlerin Yapısı ve Özellikleri, Postgraduate, M.KILIÇ(Student), 2015

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

- I. **The investigation of structural alteration of raw materials used to attain graphene quantum dots in different polylysis conditions**  
Kir S., DEHRİ İ., ÖNAL Y., ESEN R., AKMİL BAŞAR C.  
SURFACES AND INTERFACES, vol.29, 2022 (SCI-Expanded)
- II. **Investigation of electromagnetic and ultraviolet properties of nano-metal-coated textile surfaces**  
ESEN M., İlhan I., KARAASLAN M., ESEN R.  
APPLIED NANOSCIENCE, vol.10, no.2, pp.551-561, 2020 (SCI-Expanded)
- III. **Formation of carbon nanowalls by pulsed filtered cathodic vacuum arc deposition**  
Tuzemen E. S., Kilic M., Zeyrek B. K., KASAPOĞLU A. E., GÜR E., ALAYDİN B. Ö., ESEN M., ESEN R.  
DIAMOND AND RELATED MATERIALS, vol.93, pp.200-207, 2019 (SCI-Expanded)

- IV. **TiO<sub>2</sub>-NT electrodes modified with Ag and diamond like carbon (DLC) for hydrogen production by alkaline water electrolysis**  
Baran E., Baz Z., ESEN R., Devrim B. Y.  
APPLIED SURFACE SCIENCE, vol.420, pp.416-428, 2017 (SCI-Expanded)
- V. **Characterization of Ag-TiO<sub>2</sub> Powders Prepared by Sol-Gel Process**  
Evcin A., ARLI E., BAZ Z., ESEN R., Sever E. G.  
ACTA PHYSICA POLONICA A, vol.132, no.3, pp.608-611, 2017 (SCI-Expanded)
- VI. **Effects of Al concentration on photovoltaic property of ZnO:Al/p-type Si by pulsed filtered cathodic vacuum arc deposition system**  
TAKCI D. K., Tuzemen E. S., YILMAZ Ş., ESEN R.  
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.9, pp.1549-1556, 2015 (SCI-Expanded)
- VII. **Comparison of N-doped ZnO and N-Al codoped ZnO thin films deposited by pulsed filtered cathodic vacuum arc deposition**  
Tuzemen E. S., Kara K., TAKCI D. K., ESEN R.  
INDIAN JOURNAL OF PHYSICS, vol.89, no.4, pp.337-345, 2015 (SCI-Expanded)
- VIII. **Structural and electrical properties of nitrogen-doped ZnO thin films**  
Tuzemen E. S., Kara K., Elagoz S., TAKCI D. K., ALTUNTAŞ İ., ESEN R.  
APPLIED SURFACE SCIENCE, vol.318, pp.157-163, 2014 (SCI-Expanded)
- IX. **The effect of nitrogen incorporation in DLC films deposited by ECR Microwave Plasma CVD**  
ŞEKER Z., özdamar h., ESEN M., ESEN R., KAVAK H.  
APPLIED SURFACE SCIENCE, vol.314, pp.46-51, 2014 (SCI-Expanded)
- X. **Graded index optical microresonators: analytical and numerical analyses**  
Dadashi K., KURT H., Ustun K., ESEN R.  
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, vol.31, no.9, pp.2239-2245, 2014 (SCI-Expanded)
- XI. **Influence of Al concentration on structural and optical properties of Al-doped ZnO thin films**  
TAKCI D. K., Tuzemen E. S., Kara K., YILMAZ Ş., ESEN R., Baglayan O.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.25, no.5, pp.2078-2085, 2014 (SCI-Expanded)
- XII. **Effect of the oxidation temperature on microstructure and conductivity of Zn<sub>x</sub>Ny thin films and their conversion into p-type ZnO:N films**  
ERDOĞAN N. H., Kara K., Ozdamar H., ESEN R., KAVAK H.  
APPLIED SURFACE SCIENCE, vol.271, pp.70-76, 2013 (SCI-Expanded)
- XIII. **Structural, optical and electrical properties of N-doped ZnO thin films prepared by thermal oxidation of pulsed filtered cathodic vacuum arc deposited Zn<sub>x</sub>Ny films**  
ERDOĞAN N. H., Kara K., Ozdamar H., KAVAK H., ESEN R., Karaagac H.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.509, no.36, pp.8922-8926, 2011 (SCI-Expanded)
- XIV. **Dependence of film thickness on the structural and optical properties of ZnO thin films**  
Tuzemen E. S., Eker S., KAVAK H., ESEN R.  
APPLIED SURFACE SCIENCE, vol.255, no.12, pp.6195-6200, 2009 (SCI-Expanded)
- XV. **CHARACTERIZATION OF n AND p TYPE ZNO THIN FILMS DEPOSITED BY CATHODIC PULSED FILTERED VACUUM ARC SYSTEM**  
KAVAK H., ERDOĞAN N. H., Kara K., Yanis H., Baz Z., ESEN R.  
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, vol.23, pp.1719-1724, 2009 (SCI-Expanded)
- XVI. **Optical and photoconductivity properties of ZnO thin films grown by pulsed filtered cathodic vacuum arc deposition**  
KAVAK H., TUZEMEN E. S., OZBAYRAKTAR L. N., ESEN R.  
VACUUM, vol.83, no.3, pp.540-543, 2008 (SCI-Expanded)
- XVII. **Structural and optical properties of zinc nitride films prepared by pulsed filtered cathodic vacuum arc deposition**

