

## Assoc. Prof. SİBEL ŞEN

### Personal Information

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### International Researcher IDs

ORCID: 0000-0002-8965-614X

Yoksis Researcher ID: 144431

### Education Information

Doctorate, Canakkale Onsekiz Mart University, Fen Bilimleri, Fizik, Turkey 2002 - 2008

Postgraduate, Canakkale Onsekiz Mart University, Fen Bilimleri, Fizik, Turkey 1999 - 2002

Undergraduate, Ankara University, Faculty Of Science, Fizik Mühendisliği, Turkey 1993 - 1997

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Seçilmiş organik malzemelerin ince film ve organik buhar sensörü özelliklerinin incelenmesi, Canakkale Onsekiz Mart University, Fen Bilimleri Ens., Fizik, 2008

Postgraduate, Yarıiletkenler ve yarıiletkenlerin elektriksel özellikleri, Canakkale Onsekiz Mart University, Fen Bilimleri Enstitüsü, Fizik, 2002

### Research Areas

Physics, Atomic and Molecular Physics, Atomic and Molecular Interactions, Interdisciplinary Physics and Related Science and Technology Areas, Materials Science, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Electrical properties of electronic structures, interfaces, thin films and low-dimensional structures, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Canakkale Onsekiz Mart University, Fen Edebiyat Fak., Fizik, 2018 - Continues

Assistant Professor, Canakkale Onsekiz Mart University, Fizik, 2008 - 2018

Research Assistant, Canakkale Onsekiz Mart University, Fen Bilimleri Ens., Fizik, 2000 - 2008

### Advising Theses

Şen S., Organik bazlı ince filmlerle gerçekleştirilen yüzey plazmon rezonansı (SPR) gaz ve organik buhar algılama çalışmaları, Postgraduate, E.YALÇIN(Student), 2023

Şen S., Çanakkale Boğazı'ndan alınan deniz suyundaki <sup>137</sup>Cs miktarının belirlenmesi, Postgraduate, D.ATASEVEN(Student), 2017

Şen S., Çanakkale Boğazı'ndan taşınmakta olan Çernobil kaynaklı Cs-137 miktarının belirlenmesi, Postgraduate, B.BERK(Student), 2012

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

- I. **Humidity effect on real-time response of tetranitro-oxacalix[4]arene-based surface plasmon resonance (SPR) acetone sensor at room temperature**  
ŞEN S., Onder F., Capan R., AY M., Ozkaya Erdogan C.  
Optik, vol.272, 2023 (SCI-Expanded)
- II. **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)
- III. **A room temperature acetone sensor based on synthesized tetranitro-oxacalix[4]arenes: Thin film fabrication and sensing properties**  
Şen S., Cömert Önder F., Çapan R., Ay M.  
Sensors And Actuators A-Physical, vol.00, pp.112308, 2020 (SCI-Expanded)
- IV. **FILMS SPIN-COATED WITH GALLIC ACID AND THE DETECTION OF SPUN FILMS AGAINST VOLATILE ORGANIC COMPOUNDS**  
ŞEN S.  
SURFACE REVIEW AND LETTERS, vol.27, no.2, 2020 (SCI-Expanded)
- V. **Langmuir-Blodgett film properties of based on calix[4]resorcinarene and the detection of those against volatile organic compounds**  
Sen S., Capan R., Ozbek Z., Ozel M. E., Stanciu G. A., Davis F.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.125, no.11, 2019 (SCI-Expanded)
- VI. **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)
- VII. **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)
- VIII. **Thin film characterization of novel phthalimide materials**  
ŞEN S., Capan R., OZEL M. E., Hassan A. K., Turhan O., Namli H.  
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.5, no.11, pp.1243-1247, 2011 (SCI-Expanded)
- IX. **p-phthalimidobenzoic thin film for volatile organic vapor detection**  
ŞEN S., Capan R., OZEL M. E., Hassan A. K., Namli H., Turhan O.  
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.12, no.7, pp.1534-1538, 2010 (SCI-Expanded)
- X. **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)
- 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.

