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Personal Information

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International Researcher IDs

ORCID: 0000-0002-9730-1998

Publons / Web Of Science ResearcherID: C-8959-2016

ScopusID: 6602174351

Yoksis Researcher ID: 215335

Education Information

Undergraduate, Akdeniz University, Faculty Of Letters, German Language and Literature, Turkey 2017 - 2022

Doctorate, University of New Hampshire, Graduate School, Physics, United States Of America 2001 - 2006

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Fizik, Turkey 1997 - 2000

Undergraduate, Middle East Technical University, Faculty Of Arts And Sciences, Fizik, Turkey 1992 - 1997

Foreign Languages

German, B2 Upper Intermediate

English, C2 Mastery

Dissertations

Doctorate, Characterization of single-sided cadmium zinc telluride strip detectors for high energy astrophysics applications, University of New Hampshire, Graduate School, Physics, 2006

Postgraduate, CdZnTe as High Energy Photon Detector, Middle East Technical University, Fen Bilimleri Enstitüsü, Fizik, 2000

Research Areas

Physics, Astronomy and Astrophysics, Sun and Solar Systems, Astronomy and Astrophysics: Instrumentation Techniques and Observations, Nuclear physics, Experimental Methods of Particle and Nuclear Physics, Natural Sciences

Academic Titles / Tasks

Assistant Professor, Akdeniz University, Faculty of Science, Department of Space Sciences and Technologies, 2018 - Continues

Assistant Professor, Akdeniz University, Faculty of Science, Department of Space Sciences and Technologies, 2014 - 2018

Medical Doctor, --Seçiniz--, Max-Planck-Institut Für Physik, -, 2011 - 2013

Medical Doctor, University of Michigan, Faculty Of Engineering , Department Of Nuclear Engineering And Radiological Sciences, 2007 - 2010

Medical Doctor, University of New Hampshire, Eos, Space Science Center, Space Science Center, 2006 - 2007

Research Assistant, University of New Hampshire, College Of Engineering And Physical Sciences, Physics Department, Physics, 2001 - 2006

Research Assistant, Middle East Technical University, Fen Edebiyat Fakültesi, Fizik Bölümü, Fizik, 1997 - 2001

Courses

Foton Dedektörleri, Postgraduate, 2019 - 2020

Temel Elektronik, Undergraduate, 2019 - 2020, 2018 - 2019, 2016 - 2017

Kamera ve Teleskoplar, Undergraduate, 2019 - 2020, 2016 - 2017

Foton Algılayıcıları, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

Yörünge Dinamiği, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

Uzay İtki Sistemleri, Undergraduate, 2019 - 2020, 2018 - 2019

Bitirme Çalışması II, Undergraduate, 2018 - 2019, 2017 - 2018, 2015 - 2016

Uzay Cisimlerinin Elektrodinamiği, Postgraduate, 2019 - 2020

Bitirme Çalışması I, Undergraduate, 2018 - 2019, 2017 - 2018

Uzay Teknolojilerinde Seçilmiş Konular, Undergraduate, 2017 - 2018, 2015 - 2016

Foton Dedektörleri, Postgraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015