- TUEZEMEN E. S., KAVAK H., ESEN R.  
CHINESE PHYSICS LETTERS, vol.24, no.12, pp.3477-3480, 2007 (SCI-Expanded)
- XVIII. **Influence of oxygen pressure of ZnO/glass substrate produced by pulsed filtered cathodic vacuum arc deposition**  
TUZEMEN E. S., Kavak H., Esen R.  
PHYSICA B-CONDENSED MATTER, vol.390, pp.366-372, 2007 (SCI-Expanded)
- XIX. **Effects of deposition time and temperature on the optical properties of air-annealed chemical bath deposited CdS films**  
Cetinorgu E., Gumus C., Esen R.  
THIN SOLID FILMS, vol.515, no.4, pp.1688-1693, 2006 (SCI-Expanded)
- XX. **Optical and structural parameters of the ZnO thin film grown by pulsed filtered cathodic vacuum arc deposition**  
SENADIM E., EKER S., Kavak H., Esen R.  
SOLID STATE COMMUNICATIONS, vol.139, no.9, pp.479-484, 2006 (SCI-Expanded)
- XXI. **The effect of annealing on structural and optical properties of ZnO thin films grown by pulsed filtered cathodic vacuum arc deposition**  
SENADIM E., Kavak H., ESEN R.  
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.18, no.27, pp.6391-6400, 2006 (SCI-Expanded)
- XXII. **Computer-assisted infrared spectra interpretation for amorphous silicon alloys**  
Kavak H., ESEN R.  
JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER, vol.96, pp.525-535, 2005 (SCI-Expanded)
- XXIII. **Preparation and characterization, of crystalline MnS thin films by chemical bath deposition**  
Gumus C., Ulutas C., Esen R., Ozkendir O., Ufuktepe Y.  
THIN SOLID FILMS, vol.492, pp.1-5, 2005 (SCI-Expanded)

