

# Prof. İDRİS SORAR

## Personal Information

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## International Researcher IDs

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ScopusID: 20434595700

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## Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Turkey 2005 - 2009

Postgraduate, Turkey 1996 - 1999

Undergraduate, Cukurova University, Fen-Edebiyat Fakültesi, Turkey 1991 - 1996

## Foreign Languages

English

## Dissertations

Doctorate, Katkılı ve katkısız çinko oksit (ZnO) ince filmlerin hazırlanması ve karakterizasyonu, Istanbul Technical University, Fen Bilimleri Enstitüsü, 2008

Postgraduate, Kaolinit dispersiyonunun reolojik ve dielektrik özelliklerine polivinil alkol (PVA) etkisi, 1999

## Academic Titles / Tasks

Professor, Hatay Mustafa Kemal University, 2020 - Continues

Associate Professor, 2014 - Continues

Associate Professor, Uppsala Universitet (Uppsala University), 2018 - 2019

Assistant Professor, 2010 - 2014

Uppsala Universitet (Uppsala University), 2011 - 2012

Research Assistant, 2009 - 2010

Research Assistant, Istanbul Technical University, Fen Bilimleri Enstitüsü, 2000 - 2009

Research Assistant, 1997 - 2000

## Academic and Administrative Experience

Hatay Mustafa Kemal University, 2021 - Continues

Hatay Mustafa Kemal University, 2019 - Continues

Hatay Mustafa Kemal University, 2020 - 2021

2014 - 2014

2014 - 2014

## Courses

OPTİK İNCE FİMLERİN UYGULAMA ALANLARI, Undergraduate Double Major, 2016-2017, 2015-2016, 2013-2014, 2012-2013

TEMEL BİLGİ TEKNOLOJİLERİ-I, Undergraduate, 2016-2017, 2015-2016, 2014-2015

YARIİLETKEN FİZİĞİNE GİRİŞ-II, Undergraduate Double Major, 2016-2017

İNCE FİLM OPTİĞİ, Undergraduate Double Major, 2016-2017, 2015-2016, 2014-2015, 2013-2014, 2012-2013

FİZİKTE MATEMATİK METODLAR II, Undergraduate, 2016-2017

FİZİKTE MATEMATİK METODLAR I, Undergraduate, 2016-2017

KATIHAL FİZİĞİ-I, Undergraduate, 2015-2016, 2013-2014

KATIHAL FİZİĞİ-II, Undergraduate, 2015-2016, 2013-2014

TEMEL BİLGİ TEKNOLOJİLERİ-II, Undergraduate, 2015-2016

GENEL FİZİK-I, Undergraduate, 2015-2016, 2013-2014, 2012-2013

BİTİRME PROJESİ-I, Undergraduate, 2015-2016, 2014-2015

GENEL FİZİK-II, Undergraduate, 2015-2016, 2013-2014, 2012-2013

BİTİRME PROJESİ-II, Undergraduate, 2015-2016

Fizik Lab.-II, Undergraduate, 2013-2014

Fizik, Undergraduate, 2013-2014, 2010-2011

Fizik Lab.-IV, Undergraduate, 2012-2013

Kuantum Fiziği I, Undergraduate, 2012-2013

Mühendislik Fiziği-II, Undergraduate, 2012-2013

Bilgisayar II, Undergraduate, 2012-2013

Biyofizik, Undergraduate, 2012-2013

Mühendislik Fiziği-I, Undergraduate, 2012-2013

Genel Fizik-III, Undergraduate, 2012-2013

Fen ve Tekn. Lab. Uyg.I, Undergraduate, 2012-2013

Mühendisler İçin Fizik-II, Undergraduate, 2010-2011

Fizik Laboratuvarı-II, Undergraduate, 2010-2011

Mühendisler İçin Fizik-I, Undergraduate, 2010-2011

Kuantum Fiziği-II, Undergraduate, 2010-2011

Kuantum Fiziği-I, Undergraduate, 2010-2011

## Advising Theses

SORAR İ., SiC ve Al<sub>2</sub>O<sub>3</sub> ilavesinin Mg-Sn-Y alaşımlarının mikroyapı, mekanik ve korozyon özellikleri üzerindeki etkisinin incelenmesi, Postgraduate, İ.HUZEYFE(Student), 2023