Uçuş dinamiği, Postgraduate, 2017 - 2018

Uzay Cisimlerinin Elektrodinamiği, Postgraduate, 2016 - 2017

Plazma Astrofizigi, Doctorate, 2015 - 2016

Uzay İtki Sistemleri, Undergraduate, 2015 - 2016

Astrofizik I, Undergraduate, 2015 - 2016

Uzay Görevi Geometrisi, Undergraduate, 2014 - 2015

Bitirme Projesi I, Undergraduate, 2015 - 2016

Optik Bölge Disi Astronomi, Undergraduate, 2015 - 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Determination of the optimum number of sample points to classify land cover types and estimate the contribution of trees on ecosystem services using the I-Tree Canopy tool**
SELİM S., DÖNMEZ B., KILÇIK A.
Integrated Environmental Assessment and Management, vol.19, no.3, pp.726-734, 2023 (SCI-Expanded)
- II. **Temporal and Periodic Variation of the MCMESI for the Last Two Solar Cycles; Comparison with the Number of Different Class X-ray Solar Flares**
KILÇIK A., CHOWDHURY P., SARP V., YURCHYSHYN V., DÖNMEZ B., ROZELOT J., Ozguc A.
SOLAR PHYSICS, vol.295, no.11, 2020 (SCI-Expanded)
- III. **Characterisation of an n-type segmented BEGe detector**
ABT I., CALDWELL A., Donmez B., ETRILLARD C., GOOCH C., HAUERTMANN L., LAMPERT M. O., LIAO H., LIU X., Ma H., et al.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT, vol.925, pp.172-183, 2019 (SCI-Expanded)
- IV. **Critical frequencies of the ionospheric F-1 and F-2 layers during the last four solar cycles: Sunspot group type dependencies**
Yigit E., KILÇIK A., ELIAS A. G., Donmez B., Ozguc A., YURCHSHYN V., ROZELOT J.
JOURNAL OF ATMOSPHERIC AND SOLAR-TERRESTRIAL PHYSICS, vol.171, pp.157-163, 2018 (SCI-Expanded)
- V. **Signature of a possible relationship between the maximum CME speed index and the critical**

frequencies of the F1 and F2 ionospheric layers: Data analysis for a mid-latitude ionospheric station during the solar cycles 23 and 24

KILÇIK A., Ozguc A., Yigit E., Yurchyshyn V., DÖNMEZ B.

JOURNAL OF ATMOSPHERIC AND SOLAR-TERRESTRIAL PHYSICS, vol.171, pp.131-136, 2018 (SCI-Expanded)

VI. Temporal and Periodic Variations of Sunspot Counts in Flaring and Non-Flaring Active Regions

KILÇIK A., Yurchyshyn V., DÖNMEZ B., OBRIDKO V. N., Ozguc A., Rozelot J. P.

SOLAR PHYSICS, vol.293, no.4, 2018 (SCI-Expanded)

VII. The GALATEA test-facility for high purity germanium detectors

ABT I., CALDWELL A., Doenmez B., GARBINI L., IRLBECK S., MAJOROVITS B., PALERMO M., SCHULZ O., SEITZ H., STELZER F.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT, vol.782, pp.56-62, 2015 (SCI-Expanded)

VIII. Bulk and surface effects in segmented high purity germanium detectors

ABT I., CALDWELL A., Doenmez B., IRLBECK S., MAJOROVITS B., VOLYNETS O.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT, vol.718, pp.533-534, 2013 (SCI-Expanded)

IX. Collection of holes in thick TlBr detectors at low temperature

Doenmez B., HE Z., KIM H., CIRIGNANO L. J., SHAH K. S.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT, vol.689, pp.7-11, 2012 (SCI-Expanded)

X. The stability of TlBr detectors at low temperature

Doenmez B., HE Z., KIM H., CIRIGNANO L. J., SHAH K. S.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT, vol.623, no.3, pp.1024-1029, 2010 (SCI-Expanded)

XI. Single-sided CZT strip detectors

Macri J., HAMEL L., JULIEN M., MILLER R., Donmez B., MCCONNELL M., RYAN J., WIDHOLM M.

IEEE TRANSACTIONS ON NUCLEAR SCIENCE, vol.51, no.5, pp.2453-2460, 2004 (SCI-Expanded)

Articles Published in Other Journals

I. Total sunspot number calculation based on flare production potential of sunspot groups: reconstruction of SSN and its relation to some geomagnetic indices

KARSLIOGLU A. B., DÖNMEZ B., KILÇIK A.

TURKISH JOURNAL OF PHYSICS, vol.43, no.2, pp.187-195, 2019 (ESCI)

Books & Book Chapters

I. Comparison of Different Indices Used for Shoreline Extraction From Landsat 8 Operational Land Imager in the context of Coastal Planning

Selim S., Esendağlı Ç., Dönmez B.

in: Recent Studies in Planning and Design, Arzu ALTUNTAŞ, Şevket ALP, Editor, IKSAD International Publishing House, Ankara, pp.3-24, 2022

Refereed Congress / Symposium Publications in Proceedings

I. Distribution of CME Speeds and the Temporal Variation of the Number of CMEs during the Last Two Solar Cycles: Their Possible Connection with Ap and Dst Indices

KILÇIK A., Yurchyshyn V., DÖNMEZ B., Ozguc A., Rozelot J.

XIVth Hvar Astrophysical Colloquium, Hvar, Croatia, 26 - 30 September 2016, vol.40, pp.111-121

II. Effect of CMEs on Geomagnetic Activity

KILÇIK A., DÖNMEZ B.

