

## Prof. HAMİDE KAVAK

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: B-7675-2018

ScopusID: 6603398241

Yoksis Researcher ID: 5090

### Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Fizik, Turkey 1989 - 1994

Postgraduate, Dicle University, Institute Of Science, Fizik, Turkey 1986 - 1988

Undergraduate, Dicle University, Faculty Of Science, Turkey 1981 - 1985

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Silisyum Bileşiklerinin Bilgisayar Destekli Infrared (IR) Analizi, Cukurova University, Fen Edebiyat Fakültesi, Fizik, 1994

Postgraduate, Monopol Potansiyeli için Path İntegral, Dicle University, Fen Fakültesi, Fizik, 1988

### Research Areas

Physics, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Electrical properties of electronic structures, interfaces, thin films and low-dimensional structures, Optical Properties, Spectroscopy of Matter, Natural Sciences

### Academic Titles / Tasks

Professor, Cukurova University, Fen-Edebiyat Fakültesi, Fizik, 2006 - Continues

### Advising Theses

KAVAK H., Metal katkı yariletken çinko oksit (ZnO) malzemelerin üretimi ve karakterizasyonu, Doctorate, N.Sedefoğlu(Student), 2016

KAVAK H., Elektrokimyasal yöntemle ZnO ince film üretimi ve karakterizasyonu, Postgraduate, R.Taktakoğlu(Student), 2016

KAVAK H., PFCVAD Sistemi ile Üretilen n ve p-Tipi ZnO İnce Filmlerin Fotoluminesans Özelliklerinin Karşılaştırılması, Doctorate, H.Özdamar(Student), 2014

KAVAK H., KRAMERS-KRONİG DÖNÜŞÜMLERİ KULLANILARAK YARIİLETKEN İNCE FİMLERİN OPTİK PARAMETRELERİNİN BELİRLENMESİ, Postgraduate, G.Çetin(Student), 2014

KAVAK H., Modeling and simulation of positron emission mammography (PEM) based on double-sided CdTe strip detectors, Doctorate, İ.Özşahin(Student), 2014

KAVAK H., ATMALI FİLTRELİ KATODİK VAKUM ARK DEPOLAMA YÖNTEMİYLE P-TİPİ ÇİNKO OKSİT (ZnO) ÜRETİMİ VE ELEKTRİKSEL ÖZELLİKLERİ, Postgraduate, H.Yanış(Student), 2008

KAVAK H., ATMALI PLAZMA KATODİK ARK YÖNTEMİ İLE ELDE EDİLEN ZnO İNCE FİMLERİN OPTİK VE YAPISAL ÖZELLİKLERİ, Postgraduate, M.Derya(Student), 2006

KAVAK H., ATMALI PLAZMA KATODİK ARK YÖNTEMİYLE ELDE EDİLMİŞ ZnO (ÇİNKO OKSİT) İNCE FİMLERDE FOTOİLETKENLİK, Postgraduate, L.Nuket(Student), 2006

## 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. **Elementel analysis of sol-gel spin coated CZTS thin films for photovoltaic applications**  
ÖZDAL T., KAVAK H.  
International Conference on Photovoltaic Science and Technologies, 4 - 06 July 2018
- V. **Preparation of Sol-Gel Spin Coated CZTS Thin Films**  
ÖZDAL T., KAVAK H.  
International Conference on Condensed Matter and Materials Science, 11 - 15 October 2017
- VI. **Cu<sub>2</sub>O Thin Film Absorber Layer Deposition by Spin Coating Method**  
ÖZDAL T., KAVAK H.  
International Conference on Condensed Matter and Materials Science, 11 - 15 October 2017
- VII. **Parameter Analysis of Spin Coated CZTS Thin Films**  
ÖZDAL T., KAVAK H.  
NEXTGEN 2017 Nanotechnology and Next Generation High Efficiency Photovoltaic, 12 - 15 September 2017
- VIII. **Annealing Effect on The Spin Coated CZTS Thin Films**  
Özdal T., KAVAK H.  
4th International Conference on Nanotechnology, Nanomaterials Thin Films for Energy Applications, 26 - 28 July 2017
- IX. **Investigation of Solvent Stabilizer Ratio and Thermal Treatment Effect on Cu<sub>2</sub>ZnSnS<sub>4</sub> Absorber Layer**  
KAVAK H., ÖZDAL T.  
7th European Kesterite Workshop, Leuven, Belgium, 16 - 18 November 2016
- X. **Deposition of Cu<sub>2</sub>ZnSnS<sub>4</sub> Absorber Layer for Solar Cell Applications**  
ÖZDAL T., KAVAK H.

PVSEC-26 Photovoltaic Science and Engineering Conference, 24 - 28 October 2016

- XI. **Elaboration and Characterisation of Zn/CuIn<sub>3</sub>Se<sub>5</sub> Thin Films**  
Yandjah L., Kavak H., Bechiri L.  
6th International Conference on Nanomaterials - Applications & Properties (NAP), Lviv, Ukraine, 14 - 19 September 2016
- XII. **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
- XIII. **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
- XIV. **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
- XV. **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
- XVI. **Growth and Characterization of Electrodeposited ZnO Thin Film**  
KAVAK H., OZDAL t., TAKTAKOĞLU R., ESEN M., özdamar H.  
Science & applications of thin films Conference & exhibition SATF2014, 15 - 19 September 2014
- XVII. **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
- XVIII. **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
- XIX. **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
- XX. **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
- XXI. **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>NY Films**  
ERDOĞAN N. H., TAKCI D. K., SEDEFOĞLU N., ESEN R., KAVAK H.  
TFD 29. Uluslararası Fizik Kongresi, 5 - 08 September 2012, pp.618
- XXII. **Patterning sub-100nm features for submicron devices**  
Kavak H., Goodberlet J.  
Conference of the NATO-Advanced-Study-Institute on Nanoengineered Nanofibrous Materials, Belek-Antalya, Turkey, 1 - 12 September 2003, vol.169, pp.529-534

