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Education Information

Post Doctorate, University of Durham, Applied Physics Group, Physics, United Kingdom 1997 - 1998

Doctorate, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, Turkey 1992 - 1997

Postgraduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, Turkey 1989 - 1992

Undergraduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, Turkey 1984 - 1989

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Preparation and electrical structural optical characterization of In Se thin films, Middle East Technical University, 1997

Postgraduate, Effects of The Growth On The Properties of CdS Thin Films, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 1993

Research Areas

Physics, 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

Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2001 - Continues

Advising Theses

- PARLAK M., Growth, characterization and device applications of cadmium zinc telluride thin films, Doctorate, Ç.DOĞRU(Student), 2022
- PARLAK M., Structural, optical and electrical characterization of CDSEXTTE1-X thin films, Postgraduate, M.Demir(Student), 2020
- Parlak M., CZTSSe thin film: growth, characterization and solar cell applications, Doctorate, M.TERLEMEZOĞLU(Student), 2019
- TURAN R., PARLAK M., Investigation of electronic properties of detector grade cadmium zinc telluride crystals and development of electrodes for x-ray and gamma ray applications, Postgraduate, D.BENDER(Student), 2019
- PARLAK M., Deposition of Cu-Zn-Sn-Se (CZTSe) thin films and investigation of their device properties, Doctorate, Ö.BAYRAKLI(Student), 2018
- AYDINOL M. K., PARLAK M., Production and characterization of carbon-silicon nanocomposite anode materials for secondary lithium batteries, Doctorate, B.MİSER(Student), 2017
- PARLAK M., ERÇELEBİ A. Ç., Investigation on the incorporation of quantum dot thin film layers in the organic and inorganic solar cell structures, Doctorate, İ.CANDAN(Student), 2016
- PARLAK M., ERÇELEBİ A. Ç., Material and device characterization of ZnInSe₂ and Cu_{0.5}Ag_{0.5}InSe₂ thin films for photovoltaic applications, Doctorate, H.HÜSEYİN(Student), 2016
- BEŞİKCİ C., PARLAK M., Molecular beam epitaxy growth of InP/InGaAs structures for short wavelength infrared photodetectors, Postgraduate, O.TEMEL(Student), 2014
- ÖZENBAŞ A. M., PARLAK M., Effect of transition metal substitution on high-temperature properties of thermoelectric materials, Doctorate, M.GÜNEŞ(Student), 2014
- BEŞİKCİ C., PARLAK M., Fabrication and characterization of InP based quantum well infrared photodetectors, Postgraduate, G.TORUNOĞLU(Student), 2012
- BEŞİKCİ C., PARLAK M., Molecular beam epitaxy growth and characterization of mercury cadmium telluride epilayers for infrared detector applications, Postgraduate, A.TOLUNGÜÇ(Student), 2011
- PARLAK M., AKATA KURÇ B., Synthesis and characterization of titanosilicate ETS-10 for potential photovoltaic applications, Postgraduate, S.GALİOĞLU(Student), 2010
- PARLAK M., Investigation of structural, electrical and optical properties of Cu_{1-x}Ag_xInSe₂ thin films as a function of x content, Postgraduate, H.HÜSEYİN(Student), 2010
- PARLAK M., Investigation of electrical and optical properties of Ag-In-Se based devices, Doctorate, M.KALELİ(Student), 2010
- PARLAK M., Electrical, structural and optical properties of AgGaSe_{2-x}S_x thin films grown by sintered powder, Doctorate, H.KARAAĞAÇ(Student), 2010
- PARLAK M., Growth and characterization of CuIn_{1-x}Ga_xSe₂ (CIGS) thin films for solar cell structures, Postgraduate, İ.CANDAN(Student), 2009
- PARLAK M., Design and production of antireflection coating for Ge, ZnSe and ZnS in 8-12 micrometer wavelength region, Postgraduate, B.ÜÇER(Student), 2009
- PARLAK M., The effects of post-annealing process on the physical properties of silver-indium-selenium ternary semiconductor thin films deposited by electron beam technique, Doctorate, T.ÇOLAKOĞLU(Student), 2009
- KARAKAŞ G., PARLAK M., PRODUCTION OF TITANIUM DIOXIDE THIN FILMS WITH IMPROVED PHOTOCATALYTIC ACTIVITY: THE USE OF BACTERIA AS 3D TEMPLATES, Postgraduate, B.KOÇ(Student), 2009
- PARLAK M., Physical properties of CdSe thin films produced by thermal evaporation and e-beam techniques, Postgraduate, Ş.MUSTAFA(Student), 2006
- PARLAK M., Structural, electrical and optical characterization of Ge-implanted GaSe single crystal grown by Bridgman method, Postgraduate, H.KARAAĞAÇ(Student), 2005
- PARLAK M., Electrical and structural characterization of bismuth thin films, Postgraduate, G.DURKAYA(Student), 2005
- PARLAK M., Growth and characterization of InSe single crystals, Postgraduate, D.DENİZ(Student), 2004
- PARLAK M., Investigation of InSe thin film based deviges, Doctorate, K.YILMAZ(Student), 2004
- PARLAK M., Investigation of inse thin film based devices, Doctorate, K.Yılmaz(Student), 2004
- AKINOĞLU B. G., PARLAK M., Structural electrical and optical characterization of N- and Si-implanted GaSe single crystal

grown by bridgman method, Doctorate, O.Karabulut(Student), 2003

PARLAK M., The growth and characterization of gallium selenide thin films, Postgraduate, T.Çolakoğlu(Student), 2003

PARLAK M., The growth and characterization of GaSe thin films, Postgraduate, T.ÇOLAKOĞLU(Student), 2003

PARLAK M., Structural, electrical and optical characterization of N-and Si-implanted GaSe single crystal grown by Bridgman method, Doctorate, O.KARABULUT(Student), 2003

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Integrating theoretical and experimental approaches to unveil the mechanical properties of CuSbSe₂ thin films**
Surucu O., Gencer A., Usanmaz D., PARLAK M., SÜRÜCÜ G.
Physica Scripta, vol.99, no.12, 2024 (SCI-Expanded)
- II. **Exploring Temperature-Dependent bandgap and Urbach energies in CdTe thin films for optoelectronic applications**
Surucu O., Sürücü G., Hasanli N., Parlak M., Isik M.
Materials Letters, vol.373, 2024 (SCI-Expanded)
- III. **Performance analysis of CuSbSe₂ thin-film solar cells with Cd-free window layers**
SÜRÜCÜ G., Bal E., Gencer A., PARLAK M., Surucu O.
Materials Letters, vol.363, 2024 (SCI-Expanded)
- IV. **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, vol.167, 2023 (SCI-Expanded)
- V. **Nanowire geometry effects on devices and transport mechanisms: SnS₂/SiNW heterojunction**
COŞKUN E., Emir C., TERLEMEZOĞLU BİLMİŞ M., PARLAK M.
Journal of Materials Science, vol.58, no.38, pp.15132-15143, 2023 (SCI-Expanded)
- VI. **Production of detector grade CdZnTe crystal with VGF furnace by analyzing segregation of Zn and In**
Ünal M., Balbaşı Ö. B., Sedani S. H., Karaman M. C., Çelik G., Bender D., Genç A. M., Parlak M., Turan R.
Journal of Crystal Growth, vol.615, 2023 (SCI-Expanded)
- VII. **Physical characterization of thermally evaporated Sn-Sb-Se thin films for solar cell applications**
Bektas T., Surucu O., Terlemezoğlu Bilmiş M., Parlak M.
Applied Physics A: Materials Science and Processing, vol.129, no.5, 2023 (SCI-Expanded)
- VIII. **Temperature effects on optical characteristics of thermally evaporated CuSbSe₂ thin films for solar cell applications**
Surucu O., Isik M., Terlemezoğlu M., Bektas T., Hasanli N., Parlak M.
Optical Materials, vol.133, 2022 (SCI-Expanded)
- IX. **Structural, morphological and temperature-tuned bandgap characteristics of CuS nano-flake thin films**
Isik M., Terlemezoğlu M., Hasanli N., Parlak M.
Physica E: Low-Dimensional Systems and Nanostructures, vol.144, 2022 (SCI-Expanded)
- X. **Production of High-Performance CdZnTe Crystals Grown by THM for Radiation Detection Applications**
Ünal M., Balbaşı Ö. B., Karaman M. C., Genç A. M., Parlak M., Turan R.
Journal of Electronic Materials, vol.51, no.9, pp.4675-4680, 2022 (SCI-Expanded)
- XI. **Investigation of seeded vertical gradient freeze (VGF) growth of CdZnTe bulk crystals**
Balbaşı Ö. B., Ünal M., Genç A. M., Çelik G., Parlak M., Turan R.
Journal of Crystal Growth, vol.584, 2022 (SCI-Expanded)
- XII. **Interface stability problem towards the end of THM growth of cadmium zinc telluride crystals**
Ünal M., Balbaşı Ö. B., Genç A. M., Parlak M., Turan R.
Journal of Crystal Growth, vol.584, 2022 (SCI-Expanded)

