

Assoc. Prof. DİDEM KETENOĞLU

Personal Information

Fax Phone: [+90 312 212 7343](tel:+903122127343)

Web: <https://avesis.ankara.edu.tr/dketen>

Address: Faculty of Engineering, Physics Engineering, Building B, 134, Tandogan/Ankara

International Researcher IDs

ORCID: 0000-0002-2382-1413

Publons / Web Of Science ResearcherID: R-2142-2019

ScopusID: 54408485500

Yoksis Researcher ID: 108892

Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (Dr), Turkey 2004 - 2011

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (YI) (Tezli), Turkey 2002 - 2004

Undergraduate, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, Turkey 1998 - 2002

Dissertations

Doctorate, Duvar düzensizliğinin iletkenliğe etkisinin incelenmesi, Ankara University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (Dr), 2011

Postgraduate, RCo10-xNi₂Si₂ intermetalik alışıının yapısal ve magnetik özellikleri, Ankara University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (YI) (Tezli), 2004

Research Areas

Interdisciplinary Physics and Related Science and Technology Areas, Physical Chemistry, Materials Science, Structure of Liquids and Solids; Crystallography, Electronic structure of bulk material, Magnetic Properties and Materials

Academic Titles / Tasks

Associate Professor, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2023 - Continues

Courses

Physics II, Undergraduate, 2021 - 2022

PHY122, Undergraduate, 2021 - 2022

Mathematical Physics II , Undergraduate, 2021 - 2022

Physics II , Undergraduate, 2021 - 2022

FZM111 (Ziraat Fakültesi) Fizik I, Undergraduate, 2015 - 2016

FZM156 (Elektronik Müh.) Fizik II Laboratuvarı, Undergraduate, 2015 - 2016

FZM152 (Jeofizik Müh.) (A-B) Fizik II Laboratuvarı, Undergraduate, 2015 - 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Optimization of synchrotron radiation parameters using swarm intelligence and evolutionary algorithms**
Karaca A. S., BOSTANCI G. E., KETENOĞLU D., Harder M., CANBAY A. C., KETENOĞLU B., Eren E., AYDIN A., Yin Z., GÜZEL M. S., et al.
Journal of Synchrotron Radiation, vol.31, no.Pt 2, pp.420-429, 2024 (SCI-Expanded)
- II. **A dedicated application of evolutionary algorithms: synchrotron X-ray radiation optimization based on an in-vacuum undulator**
Ketenoglu B., Bostanci E., Ketenoglu D., Canbay A. C., Harder M., Karaca A. S., Eren E., Aydin A., Yin Z., Guzel M. S., et al.
CANADIAN JOURNAL OF PHYSICS, vol.102, no.3, pp.145-151, 2023 (SCI-Expanded)
- III. **A general overview and comparative interpretation on element-specific X-ray spectroscopy techniques: XPS, XAS, and XRS**
KETENOĞLU D.
X-RAY SPECTROMETRY, vol.51, no.5-6, pp.422-443, 2022 (SCI-Expanded)
- IV. **Construction of a spherically bent crystal analyzer through anodic bonding for a non-resonant inelastic X-ray scattering spectrometer**
KETENOĞLU D.
INSTRUMENTATION SCIENCE & TECHNOLOGY, vol.49, no.5, pp.545-559, 2021 (SCI-Expanded)
- V. **Distinctive applications of synchrotron radiation based X-ray Raman scattering spectroscopy: a minireview**
KETENOĞLU D.
INSTRUMENTATION SCIENCE & TECHNOLOGY, vol.49, no.4, pp.376-394, 2021 (SCI-Expanded)
- VI. **IRIXS: a resonant inelastic X-ray scattering instrument dedicated to X-rays in the intermediate energy range**
Gretarsson H., KETENOĞLU D., Harder M., Mayer S., Dill F., Spiwek M., Schulte-Schrepping H., Tischer M., Wille H., Keimer B., et al.
JOURNAL OF SYNCHROTRON RADIATION, vol.27, pp.538-544, 2020 (SCI-Expanded)
- VII. **Current status of Turkish accelerator and radiation laboratory in Ankara: the TARLA facility**
AKSOY A., Karsli O., AYDIN A., KAYA Ç., KETENOĞLU B., KETENOĞLU D., YAVAŞ Ö.
CANADIAN JOURNAL OF PHYSICS, vol.96, no.7, pp.837-842, 2018 (SCI-Expanded)
- VIII. **X-ray Raman spectroscopy of lithium-ion battery electrolyte solutions in a flow cell**
KETENOĞLU D., Spiekermann G., Harder M., Oz E., Koz C., Yagci M. C., YILMAZ E., Yin Z., Sahle C. J., Detlefs B., et al.
JOURNAL OF SYNCHROTRON RADIATION, vol.25, pp.537-542, 2018 (SCI-Expanded)
- IX. **Resonant inelastic X-ray scattering spectrometer with 25 meV resolution at the Cu K-edge**
KETENOĞLU D., Harder M., Klementiev K., Upton M., Taherkhani M., Spiwek M., Dill F., Wille H., Yavas H.
JOURNAL OF SYNCHROTRON RADIATION, vol.22, pp.961-967, 2015 (SCI-Expanded)
- X. **Influence of surface roughness on the electrical conductivity of semiconducting thin films**
KETENOĞLU D., Unal B.
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.392, no.14, pp.3008-3017, 2013 (SCI-Expanded)
- XI. **Green function solution of the Boltzmann transport equation for semiconducting thin film with rough boundaries**
KETENOĞLU D., Unal B.
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.391, no.15, pp.3828-3832, 2012 (SCI-Expanded)
- XII. **On the self-energy of 2D electron gas under random magnetic field**

