

## Prof. Dr. SERHAT ÖZDER

### Kişisel Bilgiler

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### Eğitim Bilgileri

Doktora, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Fizik, Türkiye 1986 - 1994

### Araştırma Alanları

Fizik, Yoğun Madde 2:Elektronik Yapı, Elektrik, Manyetik ve Optik Özellikler, Optik özellikler, Yoğun madde spektroskopisi, Temel Bilimler

### Akademik Unvanlar / Görevler

Prof. Dr., Çanakkale Onsekiz Mart Üniversitesi, Fen Fakültesi, Fizik Bölümü, 2005 - Devam Ediyor

### SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **A new method to determine the continuous refractive index of an absorbing film by Generalized Stockwell Transform**  
COŞKUN E., Emir C., Selamet S., PARLAK M., ÖZDER S.  
Optics and Laser Technology, cilt.167, 2023 (SCI-Expanded)
- II. **Quantitative phase imaging of erythrocyte in epilepsy patients**  
Unal A., KOCAHAN YILMAZ Ö., Altunan B., GÜNDOĞDU A. A., Uyanik M., ÖZDER S.  
MICROSCOPY RESEARCH AND TECHNIQUE, cilt.84, sa.6, ss.1172-1180, 2021 (SCI-Expanded)
- III. **An Improved Method for Determination of Refractive Index of Dielectric Films from Reflectance Spectrum by Using the Generalized Morse Wavelet**  
Tiryaki E., KOCAHAN YILMAZ Ö., ÖZDER S.  
MEASUREMENT SCIENCE REVIEW, cilt.21, sa.2, ss.61-66, 2021 (SCI-Expanded)
- IV. **Simultaneous determination of the thickness and refractive index dispersion of dielectric films by the Paul wavelet transform**  
ÖZCAN S., COŞKUN E., KOCAHAN YILMAZ Ö., ÖZDER S.  
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- V. **The zero order generalized Morse wavelet method to determine the refractive index and extinction coefficient dispersions of an absorbing film**  
KOCAHAN YILMAZ Ö., COŞKUN E., Tiryaki E., ÖZDER S.  
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- VI. **Determination of phase from the ridge of CWT using generalized Morse wavelet**  
KOCAHAN YILMAZ Ö., Tiryaki E., COŞKUN E., ÖZDER S.  
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- VII. **The generalized Morse wavelet method to determine refractive index dispersion of dielectric films**  
KOCAHAN YILMAZ Ö., ÖZCAN S., COŞKUN E., ÖZDER S.  
MEASUREMENT SCIENCE AND TECHNOLOGY, cilt.28, sa.4, 2017 (SCI-Expanded)
- VIII. **Generalized Morse wavelet for the determination of the birefringence of a liquid crystal cell**  
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- IX. **Generalized Morse wavelets for the phase evaluation of projected fringe pattern**  
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- X. **The Paul wavelet algorithm: an alternative approach to calculate the refractive index dispersion of a dielectric film from transmittance spectrum**  
COŞKUN E., ÖZDER S., Tiryaki E.  
APPLIED PHYSICS B-LASERS AND OPTICS, cilt.113, sa.2, ss.243-250, 2013 (SCI-Expanded)
- XI. **Influence of Annealing Temperature on the Electrical and Optical Properties of CdS Thin Films**  
ELMAS S., ÖZCAN S., ÖZDER S., BİLGİN V.  
ACTA PHYSICA POLONICA A, cilt.121, sa.1, ss.56-58, 2012 (SCI-Expanded)
- XII. **Paul wavelet algorithm for the determination of birefringence dispersion of a liquid crystal cell**  
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- XIII. **Determination of the refractive index of a dielectric film continuously by the generalized S-transform**  
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- XIV. **Refractive index and extinction coefficient determination of an absorbing thin film by using the continuous wavelet transform method**  
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- XV. **Phase recovery from interference fringes by using S-transform**  
Dursun A., SARAÇ Z., Topkara M. S., ÖZDER S., ECEVİT F. N.  
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- XVI. **Determination of birefringence dispersion in nematic liquid crystals by using an S-transform**  
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- XVII. **The behavior of the strange quark matter in the FRW universes**  
YILMAZ İ., KÜÇÜKARSLAN A., ÖZDER S.  
INTERNATIONAL JOURNAL OF MODERN PHYSICS A, cilt.22, sa.12, ss.2283-2291, 2007 (SCI-Expanded)
- XVIII. **Effect of an azo dye (DR1) on the dielectric parameters of a nematic liquid crystal system**  
OZDER S., OKUTAN M., KOYSAL O., GOKTAS H., SAN S. E.  
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- XIX. **Optical phase distribution evaluation by using an S-transform**  
Ozder S., KOCAHAN O., COŞKUN E., GOKTAS H.  
OPTICS LETTERS, cilt.32, sa.6, ss.591-593, 2007 (SCI-Expanded)
- XX. **Molecular reorientation based diffraction in a hybrid liquid crystal system applicable for two different laser sources simultaneously**  
Koysal O., San S. E., Okutan M., Ozder S.  
DYES AND PIGMENTS, cilt.73, sa.1, ss.65-68, 2007 (SCI-Expanded)