- XIII. **Growth and optical characterization of Sn_{0.6}Sb_{0.4}Se layer single crystals for optoelectronic applications**
Bektas T., Terlemozoglu M., Surucu O., Isik M., Parlak M.
Materials Science in Semiconductor Processing, vol.141, 2022 (SCI-Expanded)
- XIV. **Temperature-dependent optical characteristics of sputtered NiO thin films**
Terlemozoglu M., Surucu O., Isik M., Hasanli N., Parlak M.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.128, no.1, 2022 (SCI-Expanded)
- XV. **Characterization of Cu-rich and Zn-poor Cu₂ZnSnS₄ single crystal grown by vertical Bridgman technique**
Peksu E., Terlemozoglu M., Parlak M., Karaağaç H.
Journal of Crystal Growth, vol.574, 2021 (SCI-Expanded)
- XVI. **Fabrication of CdSexTe1-x thin films by sequential growth using double sources**
Demir M., Gullu H., Terlemozoglu M., Parlak M.
Physica B: Condensed Matter, vol.619, 2021 (SCI-Expanded)
- XVII. **Illumination and voltage effects on the forward and reverse bias current-voltage (I-V) characteristics in In/In₂S₃/p-Si photodiodes**
Yukselturk E., Surucu O., Terlemozoglu M., PARLAK M., ALTINDAL Ş.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.17, pp.21825-21836, 2021 (SCI-Expanded)
- XVIII. **Structural and temperature-tuned bandgap characteristics of thermally evaporated beta-In₂S₃ thin films**
Surucu O., Isik M., Terlemozoglu M., Hasanli N., Parlak M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.12, pp.15851-15856, 2021 (SCI-Expanded)
- XIX. **Temperature effects on optical characteristics of CdSe thin films**
Gullu H. H., Isik M., Surucu O., Hasanli N., Parlak M.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.123, 2021 (SCI-Expanded)
- XX. **Improvement of electrical characteristics of SnSe/Si heterostructure by integration of Si nanowires**
Coskun E., Gullu H. H., Emir C., Parlak M.
PHYSICA B-CONDENSED MATTER, vol.604, 2021 (SCI-Expanded)
- XXI. **Temperature-dependent optical characteristics of sputtered Ga-doped ZnO thin films**
Gullu H. H., Isik M., Hasanli N., Parlak M.
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, vol.263, 2021 (SCI-Expanded)
- XXII. **Towards the fabrication of third generation solar cells on amorphous, flexible and transparent substrates with well-ordered and disordered Si-nanowires/pillars**
Peksu E., Gullu O., PARLAK M., Islam M. S., Karaağaç H.
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.124, 2020 (SCI-Expanded)
- XXIII. **Temperature-tuned band gap properties of MoS₂ thin films**
Surucu O., Isik M., Gasanly N., Terlemozoglu M., Parlak M.
MATERIALS LETTERS, vol.275, 2020 (SCI-Expanded)
- XXIV. **Investigation of band gap energy versus temperature for SnS 2 thin films grown by RF-magnetron sputtering**
Isik M., Gullu H. H., Terlemozoglu M., Surucu O. B., PARLAK M., Gasanly N.
PHYSICA B-CONDENSED MATTER, vol.591, 2020 (SCI-Expanded)
- XXV. **Temperature dependent band gap in SnS₂xSe(2-2x) (x=0.5) thin films**
Delice S., Isik M., Gullu H. H., Terlemozoglu M., Surucu O. B., Gasanly N., Parlak M.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.114, 2020 (SCI-Expanded)
- XXVI. **Electrical characterization of CdZnTe/Si diode structure**
Balbasi C. D., Terlemozoglu M., Gullu H. H., Yildiz D. E., Parlak M.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.126, 2020 (SCI-Expanded)

- XXVII. **Material and Si-based diode analyses of sputtered ZnTe thin films**
Gullu H. H., Surucu O. B., Isik M., Terlemezoglu M., Parlak M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.31, no.14, pp.11390-11397, 2020 (SCI-Expanded)
- XXVIII. **Influence of temperature on optical properties of electron-beam-evaporated ZnSe thin film**
Gullu H. H., Isik M., Gasanly N., PARLAK M.
PHYSICA SCRIPTA, vol.95, no.7, 2020 (SCI-Expanded)
- XXIX. **Frequency effect on electrical and dielectric characteristics of HfO₂-interlayered Si-based Schottky barrier diode**
Gullu H. H., Yildiz D. E., Surucu O., Parlak M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.31, no.12, pp.9394-9407, 2020 (SCI-Expanded)
- XXX. **Temperature-dependent material characterization of CuZnSe₂ thin films**
Gullu H. H., Surucu O., Terlemezoglu M., Isik M., Ercelebi C., Gasanly N., Parlak M.
THIN SOLID FILMS, vol.701, 2020 (SCI-Expanded)
- XXXI. **Synthesis and temperature-tuned band gap characteristics of magnetron sputtered ZnTe thin films**
Isik M., Gullu H. H., PARLAK M., Gasanly N.
PHYSICA B-CONDENSED MATTER, vol.582, 2020 (SCI-Expanded)
- XXXII. **Temperature -dependent optical and electrical characterization of Cu-Ga-S thin films and their diode characteristics on n-Si**
Gullu H. H., Isik M., Gasanly N., PARLAK M.
OPTIK, vol.208, 2020 (SCI-Expanded)
- XXXIII. **Material and device properties of Si-based Cu_{0.5}Ag_{0.5}InSe₂ thin-film heterojunction diode**
Gullu H. H., Isik M., Delice S., Parlak M., Gasanly N.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.31, no.2, pp.1566-1573, 2020 (SCI-Expanded)
- XXXIV. **INVESTIGATION OF CONDUCTIVITY CHARACTERISTICS OF Zn-In-Se THIN FILMS**
Gullu H. H., Parlak M.
SURFACE REVIEW AND LETTERS, vol.27, no.1, 2020 (SCI-Expanded)
- XXXV. **Characterization of one-step deposited Cu₂ZnSnS₄ thin films derived from a single crystalline powder**
Peksu E., TERLEMEZOĞLU M., PARLAK M., Karaağaç H.
RENEWABLE ENERGY, vol.143, pp.1133-1142, 2019 (SCI-Expanded)
- XXXVI. **Temperature dependence of band gaps in sputtered SnSe thin films**
Delice S., Isik M., Gullu H., TERLEMEZOĞLU M., Bayrakli Surucu O., PARLAK M., Gasanly N.
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.131, pp.22-26, 2019 (SCI-Expanded)
- XXXVII. **Investigation of electrical characteristics of Ag/ZnO/Si sandwich structure**
Gullu H. H., Surucu O. B., TERLEMEZOĞLU M., Yildiz D. E., PARLAK M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.30, no.16, pp.15371-15378, 2019 (SCI-Expanded)
- XXXVIII. **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)
- XXXIX. **CZTSSe thin films fabricated by single step deposition for superstrate solar cell applications**
TERLEMEZOĞLU M., Surucu O. B., Dogru C., Gullu H. H., ÇİFTPINAR E. H., Ercelebi C., PARLAK M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.30, no.12, pp.11301-11306, 2019 (SCI-Expanded)
- XL. **Electrical Characterization of ZnInSe₂/Cu_{0.5}Ag_{0.5}InSe₂ Thin-Film Heterojunction**
Gullu H. H., PARLAK M.
JOURNAL OF ELECTRONIC MATERIALS, vol.48, no.5, pp.3096-3104, 2019 (SCI-Expanded)
- XLI. **Frequency effect on electrical and dielectric characteristics of In/Cu₂ZnSnTe₄/Si/Ag diode structure**