- XII. **Phthalimide thin film for methanol vapor detection**  
Sen S., Capan R., Ozel M. E., Hassan A. K., Turhan O., Namli H.  
SENSOR LETTERS, vol.6, no.2, pp.261-265, 2008 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Spin Kaplama Vanilya İnce Filmler ve Bu Filmlerin Uçucu Organik Bileşikleri Algılama Davranışı**  
ŞEN S.  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.12, pp.543-552, 2019 (Peer-Reviewed Journal)
- II. **Langmuir-Blodgett Thin Film Characterization of Two Organic Compounds**  
ŞEN S., ÇAPAN R., NAMLI H., TURHAN O.  
BAÜ Fen bilimleri Ens. Dergisi, vol.13, no.2, pp.1-6, 2011 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Calix[4]amine Langmuir-Blodgett thin film sensing properties against volatile organic compounds**  
Sen S., Capan R., Ozbek Z., Ozel M. E., Stanciu G. A., Davis F.  
20th Jubilee International School on Condensed Matter Physics - Physics and Applications of Advanced and Multifunctional Materials (ISCOMP), Varna, Bulgaria, 3 - 06 September 2018, vol.1186
- II. **Spin coated film properties of ferulic acid and the detection of those against volatile organic compounds**  
ŞEN S.  
5th International conference on materials science and nanotechnology for next generation (MSNG2018), Nevşehir, Turkey, 4 - 06 October 2018
- III. **Phthalimide derivative spun films for organic vapour sensing**  
ŞEN S., ÇAPAN R., TÜRKER G.  
20th Jubilee International School on Condensed Matter Physics, Varna, Bulgaria, 3 - 07 September 2018
- IV. **Spin coated film of 4-(Dimethylamino)benzaldehyde(4DMBA) for ethanol detection**  
ŞEN S.  
Turkish Physical Society 34th International Physical Congress, Muğla, Turkey, 5 - 09 September 2018
- V. **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
- VI. **Thin Film Properties and the Detection Volatile Organic Compounds of C-Methylcalix(4)Resorcinarene**  
ŞEN S., ÇAPAN R., TÜRKER G.  
34th International Physics Congress of the Turkish-Physical-Society (TPS), Konacik, Turkey, 5 - 09 September 2018, vol.2042
- VII. **Determination of the Amount of Cs-137 in the Sea Water Obtained from the Dardanelles**  
Ataseven D., Sen S.  
32nd International Physics Congress of Turkish-Physical-Society (TPS), Bodrum, Turkey, 6 - 09 September 2016, vol.1815
- VIII. **Determination of the Amount of Cs-137 in the Sea Water Received from Dardanelles**  
ATASEVEN D., ŞEN S.  
Turkish Physical Society 32nd International Physics Congress, Muğla, Turkey, 6 - 09 September 2016
- IX. **Important nuclear reactor accidents realized until today Reasons and results**  
Ataseven D., Güngör E., ŞEN S.  
9th International Physics Conference of the Balkan Physical Union, İstanbul, Turkey, 24 - 27 August 2015

