

## Prof. ZİKRIYE ÖZBEK

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ÇANAKKALE

### International Researcher IDs

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Yoksis Researcher ID: 20503

### Research Areas

Physics, Atomic and Molecular Physics, Theory of Atoms and Molecules, Interdisciplinary Physics and Related Science and Technology Areas, Materials Science, Natural Sciences

### Academic Titles / Tasks

Associate Professor, Çanakkale Onsekiz Mart University, Mühendislik Fakültesi, Biyomühendislik, 2018 - Continues

Assistant Professor, Çanakkale Onsekiz Mart University, Mühendislik Fakültesi, Biyomühendislik, 2013 - 2018

### Academic and Administrative Experience

Çanakkale Onsekiz Mart University, Mühendislik Fakültesi, Biyomühendislik, 2013 - Continues

### Courses

Biyosensörler: Genel İlkeler ve Uygulamalar, Postgraduate, 2013 - 2014

Biyofizik, Postgraduate, 2013 - 2014

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

- I. A macrocyclic tetra-undecyl calix[4]resorcinarene thin film receptor for chemical vapour sensor applications**  
ŞEN S., Davis F., Capan R., ÖZBEK Z., Ozel M. E., Stanciu G. A.  
JOURNAL OF INCLUSION PHENOMENA AND MACROCYCLIC CHEMISTRY, vol.98, no.3-4, pp.237-247, 2020 (SCI-Expanded)
- II. Electrical properties of alternating acid and amino substituted calixarene Langmuir-Blodgett thin films**  
ÖZBEK Z., Davis F., ÇAPAN R.  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.136, 2020 (SCI-Expanded)

- III. **Preparation of Langmuir-Blodgett thin films of calix[6]arenes and p-tert butyl group effect on their gas sensing properties**  
ÖZMEN M., ÖZBEK Z., BAYRAKCI M., ERTUL Ş., ERSÖZ M., ÇAPAN R.  
APPLIED SURFACE SCIENCE, vol.359, pp.364-371, 2015 (SCI-Expanded)
- IV. **Langmuir-Blodgett thin film for chloroform detection**  
Capan R., Goktas H., ÖZBEK Z., ŞEN S., Ozel M. E., Davis F.  
APPLIED SURFACE SCIENCE, vol.350, pp.129-134, 2015 (SCI-Expanded)
- V. **Swelling behavior of pyrene-labelled polystyrene LB thin film exposed to various volatile organic vapors**  
ÖZBEK Z., Erdogan M., Capan R.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.196, pp.328-335, 2014 (SCI-Expanded)
- VI. **Preparation and gas sensing properties of Langmuir-Blodgett thin films of calix[n]arenes: Investigation of cavity effect**  
ÖZMEN M., ÖZBEK Z., Bayrakci M., ERTUL Ş., ERSÖZ M., ÇAPAN R.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.195, pp.156-164, 2014 (SCI-Expanded)
- VII. **Fabrication of Langmuir-Blodgett thin films of calix[4]arenes and their gas sensing properties: Investigation of upper rim para substituent effect**  
ÖZMEN M., ÖZBEK Z., Buyukcelebi S., Bayrakci M., ERTUL Ş., ERSÖZ M., ÇAPAN R.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.190, pp.502-511, 2014 (SCI-Expanded)
- VIII. **Optical parameters of calix[4]arene films and their response to volatile organic vapors**  
Ozbek Z., Capan R., Goktas H., ŞEN S., Ince F. G., OZEL M. E., Davis F.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.158, no.1, pp.235-240, 2011 (SCI-Expanded)
- IX. **Characterization of Langmuir-Blodgett films of a calix[8]arene and sensing properties towards volatile organic vapors**  
Capan R., Ozbek Z., GOKTAS H., ŞEN S., INCE F. G., OZEL M. E., STANCIU G. A., Davis F.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.148, no.2, pp.358-365, 2010 (SCI-Expanded)
- X. **Plasma Polymerized Calixarene Thin Films and their Sensing Properties to Chloroform Vapors**  
INCE F. G., Goktas H., Ozbek Z., Capan R., Davis F.  
MOLECULAR CRYSTALS AND LIQUID CRYSTALS, vol.521, pp.104-111, 2010 (SCI-Expanded)
- XI. **Fabrication of plasma polymerized polythiophene and polypyrrole thin films as chloroform vapor sensors**  
INCE F. G., ŞEN S., OZBEK Z., Goektas H., Oze M. E., Capan R.  
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.11, no.9, pp.1182-1185, 2009 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Mathematical modelling of vapor sorption in pyrene labelled polystyrene LB thin film studied by surface plasmon resonance spectroscopy**  
ÖZBEK Z.  
Selçik Journal of applied Mathematics, vol.13, no.1, pp.111-123, 2012 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **CBAMINE LB films and the vapour detection of those against volatile organic compounds**  
ŞEN S., ÇAPAN R., ÖZBEK Z., ÖZEL M. E., STANCIU G. A., DAVIS F.  
20th Jubilee International School on Condensed Matter Physics, Varna, Bulgaria, 3 - 07 September 2018
- II. **PREPARATION AND CHARACTERIZATION OF LB THIN FILMS OF CALIX[4]ARENE DERIVATIVES**  
ÖZMEN M., ÖZBEK Z., BÜYÜKÇELEBİ S., BAYRAKCI M., ERTUL Ş., ERSÖZ M., ÇAPAN R.  
INTERNATIONAL CONGRESS ON SEMICONDUCTOR MATERIALS AND DEVICES (ICSMD-2017), 17 - 19 August 2017

