

## Res. Asst. PhD Nilüfer DUYGULU

### Personal Information

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**Address:** Yıldız Teknik Üniversitesi, Davutpaşa Kampüsü Kimya-Metalürji Fakültesi, Metalürji ve Malzeme Mühendisliği Bölümü  
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### Education Information

Doctorate, Yıldız Technical University, Graduate School Of Natural And Applied Sciences, Turkey 2008 - 2013

Post Graduate, Yıldız Teknik Üniversitesi, Metalurji Ve Malzeme Mühendisliği, Metalurji Ve Malzeme Mühendisliği /Üretim  
, Turkey 2005 - 2008

### Dissertations

Doctorate, ZINC OXIDE BASED TRANSPARENT CONDUCTIVE OXIDE THIN FILMS DEPOSITED BY R.F. MAGNETRON  
SPUTTERING FOR PHOTOVOLTAIC APPLICATIONS, Yıldız Technical University, FACULTY OF CHEMICAL AND  
METALLURGICAL ENGINEERING, Department of Metallurgical and Materials Engineering, 2013

Post Graduate, Emaye Üretiminde Kaplama ve Özelliklerinin Araştırılması, Yıldız Technical University, Graduate School of  
Natural and Applied Sciences, 2007

### Research Areas

Metallurgical and Materials Engineering, Production Metallurgy, Non-Ferrous Alloy Production, Engineering and  
Technology

### Academic Titles / Tasks

Research Assistant PhD, Yıldız Teknik Üniversitesi, Kimya Metalurji Fakültesi, Metalurji Ve Malzeme Mühendisliği , 2007 -  
Continues

### Courses

ÇÖZELTİ TERMODİNAMİĞİ, Under Graduate, 2018 - 2019

ÖLÇME VE KALİBRASYON, Under Graduate, 2019 - 2020

DEMİRDIŞI METALLER METALURJİSİ, Under Graduate, 2019 - 2020

KALİTE YÖNETİMİ, Under Graduate, 2018 - 2019

MALZEME TERMODİNAMİĞİ, Under Graduate, 2019 - 2020

NON-FERROUS METALS METALLURGY, Under Graduate, 2018 - 2019

KALİTE GÜVENÇE SİSTEMLERİ, Under Graduate, 2017 - 2018

METALURJİ LABORATUARI, Under Graduate, 2017 - 2018

## ARTICLES PUBLISHED IN JOURNALS THAT ENTERED SCI, SSCI AND AHCI INDEXES

- I. **Electrospun drug blended poly(lactic acid) (PLA) nanofibers and their antimicrobial activities**  
Duygulu N., Ciftci F., ÜSTÜNDAĞ C. B.  
JOURNAL OF POLYMER RESEARCH, vol.27, 2020 (Journal Indexed in SCI)
- II. **Etching behavior of ZnO:Ga thin films**  
Duygulu N., MUSTAFAOĞLU U., KODOLBAŞ A. O., KARAASLAN A.  
MATERIALS TESTING, vol.60, pp.1097-1103, 2018 (Journal Indexed in SCI)
- III. **Investigation of D-TS effect on r.f. magnetron sputtered ZnO thin films**  
Duygulu N., Kodolbaş A. O.  
CRYSTAL RESEARCH AND TECHNOLOGY, vol.51, pp.189-196, 2016 (Journal Indexed in SCI)
- IV. **Effect of r.f. power variation on gallium doped zinc oxide thin films**  
Duygulu N.  
VACUUM, vol.120, pp.19-27, 2015 (Journal Indexed in SCI)
- V. **Study of the a-Si:H/c-Si Heterointerface by Ex-Situ Spectroscopic Ellipsometry, Infrared Spectroscopy, and Solar Cell Modeling**  
PEHLİVAN Ö., KARATAŞ S., YILMAZ O., KODOLBAŞ A. O., DUYGULU Ö., DUYGULU N., Iskender I., TOMAK M.  
CHINESE JOURNAL OF PHYSICS, vol.53, 2015 (Journal Indexed in SCI)
- VI. **Effects of argon pressure and r.f. power on magnetron sputtered aluminum doped ZnO thin films**  
Duygulu N., Kodolbaş A. O., Ekerim A.  
JOURNAL OF CRYSTAL GROWTH, vol.394, pp.116-125, 2014 (Journal Indexed in SCI)
- VII. **Influence of r.f power on structural properties of ZnO thin films**  
DUYGULU N., Kodolbaş A. O., EKERİM A.  
JOURNAL OF CRYSTAL GROWTH, vol.381, pp.51-56, 2013 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **Elektro Eğirme Yöntemiyle Nano Boyutlu TiO<sub>2</sub> Parçacık katkılı PLA Nanofiber Üretimi**  
Duygulu N.  
Karaelmas Fen ve Mühendislik Dergisi, vol.10, pp.7-18, 2020 (National Refereed University Journal)
- II. **Isıl İşlemin Emaye Özellikleri Üzerine Etkisinin İncelenmesi**  
DUYGULU N., BEKEM A.  
Türkiye Seramik Federasyonu Dergisi, vol.20, pp.140-149, 2013 (National Non-Refereed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Effect of Fly Ash Filler on Mechanical Performance of E-glass/Polyester Composites**  
Bekem A., Birol B., Duygulu N.  
19th International Metallurgy and Materials Congress (IMMC2018), İstanbul, Turkey, 25 - 27 October 2018, pp.700-702
- II. **Effect of Fly Ash Filler on Mechanical Performance of E-glass/Polyester Composites**  
BEKEM A., BİROL B., DUYGULU N.  
19th International Metallurgy and Materials Congress (IMMC2018), İstanbul, Turkey, 25 October 2018, pp.700-702
- III. **Fabrication of Hydroxyapatite/PMMA Composite Nanofibers By Electrospinning**  
Önder B., ORUÇ M. E., ÜSTÜNDAĞ C. B., DUYGULU N.  
INTERNATIONAL CONFERENCE ON TECHNOLOGY, ENGINEERING AND SCIENCE (IConTES049), 26 October 2018
- IV. **EFFECT OF ADDITION FILLER TO PA 12 COATING**  
Bekem A., Duygulu N., Birol B.  
4TH INTERNATIONAL CONFERENCE ON ENGINEERING AND NATURAL SCIENCES (ICENS 2018), Kyiv, Ukraine, 2 - 06 May 2018, pp.192
- V. **The Development of ZnO:Ga as TCO's for Thin Film Silicon Solar Cells**