- Gullu H. H., Surucu O. B., TERLEMEZOĞLU M., Yildiz D. E., PARLAK M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.30, no.10, pp.9814-9821, 2019 (SCI-Expanded)
- XLII. **Analysis of temperature-dependent transmittance spectra of Zn_{0.5}In_{0.5}Se (ZIS) thin films**
Isik M., Gullu H. H., Delice S., Gasanly N., PARLAK M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.30, no.10, pp.9356-9362, 2019 (SCI-Expanded)
- XLIII. **Temperature dependence of electrical properties in In/Cu₂ZnSnTe₄/Si/Ag diodes**
Gullu H. H., YILDIZ D. E., Surucu O. B., TERLEMEZOĞLU M., PARLAK M.
BULLETIN OF MATERIALS SCIENCE, vol.42, no.2, 2019 (SCI-Expanded)
- XLIV. **Structural and temperature-dependent optical properties of thermally evaporated CdS thin films**
IŞIK M., Gullu H. H., Delice S., PARLAK M., Gasanly N.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.93, pp.148-152, 2019 (SCI-Expanded)
- XLV. **Effects of Si nanowire on the device properties of n-ZnSe/p-Si heterostructure**
COŞKUN E., Gullu H. H., Colakoglu T., Emir C., Bozdogan E., PARLAK M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.30, no.5, pp.4760-4765, 2019 (SCI-Expanded)
- XLVI. **PbS quantum dot enhanced p-CIGS/n-Si heterojunction diode**
Candan I., PARLAK M., Ercelebi C.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.30, no.3, pp.2127-2135, 2019 (SCI-Expanded)
- XLVII. **Construction of self-assembled vertical nanoflakes on CZTSSe thin films**
TERLEMEZOĞLU M., SURUCU O. B., COLAKOGLU T., ABAK M. K., Gullu H. H., Ercelebi C., PARLAK M.
MATERIALS RESEARCH EXPRESS, vol.6, no.2, 2019 (SCI-Expanded)
- XLVIII. **Temperature dependence of electrical properties in Cu_{0.5}Ag_{0.5}InSe₂/Si heterostructure**
Gullu H. H., PARLAK M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.29, no.13, pp.11258-11264, 2018 (SCI-Expanded)
- XLIX. **INVESTIGATION ON DEVICE CHARACTERISTICS OF n-CdS/p-Ag(Ga-In)Te-2 HETEROJUNCTION DIODE**
Bayrakli O., Gullu H. H., PARLAK M.
SURFACE REVIEW AND LETTERS, vol.25, no.5, 2018 (SCI-Expanded)
- L. **Investigation of carrier transport mechanisms in the Cu-Zn-Se based hetero-structure grown by sputtering technique**
Gullu H. H., TERLEMEZOĞLU M., Bayrakli O., Yildiz D. E., PARLAK M.
CANADIAN JOURNAL OF PHYSICS, vol.96, no.7, pp.816-825, 2018 (SCI-Expanded)
- LI. **Analysis of current conduction mechanism in CZTSSe/n-Si structure**
TERLEMEZOĞLU M., Bayrakli O., Gullu H. H., COLAKOGLU T., Yildiz D. E., PARLAK M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.29, no.7, pp.5264-5274, 2018 (SCI-Expanded)
- LII. **HRTEM Analysis of Crystallographic Defects in CdZnTe Single Crystal**
Yasar B., ERGUNT Y., KABUKCUOGLU M. P., PARLAK M., TURAN R., KALAY Y. E.
JOURNAL OF ELECTRONIC MATERIALS, vol.47, no.1, pp.778-784, 2018 (SCI-Expanded)
- LIII. **Study on the electrical properties of ZnSe/Si heterojunction diode**
Gullu H. H., Bayrakli O., Yildiz D. E., PARLAK M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.28, no.23, pp.17806-17815, 2017 (SCI-Expanded)
- LIV. **Optical and electrical characteristics of thermally evaporated Cu_{0.5}Ag_{0.5}InSe₂ thin films**
Gullu H. H., Bayrakli O., PARLAK M.
THIN SOLID FILMS, vol.639, pp.29-35, 2017 (SCI-Expanded)
- LV. **Electric and photoelectric properties of n-AgInSe₂/p-Si heterojunction diode fabricated by successive layer deposition**

- KALELİ M., ALDEMİR D. A., PARLAK M.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.123, no.9, 2017 (SCI-Expanded)
- LVI. **Investigation of precursor sequence and post-annealing effects on the properties of Cu₂SnZnSe₄ thin films deposited by the elemental thermal evaporation**
Bayraklı O., TERLEMEZOĞLU M., GULLU H. H., PARLAK M.
MATERIALS RESEARCH EXPRESS, vol.4, no.8, 2017 (SCI-Expanded)
- LVII. **Deposition of CZTSe thin films and illumination effects on the device properties of Ag/n-Si/p-CZTSe/In heterostructure**
Bayraklı O., TERLEMEZOĞLU M., GULLU H. H., PARLAK M.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.709, pp.337-343, 2017 (SCI-Expanded)
- LVIII. **Structural characterization of Zn-In-Se thin films**
Gullu H. H., PARLAK M.
MODERN PHYSICS LETTERS B, vol.31, no.5, 2017 (SCI-Expanded)
- LIX. **Investigations of thermal annealing role on the optical properties of Zn-In-Se thin films**
Gullu H. H., COŞKUN E., PARLAK M.
OPTİK, vol.144, pp.603-612, 2017 (SCI-Expanded)
- LX. **Structural characteristics of thermally evaporated Cu_{0.5}Ag_{0.5}InSe₂ thin films**
Gullu H. H., PARLAK M.
MATERIALS RESEARCH EXPRESS, vol.3, no.5, 2016 (SCI-Expanded)
- LXI. **Cu(In,Ga)(Se,Te)(₂) pentenary thin films formed by reaction of precursor layers**
Atasoy Y., Basol B. M., POLAT İ., TOMAKİN M., PARLAK M., BACAKSIZ E.
THIN SOLID FILMS, vol.592, pp.189-194, 2015 (SCI-Expanded)
- LXII. **Device behavior of an In/p-Ag(Ga,In)Te-2/n-Si/Ag heterojunction diode**
Coskun E., Gullu H. H., CANDAN İ., Bayraklı O., PARLAK M., Ercelebi C.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.34, pp.138-145, 2015 (SCI-Expanded)
- LXIII. **Study on the Structural and Electrical Properties of Sequentially Deposited Ag-Ga-In-Te Thin Films**
Coskun E., Gullu H. H., PARLAK M., Ercelebi C.
JOURNAL OF LOW TEMPERATURE PHYSICS, vol.178, pp.162-173, 2015 (SCI-Expanded)
- LXIV. **Investigation of structural and optical parameters of Cu-Ag-In-Se thin films deposited by thermal evaporation method**
Gullu H. H., CANDAN İ., COŞKUN E., PARLAK M.
OPTİK, vol.126, no.18, pp.1578-1583, 2015 (SCI-Expanded)
- LXV. **Device application of AgGa_{0.5}In_{0.5}Se₂ thin films deposited by thermal sequential stacked layer method**
COŞKUN E., Gullu H. H., PARLAK M.
MATERIALS RESEARCH EXPRESS, vol.1, no.4, 2014 (SCI-Expanded)
- LXVI. **Characterization of Co-evaporated Cu-Ag-In-Se Thin Films**
Gullu H. H., COŞKUN E., PARLAK M.
BRAZILIAN JOURNAL OF PHYSICS, vol.44, no.6, pp.719-725, 2014 (SCI-Expanded)
- LXVII. **SYNTHESIS AND APPLICATION OF RGD-BASED BIOSENSOR AND BIOIMAGING MATERIALS**
PARLAK M., ÖZÇUBUKÇU S.
JOURNAL OF PEPTIDE SCIENCE, vol.20, 2014 (SCI-Expanded)
- LXVIII. **An instrument for the high temperature measurement of the Seebeck coefficient and electrical resistivity**
GÜNEŞ M., PARLAK M., Ozenbas M.
MEASUREMENT SCIENCE AND TECHNOLOGY, vol.25, no.5, 2014 (SCI-Expanded)
- LXIX. **Production and characterization of layer by layer sputtered single-phase AgInSe₂ thin film by thermal selenization**
KALELİ M., ÇOLAKOĞLU T., PARLAK M.
APPLIED SURFACE SCIENCE, vol.286, pp.171-176, 2013 (SCI-Expanded)
- LXX. **Silicon nanowire-silver indium selenide heterojunction photodiodes**

KULAKCI M., ÇOLAKOĞLU T., OZDEMİR B., PARLAK M., ÜNALAN H. E., TURAN R.