## Articles Published in Other Journals

- I. **SYNTHESIS AND CHARACTERIZATION OF GRAPHENE QUANTUM DOTS FROM DRIED PINE LEAVES**  
Önal Y., Kır Ş., Dehri İ., Esen R.  
Journal of the Turkish Chemical Society Section B: Chemical Engineerin, vol.2, no.2, pp.109-120, 2019 (Peer-Reviewed Journal)
- II. **Ortopedik Klinik Uygulamalar için bir Fiksatorün Tasarımı İmalatı ve Kullanılışı**  
AKÇALI İ. D., Şahlar M. O., AYDIN A., İBRİKÇİ T., ÜN M. K., ESEN R., Gülşen M., Bayram H.  
Mühendis ve Makina, vol.51, 2010 (Peer-Reviewed Journal)
- III. **Physical properties of tin oxide films prepared by spray pyrolysis**  
GÜMÜŞ C., Esen R.  
Balkan Physics Letters, vol.11, no.2, pp.65-71, 2003 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Fiksator Otomasyonu**  
AKÇALI İ. D., ÜN M. K., İBRİKÇİ T., ESEN R.  
Tubitak Proje No:106M466 Kesin Raporu, Adana, 2010
- II. **Endüstriyel Süreçlerde Bilgisayarlı Denetim**  
AKÇALI İ. D., Altun Z. G., Özcan M. T., ESEN R., Macit İ.  
Ç.Ü. Arş. Fonu Kesin Proje Raporu, 2001, Adana, 2001

## Refereed Congress / Symposium Publications in Proceedings

- I. **PROPERTIES OF AMORPHOUS CARBON FILMS**  
ŞEKER Z., ÖZDAMAR H., ESEN M., SEDEFOĞLU N., KAVAK H., ESEN R.  
Turkish Physical Society 30 th TFD, İstanbul, Turkey, pp.188
- II. **PROPERTIES OF AMORPHOUS CARBON FILMS**  
ŞEKER Z., ÖZDAMAR H., ESEN M., SEDEFOĞLU N., KAVAK H., ESEN R.  
Turkish Physical Society 30 th TFD, İstanbul, Turkey, pp.188
- III. **PROPERTIES OF AMORPHOUS CARBON FILMS**  
ŞEKER Z., ÖZDAMAR H., ESEN M., SEDEFOĞLU N., KAVAK H., ESEN R.  
Turkish Physical Society 30 th TFD, İstanbul, Turkey, pp.188
- IV. **Characterization of graphene nanowalls (GNWs) deposited under argon atmosphere.**  
KESİK ZEYREK B., ŞENADIM TÜZEMEN E., KILIÇ M., ESEN R.  
5th International Conference on Materials Science and Nanotechnology For Next Generation (MSNG-2018), 4 - 06 October 2018
- V. **Hydrothermal Synthesis of Lead Free Alkali Niobate Ceramics**  
ERÜNAL E., AY B., YILDIZ E., ESEN R.  
5th International Conference on Materials Science and Nanotechnology for Next Generation, Nevşehir, Turkey, 4 - 06 October 2018, pp.1
