

# Prof. İDRİS KABALCI

## Personal Information

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## International Researcher IDs

ORCID: 0000-0001-9398-0156

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## Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (Dr), Turkey 1998 - 2006

Postgraduate, Selcuk University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey 1994 - 1997

Undergraduate, Selcuk University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 1987 - 1991

## Dissertations

Doctorate, Florotelürit optik camların termal mikroyapısal ve spektroskopik özellikleri, Istanbul Technical University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (Dr), 2006

Postgraduate, Moleküler orbital teori ve bunun bazı organik moleküllere uygulanması, Selcuk University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 1997

## Academic Titles / Tasks

Professor, Usak University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2021 - 2021

Professor, Karabuk University, Mühendislik Fakültesi, Biyomedikal Mühendisliği Bölümü, 2017 - 2021

Associate Professor, Karabuk University, Mühendislik Fakültesi, Biyomedikal Mühendisliği Bölümü, 2014 - 2017

Associate Professor, Harran University, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2012 - 2014

Assistant Professor, Harran University, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2008 - 2010

Research Assistant, Istanbul Technical University, Fen-Edebiyat Fakültesi, Fizik Mühendisliği Bölümü, 1998 - 2006

Research Assistant, Harran University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 1993 - 1998

## Academic and Administrative Experience

Usak University, 2022 - Continues

Usak University, 2021 - Continues

Karabuk University, 2015 - Continues

Usak University, 2022 - 2023

Karabuk University, 2017 - 2017

Harran University, 2014 - 2014

Harran University, 2009 - 2010

## Courses

Fizik 1, Undergraduate, 2022 - 2023  
Introduction to Laser, Undergraduate, 2021 - 2022  
Nanotechnology and Nanomaterials, Postgraduate, 2021 - 2022  
Introduction to Glass Science Technologies, Undergraduate, 2021 - 2022  
Uzmanlık, Postgraduate, 2020 - 2021  
Biomedical Instrumentation II, Undergraduate, 2020 - 2021  
Uzmanlık, Doctorate, 2020 - 2021  
Bilimsel Araştırma Teknikleri ve Etik, Doctorate, 2020 - 2021  
Fizik I, Undergraduate, 2020 - 2021, 2018 - 2019  
Bilimsel Araştırma Teknikleri ve Etik, Postgraduate, 2020 - 2021  
Chemical Biologic and Nuclear Processes, Doctorate, 2019 - 2020  
Biomedical Optic, Postgraduate, 2019 - 2020  
Electromagnetic Field Theory, Undergraduate, 2019 - 2020  
Optoelektronik Cihazlar, Postgraduate, 2018 - 2019  
Değerler Eğitimi, Undergraduate, 2018 - 2019  
Biyomedikal Mühendislikte Temel Matematik, Postgraduate, 2018 - 2019  
Physics I, Undergraduate, 2018 - 2019  
Biyomedikal Optik, Postgraduate, 2017 - 2018  
Biyomedikal bilimler için Temel Matematik, Postgraduate, 2017 - 2018  
Fizik 1, Undergraduate, 2017 - 2018  
Reading and Speaking in Foreign Language, Undergraduate, 2017 - 2018  
GENEL FİZİK, Undergraduate, 2016 - 2017  
ELECTROMAGNETIC FIELD THEORY, Undergraduate, 2015 - 2016, 2014 - 2015  
ELECTRICAL MATERIALS, Undergraduate, 2015 - 2016, 2014 - 2015  
Fizik II, Undergraduate, 2015 - 2016  
GENEL FİZİK II, Undergraduate, 2015 - 2016, 2014 - 2015  
GENEL FİZİK, Undergraduate, 2013 - 2014, 2012 - 2013, 2009 - 2010  
Atom ve Molekül Fiziği, Undergraduate, 2011 - 2012  
Lazer ve Uygulamaları, Undergraduate, 2009 - 2010