NANOTECHNOLOGY, vol.24, no.37, 2013 (SCI-Expanded)

- LXXI. **Preparation and characterization of cost effective spray pyrolyzed absorber layer for thin film solar cells**
Sankir N. D., Aydin E., Unver H., Uluer E., PARLAK M.
SOLAR ENERGY, vol.95, pp.21-29, 2013 (SCI-Expanded)
- LXXII. **A baseball-bat-like CdTe/TiO₂ nanorods-based heterojunction core-shell solar cell**
Karaagac H., PARLAK M., Aygun L. E., Ghaffari M., Biyikli N., Okyay A. K.
SCRIPTA MATERIALIA, vol.69, no.4, pp.323-326, 2013 (SCI-Expanded)
- LXXIII. **Structural and optical properties of Zn-In-Te thin films deposited by thermal evaporation technique**
Gullu H. H., Bayrakli O., CANDAN İ., COŞKUN E., PARLAK M.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.566, pp.83-89, 2013 (SCI-Expanded)
- LXXIV. **Heterojunction solar cells with integrated Si and ZnO nanowires and a chalcopyrite thin film**
KARAAĞAÇ H., PARLAK M., YENGEL E., Islam M. S.
MATERIALS CHEMISTRY AND PHYSICS, vol.140, no.1, pp.382-390, 2013 (SCI-Expanded)
- LXXV. **Defect-induced room temperature ferromagnetism in B-doped ZnO**
Yilmaz S., Nisar J., Atasoy Y., McGlynn E., Ahuja R., PARLAK M., BACAŞIZ E.
CERAMICS INTERNATIONAL, vol.39, no.4, pp.4609-4617, 2013 (SCI-Expanded)
- LXXVI. **Surface morphology and depth profile study of Cd_{1-x}Zn_xTe alloy nanostructures**
Yilmaz E., Tugay E., Aktag A., YILDIZ İ., PARLAK M., TURAN R.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.545, pp.90-98, 2012 (SCI-Expanded)
- LXXVII. **Au/TiO₂ nanorod-based Schottky-type UV photodetectors**
Karaagac H., Aygun L. E., PARLAK M., Ghaffari M., Biyikli N., Okyay A. K.
PHYSICA STATUS SOLIDI-RAPID RESEARCH LETTERS, vol.6, no.11, pp.442-444, 2012 (SCI-Expanded)
- LXXVIII. **Spin pumping effects for Co/Ag films**
DEMİRTAŞ S., PARLAK M.
JOURNAL OF APPLIED PHYSICS, vol.112, no.5, 2012 (SCI-Expanded)
- LXXIX. **Thickness-dependent nonlinear absorption behaviors in polycrystalline ZnSe thin films**
Karatay A., Yaglioglu H. G., Elmali A., PARLAK M., KARAAĞAÇ H.
OPTICS COMMUNICATIONS, vol.285, no.6, pp.1471-1475, 2012 (SCI-Expanded)
- LXXX. **Structural, optical and magnetic properties of Mn diffusion-doped CdS thin films prepared by vacuum evaporation**
AKSU S., BACAŞIZ E., PARLAK M., YILMAZ Ş., POLAT İ., Altunbas M., Turksoy M., Topkaya R., ÖZDOĞAN K.
MATERIALS CHEMISTRY AND PHYSICS, vol.130, pp.340-345, 2011 (SCI-Expanded)
- LXXXI. **Studies on device properties of an n-AgIn₅Se₈/p-Si heterojunction diode**
KALELİ M., PARLAK M., Ercelebi C.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.26, no.10, 2011 (SCI-Expanded)
- LXXXII. **Structural, optical and magnetic properties of Cr doped ZnO microrods prepared by spray pyrolysis method**
YILMAZ Ş., PARLAK M., ÖZCAN Ş., Altunbas M., McGlynn E., BACAŞIZ E.
APPLIED SURFACE SCIENCE, vol.257, no.22, pp.9293-9298, 2011 (SCI-Expanded)
- LXXXIII. **Deposition of AgGaS₂ thin films by double source thermal evaporation technique**
KARAAĞAÇ H., PARLAK M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.22, no.9, pp.1426-1432, 2011 (SCI-Expanded)
- LXXXIV. **Deposition and characterization of layer-by-layer sputtered AgGaSe₂ thin films**
KARAAĞAÇ H., PARLAK M.
APPLIED SURFACE SCIENCE, vol.257, no.13, pp.5731-5738, 2011 (SCI-Expanded)
- LXXXV. **The investigation of structural, electrical, and optical properties of thermal evaporated AgGaS₂ thin films**
KARAAĞAÇ H., PARLAK M.

- THIN SOLID FILMS, vol.519, no.7, pp.2055-2061, 2011 (SCI-Expanded)
- LXXXVI. **Investigation of physical properties of quaternary AgGa_{0.5}In_{0.5}Te₂ thin films deposited by thermal evaporation**
KARAAĞAÇ H., PARLAK M.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.503, no.2, pp.468-473, 2010 (SCI-Expanded)
- LXXXVII. **Structural, optical and electrical properties of Al-doped ZnO microrods prepared by spray pyrolysis**
BACAŞIZ E., AKSU S., Yılmaz S., PARLAK M., Altunbas M.
THIN SOLID FILMS, vol.518, no.15, pp.4076-4080, 2010 (SCI-Expanded)
- LXXXVIII. **Characterization of AgGa_{0.5}In_{0.5}Se₂ thin films deposited by electron-beam technique**
KARAAĞAÇ H., KALELİ M., PARLAK M.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.42, no.16, 2009 (SCI-Expanded)
- LXXXIX. **Effects of annealing temperature on the structural and optical properties of ZnO hexagonal pyramids**
BACAŞIZ E., YILMAZ Ş., PARLAK M., Varilci A., Altunbas M.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.478, pp.367-370, 2009 (SCI-Expanded)
- XC. **Electrical properties and photoconductivity of polyaniline/sulfonated poly(arylene ether sulfone) composite films**
Sankir N. D., Sankir M., PARLAK M.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.95, no.2, pp.589-594, 2009 (SCI-Expanded)
- XCI. **Effects of annealing on structural, electrical and optical properties of AgGa(Se_{0.5}S_{0.5})₂ thin films deposited by using sintered stoichiometric powder**
KARAAĞAÇ H., PARLAK M.
CRYSTAL RESEARCH AND TECHNOLOGY, vol.44, no.4, pp.440-446, 2009 (SCI-Expanded)
- XCII. **Effects of annealing on structural and morphological properties of e-beam evaporated AgGaSe₂ thin films**
KARAAĞAÇ H., PARLAK M.
APPLIED SURFACE SCIENCE, vol.255, no.11, pp.5999-6006, 2009 (SCI-Expanded)
- XCIII. **Electrical and photoelectrical properties of Ag-In-Se thin films evaporated by e-beam technique**
ÇOLAKOĞLU T., PARLAK M.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.42, no.3, 2009 (SCI-Expanded)
- XCIV. **The effects of zinc nitrate, zinc acetate and zinc chloride precursors on investigation of structural and optical properties of ZnO thin films**
BACAŞIZ E., PARLAK M., TOMAKİN M., Özcelik A., Karakiz M., Altunbas M.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.466, pp.447-450, 2008 (SCI-Expanded)
- XCV. **Structural, optical and magnetic properties of Cd(1-x)Co_xS thin films prepared by spray pyrolysis**
BACAŞIZ E., TOMAKİN M., Altunbas M., PARLAK M., Colakoglu T.
PHYSICA B-CONDENSED MATTER, vol.403, pp.3740-3745, 2008 (SCI-Expanded)
- XCVI. **Structural, optical and magnetic properties of Zn_{1-x}Co_xO thin films prepared by spray pyrolysis**
BACAŞIZ E., AKSU S., Basol B. M., Altunbas M., PARLAK M., Yamnaz E.
THIN SOLID FILMS, vol.516, no.21, pp.7899-7902, 2008 (SCI-Expanded)
- XCVII. **Investigation of optical parameters of Ag-In-Se thin films deposited by e-beam technique**
ÇOLAKOĞLU T., PARLAK M., ÖZDER S.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.354, no.30, pp.3630-3636, 2008 (SCI-Expanded)
- XCVIII. **The temperature profile and bias dependent series resistance of Au/Bi₄Ti₃O₁₂/SiO₂/n-Si (MFIS) structures**
Altındal S., Parlaktuerk F., Tataroglu A., PARLAK M., Sarmasov S. N., Agasiev A. A.
VACUUM, vol.82, no.11, pp.1246-1250, 2008 (SCI-Expanded)
- XCIX. **Effect of boron implantation on the electrical and photoelectrical properties of e-beam deposited Ag-In-Se thin films**
ÇOLAKOĞLU T., PARLAK M., KULAKCI M., TURAN R.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.41, no.11, 2008 (SCI-Expanded)