- VI. **Hydrothermal Synthesis of Lead Free Alkali Niobate Ceramics**  
ERÜNAL E., AY B., YILDIZ E., ESEN R.  
5th International Conference on Materials Science and Nanotechnology for Next Generation, Nevşehir, Turkey, 4 - 06 October 2018, pp.1
- VII. **Hydrothermal Synthesis of Lead Free Alkali Niobate Ceramics**  
ERÜNAL E., AY B., YILDIZ E., ESEN R.  
5th International Conference on Materials Science and Nanotechnology for Next Generation, Nevşehir, Turkey, 4 - 06 October 2018, pp.1
- VIII. **Corrosion Behaviour of DLC Film Deposited on TiO<sub>2</sub>-NT by MW ECR in a Simulated Body Fluid Solution**  
BARAN E., BAZ Z., ESEN R., YAZICI B.  
XV. International Corrosion Symposium, Hatay, Turkey, 26 - 28 September 2018, pp.111
- IX. **The Investigation of Structural Alteration of Raw Materials Used to Attain Graphene Quantum Dot in Different Prolysis Conditions**  
Kır Ş., Dehri İ., ÖNAL Y., ESEN R.  
ICNTC Conference 4th International Conference on New Trends in Chemistry, 11 - 13 May 2018
- X. **Characterization of Au Nanoparticle Coated with Diamond-Like Carbon Films**  
Baz Z., ESEN M., ARLI E., ESEN R.  
International Conference on Condensed Matter and Materials Science, Adana, Turkey, 11 - 15 October 2017
- XI. **Structure and Properties of Nanoparticle Au/DLC Composite Films Fabricated by MW ECR Plasma Deposition System**  
Baz Z., ESEN M., ARLI E., ESEN R.  
International Conference on Condensed Matter and Materials Science, Adana, Turkey, 11 - 15 October 2017
- XII. **Effect of argon atmosphere on spectroscopic ellipsometry properties of carbon films using pulsed filtered cathodic vacuum arc deposition technique**  
KILIÇ M., ŞENADIM TÜZEMEN E., KESİK ZEYREK B., ESEN R.  
INTERNATIONAL CONFERENCE ON CONDENSED MATTER AND MATERIAL SCIENCES -ADANA, 11 - 15 October 2017
- XIII. **Fabrication and Photovoltaic Properties of Al-doped ZnO Thin Films**  
TAKCI D. K., ŞENADIM TÜZEMEN E., ESEN R.  
MSNG2017, 28 - 30 June 2017
- XIV. **Diamond like carbon (DLC) coated on TiO<sub>2</sub>-NT-Ag electrode by MW ECR plasma system for hydrogen production**  
BARAN E., BAZ Z., ESEN R., YAZICI B.