- III. **Organic Vapor Sensing Properties of Calix[6]Arene and p-tert-butyl Calix[6]Arene LB Films**  
ÖZMEN M., ÖZBEK Z., BAYRAKCI M., ERTUL Ş., ERSÖZ M., ÇAPAN R.  
INTERNATIONAL CONGRESS ON SEMICONDUCTOR MATERIALS AND DEVICES (ICSMD-2017), 17 - 19 August 2017
- IV. **Swelling Behaviour of Calix[N]Arene Langmuir-Blodgett Thin Films**  
ÖZMEN M., ÖZBEK Z., BAYRAKCI M., ERTUL Ş., ERSÖZ M., ÇAPAN R.  
INTERNATIONAL CONGRESS ON SEMICONDUCTOR MATERIALS AND DEVICES (ICSMD-2017), 17 - 19 August 2017
- V. **PREPARATION and GAS SENSING PROPERTIES of Fe<sub>3</sub>O<sub>4</sub> FUNCTIONALIZED GRAPHENE OXIDE COMPOSITE THIN FILM**  
ÖZMEN M., ÖZBEK Z., BÜYÜKÇELEBİ S., BAYRAKCI M., ERTUL Ş., ERSÖZ M., ÇAPAN R.  
International Congress on Semiconductor Materials and Devices" (ICSMD-2017), 17 - 19 August 2017
- VI. **PHENOLICS ANTIOXIDANT AND ANTIMICROBIAL POTENTIALS OF SHERBETS FROM FLOWERS OF ALTHAE ROSEA AND HIBISCUS SYRIACUS**  
ŞEHİTOĞLU M. H., PALA Ç., ÖZKILINÇ H., ÖZBEK Z.  
Workshop on Determining Antioxidants as Reactive Species Scavengers, İstanbul, Turkey, 27 October - 28 January 2014, pp.55
- VII. **Antioxidant and Antimicrobial Potentials of Sherbets From Flowers of Althae rosea and Hibiscus syriacus**  
ŞEHİTOĞLU M. H., PALA Ç., ÖZKILINÇ H., ÖZBEK Z.  
Workshop on Determining Antioxidants as Reactive Species Scavengers, 27 October - 28 July 2014
- VIII. **Chracterization and Organic Vapor Sensing Properties of Langmuir Blodgett Thin films of Calix n arenes**  
ÖZMEN M., ÖZBEK Z., Mevlut B., ERTUL Ş., ERSÖZ M., ÇAPAN R.  
Turkish Physical Society 31th International Physics Congress, 21 - 24 July 2014
- IX. **Fabrication and volatile Organic Vapor Sensing Propeties of Pyrene Labelled Polystyrene Thin Film Surfaces**  
ÖZBEK Z., ERDOĞAN M., ÇAPAN R.  
Turkish Physical Society 31th International Physics Congress, 21 - 24 July 2014
- X. **SENSING PROPERTIES OF BASED ON CALIX[N] ARENE MULTILAYERS TOWARDS VOLATILE ORGANIC VAPORS**  
ŞEN S., ÇAPAN R., ÖZBEK Z., ÖZEL M. E., DAVIS F., GÖKTAŞ H., İNCE F.  
TURKISH PHYSICAL SOCIETY 31st INTERNATIONAL PHYSICS CONGRESS, Muğla, Turkey, 21 - 24 July 2014
