

Prof. OLGUN ADEM KAYA

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International Researcher IDs

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Publons / Web Of Science ResearcherID: ABH-6274-2020

Yoksis Researcher ID: 120244

Education Information

Doctorate, Inonu University, Fen Bilimleri, Fizik, Turkey 1999 - 2004

Postgraduate, Inonu University, Fen Bilimleri, Fizik, Turkey 1996 - 1998

Undergraduate, Inonu University, Fen Edebiyat, Fizik, Turkey 1991 - 1995

Dissertations

Doctorate, İki ve Üç Boyutta Nonlinear Akustik Alan Yapılarının Nümerik İncelemesi, Inonu University, Fen Edebiyat Fak, Fizik, 2004

Postgraduate, Çeşitli Geometrilere Sahip Akustik Kaynakların Lineer Ortamda Oluşturdukları Basınç Alanlarının İncelenmesi, Inonu University, Fen Edebiyat Fak, Fizik, 1998

Research Areas

Physics, Interdisciplinary Physics and Related Science and Technology Areas, Materials Science, Natural Sciences

Academic Titles / Tasks

Professor, Inonu University, Eğitim Fakültesi, Böte , 2018 - Continues

Associate Professor, Inonu University, Eğitim Fakültesi, Bilgisayar Ve Öğretim Teknolojileri Eğitimi Bölümü, 2013 - 2018

Assistant Professor, Inonu University, Eğitim Fakültesi, Bilgisayar Ve Öğretim Teknolojileri Eğitimi Bölümü, 2006 - 2013

Research Assistant, Inonu University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 1997 - 2006

Academic and Administrative Experience

Inonu University, Eğitim Fakültesi, Bilgisayar Ve Öğretim Teknolojileri Eğitimi Bölümü, 2013 - 2017

Inonu University, Eğitim Fakültesi, Bilgisayar Ve Öğretim Teknolojileri Eğitimi Bölümü, 2006 - 2009

Courses

Bilgisayar II, Undergraduate, 2013-2014
Fizik II, Undergraduate, 2013-2014
Bilgisayar Ağları ve İletişim, Undergraduate, 2013-2014
Matlab Programlamaya Giriş, Undergraduate, 2013-2014
Akustik, Undergraduate, 2013-2014
Bilgisayar I, Undergraduate, 2013-2014
fizik I, Undergraduate, 2013-2014
Proje Gel. ve Yön. Sis., Undergraduate, 2013-2014
Topluma Hizmet Uygulamaları, Undergraduate, 2013-2014

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Acoustic sorting of airborne particles by a phononic crystal waveguide**
KÖRÖZLÜ N., Bicer A., Sayarcan D., KAYA O. A., ÇİÇEK A.
ULTRASONICS, vol.124, 2022 (SCI-Expanded)
- II. **Broad omnidirectional acoustic band gaps in a three-dimensional phononic crystal composed of face-centered cubic Helmholtz resonator network**
Bicer A., KÖRÖZLÜ N., KAYA O. A., ÇİÇEK A.
JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA, vol.150, no.3, pp.1591-1596, 2021 (SCI-Expanded)
- III. **One-dimensional surface phononic crystal ring resonator and its application in gas sensing**
KAYA O. A., KÖRÖZLÜ N., Trak D., ARSLAN Y., ÇİÇEK A.
APPLIED PHYSICS LETTERS, vol.115, no.4, 2019 (SCI-Expanded)
- IV. **Ultrasonic Gas Sensing by Two-Dimensional Surface Phononic Crystal Ring Resonators**
ÇİÇEK A., Trak D., ARSLAN Y., KÖRÖZLÜ N., KAYA O. A., ULUĞ B.
ACS SENSORS, vol.4, no.7, pp.1761-1765, 2019 (SCI-Expanded)
- V. **Gas sensing through evanescent coupling of spoof surface acoustic waves**
ÇİÇEK A., ARSLAN Y., Trak D., Okay F. C., KAYA O. A., KÖRÖZLÜ N., ULUĞ B.
SENSORS AND ACTUATORS B-CHEMICAL, vol.288, pp.259-265, 2019 (SCI-Expanded)
- VI. **Acoustic Tamm states of three-dimensional solid-fluid phononic crystals**
Korozlu N., KAYA O. A., Cicek A., ULUĞ B.
JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA, vol.143, no.2, pp.756-764, 2018 (SCI-Expanded)
- VII. **Acoustophoretic separation of airborne millimeter-size particles by a Fresnel lens**
Cicek A., Korozlu N., KAYA O. A., ULUĞ B.
SCIENTIFIC REPORTS, vol.7, 2017 (SCI-Expanded)
- VIII. **Phononic crystal surface mode coupling and its use in acoustic Doppler velocimetry**
Cicek A., Salman A., KAYA O. A., ULUĞ B.
ULTRASONICS, vol.65, pp.78-86, 2016 (SCI-Expanded)
- IX. **Evanescent coupling between surface and linear-defect guided modes in phononic crystals**
Cicek A., Salman A., KAYA O. A., ULUĞ B.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.49, no.3, 2016 (SCI-Expanded)
- X. **Sharp bends of phononic crystal surface modes**
Cicek A., Salman A., KAYA O. A., ULUĞ B.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.27, no.47, 2015 (SCI-Expanded)
- XI. **Surface modification of YIG by magnet array**
ATALAY S., KOLAT V. S., BAKIR H. G., İZGİ T., KAYA A., KAYA O. A., GENÇER H.
APPLIED SURFACE SCIENCE, vol.354, pp.337-341, 2015 (SCI-Expanded)
- XII. **Low-concentration liquid sensing by an acoustic Mach-Zehnder interferometer in a two-dimensional phononic crystal**
Salman A., KAYA O. A., Cicek A., ULUĞ B.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.48, no.25, 2015 (SCI-Expanded)