## Advising Theses

İDRİS K., Investigations of temperature dependent optical properties of tellurium based glass materials for photonics and biomedical applications, Postgraduate, T.ABDULLAH(Student), 2023  
İDRİS K., Fotonik ve biyomedikal uygulamalar için üçlü boratesaslı optik cam malzemelerin yapısal parametrelerinin araştırılması, Postgraduate, İ.ÇAĞLA(Student), 2022  
İDRİS K., AMALGAM DENTAL FILLINGS AS THE SOURCE OF MERCURY EXPOSURE AND ALTERNATIVE SOLUTIONS, Postgraduate, Y.ABDALLALI(Student), 2022  
İDRİS K., Biyomedikal uygulamalar için iterbiyum ve gadolinyum katkılı lazer cam biyomalzemeler, Postgraduate, S.KEMİK(Student), 2021  
İDRİS K., Investigation of the effects of commonly used tobacco and its varieties on human physiology system, Postgraduate, A.ALMGADMI(Student), 2021  
İDRİS K., TeO<sub>2</sub>-ZnO-Al<sub>2</sub>O<sub>3</sub>-Bi<sub>2</sub>O<sub>3</sub> oksitli camlarının üretimi, yapısal ve mekanik özellikleri, Postgraduate, S.SEMİH(Student), 2019  
İDRİS K., Optoelektronik cihazların modellenmesi için III-V bileşiklerinin fiziksel özelliklerine sıcaklığın ve basıncın etkisi, Postgraduate, E.CEMAL(Student), 2019  
İDRİS K., Ultra-wide band based indoor positioning system using lateration methods, Postgraduate, A.DURU(Student), 2018

İDRİS K., Tulyum iyonu katkılı üçlü telürit esaslı fotonik camların spektroskopik ve mikroyapısal özellikleri, Postgraduate, T.DURAN(Student), 2011

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

- I. **The effect of Bi<sub>2</sub>O<sub>3</sub>/PbO substitution on physical, optical, structural, and gamma shielding properties of boro-tellurite glasses**  
Marzuki A., Sasmi T., Fausta D. E., Harjana H., Suryanti V., KABALCI İ.  
Radiation Physics and Chemistry, vol.205, 2023 (SCI-Expanded)
- II. **Potential glass network for IR applications and rare-earth ions**  
KABALCI İ., Gökçe H., Körpe N.  
Acta Physica Polonica A, vol.143, no.3, pp.222-227, 2021 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Indoor Positioning and Fall Detection System Design for People with Alzheimer'xks and Epilepsy Disease**  
DURU A., İLERİ K., KABALCI İ.  
International Journal of Advances in Science Engineering and Technology, 2018 (Peer-Reviewed Journal)
- II. **Tulyum katkılı florotelürit optik camların, termal, mikroyapısal ve spektroskopik özellikleri**  
KABALCI İ., Özen G., Sennaroğlu A.  
ITU Fen Bilimleri Dergisi/c, vol.4, no.1, pp.41-49, 2005 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Ultra-Wideband Positioning System Using TWR and Lateration Methods**  
DURU A., ŞEHİRLİ E., KABALCI İ.  
Proceedings of the Fourth International Conference on Engineering and MIS 2018 (ICEMIS'18), İstanbul, Turkey, 19 - 20 June 2018, pp.1-4
- II. **I.Kabalci, Complementary methods for optical, structural and mechanical analysis of rare earth ion (Er<sub>2</sub>O<sub>3</sub>, Tm<sub>2</sub>O<sub>3</sub>) doped B<sub>2</sub>O<sub>3</sub>-ZnO-TiO<sub>2</sub> glasses,, Guangzhou, China, May 23-25, 2017.**  
KABALCI İ.  
Global Conference on polymer and Composite Materials, 23 - 25 May 2017
- III. **Mechanical, Optical and Microstructural Properties of Bi<sub>2</sub>O<sub>3</sub>-ZnO-TeO<sub>2</sub> Glasses**  
KABALCI İ., Zheng J., Wang L., Peng M.  
24th International Congress on Glass (ICG 2016), Şangay, China, 7 - 11 April 2016
- IV. **Effect of glass compositions on the thermal and microstructural properties of TeO<sub>2</sub> ZnO TiO<sub>2</sub> glass systems**  
KABALCI İ., Nese O. K., POLAT R.  
The third International Symposium on Innovative Technologies in Engineering and Science, 3 - 05 June 2015
- V. **Comparing the Effect of the Thulium Erbium and Ytterbium Ion Concentrations on the Absorption Spectra on Tellurium and Borate Based Glasses**  
KABALCI İ., TAY T., Kostka P., Zavadil J., Gladkov P.  
Lighting UP Africa with lasers, optics, and fibres (LUPA), 15 - 20 March 2015
- VI. **Photoluminescence properties at low temperature of Tm<sub>3</sub> doped tellurite based optical glasses**  
KABALCI İ., TAY T., Kostka P., Zavadil J., Gladkov P.  
Development in Optics and Communications in Spectroscopy, Industry and Medicine, Riga, Latvia, 9 - 12 April 2014
- VII. **Investigation of infrared and raman spectra TeO<sub>2</sub>-Nb<sub>2</sub>O<sub>5</sub>-TiO<sub>2</sub> Glasses**

KABALCI İ., Gökçe H.