YILMAZ O., MUSTAFAOĞLU Ü., ERGÜNHAN B. H. , DUYGULU N., TUNA Ö., KODOLBAŞ A. O.

2017 ICG ANNUAL MEETING 32nd ŞİŞECAM GLASS SYMPOSIUM, 22 - 25 October 2017

- VI. **Effect of Sputtering Power and Post Annealing Process on Properties of ZnO:Ga Thin Film**  
ERGÜNHAN B. H. , TUNA Ö., DUYGULU N., TÜRKÜZ S.  
2017 ICG ANNUAL MEETING 32nd ŞİŞECAM GLASS SYMPOSIUM, 22 - 25 October 2017
- VII. **Investigation the Influence of Doping Elements on Etched Zinc Oxide Thin Films Deposited By Sputtering Technique**  
KODOLBAŞ A. O. , MUSTAFAOĞLU Ü., ERGÜNHAN B. H. , DUYGULU N., YILMAZ O., TUNA Ö., TÜRKÜZ S., KARAASLAN A.  
2017 ICG ANNUAL MEETING 32nd ŞİŞECAM GLASS SYMPOSIUM, 22 - 25 October 2017
- VIII. **Etched Zinc Oxide Thin Films Deposited by Sputtering Technique**  
DUYGULU N., MUSTAFAOĞLU Ü., ERGÜNHAN B. H. , KODOLBAŞ A. O. , KARAASLAN A.  
2017 ICG ANNUAL MEETING 32nd ŞİŞECAM GLASS SYMPOSIUM, 22 - 25 October 2017
- IX. **Influence of Doping Elements on Zinc Oxide Thin Films Deposited by Sputtering**  
DUYGULU N., MUSTAFAOĞLU Ü., ERGÜNHAN B. H. , YILMAZ O., KODOLBAŞ A. O. , KARAASLAN A.  
2017 ICG ANNUAL MEETING 32nd ŞİŞECAM GLASS SYMPOSIUM, 22 - 25 October 2017
- X. **Influence of Solvent Treatment Parameters on Performance of Perovskite Solar Cells**  
Menda D., ONGÜL F., Gürşen A., DUYGULU N., KALELİ M., GÜNEŞ S.  
Turkish Physical Society 33rd International Physics Conference, 6 - 10 October 2017
- XI. **Influence of Solvent Treatment Parameters on Performance of Perovskite Solar Cell**  
MENDA U. D. , Ongül F., Gürşen A., DUYGULU N., KALELİ M., GÜNEŞ S.  
Turkish Physical Society 33rd International Physics Congress, 6 September - 10 October 2017
- XII. **Influence of Solvent Parameters on Performance of Perovskite Solar Cells**  
MENDA U. D. , Ongül F., Gürşen A., DUYGULU N., KALELİ M., GÜNEŞ S.  
TFD 33. Uluslararası Kongresi, 5 - 09 September 2017
- XIII. **Optimization of Process Pressure Wet Chemical Etch Texturing Behaviour of ZnO Ga Thin Films**  
DUYGULU N., MUSTAFAOĞLU Ü., TOP S.  
European Materials Research Society (E-MRS), Lille, France, 02 May 2016, pp.12
- XIV. **Effect of R F Power Variation On Gallium Doped Zinc Oxide Thin Films**  
DUYGULU N., YILMAZ O., PEHLİVAN Ö., KODOLBAŞ A. O. , EKERİM A.  
Science & Applications of Thin Films, Conference & Exhibition, 15 - 19 October 2014
- XV. **Influence of deposition parameters on ZnO and ZnO:Al thin films**  
Duygulu N., KODOLBAŞ A. O. , Ekerim A.  
Fall Meeting Symposium on Novel Materials for Electronic, Optoelectronic, Photovoltaic and Energy Saving Applications (E-MRS), Warszawa, Poland, 16 - 20 September 2013, vol.11, pp.1460-1463
- XVI. **Structural Optical and Electrical Properties of Zinc Oxide and Aluminum Doped Zinc Oxide for Photovoltaic Applications**  
DUYGULU N., KODOLBAŞ A. O. , DUYGULU O., EKERİM A.  
Solar TR2 2012, Antalya, Turkey, 7 - 09 November 2012
- XVII. **INVESTIGATION OF 5 MOL% YSZ ELECTROLYTE FOR SOFC**  
Duygulu N., EKERİM A.  
TMS 140th Annual Meeting and Exhibition, California, United States Of America, 27 February - 03 March 2011, pp.457-464
- XVIII. **Toplam Verimli Bakımın Ekonomik Analizi**  
EKERİM A., DUYGULU N.  
15.Uluslararası Metalurji ve Malzeme Kongresi, İstanbul, Turkey, 11 - 13 November 2010
- XIX. **APPLICATION OF ECAP ON COMMERCIAL PURITY ALUMINUM**  
Evcimen N., BAYRAK Y., EKERİM A.  
TMS 2010 Annual Meeting Supplemental Proceedings on Materials Processing and Properties, Washington, United States Of America, 14 - 18 February 2010, pp.83-88
- XX. **Alüminyumun Plastik Deformasyonla Tane Küçülmesi Ve Tarama Elektron Mikroskobu İncelemesi**

