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International Researcher IDs

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Education Information

Doctorate, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, Turkey 1979 - 1985
Postgraduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, Turkey 1976 - 1979
Undergraduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, Turkey 1971 - 1976

Dissertations

Doctorate, Electrical and photo-elctrical properties of n-CdS/CuS and n-CdS/p-Si heterojunction devices and solar cells, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 1985
Postgraduate, Electroluminescence in Au-ZnSe (MIS) diodes, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 1979

Research Areas

Natural Sciences

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 1998 - Continues
Associate Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 1990 - 1998
Assistant Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 1988 - 1990
Lecturer PhD, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 1985 - 1988
Lecturer, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 1982 - 1985
Research Assistant, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 1976 - 1982

Academic and Administrative Experience

Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2008 - 2016

Advising Theses

ERÇELEBİ A. Ç., The growth of SNSBSE2 crystal and the investigation of physical properties of thermally evaporated snsbse2 thinfilms, Postgraduate, T.BEKTAŞ(Student), 2022

ERÇELEBİ A. Ç., Optimization of silicon-oxynitride thin films for crystalline silicon(C-Si) perc cell, Postgraduate, H.HÜSEYİN(Student), 2022

ERÇELEBİ A. Ç., PARLAK M., Investigation on the incorporation of quantum dot thin film layers in the organic and inorganic solar cell structures, Doctorate, İ.CANDAN(Student), 2016

ERÇELEBİ A. Ç., Fabrication and investigation of extremely thin CdTe absorber layer solar cells, Doctorate, A.HOSSEİNİ(Student), 2016

ERÇELEBİ A. Ç., PARLAK M., Material and device characterization of ZnInSe2 and Cu0.5Ag0.5InSe2 thin films for photovoltaic applications, Doctorate, H.HÜSEYİN(Student), 2016

ERÇELEBİ A. Ç., Growth and characterization of CuIn1-x GaxSe2 (CIGS) thin films for solar cell structures, Postgraduate, İ.Candan(Student), 2009

ERÇELEBİ A. Ç., Characterization of cds thin films and schottky barrier diodes, Postgraduate, S.Korkmaz(Student), 2005

ERÇELEBİ A. Ç., Preparation and electrical structural optical characterization of InSe thin films, Doctorate, M.Parlak(Student), 1997

ERÇELEBİ A. Ç., Investigation of thin film CdS/CdTe heterojunction devices, Doctorate, H.Mamikoğlu(Student), 1994

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **FABRICATION AND CHARACTERIZATION OF TiO2 THIN FILM FOR DEVICE APPLICATIONS**
HOSSEINI A., GÜLLÜ H. H., COŞKUN E., PARLAK M., ERÇELEBİ A. Ç.
SURFACE REVIEW AND LETTERS, vol.26, no.6, 2019 (SCI-Expanded)
- II. **WEAK-COUPPLING OPTICAL POLARON IN QW-CONFINED MEDIA**
YILDIRIM T., ERCELEBI A.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.3, no.24, pp.4357-4364, 1991 (SCI-Expanded)
- III. **THE GROUND-STATE DESCRIPTION OF THE OPTICAL POLARON VERSUS THE EFFECTIVE DIMENSIONALITY IN QUANTUM-WELL-TYPE SYSTEMS**
YILDIRIM T., ERCELEBI A.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.3, no.10, pp.1271-1277, 1991 (SCI-Expanded)
- IV. **THE TWO-DIMENSIONAL MAGNETO-POLARON IN THE STRONG-COUPPLING REGIME**
ERCELEBI A.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.1, no.13, pp.2321-2326, 1989 (SCI-Expanded)
- V. **POLARON PROPERTIES OF THE WANNIER EXCITON IN A QUANTUM-WELL CONFINEMENT**
ERCELEBI A., OZDINCER U.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.1, no.11, pp.1999-2007, 1989 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Directional Self Assembly of Nanoflakes on the Surface of CZTSSe Thin Films on Glass Substrates: Growth and Characterization**
TERLEMEZOĞLU M., BAYRAKLI Ö., ÇOLAKOĞLU T., GÜLLÜ H. H., ABAK M. K., ERÇELEBİ A. Ç., PARLAK M.
The 33rd Şişecam Glass Symposium, İstanbul, Turkey, 02 November 2018
- II. **Directional Self Assembly of CZTSSe Thin Films on Glass Substrates: Growth and Characterization**
TERLEMEZOĞLU M., SÜRÜCÜ Ö., ÇOLAKOĞLU T., GÜLLÜ H. H., ABAK M. K., ERÇELEBİ A. Ç., PARLAK M.
The 33rd Şişecam Glass Symposium, İstanbul, Turkey, 02 November 2018
- III. **Fabrication of CZTSSe Spuerstrate Solar Cells by RF Magnetron Sputtering Technique**
TERLEMEZOĞLU M., BAYRAKLI Ö., DOĞRU Ç., GÜLLÜ H. H., ÇİFTPINAR E. H., ERÇELEBİ A. Ç., PARLAK M.
Turkish Physical Society 34th International Physics Congress (TFD-34), Muğla, Turkey, 5 - 09 September 2018
- IV. **Fabrication and investigation of extremely thin CdTe absorber layer solar cells**

HOSSEINI A., GÜLLÜ H. H., BAYRAKLI Ö., PARLAK M., TURAN R., ERÇELEBİ A. Ç.