XIVth Hvar Astrophysical Colloquium, HVAR, Croatia, 26 - 30 September 2016

III. Signature of a Possible Relationship between the Maximum CME Speed Index and the Critical Frequencies of the F1 and F2 Ionospheric Layers Data Analysis for a Midlatitude Ionosphere

KILÇIK A., Ozguc A., Yigit E., Yurchyshyn V., DÖNMEZ B.

Eighth workshop Solar Influence on the Magnetosphere, Ionosphere and Atmosphere, Sunny Beach, Bulgaria, 30 May - 03 June 2016

IV. The GALATEA Test-facility

ABT I., CALDWELL A., DÖNMEZ B., GARBINI L., IRLBECK S., MAJOROVITS B., PALERMO M., SCHULZ O., SEITZ H., STELZER F.

13th International Conference on Topics in Astroparticle and Underground Physics, TAUP 2013, California, United States Of America, 8 - 13 September 2013, vol.61, pp.750-758

V. Investigation of Polarization Effect with TlBr Detectors at Different Operating Temperatures

Doenmez B., THRALL C. L., HE Z., CIRIGNANO L. J., KIM H., SHAH K. S.

IEEE Nuclear Science Symposium (NSS)/Medical Imaging Conference (MIC)/17th International Workshop on Room-Temperature Semiconductor X-ray and Gamma-ray Detectors, Tennessee, United States Of America, 30 October - 06 November 2010, pp.3773-3775

VI. Characterization of Pixellated Thallium Bromide Radiation Detectors for Gamma-ray Spectroscopy

NOWICKI S., Doenmez B., ANDERSON S., HE Z., SHAH K., CIRIGNANO L., KIM H.

IEEE Nuclear Science Symposium/Medical Imaging Conference, Dresden, Germany, 19 - 25 October 2008, pp.5130-5131

VII. Investigation of Pixellated TlBr Detectors Using Digital Signal Processing Techniques

Doenmez B., ANDERSON S. E., HE Z., CIRIGNANO L. J., KIM H., SHAH K. S.

IEEE Nuclear Science Symposium/Medical Imaging Conference, Dresden, Germany, 19 - 25 October 2008, pp.5098-5099

VIII. Sub-pixel position resolution in pixelated semiconductor detectors

ANDERSON S. E., Donmez B., HE Z.

IEEE Nuclear Science Symposium/Medical Imaging Conference, Hawaii, United States Of America, 26 October - 03 November 2007, pp.1569-1576

IX. 3D position sensing on UltraPeRL CdZnTe detectors

Donmez B., KIM J., HE Z.

IEEE Nuclear Science Symposium/Medical Imaging Conference, Hawaii, United States Of America, 26 October - 03 November 2007, pp.420-423

X. Three-dimensional signal correction on UltraPeRL CZT detectors

KIM J., Donmez B., NELSON K., HE Z.

IEEE Nuclear Science Symposium/Medical Imaging Conference, Hawaii, United States Of America, 26 October - 03 November 2007, pp.1289-1290

XI. Further Studies of Single-Sided Charge-Sharing CZT Strip Detectors.

DÖNMEZ B., MACRI J. R., MCCONNELL M. L., RYAN J. M., WIDHOLM M., NARITA T., HAMEL L. A.

SPIE Conference, Hard X-Ray and Gamma-Ray Detector Physics VIII, California, United States Of America, 14 - 19 August 2006, pp.62-70

XII. Characterization of single-sided charge-sharing CZT strip detectors for gamma-ray astronomy

Donmez B., MACRI J. R., RYAN J. M., LEGERE J. S., MCCONNELL M. L., WIDHOLM M., NARITA T., HAMEL L.

Conference on Hard X-Ray and Gamma-Ray Detector Physics and Penetrating Radiation Systems VIII, California, United States Of America, 14 - 17 August 2006, vol.6319

XIII. Optimization of Single-Sided Charge-Sharing Strip Detectors

HAMEL L. A., BENOIT M., Doenmez B., MACRI J. R., MCCONNELL M. L., NARITA T., RYAN J. M.