- C. **Control of the thickness distribution of evaporated functional electroceramic NTC thermistor thin films**
Schmidt R., Parlak M., Brinkman A.
JOURNAL OF MATERIALS PROCESSING TECHNOLOGY, vol.199, pp.412-416, 2008 (SCI-Expanded)
- CI. **Electrical, photo-electrical, optical and structural properties of CdSe thin films deposited by thermal and e-beam techniques**
Hus S. M., PARLAK M.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.41, no.3, 2008 (SCI-Expanded)
- CII. **Structural characterization of polycrystalline Ag-In-Se thin films deposited by e-beam technique**
Colakoglu T., PARLAK M.
APPLIED SURFACE SCIENCE, vol.254, no.6, pp.1569-1577, 2008 (SCI-Expanded)
- CIII. **On the profile of frequency dependent series resistance and surface states in Au/Bi₄Ti₃O₁₂/SiO₂/n-Si(MFIS) structures**
Parlaktuerk F., Altindal S., Tataroglu A., PARLAK M., AGASIEV A.
MICROELECTRONIC ENGINEERING, vol.85, no.1, pp.81-88, 2008 (SCI-Expanded)
- CIV. **Investigation of photovoltaic properties of amorphous InSe thin film based Schottky devices**
Yilmaz K., PARLAK M., Ercelebi C.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.22, no.12, pp.1268-1271, 2007 (SCI-Expanded)
- CV. **Effects of CdCl₂ treatment on properties of CdTe thin films grown by evaporation at low substrate temperatures**
BACAKSIZ E., ALTUNBAŞ M., Yfınlıaz S., Tornakin M., Parlak M.
CRYSTAL RESEARCH AND TECHNOLOGY, vol.42, no.9, pp.890-894, 2007 (SCI-Expanded)
- CVI. **Current conduction mechanism in Al/p-Si Schottky barrier diodes with native insulator layer at low temperatures**
ALTINDAL Ş., Kanbur H., Yildiz D. E., Parlak M.
APPLIED SURFACE SCIENCE, vol.253, no.11, pp.5056-5061, 2007 (SCI-Expanded)
- CVII. **Structural and electrical properties of TlGa(SxSe_{1-x})₂ mixed crystals**
KARABULUT O., Parlak M., Mamedov G. M.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.429, pp.50-55, 2007 (SCI-Expanded)
- CVIII. **Anisotropic behaviors in polycrystalline Cd-doped GaSe thin films**
Colakoglu T., Parlak M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.17, no.12, pp.1017-1024, 2006 (SCI-Expanded)
- CIX. **Structural, electrical and optical properties of Ge implanted GaSe single crystals grown by Bridgman technique**
KARAAĞAÇ H., Parlak M., KARABULUT O., SERİNCAN U., Turan R., Akinoglu B. G.
CRYSTAL RESEARCH AND TECHNOLOGY, vol.41, no.12, pp.1159-1166, 2006 (SCI-Expanded)
- CX. **Influence of ion implantation on structural and photoconductive properties of Bridgman grown GaSe single crystals**
KARABULUT O., Parlak M., Turan R., SERİNCAN U., Akinoglu B. G.
CRYSTAL RESEARCH AND TECHNOLOGY, vol.41, no.3, pp.243-249, 2006 (SCI-Expanded)
- CXI. **Effect of Cd-doping level on the electrical, structural and photoconductivity properties of GaSe thin films**
Colakoglu T., Parlak M.
THIN SOLID FILMS, vol.492, pp.52-60, 2005 (SCI-Expanded)
- CXII. **Electronic properties of polyamide-PPy/metal junction and electrical conductivity of a typical sample at low temperatures**
SÜNEL N., SEDEF A. Y., Parlak M., Toppare L. K.
MATERIALS CHEMISTRY AND PHYSICS, vol.91, no.1, pp.227-232, 2005 (SCI-Expanded)
- CXIII. **Electrical and photoconductive properties of Ga_{0.75}Se_{0.25} mixed crystals**
KARABULUT O., Parlak M., YILMAZ K., Gasanlı N.

- CRYSTAL RESEARCH AND TECHNOLOGY, vol.40, no.3, pp.253-258, 2005 (SCI-Expanded)
- CXIV. **Space-charge-limited current analysis in amorphous InSe thin films**
YILMAZ K., Parlak M., Ercelebi C.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.15, no.4, pp.225-229, 2004 (SCI-Expanded)
- CXV. **Growth, electrical and structural characterization of beta-GaSe thin films**
Parlak M., QASRAWÍ A., Ercelebi C.
JOURNAL OF MATERIALS SCIENCE, vol.38, no.7, pp.1507-1511, 2003 (SCI-Expanded)
- CXVI. **Annealing effect on electrical and photoconductive properties of Si implanted GaSe single crystal**
KARABULUT O., Parlak M., YILMAZ K., Turan R., Akinoglu B. G.
CRYSTAL RESEARCH AND TECHNOLOGY, vol.38, no.12, pp.1071-1076, 2003 (SCI-Expanded)
- CXVII. **Electrical properties of nitrogen implanted GaSe single crystal**
KARABULUT O., Parlak M., Turan R., SERİNCAN U., TAŞARKUYU E., Akinoglu B. G.
CRYSTAL RESEARCH AND TECHNOLOGY, vol.38, no.9, pp.811-816, 2003 (SCI-Expanded)
- CXVIII. **Conduction mechanism in H-type polysiloxane-polypyrrole block copolymers**
BOZKURT A., Parlak M., Ercelebi C., Toppare L. K.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.85, no.1, pp.52-56, 2002 (SCI-Expanded)
- CXIX. **Characterization of p-In₂Se₃ thin films**
QASRAWÍ A., Parlak M., Ercelebi C., Gunal I.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.12, no.8, pp.473-476, 2001 (SCI-Expanded)
- CXX. **The effect of substrate and post annealing temperature on the electrical properties of polycrystalline InSe thin films**
Parlak M., Ercelebi C.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.10, no.4, pp.313-319, 1999 (SCI-Expanded)
- CXXI. **Effect of heat treatment on nickel manganite thin film thermistors deposited by electron beam evaporation**
PARLAK M., Hashemi T., Hogan M., Brinkman A.
Thin Solid Films, vol.345, no.2, pp.307-311, 1999 (SCI-Expanded)
- CXXII. **Electron beam evaporation of nickel manganite thin-film negative temperature coefficient thermistors**
Parlak M., HASHEMÍ T., Hogan M., Brinkman A.
JOURNAL OF MATERIALS SCIENCE LETTERS, vol.17, no.23, pp.1995-1997, 1998 (SCI-Expanded)
- CXXIII. **The effect of substrate and post-annealing temperature on the structural and optical properties of polycrystalline InSe thin films**
PARLAK M., Ercelebi Ç.
Thin Solid Films, vol.322, pp.334-339, 1998 (SCI-Expanded)
- CXXIV. **Structural and electrical characterization of Ag₃Ga₅Te₉ and Ag₃In₅Se₉ crystals**
Parlak M., Ercelebi C., Gunal I., Ozkan H., Gasanly N.
CRYSTAL RESEARCH AND TECHNOLOGY, vol.33, no.6, pp.923-928, 1998 (SCI-Expanded)
- CXXV. **Current transport mechanisms in low resistive CdS thin films**
Gunal I., Parlak M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.8, no.1, pp.9-13, 1997 (SCI-Expanded)
- CXXVI. **Crystal data, electrical resistivity and mobility in Cu₃In₅Se₉ and Cu₃In₅Te₉ single crystals**
Parlak M., Ercelebi C., Gunal I., ÖZKAN H., Gasanly N., Culfaz A.
CRYSTAL RESEARCH AND TECHNOLOGY, vol.32, no.3, pp.395-400, 1997 (SCI-Expanded)
- CXXVII. **Anisotropy of electrical resistivity and hole mobility in InTe single crystals**
Parlak M., Ercelebi C., Gunal I., ÖZKAN H., Gasanly N.
CRYSTAL RESEARCH AND TECHNOLOGY, vol.31, no.5, pp.673-678, 1996 (SCI-Expanded)
- CXXVIII. **Growth and characterization of polycrystalline InSe thin films**
PARLAK M., Ercelebi Ç., GÜNAL İ., SALAEVA Z., ALLAKHVERDIEV K.
Thin Solid Films, vol.258, pp.86-90, 1995 (SCI-Expanded)