The Second International Hydrogen Technologies Congress (IHTEC-2017), Adana, Turkey, 15 - 18 March 2017, pp.35

- XV. **INVESTIGATION of OPTICAL BAND GAP of ZINC NITRIDE FILMS PREPARED by PULSED FILTERED CATHODIC VACUUM ARC DEPOSITION**  
TAKCI D. K., ŞENADIM TÜZEMEN E., ESEN R.  
IMSEC 2016, 26 - 28 October 2016
- XVI. **Investigation of optical band gap of zinc nitride films prepared by pulsed cathodic vacuum arc deposition**  
Deniz K. K., ŞENADIM TÜZEMEN E., ESEN R.  
1st International mediterranean science and engineering congress, 26 - 28 October 2016
- XVII. **Effect of TiO<sub>2</sub>-NTs and diamond like carbon (DLC) coated TiO<sub>2</sub>-NTs electrodes on the electrocatalytic hydrogen production**  
BARAN E., BAZ Z., ESEN R., YAZICI B.  
1st International Mediterranean SCIENCE AND ENGINEERING CONGRESS (IMSEC2016), Adana, Turkey, 26 - 28 October 2016, pp.3481
- XVIII. **Influence of Al concentration on optical and electrical properties of ZnO Al thin films**  
Takci D. K., YILMAZ Ş., ŞENADIM TÜZEMEN E., ESEN R.  
Turkish Physical society 32nd International Physics Congress, 6 - 09 September 2016
- XIX. **FABRICATION OF SB DOPED ZNO NANOPARTICLES AND STRUCTURAL AND OPTICAL PROPERTIES**  
SEDEFOĞLU N., ERDOĞAN N. H., KUTLU T., KAVAK H., ESEN R.  
9th INTERNATIONAL PHYSICS CONFERENCE OF THE BALKAN PHYSICAL UNION – BPU9, 24-27 AUGUST 2015, İSTANBUL UNIVERSITY, İSTANBUL / TURKEY, Singapore, 24 - 27 August 2015
- XX. **XPS ANALYSIS AND SURFACE MORPHOLOGY OF N DOPED ZNO THIN FILMS**  
ERDOĞAN N. H., ESEN R., KAVAK H.  
9th INTERNATIONAL PHYSICS CONFERENCE OF THE BALKAN PHYSICAL UNION, İstanbul, Turkey, 24 - 27 August 2015, pp.425
- XXI. **XPS analysis and surface morphology of N doped ZnO Thin Films**  
ERDOĞAN N. H., SEDEFOĞLU N., kutlu t., KAVAK H., ESEN R.  
9th International Physics conference of the balkan Physical Union, 24 - 27 August 2015
- XXII. **Fabrication of Sb doped ZnO Nanoparticles and Structural and Optical Properties**  
SEDEFOĞLU N., ERDOĞAN N. H., Kutlu T., KAVAK H., ESEN R.  
9th International Physics Conference of the Balkan Physical Union, 24 - 27 August 2015
- XXIII. **ZnO İNCE FİLMLERİN OPTİKSEL VE YAPISAL ÖZELLİKLERİ**  
SEDEFOĞLU N., ESEN M., ÖZDAMAR H., ŞEKER(ZAİMOĞLU) Z., KAVAK H., ESEN R.  
Turkish Physical Society 30 th TFD, İstanbul, Turkey, 2 - 05 September 2013, pp.181
- XXIV. **PRODUCTION OF CARBON NITRIDE THIN FILMS BY MW ECR DEPOSITING SYSTEM**  
ESEN M., SEDEFOĞLU N., ÖZDAMAR H., ŞEKER Z., KAVAK H., ESEN R.  
TÜRK FİZİK DERNEĞİ 30. ULUSLARARASI FİZİK KONGRESİ, 2 - 05 September 2013
- XXV. **PRODUCTION OF CARBON NITRIDE THIN FILMS BY MW-ECR DEPOSITING SYSTEMS**  
ESEN M., SEDEFOĞLU N., ÖZDAMAR H., ŞEKER Z., KAVAK H., ESEN R.  
Turkish Physical Society 30 th TFD, İstanbul, Turkey, 2 - 05 September 2013, pp.152
- XXVI. **Structural and Electrical Properties of Nitrogen-Doped ZnO Thin Films**  
ŞENADIM TÜZEMEN E., KARA K., ELAĞÖZ S., TAKCI D. K., ALTUNTAŞ İ., ESEN R.  
9th Nanoscience and Nanotechnology Conference, 24 - 28 June 2013, pp.402
- XXVII. **Investigation of Electrical and Optical Properties ZnO:Al Compounds Prepared by Pulsed Filtered Cathodic Vacuum Arc Deposition Technique**  
TAKCI D. K., ERDOĞAN N. H., SEDEFOĞLU N., YILMAZ Ş., ESEN R., KAVAK H.  
TFD 29. Uluslararası Fizik Kongresi, 5 - 08 September 2012, pp.619
- XXVIII. **X-Ray Photoelectron Spectroscopy and Photoluminescence Analysis of N-Doped ZnO Thin films Prepared By Thermal Oxidation of Pulsed Filtered Cathodic Vacuum Arc Deposited Zn<sub>x</sub>N<sub>y</sub> Films**  
ERDOĞAN N. H., TAKCI D. K., SEDEFOĞLU N., ESEN R., KAVAK H.