## Expert Reports

- I. **2379 ile 2767 çeliklerin plazma elektroliz tekniği ile nitrürlenmesi ve yüzey özelliklerinin incelenmesi**  
KAVAK H.  
2015

## Supported Projects

- KAVAK H., Özdal T., Project Supported by Higher Education Institutions, Spin Kaplama ile CZTS Güneş Hücresi Üretimi ve Analitik Modellemesi, 2016 - 2021
- ESEN M., KAVAK H., ESEN m., Project Supported by Higher Education Institutions, ECR (Electron Cyclotron Resonance) yöntemi ile nano yapıların üretimi ve karakterizasyonu, 2018 - 2020
- KAVAK H., Özdal T., Project Supported by Higher Education Institutions, Parameter Analysis of Spin Coated CZTS Thin Films, 2017 - 2017
- KAVAK H., Özdal T., Project Supported by Higher Education Institutions, Spin Kaplı CZTS İnce Filmler Üzerine Tavlamamın Etkisi, 2017 - 2017
- KAVAK H., Özdal T., Aslan M. S., Project Supported by Higher Education Institutions, Spin Kaplama Yöntemi ile CZT Fotoaktif Katman Üretimi, 2016 - 2017
- KAVAK H., Özdal T., Project Supported by Higher Education Institutions, Deposition of Cu<sub>2</sub>ZnSnS<sub>4</sub> Absorber Layer for Solar Cell Applications, 2016 - 2016
- KAVAK H., Project Supported by Higher Education Institutions, XIşını Kırınım XRD Difraktometresinin Bakım ve Onarımı, 2016 - 2016
- KAVAK H., Özdal T., Project Supported by Higher Education Institutions, Yarıiletken ZnO ince filmler için veri aktarım sisteminin geliştirilmesi, 2016 - 2016
- KAVAK H., Project Supported by Higher Education Institutions, Elektrokimyasal Yöntemle ZnO İnce Üretimi ve Karakterizasyonu, 2013 - 2016
- KAVAK H., Project Supported by Higher Education Institutions, Metal Katkılı Yarıiletken Çinko Oksit (ZnO) Malzemelerin Üretimi ve Karakterizasyonu, 2013 - 2016
- KAVAK H., Project Supported by Higher Education Institutions, Organik Yarıiletken Malzemelerin Sentezlenmesi Karakterizasyonu ve Aygıt Uygulamaları, 2015 - 2015
- KAVAK H., Project Supported by Higher Education Institutions, Elektrodepolama Yöntemi ile ZnO Büyütülmesi ve Karakterizasyonu, 2014 - 2015
- KAVAK H., Özdal T., Project Supported by Higher Education Institutions, Karbon Bazlı Filmlerin İletkenliğinin Sıcaklıkla Değişimi, 2012 - 2015
- KAVAK H., Project Supported by Higher Education Institutions, Kramers-Kronig Dönüşümleri Kullanılarak Yarıiletken İnce Filmlerin Optik Parametrelerinin Belirlenmesi, 2013 - 2014
- KAVAK H., Project Supported by Higher Education Institutions, Medikal Görüntülemeye Yarıiletken Dedektör Geliştirilmesi ve Optimizasyonu, 2012 - 2014

## Scientific Refereeing

- Material Science Engineering, SCI Journal, May 2017
- Fırat Üniversitesi Dergisi, National Scientific Refreed Journal, January 2017
- Applied Surface Science, SCI Journal, October 2014
- Material Science and Engineering, National Scientific Refreed Journal, September 2013

## Metrics

- Publication: 61
- Citation (WoS): 573
- Citation (Scopus): 675
- H-Index (WoS): 12
- H-Index (Scopus): 14

## **Congress and Symposium Activities**

9Th European Kesterite Workshop, Attendee, Ghent, Belgium, 2018

MP1402 COST ACTION, HERALD Summit, Workshop, Attendee, Braga, Portugal, 2018

MP1308 TO-BE COST ACTION, Spring Meeting 2018, Attendee, Spain, 2018

ICCMMS-2017 (International Conference on Condensed Matter and Material Science), Attendee, Adana, Turkey, 2017

ICCMMS-2017 (International Conference on Condensed Matter and Material Science), Attendee, Palma, Spain, 2017

NANOENERGY 2017 (4th International Conference on Nanotechnology, Nanomaterials & Thin Films for Energy Applications), Attendee, Espoo, Finland, 2017

7Th European Kesterite Workshop, Attendee, Leuven, Belgium, 2016

26th International Photovoltaic Science and Engineering Conference (PVSEC-26), Attendee, Singapore, Singapore, 2016

SATF2014 Science & Applications of Thin Films, Attendee, Çeşme/İzmir, Turkey, 2014

## **Non Academic Experience**

Cukurova Universitesi

Cukurova Universitesi

Cukurova Universitesi

Cukurova Universitesi

Dicle Üniversitesi