15th International Workshop on Room-Temperature Semiconductor X- and Gamma-Ray Detectors/ 2006 IEEE Nuclear Science Symposium, California, United States Of America, 29 October - 04 November 2006, pp.3759-3761

XIV. Continued studies of single-sided charge-sharing CZT strip detectors

Donmez B., MACRI J. R., MCCONNELL M. L., RYAN J. M., WIDHOLM M., HAMEL L., NARITA T.

Nuclear Science Symposium/Medical Imaging Conference, Fajardo, Puerto Rico, 23 - 29 October 2005, pp.1408-1411

XV. Readout and performance of thick CZT strip detectors with orthogonal coplanar anodes

Macri J., Donmez B., Hamel L., Julien M., McClish M., McConnell M., Miller R., Ryan J., Widholm M.

IEEE Nuclear Science Symposium/Medical Imaging Conference (NSS/MIC), Norfolk, United Kingdom, 10 - 16 November 2002, pp.468-472

XVI. Development of CZT strip detector modules for 0.05 to 1 MeV gamma-ray imaging and spectroscopy

Ryan J., Donmez B., Macri J., McClish M., McConnell M., Miller R., Widholm M., Hamel L., Julien M.

Conference on X-Ray and Gamma-Ray Telescopes and Instruments for Astronomy, Hawaii, United States Of America, 24 - 28 August 2002, vol.4851, pp.885-894

Supported Projects

KILÇIK A., DÖNMEZ B., Project Supported by Higher Education Institutions, Yayın süreklilik desteği 2018, 2018 - 2019

Memberships / Tasks in Scientific Organizations

Atatürk Üniversitesi, Member, 2018 - Continues

TUBİTAK, Member, 2017 - Continues

Türk Astronomi Derneği, Member, 1999 - Continues

TUBİTAK, Member, 2016 - 2018

Scientific Refereeing

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, SCI Journal, December 2021

Journal of Geophysical Research: Space Physics, SCI Journal, February 2017

Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, SCI Journal, January 2017

Journal of Geophysical Research: Space Physics, SCI Journal, March 2016

IEEE Transactions on Nuclear Science, SCI Journal, July 2012

IEEE Transactions on Nuclear Science, SCI Journal, July 2009

Metrics

Publication: 29

Citation (WoS): 93

Citation (Scopus): 115

H-Index (WoS): 6

H-Index (Scopus): 7

Congress and Symposium Activities

Solar Influences on the Magnetosphere, Ionosphere and Atmosphere (Ninth Workshop), Attendee, Burgas, Bulgaria, 2017

Solar Influences on the Magnetosphere, Ionosphere and Atmosphere (Eight Workshop), Attendee, Burgas, Bulgaria, 2016

Solar Influences on the Magnetosphere, Ionosphere and Atmosphere (Seventh Workshop), Attendee, Burgas, Bulgaria, 2015

Ulusal Astronomi Kongresi, Attendee, Ankara, Turkey, 2015

Symposium of Sino-German GDT Cooperation, Attendee, Germany, 2013

DPG-Frühjahrstagung, Attendee, Dresden, Germany, 2013

The XXV. International Conference on Neutrino Physics and Astrophysics, Attendee, Kyôto, Japan, 2012

DPG-Frühjahrstagung, 2012, Attendee, Göttingen, Germany, 2012

12th International Conference on Topics in Astroparticle and Underground Physics (TAUP), Attendee, München, Germany, 2011

Symposium on Radiation Measurements and Applications (SORMA) XII, Attendee, Michigan, United States Of America, 2010

ANS RPSD Topical Meeting, Attendee, Nevada, United States Of America, 2010

IEEE NSS/MIC Conference, Attendee, Dresden, Germany, 2008

2nd Workshop on Astrophysics of Neutron Stars, Attendee, İstanbul, Turkey, 2008

IEEE NSS/MIC Conference, Attendee, Hawaii, United States Of America, 2007

SPIE Conference, Hard X-Ray and Gamma-Ray Detector Physics VIII, Attendee, California, United States Of America, 2006

APS April Meeting, Attendee, Texas, United States Of America, 2006

IEEE NSS/MIC Conference, Attendee, San Juan, Puerto Rico, 2005

SPIE Conference, Hard X-Ray and Gamma-Ray Detector Physics VII, Attendee, California, United States Of America, 2005

NATO/ASI Summer School, Electromagnetic Spectrum of Neutron Stars, Attendee, Muğla, Turkey, 2004