TFD 29. Uluslararası Fizik Kongresi, 5 - 08 September 2012, pp.618

- XXIX. **A Mathematical Model in the Implementation of a Stewart-Gough Platform as an External Fixator**  
AKÇALI İ. D., Şahlar M. O., Ün K., AYDIN A., İBRİKÇİ T., ESEN R., Gulsen M., Bayram H.  
11th International Congress of the IUPESM/World Congress on Medical Physics and Biomedical Engineering,  
Munich, Germany, 7 - 12 September 2009, vol.25, pp.708-711
- XXX. **Ortopedik Klinik Uygulamalar İçin Bir Fiksatorün Tasarımı İmalatı ve Kullanılışı**  
AKÇALI İ. D., Şahlar M. O., AYDIN A., İBRİKÇİ T., ÜN M. K., ESEN R., Gülşen M., Bayram H.  
III. Ulusal Tıbbi Cihazlar İmalat Sanayi Kongre ve Sergisi, Samsun, Turkey, 6 - 07 November 2009, pp.3-43
- XXXI. **Ortopedik Klinik Uygulamalar İçin Bir Fiksatorün Tasarımı İmalatı Ve Kullanılışı**  
AKÇALI İ. D., Şahlar O., AYDIN A., İBRİKÇİ T., ÜN M. K., ESEN R.  
III. Ulusal Tıbbi Cihazlar İmalatı Sanayi Kongre ve Sergisi, Samsun, Turkey, 6 - 07 November 2009, pp.3-8
- XXXII. **A Mathematical Model in the Implementation of a Stewart-Gough Platform as an External Fixator**  
AKÇALI İ. D., Şahlar O., ÜN M. K., AYDIN A., İbriki T., ESEN R., Gülşen M., Bayram H.  
World Congress on Medical Physics and Biomedical Engineering, Münih, Germany, 7 - 12 September 2009, vol.25,  
pp.708-7011
- XXXIII. **A Mathematical Model in the Implementation of a Stewart-Gough Platform as an External Fixator**  
AKÇALI İ. D., Şahlar O., ÜN M. K., AYDIN A., İbriki T., ESEN R., Gülşen M., Bayram H.  
World Congress on Medical Physics and Biomedical Engineering, Münih, Germany, 7 - 12 September 2009, vol.25,  
pp.708-7011
- XXXIV. **A Mathematical Model in the Implementation of a Stewart-Gough Platform as an External Fixator**  
AKÇALI İ. D., Şahlar M. O., AYDIN A., İBRİKÇİ T., ÜN M. K., ESEN R., Gülşen M., Bayram H.  
World Congress on Medical Physics and Biomedical Engineering IFMBE Proceedings, Munich,, Germany, 7 - 12  
September 2009, pp.708-711
- XXXV. **Stewart Platformunun Konuşlandırılmasıyla Kemik Fragmanlarının Hizalanması**  
AKÇALI İ. D., Şahlar M. O., AYDIN A., Bayram H., İBRİKÇİ T., ÜN M. K., ESEN R., Gülşen M.  
2. Ulusal Yapay Organlar ve Destek Sistemleri Kongresi, Antalya, Turkey, 23 - 26 April 2009, pp.19
- XXXVI. **Alignment of Bone Fragments through the Deployment of a Stewart Platform Mechanism**  
AKÇALI İ. D., Şahlar O., AYDIN A., İbriki T., ÜN M. K., ESEN R., Gülşen M., Bayram H.  
TUYOD 2009 2nd National Congress on Artificial Organs and Support Systems, Antalya, Turkey, 23 - 26 April 2009,  
vol.33, no.8

## Supported Projects

ESEN R., S. A. ABUSAID W., Project Supported by Higher Education Institutions, Çok amaçlı karbon kaplama (multipurpose carbon coating), 2018 - 2020

TÜKEL S. S., PAKSOY H. Ö., AKILLI H., ESEN R., ÖZÇELİK B., EKİCİBİL A., EKŞİ A. K., YILDIZ E., GÜZEL B., KARDAŞ G., et al., Project Supported by Higher Education Institutions, Temel ve Mühendislik Bilimlerinde Çeşitli Malzemelerin Fiziksel Özelliklerinin Araştırılabilimleri için gerek duyulan Fiziksel Özellik Ölçüm Sistemi PPMS Physical Property Measurement Sisteminin Çukurova Üniversitesi Merkezi Araştırma Laboratuvarına Kazandırılması ve Malzeme Üretim Laboratuvarının Oluşturulması, 2015 - 2018

ESEN R., Kılıç M., Project Supported by Higher Education Institutions, Atmalı Vakum Ark ile Üretilen Karbon Filmlerin Yapısı ve Özellikleri, 2015 - 2017

AKÇALI İ. D., ÖZLÜOYMAK Ö. B., YÜREKLİ O., İNCE A., ESEN R., MUTLU H., Project Supported by Higher Education Institutions, Hareketli Pano Sistemi, 2014 - 2016

ESEN R., Project Supported by Higher Education Institutions, Çinko Oksit Filmlerde Tuzak Parametrelerinin Belirlenmesi, 2012 - 2015

## Metrics

Publication: 64

Citation (WoS): 399

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H-Index (Scopus): 13