Articles Published in Other Journals

- I. **Enhancement in Photovoltaic Characteristics of CdS/CdTe Heterojunction**
Surucu G., Gullu H. H., Bayrakli O., PARLAK M.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.20, no.4, pp.801-805, 2017 (ESCI)
- II. **Investigation of post-thermal annealing on material properties of Cu-In-Zn-Se thin films**
Gullu H. H., PARLAK M.
JOURNAL OF SEMICONDUCTORS, vol.38, no.12, 2017 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **CdZnTe BULK-CRYSTAL GROWTH AND SURFACE PROCESSING TECHNOLOGY AT METU-CGL**
Ergunt Y., Kabukcuoğlu M. P., Balbasi Ö. B., Yaşar B., Kalay Y. E., Turan R., Parlak M.
International Conference on Radiation Applications , Belgrade, Serbia And Montenegro, 16 - 19 September 2019, pp.167-171
- II. **Transfer of ordered and disordered Si nanowires onto alien substrates for the fabrication of third-generation solar cells**
Karaağaç H., Guller O., Peksu E., Humali E., TERLEMEZOĞLU M., PARLAK M., Islam S.
Micro- and Nanotechnology Sensors, Systems, and Applications XI Conference / SPIE Defense and Security Symposium, Maryland, United States Of America, 14 - 18 April 2019, vol.10982
- III. **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
- IV. **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
- V. **CdZnTe Bulk Crystal Growth and Temperature Modeling Studies at METU-CGL**
BALBAŞI Ö. B., ERGUNT Y., DOĞRU Ç., KABUKÇUOĞLU M., ÜNAL M., PARLAK M., TURAN R.
SPIE, San Diego, United States Of America, 17 September 2017 - 21 September 2018
- VI. **Growth, Wafering and Surface Preparation of CdZnTe Crystals for X-ray and Gamma Ray Applications**
ÜNAL M., Bender D., BALBAŞI Ö. B., Ünalın A. M., Kabukcuoğlu M. P., Ergunt H. Y., PARLAK M., TURAN R.
SIXTH EUROPEAN CONFERENCE ON CRYSTAL GROWTH, Varna, Bulgaria, 16 - 20 September 2018
- VII. **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, Turkey, 5 - 09 September 2018
- VIII. **Fabrication and Electrical Characterization of p-AgGa_{0.5}In_{0.5}Te₂ Thin Film Heterostructure with Cd-Free Front Layer**
BAYRAKLI Ö., GÜLLÜ H. H., TERLEMEZOĞLU M., YILDIZ D. E., PARLAK M.
Turkish Physical Society 34th International Physics Congress (TFD-34), Muğla, Turkey, 5 - 09 September 2018
- IX. **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
- X. **CdZnTe Bulk Crystal Growth and Temperature Modeling Studies at METU-CGL**
BALBAŞI Ö. B., Ergunt Y., DOĞRU Ç., Kabukcuoğlu M., ÜNAL M., PARLAK M., TURAN R.
Conference on Hard X-Ray, Gamma-Ray, and Neutron Detector Physics XX, California, United States Of America, 20 - 21 August 2018, vol.10762
- XI. **Effects of in-situ selenization on the physical properties of CZTSe thin films**
BAYRAKLI Ö., TERLEMEZOĞLU M., GÜLLÜ H. H., SÜRÜCÜ G., PARLAK M.

- European Materials Research Society-Spring Meeting 2018, France, 18 - 22 June 2018
- XII. **The Effect of Substrate Temperature on CdZnTe thin films**
DOĞRU Ç., TERLEMEZOĞLU M., BAYRAKLI Ö., GÜLLÜ H. H., PARLAK M.
European Materials Research Society-Spring Meeting 2018, France, 18 - 22 June 2018
- XIII. **Material Characterization of Amorphous Molybdenum Oxide Thin Films**
GÜLLÜ H. H., BAYRAKLI Ö., TERLEMEZOĞLU M., PARLAK M.
European Materials Research Society-Spring Meeting 2018, France, 18 - 22 June 2018
- XIV. **Post-annealing effects of CdSe Thin Films**
DEMİR M., TERLEMEZOĞLU M., BAYRAKLI Ö., GÜLLÜ H. H., PARLAK M.
European Materials Research Society-Spring Meeting 2018, France, 18 - 22 June 2018
- XV. **Self-assembled vertical nanoflakes on the surface of CZTSSe thin films for solar energy harvesting**
TERLEMEZOĞLU M., BAYRAKLI Ö., ÇOLAKOĞLU T., ABAK M. K., GÜLLÜ H. H., TURAN R., PARLAK M.
European Materials Research Society-Spring Meeting 2018, France, 18 - 22 June 2018
- XVI. **Fiziksel Buharlaştırma Tekniği ile Üretilen Cu₂ZnSn(S,Se)₄ İnce Filmlerinin Karakterizasyonu ve Aygıt Özelliklerinin İncelenmesi**
TERLEMEZOĞLU M., BAYRAKLI Ö., GÜLLÜ H. H., YILDIZ D. E., PARLAK M.
23. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 22 December 2017
- XVII. **n-ZnSe/p-Si Nanotel Heteroeklemlerin Foto-İletkenlik Davranışlarının İncelenmesi**
COŞKUN E., GÜLLÜ H. H., PARLAK M.
23. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 22 December 2017
- XVIII. **Determination of the Interface Properties of p-CZTSe/n-Si Nanowire Heterojunction Diode**
BAYRAKLI Ö., TERLEMEZOĞLU M., GÜLLÜ H. H., YILDIZ D. E., ÇOLAKOĞLU T., COŞKUN E., PARLAK M.
Materials Research Society (MRS) 2017 Fall Meeting, Boston, 26 November - 01 December 2017
- XIX. **Plasmonic Effect of Sputtered Ag Nano-Particles on the Photovoltaic Characteristics of Si-Based Heterojunction Diode**
KAYRA GÜLLÜ S., GÜLLÜ H. H., PARLAK M., BEK A.
Materials Research Society (MRS) 2017 Fall Meeting, Boston, United States Of America, 26 November - 01 December 2017
- XX. **Dielectric properties of electron beam evaporated ZnSe/Si heterostructures in the wide frequency range**
YILDIZ D. E., GÜLLÜ H. H., BAYRAKLI Ö., PARLAK M.
International Symposium on Multidisciplinary Studies, 10 - 11 November 2017
- XXI. **Investigation of carrier transport mechanisms in the CuZnSe₂-based heterostructure grown by sputtering technique**
GÜLLÜ H. H., TERLEMEZOĞLU M., BAYRAKLI Ö., YILDIZ D. E., PARLAK M.
Turkish Physical Society 33rd International Physics Congress, Muğla, Turkey, 6 September - 11 November 2017
- XXII. **Device Behavior Of CZTSe/Si Nanowire Heterojunction**
SÜRÜCÜ G., BAYRAKLI Ö., GÜLLÜ H. H., TERLEMEZOĞLU M., PARLAK M.
Photovoltaic Technical Conference, 26 - 28 October 2017
- XXIII. **Optimization of the Fabrication Process for Al-doped ZnO Thin Films on Soda Lime Glass Substrates by Thermal Heating**
BAYRAKLI Ö., GÜLLÜ H. H., TERLEMEZOĞLU M., PARLAK M.
2017 ICG ANNUAL MEETING and 32nd ŞİŞECAM GLASS SYMPOSIUM, İstanbul, Turkey, 22 - 25 October 2017
- XXIV. **The electrical properties of p-CZTSSe/n-Si heterostructure**
TERLEMEZOĞLU M., BAYRAKLI Ö., GÜLLÜ H. H., YILDIZ D. E., PARLAK M.
International Conference on Condensed Matter and Materials Science, Adana, Turkey, 11 - 15 October 2017
- XXV. **Deposition of CZTSe thin films and investigation of their devices properties**
BAYRAKLI Ö., TERLEMEZOĞLU M., GÜLLÜ H. H., YILDIZ D. E., SÜRÜCÜ G., PARLAK M.
International Conference on Condensed Matter and Materials Science, Adana, Turkey, 11 - 15 October 2017
- XXVI. **Influence of the Heat Treatment on the Material Properties of Self-Aligned Planar Cu-Ag-In-Sn Nanowires**