SORAR İ., Sol-jel yöntemiyle hazırlanan metal ftalosiyanın katkılı TiO<sub>2</sub> filmlerin optik ve yapısal özelliklerinin incelenmesi, Doctorate, H.SARIGÜL(Student), 2021

SORAR İ., Dekstrin ve kumarin katkılı TiO<sub>2</sub> filmlerin optik ve morfolojik özelliklerinin incelenmesi, Postgraduate, D.DİKÇE(Student), 2021

SORAR İ., Yüksek basınçlı döküm yöntemi ile üretilen biyobozunur mg alaşımlarının mekanik ve korozyon özelliklerine nadir element ilavesinin etkisi, Doctorate, S.ÖZARSLAN(Student), 2018

SORAR İ., Sol-jel yöntemiyle hazırlanan TiO<sub>2</sub> filmlerin elektrokromik özellikleri, Postgraduate, H.SARIGÜL(Student), 2015

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

- I. **Durability and rejuvenation of electrochromic tungsten oxide thin films in LiClO<sub>4</sub>-propylene carbonate viscous electrolyte: Effect of Ti doping of the film and polyethylene oxide addition to the electrolyte**  
SORAR İ., ATAĞ G., Bayrak Pehlivan İ., Granqvist C. G., Niklasson G. A.  
Solid State Sciences, vol.137, 2023 (SCI-Expanded)
- II. **Spectroscopic, electrochemical and optical properties of non-peripherally (2,2-dimethyl-1,3-dioxolan-4-yl)methoxy groups substituted metal-free and metallophthalocyanines**  
Tağman İ., Özçeşmeci M., Gümrükçü S., SORAR İ.  
Journal of Molecular Structure, vol.1245, 2021 (SCI-Expanded)
- III. **The effect of Zn metallophthalocyanine on the optical and structural properties of sol-gel spin coated TiO<sub>2</sub> thin films**  
Sarigül H., Özçeşmeci İ., SORAR İ.  
Journal of Optoelectronics and Advanced Materials, vol.23, no.11-12, pp.587-593, 2021 (SCI-Expanded)
- IV. **Potentiostatic rejuvenation of electrochromic WO<sub>3</sub> thin films: Exploring the effect of polyethylene oxide in LiClO<sub>4</sub>-Propylene carbonate electrolytes**  
SORAR İ., Bayrak Pehlivan İ., Bohlin J., Granqvist C. G., Niklasson G. A.  
Solar Energy Materials and Solar Cells, vol.218, 2020 (SCI-Expanded)
- V. **Optical and morphological properties and in silico studies on metallophthalocyanines containing pyridyloxy moieties**  
SORAR İ., Özçeşmeci İ., Katırcı R., Gül A.  
Journal of Molecular Structure, vol.1212, 2020 (SCI-Expanded)
- VI. **Electrochromism of W-In oxide thin films: Implications for cycling durability**  
SORAR İ., Pehlivan İ. B., Granqvist C. G., Niklasson G. A.  
Thin Solid Films, vol.697, 2020 (SCI-Expanded)
- VII. **Cycling Durability of Electrochromic W-Ti Oxide Thin Films: Optical Transmittance Data Signal Dual Degradation Modes**  
SORAR İ., Granqvist C. G., Niklasson G. A.  
Journal of the Electrochemical Society, vol.167, no.2, 2020 (SCI-Expanded)
- VIII. **Electrochromism in Ni Oxide Thin Films Made by Advanced Gas Deposition and Sputtering: A Comparative Study Demonstrating the Significance of Surface Effects**  
SORAR İ., Welearegay T. G., Primetzhofer D., Österlund L., Granqvist C. G., Niklasson G. A.  
Journal of the Electrochemical Society, vol.167, no.11, 2020 (SCI-Expanded)
- IX. **Microstructure, mechanical and corrosion properties of novel Mg-Sn-Ce alloys produced by high pressure die casting**  
ÖZARSLAN S., Şevik H., SORAR İ.  
Materials Science and Engineering C, vol.105, 2019 (SCI-Expanded)
- X. **Synthesis, characterization, and optical studies of pentoxy-substituted tetrakis(pentafluorobenzyloxy)phthalocyanines**  
Özçeşmeci M., SORAR İ., Özçeşmeci İ., Hamuryudan E.  
Journal of Coordination Chemistry, vol.71, no.15, pp.2281-2292, 2018 (SCI-Expanded)
- XI. **Synthesis and some optical results of long chain substituted phthalocyanines**  
Özçeşmeci İ., SORAR İ.  
Turkish Journal of Chemistry, vol.42, no.1, pp.21-28, 2018 (SCI-Expanded)
- XII. **Thin films of fluorinated groups substituted metallophthalocyanines as an optical material**  
Özçeşmeci M., Özçeşmeci İ., SORAR İ., Hamuryudan E.  
Inorganic Chemistry Communications, vol.86, pp.209-212, 2017 (SCI-Expanded)
- XIII. **Optical studies on phthalocyanines substituted with phenylazonaphthoxy groups**  
Özçeşmeci İ., SORAR İ., Gül A.  
Philosophical Magazine, vol.96, no.28, pp.2986-2999, 2016 (SCI-Expanded)
- XIV. **Electrochromism of DC magnetron-sputtered TiO<sub>2</sub> : Role of film thickness**  
SORAR İ., Pehlivan E., Niklasson G. A., Granqvist C. G.