Unal B., KETENOĞLU D.

PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.44, no.2, pp.483-486, 2011 (SCI-Expanded)

XIII. **Influence of the Ni substitution for Co on 4f-3d interactions in ErCo_{10-x}Ni_xSi₂ (0 ≤ x ≤ 10)**

Cakmak D., Elmali A., Elerman Y., Cakir O.

SOLID STATE COMMUNICATIONS, vol.131, no.3-4, pp.241-243, 2004 (SCI-Expanded)

Articles Published in Other Journals

I. **A hard X-ray self-amplified spontaneous emission free-electron laser optimization using evolutionary algorithms for dedicated user applications**

KETENOĞLU D., BOSTANCI G. E., AYDIN A., KETENOĞLU B.

TURKISH JOURNAL OF PHYSICS, vol.43, no.6, pp.551-555, 2019 (ESCI)

Supported Projects

Ketenoglu D., Bostanci G. E., Çağlar Eryurt B., Eskici B., Gök C., Açici K., Güzel M. S., TÜBİTAK Project, Tarihi Pigmentlerin Yapay Zekâ ile Tespiti, 2023 - 2025

Ketenoglu B., Bostanci G. E., Ketenoglu D., Güzel M. S., Aydın A., TÜBİTAK International Bilateral Joint Cooperation Program Project, Genetic Algorithms based Synchrotron radiation Optimization for an X-ray beamLINE (GASOLINE), 2022 - 2024

Ketenoglu B., Aksoy A., Yavaş Ö., Ketenoglu D., Kaya Ç., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Electron Accelerator and Radiation Facility (TARLA), 2016 - 2021

Scientific Refereeing

Crystals, Journal Indexed in SCI-E, July 2022

CRYSTALS, Journal Indexed in SCI-E, May 2022

CHEMICAL REVIEWS, Journal Indexed in SCI-E, April 2022

Tasks In Event Organizations

Ketenoglu D., International Hybrid Workshop on Start-to-End Beamline Optimization for Synchrotron Radiation and Free-Electron Laser Facilities through Artificial Intelligence Approaches , Workshop Organization, Germany, Kasım 2022

Çakir O., Ketenoglu D., KETENOĞLU B., Türk Fizik Derneği 14. Ulusal Parçacık Hızlandırıcıları ve Dedektörleri Yaz Okulu (UPHDYO-XIV), Science / Art Camp or Summer School Organization, Turkey, Eylül 2022

Adıgüzel A., Süsoy Doğan G., Yılmaz Alan H., Aydoğu H. S., Aksu Canbay C., Çetinkaya H., Çilli A., Güdekli E., Gürakar S., Güzelçimen F., et al, Turkish Physical Society (TPS) 38th International Physics Congress, Scientific Congress, Muğla, Turkey, Eylül 2022

Metrics

Publication: 16

Citation (WoS): 95

Citation (Scopus): 113

H-Index (WoS): 5

H-Index (Scopus): 6