2nd international congress on the world of technology and advanced materials, 28 September - 02 October 2016

V. Investigation of Electrical Properties of Cu Ag In Se Thin Films Deposited by Thermal Evaporation Method

GÜLLÜ H. H., COŞKUN E., BAYRAKLI Ö., PARLAK M., ERÇELEBİ A. Ç.

EU PVSEC 2015 Hamburg, Hamburg, Germany, 14 - 18 September 2015

VI. Synthesis and characterization of CuZnSe₂ thin film structures II VI Conference Paris 2015 September 13 18

GÜLLÜ H. H., BAYRAKLI Ö., PARLAK M., ERÇELEBİ A. Ç.

II-VI Conference, Paris 2015, Paris, France, 13 - 18 September 2015

VII. Preparation and Characterization of Sputtered CuZnSe₂ Thin Films

GÜLLÜ H. H., BAYRAKLI Ö., PARLAK M., ERÇELEBİ A. Ç.

SolarTR-3: 3rd Turkish Solar Electricity Conference and Exhibition, Ankara, Turkey, 27 - 29 April 2015

VIII. Characterization of Ag Ga In Te Thin Films for Solar Cell Applications O Bayraklı H H Güllü1 E Coşkun İ Candan M Parlak Ç Ercelebi

BAYRAKLI Ö., GÜLLÜ H. H., COŞKUN E., CANDAN İ., PARLAK M., ERÇELEBİ A. Ç.

SolarTR-3: 3rd Turkish Solar Electricity Conference and Exhibition, Ankara, Turkey, 27 - 29 April 2015

Supported Projects

PARLAK M., TERLEMEZOĞLU M., DEMİR M., ERÇELEBİ A. Ç., Project Supported by Higher Education Institutions,

Alternatif soğurucu katman olarak SnSexTe(1-x) ince film yapısının üretimi ve özelliklerinin araştırılması, 2018 - 2019

PARLAK M., BAYRAKLI Ö., TERLEMEZOĞLU M., ERÇELEBİ A. Ç., GÜLLÜ H. H., Project Supported by Higher Education

Institutions, Cu₂ZnSn(S,Se)₄ İnce Filmlerinin Fiziksel Buharlaştırma Tekniği ile Üretilmesi ve Özelliklerinin Belirlenmesi, 2017 - 2017

PARLAK M., BAYRAKLI Ö., TERLEMEZOĞLU M., ERÇELEBİ A. Ç., GÜLLÜ H. H., Project Supported by Higher Education

Institutions, Cu₂ZnSnSe₄ İnce Filmlerinin Fiziksel Buharlaştırma Tekniği ile Üretilmesi ve Özelliklerinin Belirlenmesi, 2016 - 2016

PARLAK M., BAYRAKLI Ö., ERÇELEBİ A. Ç., GÜLLÜ H. H., Project Supported by Higher Education Institutions, ZnSnS₂ ince filmlerinin Isısal buharlaştırma tekniği ile üretilmesi ve özelliklerinin belirlenmesi, 2015 - 2015

PARLAK M., BAYRAKLI Ö., ERÇELEBİ A. Ç., GÜLLÜ H. H., Project Supported by Higher Education Institutions, CuSn(S,Se yada Te)₂ ve CuZn(Se,S)₂ ince filmlerinin Isıl buharlaştırma ve saçtırmalı kaplama tekniğiyle üretilmesi ve özelliklerinin belirlenmesi, 2014 - 2014

PARLAK M., BAYRAKLI Ö., ERÇELEBİ A. Ç., GÜLLÜ H. H., Project Supported by Higher Education Institutions, CuZnSnTe₂ ince filmlerinin manyetik saçtırmalı kaplama tekniğiyle üretilmesi ve özelliklerinin belirlenmesi, 2013 - 2013

ERÇELEBİ A. Ç., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, AR-GE, Eğitim ve Ölçme Merkezi, 1998 - 2011

Metrics

Publication: 13

Citation (WoS): 93

Citation (Scopus): 96

H-Index (WoS): 4

H-Index (Scopus): 4

Non Academic Experience

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