- GÜLLÜ H. H., BAYRAKLI Ö., YILDIZ D. E., PARLAK M.
International Conference on Condensed Matter and Materials Science, 11 - 15 October 2017
- XXVII. **Temperature dependent current-voltage characteristics of SnTe-based Schottky Barrier Diode**
GÜLLÜ H. H., YILDIZ D. E., TERLEMEZOĞLU M., PARLAK M.
International Conference on Condensed Matter and Materials Science, 11 - 15 October 2017
- XXVIII. **Synthesis and Characterization of MoO₃ Thin Films under the Effect of Sputtering Power**
GÜLLÜ H. H., BAYRAKLI Ö., TERLEMEZOĞLU M., PARLAK M.
European Materials Research Society (EMRS) Fall Meeting, 2017, Warszawa, Poland, 18 - 21 September 2017
- XXIX. **Characterization of CuIn_{0.7}Ga_{0.3}Se₂ Thin Films Deposited by Single Stage Thermal Evaporation Process**
KARAAĞAÇ H., PEKSU E., BEHZAD H., AKGOZ S., PARLAK M.
E-MRS, 22 - 26 May 2017
- XXX. **Preparation of CuIn_{0.7}Ga_{0.3}Se₂ Thin Films for the Fabrication of a Si-Nanowires Based Third Generation Solar Cell**
KARAAĞAÇ H., PEKSU E., BEHZAD H., AKGOZ S., PARLAK M.
E MRS, 22 - 26 May 2017
- XXXI. **Characterization of CuIn_{0.7}Ga_{0.3}Se₂ Thin Films Deposited by Single Stage Thermal Evaporation Process**
Karaağaç H., Peksu E., Behzad H., Akgoz S., Parlak M.
EMRS Spring Meeting / Symposium S on Analytical Techniques for Precise Characterization of Nanomaterials (ALTECH) / Symposium P on Silicon and Silicon Nanostructures - From Recent Fundamental Research to Novel Applications, Strasbourg, France, 22 - 26 May 2017, vol.14
- XXXII. **Theoretical and Experimental Investigation of Nano-mechanical Characteristics of SnTe Thin Films**
BAYRAKLI Ö., GÜLLÜ H. H., SÜRÜCÜ G., TERLEMEZOĞLU M., PARLAK M.
European Materials Research Society- Spring Meeting 2017, Strasbourg, France, 22 - 26 May 2017
- XXXIII. **The Effects of Substrate and Annealing Temperatures on Surface Morphology of Sputtered SnSe Thin Films**
GÜLLÜ H. H., TERLEMEZOĞLU M., BAYRAKLI Ö., PARLAK M.
European Materials Research Society-Spring Meeting 2017, Strasbourg, France, 22 - 26 May 2017
- XXXIV. **Physical properties and device application of CZTSSe thin films deposited by thermal evaporation method**
TERLEMEZOĞLU M., BAYRAKLI Ö., GÜLLÜ H. H., ÇOLAKOĞLU T., PARLAK M.
European Materials Research Society-Spring Meeting 2017, France, 22 - 26 May 2017
- XXXV. **The Effect of CdCl₂ Treatment on CdZnTe Thin Films**
DOĞRU Ç., BAYRAKLI Ö., TERLEMEZOĞLU M., PARLAK M.
European Materials Research Society-Spring Meeting 2017, France, 22 - 26 May 2017
- XXXVI. **Synthesis and Structural Characterization on the (Cu,Ag)GaTe₂ Thin Films Deposited on Si Nanowires**
COŞKUN E., GÜLLÜ H. H., BAYRAKLI Ö., TERLEMEZOĞLU M., PARLAK M.
European Materials Research Society-Spring Meeting 2017, 22 - 26 May 2017
- XXXVII. **Influence of Chemical Post-deposition Treatment on the Structural Properties of ZnSnTe₂ Thin Films**
GÜLLÜ H. H., BAYRAKLI Ö., EMİR C., TERLEMEZOĞLU M., PARLAK M.
European Materials Research Society-Spring Meeting 2017, France, 22 - 26 May 2017
- XXXVIII. **Deposition and characterization of ZTSeS thin films for photovoltaic applications**
BAYRAKLI Ö., TERLEMEZOĞLU M., GÜLLÜ H. H., SÜRÜCÜ G., PARLAK M.
Photovoltaic Technical Conference, 26 - 28 April 2017
- XXXIX. **Investigation of Defects in CZT Single Crystals**
YAŞAR B., KABUKÇUOĞLU M., ERGUNT Y., PARLAK M., TURAN R., KALAY Y. E.
TMS 2017, 26 February - 02 March 2017
- XL. **Zn Sn Se İnce Filmlerinin Üretimi ve Karakterizasyonu**
GÜLLÜ H. H., BAYRAKLI Ö., PARLAK M., Terlemezoğlu M.