- Applied Surface Science, vol.318, pp.24-27, 2014 (SCI-Expanded)
- XV. **Synthesis, optical and structural studies of tetrakis[4-(2',3', 4',5',6'-pentafluorobenzyloxy)benzyloxy]-substituted metallo-phthalocyanines**  
Özçeşmeci M., SORAR İ., Hamuryudan E.  
Synthetic Metals, vol.162, no.1-2, pp.154-161, 2012 (SCI-Expanded)
- XVI. **Zinc(II)phthalocyanine as an optical window for visible region**  
Özçeşmeci İ., SORAR İ., Gül A.  
Inorganic Chemistry Communications, vol.14, no.8, pp.1254-1257, 2011 (SCI-Expanded)
- XVII. **Optical and structural properties of Si-doped ZnO thin films**  
SORAR İ., Saygin-Hinczewski D., Hinczewski M., Tepehan F.  
Applied Surface Science, vol.257, no.16, pp.7343-7349, 2011 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Investigation of optical and structural properties of cobalt phthalocyanine doped tio2 films prepared by sol-gel method Sol-jel yöntemiyle hazırlanan kobalt ftalosiyanın katkılı tio2 filmlerin optik ve yapısal özelliklerinin incelenmesi**  
Sarigül H., Özçeşmeci M., SORAR İ.  
El-Cezeri Journal of Science and Engineering, vol.8, no.1, pp.299-308, 2021 (Scopus)
- II. **Investigation of biodegradable ternary Mg-Zn-La magnesium alloys**  
ÖZARSLAN S., ŞEVİK H., SORAR İ.  
AIP CONFERENCE PROCEEDINGS, vol.1935, no.1, pp.50005, 2018 (Scopus)
- III. **Optical investigation of palladium(II) phthalocyanine including an aromatic group**  
Özçeşmeci İ., SORAR İ.  
Journal of the Turkish Chemical Society, Section A: Chemistry, vol.5, no.1, pp.295-302, 2018 (Scopus)
- IV. **Sol Jel Yöntemiyle Hazırlanan TiO2 Filmlerin Optik ve Elektrokromik Özellikleri**  
SARIGÜL H., SORAR İ.  
International journal of advances in engineering and pure sciences (Online), vol.28, no.2, pp.81-88, 2016 (Peer-Reviewed Journal)
- V. **Antireflective filters of composite materials based on TiO2 and ZnO thin films**  
Saygin-Hinczewski D., Hinczewski M., SORAR İ., TEPEHAN F. Z., Tepehan G.  
Journal of Optoelectronics and Advanced Materials-Symposia, no.1, pp.382-385, 2009 (Peer-Reviewed Journal)
- VI. **ZnO ince filmlerin optik ve yapısal özelliklerine ısıtma işlem sıcaklığının etkisi**  
SORAR İ., TEPEHAN F. Z.  
İTÜ Dergisi/C, Fen Bilimleri, no.7, pp.21-26, 2009 (Peer-Reviewed Journal)
- VII. **The effect of polyvinyl alcohol PVA on rheological and dielectric properties of kaolinite dispersion**  
SORAR İ., YILMAZ H., Güler S., Güler Ç.  
Anadolu University Journal of Science and Technology, no.2, pp.335-342, 2002 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Investigation of Microstructural, Mechanical and Corrosion Properties of Biodegradable Mg-Sn-Y Alloys**  
ÖZARSLAN S., ŞEVİK H., SORAR İ.  
The Turkish Physical Society 39 th International Physics Congress (TPS-39), Muğla, Turkey, 31 August - 04 September 2023
- II. **Synthesis and optical investigation of metallophthalocyanines.**  
ÖZÇEŞMECİ İ., SORAR İ.  
Paintistanbul Turkcoat 2018, 20 - 21 March 2018