- XI. **Thin Film Characterization And Gas Sensing Properties Of Calix[4]arene**  
ÖZBEK Z., ÇAPAN R., ÖZEL M. E., GÖKTAŞ H., ŞEN S., İNCE F., DAVIS F.  
Turkish Physical Society 27thInternational Physics Congress İstanbul Turkey, İstanbul, Turkey, 14 - 17 September 2010
- XII. **Kaliksaren Moleküllerinin Organik Buhar Sensör Uygulaması**  
ÇAPAN R., ÖZBEK Z., ÖZEL M. E., GÖKTAŞ H., ŞEN S., İNCE F., DAVIS F.  
Turkish Physical Society 27 th International Physics Congress İstanbul Turkey, İstanbul, Turkey, 14 - 17 September 2010
- XIII. **Langmuir-Blodgett Thin Film Preparation of C11amine Material**  
ŞEN S., ÇAPAN R., ÖZBEK Z., ÖZEL M. E., GÖKTAŞ H., İNCE F., DAVIS F.  
Turkish Physical Society 27 th International Physics Congress İstanbul Turkey, İstanbul, Turkey, 14 - 17 September 2010
- XIV. **Surface Plasmon Resonance Study of Calixarene Langmuir-Blodgett (LB) Thin film**  
ÖZBEK Z., ÇAPAN R., ŞEN S., İNCE F., GÖKTAŞ H., ÖZEL M. E., DAVIS F.  
Türk Fizik Derneği 26. Uluslararası Fizik Kongresi, Muğla, Turkey, 24 - 27 September 2009
- XV. **Calixarene Langmuir-Blodgett Thin films for Volatile Organic Compounds**  
ÇAPAN R., ÖZBEK Z., ŞEN S., İNCE F., GÖKTAŞ H., ÖZEL M. E., DAVIS F.  
Türk Fizik derneği 26. Uluslararası Fizik Kongresi, Muğla, Turkey, 24 - 27 September 2009
- XVI. **Calixarene Thin Film as a Sensing Element to Volatile Organic Vapours**  
ÇAPAN R., ÖZBEK Z., STANCIU G. A., GÖKTAŞ H., ŞEN S., İNCE F., ÖZEL M. E., DAVIS F.

The 6 th International Edition of: Romanian Conference on Advanced Materials: ROCAM 2009, Brasov, Romania, 25  
- 28 August 2009

XVII. **Plasma Polymerized Polythiophene and Polypyrrole Thin films in Gas Sensors**

İNCE F., ŞEN S., ÖZBEK Z., GÖKTAŞ H., ÖZEL M. E., ÇAPAN R.

15 th International School on Condensed Matter Physics, Varna, Bulgaria, 31 August - 05 September 2008

## **Supported Projects**

Çapan R., Şen S., Özbek Z., TUBITAK Project, Organik İnce Filmlerin Fiziksel Özelliklerinin ve Zararlı Gazlara Karşı Duyarlılığının İncelenmesi, 2007 - 2009

## **Metrics**

Publication: 37

Citation (WoS): 260

Citation (Scopus): 269

H-Index (WoS): 9

H-Index (Scopus): 9