DUYGULU N., EKERİM A.

19. Ulusal Elektron Mikroskopi Kongresi, Trabzon, Turkey, 22 - 25 June 2009

XXI. **High Purity Pig Iron Production by Using Steel Scrap and Comparison with Sorelmatel**

DUYGULU N.

5. Uluslararası İleri Teknolojiler Sempozyumu, Karabük, Turkey, 13 - 15 May 2009

XXII. **Effect of Composition and Heat Treatment to Mechanical Properties on Cast Steels**

DUYGULU N.

14.Uluslararası Metalurji ve Malzeme Kongresi, İstanbul, Turkey, 16 - 18 October 2008

XXIII. **Elektro Cüruf Ergitme Prosesi ve Prosesin Modellenmesi**

DUYGULU N.

IMSP 2008,12 th International Materials Symposium, Denizli, Turkey, 15 - 17 October 2008

## Supported Projects

DUYGULU N., KARAASLAN A., EKERİM A., TUBITAK Project, Sıçratma Yöntemiyle Üretilen, Pürüzlendirilmiş Çinko Oksit Cam Kaplamalara Katkı Elementlerinin Etkisinin İncelenmesi ve Fotovoltaik Uygulamalarının Geliştirilmesi, 2017 - 2017

DUYGULU N., Project Supported by Higher Education Institutions, a Si H c Si HETEROEKLEM GÜNES PİLLERİ İÇİN SAYDAM İLETKEN OKSİT TABAKALARININ BÜYÜTÜLMESİ VE TERMODİNAMİK ANALİZİ, 2011 - 2013

## Scientific Refereeing

VACUUM, SCI Journal, April 2016

CRYSTAL RESEARCH AND TECHNOLOGY, SCI Journal, January 2015

## Invited Congress and Symposium Activities

Optimization of Process Pressure Wet Chemical Etch Texturing Behaviour of ZnO Ga Thin Films, Attendee, Lille, France, 2016

Effect of R F Power Variation On Gallium Doped Zinc Oxide Thin Films, Attendee, Turkey, 2014

Influence of Deposition Parameters on ZnO and ZnO Al Thin Films, Attendee, Warszawa, Poland, 2013

Structural Optical and Electrical Properties of Zinc Oxide and Aluminum Doped Zinc Oxide for Photovoltaic Applications, Attendee, --Seçiniz--, Turkey, 2012

Investigation of 5 MOL YSZ Electrolyte for SOFC, Attendee, California, United States Of America, 2011

Toplam Verimli Bakımın Ekonomik Analizi, Attendee, Turkey, 2010

Application of ECAP on Commercial Purity Aluminum, Attendee, --Seçiniz--, United States Of America, 2010

Alüminyumun Plastik Deformasyonla Tane Küçülmesi Ve Tarama Elektron Mikroskobu İncelemesi, Attendee, Turkey, 2009

High Purity Pig Iron Production by Using Steel Scrap and Comparison with Sorelmatel, Attendee, Turkey, 2009

Elektro Cüruf Ergitme Prosesi ve Prosesin Modellenmesi, Attendee, Turkey, 2008

Effect of Composition and Heat Treatment to Mechanical Properties on Cast Steels, Attendee, Turkey, 2008

## Citations

Total Citations (WOS):61

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