- 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. **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
- 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. **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
- XIV. **Çanakkale Boğazi'na Ait Balık Türlerindeki Çernobil Kaynaklı Cs-137 Aktivitesinin Belirlenmesi**  
BARIŞ B., NURDAN G., ŞEN S.  
Turkish Physical Society 27 th International Physics Congress, İstanbul, Turkey, 14 - 17 September 2010
- 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. **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
- XVII. **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
- XVIII. **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
- XIX. **The Langmuir and Deposition Properties of Calixarenes**  
ÖZBEK Z., ŞEN S., İNCE F., ÇAPAN R., GÖKTAŞ H., ÖZEL M. E., DAVIS F.  
Condensed Matter Physics of Balkan Countries, Muğla, Turkey, 26 - 28 May 2008
- XX. **Spektroskopik Elipsometri**  
ŞEN S., ÖZEL M. E.  
24. Uluslararası TFD Fizik Kongresi, Malatya, Turkey, 28 - 31 August 2007
- XXI. **Organic Vapour Sensing Properties of Spin Coated thin Films**  
ŞEN S., ÇAPAN R., ÖZEL M. E., HASSA A. K., TURHAN O., NAMLI H.  
24. Uluslararası TFD Fizik Kongresi, Malatya, Turkey, 28 - 31 August 2007
- XXII. **Thin Film Preparation of (N-Phthalimide) p-aminobenzoic acid Molecule**  
ŞEN S., ÇAPAN R., ÖZEL M. E., HASSA A. K., TURHAN O., NAMLI H.  
24. Uluslararası TFD Fizik Kongresi, Malatya, Turkey, 28 - 31 August 2007
- XXIII. **Thin films of two novel phthalimide derivatives deposited by spin coating: determination of film parameters and gas sensing behaviour**  
ŞEN S., ÖZEL M. E., ÇAPAN R., HASSAN A., TURHAN O., NAMLI H.  
Nanoscience and Nanotechnology 2007, NANOTR III Bilkent Üniversitesi, ANKARA, TURKEY, Ankara, Turkey, 11 - 14 May 2007
- XXIV. **Langmuir- Blodgett Thin Film Characterization of Two Novel Organic Compounds**  
ŞEN S., ÖZEL M. E., AÇIKBAŞ Y., EVYAPAN M., ÇAPAN R., STANCIU G. A., TURHAN O., NAMLI H.

10 th European Conference on Organised Films, Riga, Latvia, 20 - 24 August 2006

**XXV. Langmuir-Blodgett Thin Films Characterization of Two Organic Compounds as Gas Sensors**

ŞEN S., ÖZEL M. E., EVYAPAN M., AÇIKBAŞ Y., ÇAPAN R., STANCIU G. A., TURHAN O., NAMLI H.

Nanoscience and Nanotechnology, 2006, NANOTR II, Middle East Technic University, Ankara, Turkey, 3 - 05 May 2006

**XXVI. Meteorite Impact Crater Inventory of Turkey**

KOCAHAN YILMAZ Ö., ÖZEL M. E., YILDIRIM H., ŞENGÜL ULUOCAK E., ŞEN S.

Recent Advances in Space Technologies 2005, İstanbul, Turkey, 9 - 11 June 2005

## Supported Projects

ŞEN S., TÜRKER G., ÇAPAN R., Project Supported by Higher Education Institutions, Kalikseren ve Fitalimit Türevi Organik Bileşiklerin İnce Film Özellikleri ve Gaz Sensörü Özelliklerinin İncelenmesi, 2018 - 2019

ŞEN S., Ataseven D., Project Supported by Higher Education Institutions, ÇANAKKALE BOĞAZI'NDAN ALINAN DENİZ SUYUNDAKİ Cs-137 MİKTARININ BELİRLENMESİ, 2016 - 2017

Şen S., Türker G., Project Supported by Higher Education Institutions, GALLİK VE İMİDAZOL ASİT BİLEŞİKLERİNE AİT İNCE FİMLERİN SPİN KAPLAMA YÖNTEMİYLE ELDE EDİLMESİ, 2012 - 2015

ŞEN S., TÜRKER G., UZUNOĞLU T., Project Supported by Higher Education Institutions, 3-ketohexadekanoinik asit metilester ve 4-[dimetilamino]-benzaldehit Bileşiklerine ait İnce Filmlerin Elektriksel Özelliklerinin İncelenmesi, 2012 - 2015

ŞEN S., BERK B., Project Supported by Higher Education Institutions, Çanakkale Boğazından Taşınmakta Olan Çernobil Kaynaklı 137Cs Miktarının Belirlenmesi, 2010 - 2012

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

Şen S., Özel M. E., Project Supported by Higher Education Institutions, Seçilmiş Organik Malzemelerin İnce Film ve Organik Buhar Sensörü Özelliklerinin İncelenmesi, 2005 - 2009

## Metrics

Publication: 41

Citation (WoS): 136

Citation (Scopus): 144

H-Index (WoS): 5

H-Index (Scopus): 6

## Non Academic Experience

Sheffield Hallam üniversitesi Engineering and Mathematics bölümü