XLVIII Zakopane School of Physics, Zakopane, Poland, 20 - 25 May 2013

- VIII. **Luminescence and Optical Properties of Tm<sup>3</sup> doped TeO<sub>2</sub>-ZnO-TiO<sub>2</sub> Glasses for Fiber Optic Applications**  
KABALCI İ., TAY T., Özdemir M., Özen G.  
Luminesans Dozimetri Kongresi 4, Gaziantep, Turkey, 20 - 22 September 2010
- IX. **Optical properties and crystallization kinetics of TeO<sub>2</sub>-ZnO-TiO<sub>2</sub> glasses**  
KABALCI İ., ÖZTÜRK KÖRPE N., Duran T., Özdemir M.  
International Conference on Optical and Optoelectronic Properties of Materials and Applications, Budapest, Hungary, 15 - 20 August 2010
- X. **Optical absorption and spectroscopic properties of thulium doped TeO<sub>2</sub>-Nb<sub>2</sub>O<sub>5</sub>-TiO<sub>2</sub> glasses**  
KABALCI İ., TAY T., Özen G.  
International Conference on Optical and Optoelectronic Properties of Materials and Applications, Budapest, Hungary, 15 - 20 August 2010
- XI. **Physical and Microstructural investigation of Tm<sup>3</sup> doped TeO<sub>2</sub>-ZnO-TiO<sub>2</sub> optical glasses**  
KABALCI İ., Gökçe H., Öveçoğlu M. L.  
16.Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 06 November 2009
- XII. **Optical characterization of PLD grown nitrogen-doped TiO<sub>2</sub> thin films**  
Farkash B., Heszler P., KABALCI İ., Budai J., Geretovzky Z.  
E-MRS, Strasbourg, France, 28 May - 01 June 2007
- XIII. **Characterization of thermal and microstructural properties of the TeO<sub>2</sub>-Nb<sub>2</sub>O<sub>5</sub> glasses**  
Gökçe H., KABALCI İ., Öveçoğlu M. L., Özen G.  
11th International Materials Symposium, Denizli, Turkey, 19 - 20 April 2006
- XIV. **Radiative lifetime and Quantum efficiency of Tm<sup>3</sup> -doped TeO<sub>2</sub> -PbF<sub>2</sub> glasses**  
KABALCI İ., Özen G., Sennaroğlu A.  
IX. ULUSAL SIVIHAL FİZİĞİ SEMPOZYUMU, Turkey, 22 - 25 September 2005
- XV. **Composition dependence of the intensity parameters in TeO<sub>2</sub>-PbF<sub>2</sub>: Tm<sup>3</sup> glasses**  
KABALCI İ., Özen G., Kurt A., Sennaroğlu A.  
MRS (Material Research Symposium), Boston, United States Of America, 1 - 03 December 2004, vol.829
- XVI. **Effect of the local structure on the spontaneous and stimulated emission probabilities of Tm<sup>3</sup> in TeO<sub>2</sub>-ZnO glass**  
Özen G., KABALCI İ., Sennaroğlu A., Kurt A., Collins J., Chen X., Forte O., DiBartolo B.  
MRS (Material Research Symposium), Boston, United States Of America, 1 - 03 December 2004, vol.848
- XVII. **Spectroscopic properties of Tm<sup>3</sup>: TeO<sub>2</sub>-PbF<sub>2</sub> glasses in the near infrared**  
KABALCI İ., Özen G., Kurt A., DEMİRBAŞ Ü., Sennaroğlu A.  
SPIE, 5 - 08 September 2003, vol.5460, pp.195-203

## Metrics

Publication: 21

Citation (Scopus): 8

H-Index (WoS): 1

H-Index (Scopus): 2

## Artistic Activity

KABALCI İ., Aile ve Değerler Eğitimi, December 2017

KABALCI İ., Disiplinler Arası Tıbbi Araştırmalar çalıştayı, December 2017

KABALCI İ., 2nci Askeri Elektronik Semineri, September 2012

KABALCI İ., International Workshop on Cleanroom Training, June 2010

KABALCI İ., Nanoelectronics and Nanophotonics, January 2009

KABALCI İ., Fotonik Malzemeler ve Aygıtlar,, May 2008

## **Non Academic Experience**

HATAY MUSTAFA KEMAL ÜNİVERSİTESİ

South China University of Technolgy Guannghzhou China

YÜKSEKÖĞRETİM KURULU BAŞKANLIĞI

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Yessenov University

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KASTAMONU ÜNİVERSİTESİ

Guney Çin Teknoloji Üniversitesi

İngiltere-Southampton Üniversitesi

Macaristan-Szeged Üniversitesi/ Optoelektronik ve Fizik Bölümü