22. Yoğun Madde Fiziği Ankara Toplantısı, 16 Aralık 2016, Turkey, 16 December 2016

- XLI. Investigation of the device properties of CZTSe Thin Films for solar Cells**
BAYRAKLI Ö., GÜLLÜ H. H., PARLAK M.
2nd International Congress on the world of technology and advanced materials, 28 September - 02 October 2016
- XLII. 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
- XLIII. Electrical Characterization of Cu_{0.5}Ag_{0.5}InSe₂ thin films**
GÜLLÜ H. H., BAYRAKLI Ö., PARLAK M.
2nd International congress on the world of technology and advanced materials, 28 September - 02 October 2016
- XLIV. Investigation of taerial properties of magnetron sputtered Cu Ag In Se thin films**
GÜLLÜ H. H., PARLAK M.
SATF 2016 Science and application of thin films Conference, İzmir Çeşme, Turkey, 19 - 23 September 2016
- XLV. Effects of Substrate Temperature on material characteristics of sputtered Aluminum doped ZnO thin films**
BAYRAKLI Ö., EMİR C., GÜLLÜ H. H., PARLAK M.
SATF 2016 Science and applications of thin films conference, Çeşme İzmir, Turkey, 19 - 23 September 2016
- XLVI. Design And device Application of Si based Cu Ag Ga Te thin film Heterostructure**
GÜLLÜ H. H., COŞKUN E., BAYRAKLI Ö., PARLAK M.
SARF 2016 Science and Application of Thin Films Conference, İzmir, çeşme, Turkey, 19 - 23 September 2016
- XLVII. Effect of Zn Doping on CdS thin film deposited by RF magnetron sputtering**
TERLEMEZ OĞLU M., GÜLLÜ H. H., BAYRAKLI Ö., PARLAK M.
EU PVSEC 2016 32nd European Photovoltaic Solar Energy Conference, Munich, Germany, 20 - 24 June 2016
- XLVIII. Fabrication and characterization of p CuInSe₂ n Si Heterojunction Diode**
GÜLLÜ H. H., BAYRAKLI Ö., COŞKUN E., PARLAK M.
EU PVSEC 2016, Munich, Germany, 20 - 24 June 2016
- XLIX. Improvement on the photovoltaic device performance of n CdS p Si heterojunction diode with the inclusion of Ag plasmonic layer**
KAYRA GÜLLÜ S., GÜLLÜ H. H., PARLAK M., BEK A.
12th international nanoscience and nanotechnology coference, Turkey, 3 - 05 June 2016
- L. Plasmonic Enhancement for the Performance ofp CdTe n Si Heterojunction Diode**
KAYRA GÜLLÜ S., GÜLLÜ H. H., PARLAK M., BEK A.
EMRS2016 spring, 2 - 06 May 2016
- LI. Device Characterization of In p Cu_{0.5}Ag_{0.5}InSe₂ n Si Ag Heterojunction Diode V P2 8**
GÜLLÜ H. H., PARLAK M.
EMRS Spring Meeting in Lille April 30-May 5 2016, Lille, France, 30 April - 05 May 2016
- LII. The effect of different annealing procedures on CZTSe thin film properties V P3 4**
BAYRAKLI Ö., GÜLLÜ H. H., PARLAK M.
EMRS Spring Meeting in Lille April 30-May 5 2016, Lille, France, 30 April - 05 May 2016
- LIII. Device Characterization of ZnInSe₂ Thin Films T P2 28**
GÜLLÜ H. H., PARLAK M.
EMRS Spring Meeting in Lille April 30-May 5 2016, Lille, France, 30 April - 05 May 2016
- LIV. Device Characterization of Zn Sn Se ZTSe Thin Films for Solar Cells T P2 69**
BAYRAKLI Ö., GÜLLÜ H. H., COŞKUN E., PARLAK M.
EMRS Spring Meeting in Lille April 30-May 5 2016, Lille, France, 30 April - 05 May 2016
- LV. Optical Behavior of Sequential ThermalEvaporated ZnInSe₂ Thin Films V P2 9**Hasan Huseyin Gullu
Emre Coskun OzgeBayrakli Mehmet Parlak
GÜLLÜ H. H., COŞKUN E., BAYRAKLI Ö., PARLAK M.
EMRS Spring Meeting in Lille April 30-May 5 2016, Lille, France, 30 April - 05 May 2016
- LVI. Plasmonic Enhancement for the Performance of p CdTe n Si Heterojunction Diode T P2 33**Seda
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- GÜLLÜ H. H., PARLAK M., GÜLLÜ KAYRA S., BEK A.
EMRS Spring Meeting in Lille April 30-May 5 2016, Lille, France, 30 April - 05 May 2016
- LVII. **Studies on Device Properties of n ZnSe p Si Heterojunction Diode T P1 63**
GÜLLÜ H. H., BAYRAKLI Ö., COŞKUN E., PARLAK M.
EMRS Spring Meeting in Lille April 31-May 5 2016, Lille, France, 30 April - 05 May 2016
- LVIII. **Effect of nanowire length on device performance of n In₂Se₃ p Si nanowire heterojunctions T P1 85**
Emre Coskun Tahir Colakoglu Hasan HuseyinGullu Ozge Bayraklı Mehmet Parlak
COŞKUN E., GÜLLÜ H. H., BAYRAKLI Ö., PARLAK M.
EMRS Spring Meeting in Lille April 31-May 5 2016, Lille, France, 30 April - 05 May 2016
- LIX. **HRTEM Analysis of Crystallographic Defects in Cd Zn Te SingleCrystals**
KALAY Y. E., Erkunt Y., Kabukçuoğlu M., PARLAK M., TURAN R., YAŞAR B.
TMS 2016, United States Of America, 14 - 18 February 2016
- LX. **Device Characterization of ZnInSe₂ Thin Films**
Gullu H. H., PARLAK M.
E-MRS Spring Meeting / Symposium T on Advanced Materials and Characterization Techniques for Solar Cells III,
Lille, France, 2 - 06 May 2016, vol.102, pp.110-120
- LXI. **Saçtırma Yöntemi ile Üretilen ITO İnce Filmlerinin Farklı Alttaş ve Tavlama Sıcaklıklarına göre İncelenmesi**
GÜLLÜ H. H., BAYRAKLI Ö., PARLAK M.
21. Yoğun Madde Fiziği-Ankara Toplantısı,, Ankara, Turkey, 25 December 2015
- LXII. **AgGa x In 1 x Te 2 İnce Filmlerin Üretilmesi ve Aygıt Özelliklerinin Belirlenmesi**
BAYRAKLI Ö., GÜLLÜ H. H., PARLAK M.
21. Yoğun Madde Fiziği-Ankara Toplantısı, Gazi Univer., 2015, Ankara, Turkey, 25 December 2015
- LXIII. **Saçtırma Yöntemiyle Üretilen Ag Zengin AgInSe₂ İnce Filmlerinin Özellikleri**
GÜLLÜ H. H., BAYRAKLI Ö., PARLAK M.
21. Yoğun Madde Fiziği-Ankara Toplantısı, Gazi Univer., 2015,, Ankara, Turkey, 25 December 2015
- LXIV. **Üretim Sonrası Isıl İşlem Sıcaklığının ZnSe İnce Film Özellikleri Üzerine Etkisi**
GÜLLÜ H. H., BAYRAKLI Ö., PARLAK M.
21. Yoğun Madde Fiziği-Ankara Toplantısı, Gazi Univer., 2015, Ankara, Turkey, 25 December 2015
- LXV. **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
- LXVI. **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
- LXVII. **Structural Characterization and Optical Properties of AgInSe₂Thin Films**
GÜLLÜ H. H., BAYRAKLI Ö., PARLAK M.
NANO-TR11 2015 Meeting, Ankara,, Ankara, Turkey, 23 - 25 June 2015
- LXVIII. **Device Measurements and Analysis of Ag Ga In Te Based Thin Film Heterojunction Diode Ö Bayraklı H H Güllü and M Parlak SolarTR 3 3rd Turkish Solar Electricity Conference and Exhibition 27 29 April 2015**
BAYRAKLI Ö., GÜLLÜ H. H., PARLAK M.
SolarTR-3: 3rd Turkish Solar Electricity Conference and Exhibition, Ankara, Turkey, 27 - 29 April 2015
- LXIX. **Characterization of Ag Ga In Te Thin Films for Solar Cell Applications O Bayraklı H H Güllü1 E Coşkun İ Candan M Parlak Ç Erçelebi**
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
- LXX. **Investigation of optical parameters of thermally evaporated ZnSe thin films**
Gullu H. H., COŞKUN E., PARLAK M.

3rd Turkish Solar Electricity Conference and Exhibition (SolarTR), Ankara, Turkey, 27 - 29 April 2015, vol.12, pp.1224-1228

LXXI. 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

LXXII. Material and Device Characterization of Cu_{0.5}Ag_{0.5}InSe₂ and ZnInSe₂ Thin Films for Photovoltaic Applications

GÜLLÜ H. H., COŞKUN E., BAYRAKLI Ö., PARLAK M.

MRS Spring Meeting in San Francisco, California, San-Francisco, United States Of America, 6 - 10 April 2015

LXXIII. Nano heterojunctions of cadmium sulfide and cadmium telluride for photoelectrochemical cell applications

Sankir N. D., Dogan B., PARLAK M., Kucukyavuz Z.

2010 MRS Spring Meeting, San Francisco, CA, United States Of America, 5 - 09 April 2010, vol.1258, pp.157-162

Supported Projects

PARLAK M., TUBITAK Project, KIZIL ÖTESİ GÖRÜNTÜLEYİCİ ARAYICI BAŞLIK GELİŞTİRİLMESİ PROJESİ, 2013 - Continues

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

Alternatif soğurucu katman olarak Sn_xSe_{1-x}Te 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

KALAY Y. E., Başkan M., PARLAK M., TURAN R., Project Supported by Higher Education Institutions, ALTTAŞ OLARAK KULLANILACAK Cd_{1-x}Zn_xTe (CZT) TEK KRİSTALLERİNİN MİKROYAPISAL KARAKTERİZASYONU, 2013 - 2013

PARLAK M., Project Supported by Higher Education Institutions, Zn(x)In(1-X)te₂ İnce Filmlerinin Üretilmesi Ve Aygıt Özelliklerinin Belirlenmesi, 2012 - 2012

PARLAK M., Project Supported by Higher Education Institutions, CuagInse₂ İnce Filmlerin Üretimi Ve Film Özelliklerinin İncelenmesi, 2011 - 2011

Metrics

Publication: 203

Citation (WoS): 2199

Citation (Scopus): 2275

H-Index (WoS): 24

H-Index (Scopus): 24

Invited Talks

24. Yoğun Madde Fiziği-Ankara Toplantısı, Bilkent Üniversitesi 21 Aralık 2018, Seminar, İhsan Doğramacı Bilkent Üniversitesi, Turkey, December 2018
CZTS Workshop İYTE Gülbahçe, Workshop, İzmir Yüksek Teknoloji Enstitüsü, Turkey, March 2018

Non Academic Experience

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