- I. **Yaw Ve Pitch Kontrollü Dişli Kutusuz 5kW Rüzgâr Türbini Üretilmesi Ve Verimliliği**  
YÜCEL M., ÖZDER S.  
Çanakkale Onsekiz mart Univ. Fen Bilimleri Enstitüsü dergisi, cilt.4, sa.1, ss.74-87, 2018 (Hakemli Dergi)

## **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **CHEMICALLY SPRAYED SnO<sub>2</sub>:F (FTO) THIN FILMS FOR PHOTOVOLTAIC APPLICATIONS**  
KÜÇÜKARSLAN A., SARICA E., GÜNEŞ İ., AKYÜZ İ., ÖZDER S., BİLGİN V.  
6nd International Conference on Material Science and Technology in Cappadocia (IMSTEC'21),  
Nevşehir/Kapadokya, Türkiye, 26 - 28 Kasım 2021
- II. **Ultrasonically spray deposited tin-doped indium oxide thin films for photovoltaic solar cell application**  
GÜNEŞ İ., SARICA E., AKYÜZ İ., KÜÇÜKARSLAN A., ÖZDER S., BİLGİN V.  
Turkish Physical Society 37th International Physical Congress (TPS-37), Muğla, Türkiye, 1 - 05 Eylül 2021
- III. **Determination of surface profile of thin films by continuous wavelet transform.**  
TİRYAKİ E., KOCAHAN YILMAZ Ö., COŞKUN E., ÖZDER S.  
6. International Conference of Material Science and Nanotechnology for Next Generation (MSNG2019), Kayseri, Türkiye, 16 - 17 Ekim 2019
- IV. **Electrical Properties of ZnSe/Si Nanowire and ZnSe/Si Heterostructures**  
BOZDOĞAN E., COŞKUN E., ÖZDER S., GÜLLÜ H. H., PARLAK M.  
Turkish Physical Society 34th International Physics Congress (TFD-34), Muğla, Türkiye, 5 - 09 Eylül 2018
- V. **FOURIER TRANSFORM PHASE METHOD FOR THE DETERMINATION OF SURFACE MORPHOLOGY OF THIN FILM**  
KOCAHAN YILMAZ Ö., ERTÜRK E., ÖZDER S.  
International Conference on Physical Chemistry and Functional Materials, Türkiye, 19 - 21 Haziran 2018
- VI. **QUANTITATIVE PHASE IMAGING OF THIN FILM SURFACE BY DIFFRACTION PHASE MICROSCOPY**  
KOCAHAN YILMAZ Ö., ÖZDER S.  
International Conference on Physical Chemistry and Functional Materials, 19 - 21 Haziran 2018
- VII. **Substrate temperature effect on the structural, morphological, optical and electrical properties of spray-deposited zinc sulphide thin films**  
DEMİRSELÇUK B., BİLGİN V., SARICA E., ÖZDER S.  
Turkish Physical Society 33rd International Physics Congress, 6 - 10 Eylül 2017
- VIII. **Effect of Zn/S molar ratio on the physical properties of spray-pyrolysed ZnS thin films for photovoltaic applications**  
DEMİRSELÇUK B., BİLGİN V., ÖZDER S., SARICA E.  
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- IX. **Optical properties of silicon nanowires for different length fabricated by metal assisted chemical etching method**  
BOZDOĞAN E., COŞKUN E., ÖZDER S., KOCAHAN YILMAZ Ö.  
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- X. **Production of silicon nanowire having different size by using metal assisted chemical etching method**  
BOZDOĞAN E., COŞKUN E., ÖZDER S., KOCAHAN YILMAZ Ö.  
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- XI. **The generalized morse wavelet to determine the refractive index and the extinction coefficient of an absorbing film from reflectance spectrum: a simulation study**  
TİRYAKİ E., KOCAHAN YILMAZ Ö., ÖZDER S.  
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- XII. **A simulation study to determine the birefringence dispersion of a liquid crystal from reflectance spectrum by using the paul wavelet**