- III. **Optical Studies of Tetrakis(3,5-bis(2',3',4',5',6'-pentafluorobenzyloxy)benzyloxy) Phthalocyanines**  
ÖZÇEŞMECİ M., SORAR İ., HAMURYUDAN E.  
Paintistanbul Turkcoat 2018 International Paint Coatings Industry, Raw Materials, Auxiliary Products Congress and Paint Schools, 20 - 21 March 2018
- IV. **Investigation of Biodegradable Ternary Magnesium Alloys**  
ÖZARSLAN S., ŞEVİK H., SORAR İ.  
The Turkish Physical Society 33th International Physics Congress (TPS-33), Muğla, Turkey, 6 - 10 September 2017
- V. **Microstructure and Mechanical Properties of Mg-Zn-Ce Magnesium Alloys**  
ÖZARSLAN S., ŞEVİK H., SORAR İ.  
The Turkish Physical Society 33th International Physics Congress (TPS-33), Muğla, Turkey, 6 - 10 September 2017
- VI. **Synthesis of peripherally tetra- hexylthio substituted metallo-phthalocyanines and their some optical results**  
SORAR İ., ÖZÇEŞMECİ İ.  
19. JCF-Frühjahrssymposium, 29 March - 01 April 2017
- VII. **Production and mechanical characterization of Mg Y xYb biomaterials**  
ŞAHİN O., ÖZARSLAN S., SORAR İ.  
International Conference on Surfaces, Coatings and Nanostructured Materials (NANOSMAT-USA)-2016, Texas, United States Of America, 18 - 20 May 2016, pp.64
- VIII. **Indentation Size Effect of Biodegradable Mg Y Er Biomaterial**  
ŞAHİN O., ÖZARSLAN S., SORAR İ.  
International Conference on Surfaces, Coatings and Nanostructured Materials (NANOSMAT-USA), United States Of America, 18 - 20 May 2016
- IX. **Electrochromic Properties of TiO<sub>2</sub> Thin Films Prepared By Sol Gel Method**  
SARIGÜL H., SORAR İ.  
International Conference on Natural Science and Engineering, Kilis, Turkey, 19 - 20 March 2016
- X. **Synthesis and Optical Studies on Phthalocyanines Substituted with Phenylazonaphthoxy Groups**  
SORAR İ., ÖZÇEŞMECİ İ.  
18. JCF-Frühjahrssymposium, Germany, 16 - 19 March 2016

## Supported Projects

SORAR İ., Katkılı ve katkısız çinko oksit ZnO ince filmlerin hazırlanması ve karakterizasyonu, Continues  
SORAR İ., TUBITAK Project, Vakumda termal ve reaktif buharlaştırma yöntemleri ile metal oksit filmlerin hazırlanması ve optik özelliklerinin incelenmesi, Continues  
ÖZARSLAN S., SORAR İ., Project Supported by Higher Education Institutions, Yüksek Basıncılı Döküm Yöntemi ile Üretilen Mg Alaşımlarının Mekanik ve Korozyon Özelliklerine Nadir Element İlavesinin Etkisi, 2016 - 2018  
SORAR İ., Project Supported by Higher Education Institutions, Sol gel yöntemiyle hazırlanan TiO<sub>2</sub> filmlerin elektrokromik özellikleri, 2013 - 2015

## Scientific Refereeing

Other journals, January 2017  
Other journals, January 2016  
El-Cezeri Journal of Science and Engineering, Other Journals, January 2016  
Other journals, January 2015

## Metrics

Publication: 34

Citation (Scopus): 227

H-Index (Scopus): 8

## **Non Academic Experience**

MİLLİ EĞİTİM BAKANLIĞI