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Turkish Physical Society 33th International Physics Congress, 6 - 09 Eylül 2017

- XIII. **A Simulation Study for Determination of Refractive Index Dispersion of Dielectric Film from Reflectance Spectrum by Using Paul Wavelet**  
Tiryaki E., COŞKUN E., KOCAHAN YILMAZ Ö., ÖZDER S.  
32nd International Physics Congress of Turkish-Physical-Society (TPS), Bodrum, Türkiye, 6 - 09 Eylül 2016, cilt.1815
- XIV. **Optical Phase Distribution Evaluation by Using Zero Order Generalized Morse Wavelet**  
KOCAHAN YILMAZ Ö., Elmas M. N., Durmus C., COŞKUN E., Tiryaki E., ÖZDER S.  
32nd International Physics Congress of Turkish-Physical-Society (TPS), Bodrum, Türkiye, 6 - 09 Eylül 2016, cilt.1815
- XV. **3D Profile Measurements of Objects by Using Zero Order Generalized Morse Wavelet**  
KOCAHAN YILMAZ Ö., Durmus C., Elmas M. N., COŞKUN E., Tiryaki E., ÖZDER S.  
32nd International Physics Congress of Turkish-Physical-Society (TPS), Bodrum, Türkiye, 6 - 09 Eylül 2016, cilt.1815
- XVI. **Quantitative Phase Imaging of Red Blood Cell by Diffraction Phase Microscopy**  
KOCAHAN YILMAZ Ö., Tiryaki E., Durmus C., Elmas M. N., COŞKUN E., ÖZDER S.  
International Workshop on Computing and Electromagnetics (CEM), Barcelona, İspanya, 21 - 24 Haziran 2017, ss.21-22
- XVII. **An Improved Method For Determination Of Refractive Index Of Absorbing Films: A Simulation Study**  
Özcan S., Coşkun E., Kocahan Yılmaz Ö., Özder S.  
32nd International Physics Congress of Turkish-Physical-Society (TPS), Bodrum, Türkiye, 6 - 09 Eylül 2016, cilt.1815
- XVIII. **An Improved Method For Simultaneous Determination Of Refractive Index And Thickness Of Dielectric Films A Simulation Study**  
ÖZCAN S., COŞKUN E., KOCAHAN YILMAZ Ö., ÖZDER S.  
Science and Applications of Thin Films, Congress & Exhibition - SATF 2016, İzmir, Türkiye, 19 - 23 Eylül 2016
- XIX. **Determination of the Refractive Index of Dielectric Films from the Transmittance Spectrum by Using Morse Wavelet**  
TİRYAKİ E., KOCAHAN YILMAZ Ö., COŞKUN E., ELMAS M. N., ÖZDER S.  
Science and Applications of Thin Films, Conference & Exhibition SATF 2016, 19 - 23 Eylül 2016
- XX. **Theoretical Determination of the Refractive Index and Extinction Coefficient of an Absorbing Thin Film by Using Morse Wavelet**  
TİRYAKİ E., KOCAHAN YILMAZ Ö., COŞKUN E., DURMUŞ Ç., ÖZDER S.  
Science and Applications of Thin Films, Conference & Exhibition (SATF 2016), 19 - 23 Eylül 2016
- XXI. **A simulation study for determination of refractive index dispersion of dielectric film from reflectance spectrum by using Paul wavelet**  
TİRYAKİ E., COŞKUN E., ÖZDER S., BOZDOĞAN E., KOCAHAN YILMAZ Ö., ELMAS M. N.  
Turkish Physical Society 32th International Physics Congress, 6 - 09 Eylül 2016
- XXII. **An improved method for determination of refractive index of absorbing films a simulation study**  
ÖZCAN S., COŞKUN E., ÖZDER S., KOCAHAN YILMAZ Ö.  
Turkish Physical Society 32th International Physics Congress, 6 - 09 Eylül 2016
- XXIII. **Optical phase distribution evaluation by using zero order generalized Morse wavelet**  
KOCAHAN YILMAZ Ö., ELMAS M. N., DURMUŞ Ç., COŞKUN E., TİRYAKİ E., ÖZDER S.  
Turkish Physical Society 32th International Physics Congress, 6 - 09 Eylül 2016
- XXIV. **Determination of the refractive index dispersion of dielectric film from reflectance spectrum by using Morlet wavelet**  
TİRYAKİ E., COŞKUN E., ÖZDER S., KUŞ E., KOCAHAN YILMAZ Ö., DURMUŞ Ç.  
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- XXV. **3D profile measurements of objects by using zero order generalized Morse wavelet**  
KOCAHAN YILMAZ Ö., DURMUŞ Ç., ELMAS M. N., COŞKUN E., TİRYAKİ E., ÖZDER S.

Turkish Physical Society 32th International Physics Congress, 6 - 09 Eylül 2016

**XXVI. Alternatif üstel tipli orbitaller hiperbolik kosinüs tiplifonksiyonlarının verimliliği**

ERTÜRK M., ÖZDER S., Öztürk E.

ADIM FİZİK GÜNLERİ V, Eskişehir, Türkiye, 21 - 23 Nisan 2016

**XXVII. An Improved Method For The Determination Of Birefringence Dispersion Of Liquid Crystal Cell: A Simulation Study**

ÖZCAN S., COŞKUN E., KOCAHAN YILMAZ Ö., ÖZDER S.

9th International Physics Conference of the Balkan-Physical-Union (BPU), İstanbul, Türkiye, 24 - 27 Ağustos 2015, cilt.1722

**XXVIII. Profile Measurement of Objects by Using Stockwell and Continuous Wavelet Transforms**

Kocahan O., COŞKUN E., ÖZDER S.

IEEE 16th Signal Processing and Communications Applications Conference, Aydın, Türkiye, 20 - 22 Nisan 2008, ss.804-807

**XXIX. S-transform analysis of projected fringe patterns - art. no. 66161A**

Kocahan O., ÖZDER S., COŞKUN E.

Conference on Optical Measurement Systems for Industrial Inspection V, Munich, Almanya, 18 - 22 Haziran 2007, cilt.6616

**XXX. Optical phase distribution evaluation by using S-transform**

Kocallan O., ÖZDER S., COŞKUN E.

6th International Conference of the Balkan-Physical-Union, İstanbul, Türkiye, 22 - 26 Ağustos 2006, cilt.899, ss.684

## **Desteklenen Projeler**

COŞKUN E., ÖZDER S., YILMAZ Ö. K., BOZDOĞAN E., Yükseköğretim Kurumları Destekli Proje, Metal destekli kimyasal aşındırma yöntemi ile farklı boyutlarda veveya açılarda Silisyum nano ipliksi yapıların üretimi, 2019 - 2020

## **Metrikler**

Yayın: 62

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Atıf (Scopus): 159

H-İndeks (WoS): 7

H-İndeks (Scopus): 7