- XIII. **Guiding airborne sound through surface modes of a two-dimensional phononic crystal**
Cicek A., Gungor T., KAYA O. A., ULUĞ B.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.48, no.23, 2015 (SCI-Expanded)
- XIV. **YIG Film for Magnetic Field Sensor**
KAYA A., ATALAY S., GENÇER H., KAYA O. A., KOLAT V. S., İZGİ T.
ACTA PHYSICA POLONICA A, vol.127, no.4, pp.937-939, 2015 (SCI-Expanded)
- XV. **Acoustic Mach-Zehnder interferometer utilizing self-collimated beams in a two-dimensional phononic crystal**
KAYA O. A., Cicek A., SALMAN A., ULUĞ B.
SENSORS AND ACTUATORS B-CHEMICAL, vol.203, pp.197-203, 2014 (SCI-Expanded)
- XVI. **Determination of concentration of ethanol in water by a linear waveguide in a 2-dimensional phononic crystal slab**
SALMAN A., KAYA O. A., Cicek A.
SENSORS AND ACTUATORS A-PHYSICAL, vol.208, pp.50-55, 2014 (SCI-Expanded)
- XVII. **Acoustic waveguiding by pliable conduits with axial cross sections as linear waveguides in two-dimensional sonic crystals**
Cicek A., KAYA O. A., ULUĞ B.
JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA, vol.134, no.5, pp.3613-3618, 2013 (SCI-Expanded)
- XVIII. **Acoustic beam splitting in a sonic crystal around a directional band gap**
Cicek A., KAYA O. A., ULUĞ B.
CHINESE PHYSICS B, vol.22, no.11, 2013 (SCI-Expanded)
- XIX. **Self-collimated slow sound in sonic crystals**
KAYA O. A., Cicek A., ULUĞ B.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.45, no.36, 2012 (SCI-Expanded)
- XX. **Refraction-based photonic crystal diode**
Cicek A., YÜCEL M. B., KAYA O. A., ULUĞ B.
OPTICS LETTERS, vol.37, no.14, pp.2937-2939, 2012 (SCI-Expanded)
- XXI. **Refraction-type sonic crystal junction diode**
Cicek A., KAYA O. A., ULUĞ B.
APPLIED PHYSICS LETTERS, vol.100, no.11, 2012 (SCI-Expanded)
- XXII. **Impacts of uniaxial elongation on the bandstructures of two-dimensional sonic crystals and associated applications**
Cicek A., KAYA O. A., ULUĞ B.
APPLIED ACOUSTICS, vol.73, no.1, pp.28-36, 2012 (SCI-Expanded)
- XXIII. **Slow sound propagation in a sonic crystal linear waveguide**
Cicek A., KAYA O. A., Yilmaz M., ULUĞ B.
JOURNAL OF APPLIED PHYSICS, vol.111, no.1, 2012 (SCI-Expanded)
- XXIV. **Superprism effect in a deformed triangular sonic crystal**
KAYA O. A., Cicek A., Yilmaz M., ULUĞ B.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.44, no.32, 2011 (SCI-Expanded)
- XXV. **Wide-band all-angle acoustic self-collimation by rectangular sonic crystals with elliptical bases**
Cicek A., KAYA O. A., ULUĞ B.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.44, no.20, 2011 (SCI-Expanded)
- XXVI. **Focusing with two-dimensional angular-symmetric circular acoustic lenses**
KAYA O. A., Cicek A., ULUĞ B.
ACOUSTICAL PHYSICS, vol.57, no.3, pp.292-300, 2011 (SCI-Expanded)
- XXVII. **Finite amplitude pressure field of elliptical and rhomboid transducers in three dimensions**
KAYA O. A., KALECİ D., ŞAHİN A.
ACOUSTICAL PHYSICS, vol.57, no.2, pp.127-135, 2011 (SCI-Expanded)
- XXVIII. **Frequency-controlled wave focusing by a sonic crystal lens**
ALAGÖZ S., KAYA O. A., ALAGÖZ B. B.

APPLIED ACOUSTICS, vol.70, pp.1400-1405, 2009 (SCI-Expanded)

XXIX. **Pressure field of rectangular transducers at finite amplitude in three dimensions**

Kaya O. A., SAHİN A., KALECİ D.

ULTRASOUND IN MEDICINE AND BIOLOGY, vol.32, no.2, pp.271-280, 2006 (SCI-Expanded)

Articles Published in Other Journals

I. **Nonlinear Acoustic Pressure Field Structure in Two and Three Dimensions**

KAYA O. A., ŞAHİN A., KALECİ D.

Balkan Physics Letters, no.Special Issue, pp.186-190, 2008 (Peer-Reviewed Journal)

II. **Acoustic Field Calculation on Linux Cluster**

KALECİ D., KAYA O. A., ŞAHİN A.

Balkan Physics Letters, pp.215-219, 2008 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. **Surface Modification Of Yig By Magnet Array,**

BAKIR H. G., KOLAT V. S., İZGİ T., KAYA A. O., KAYA O. A., GENÇER H., ATALAY S.

European Conference On Surface Science, 31 August - 04 September 2014

II. **Polarization-Independent Self-Collimated Beam Splitting in Two-Dimensional Photonic Crystals**

YÜCEL M. B., KAYA O. A., CİCEK A., ULUĞ B.

12th International Conference on Numerical Simulation of Optoelectronic Devices (NUSOD), Shanghai, China, 28 - 31 August 2012, pp.41-42

Supported Projects

KAYA O. A., TUBITAK Project, Magnonik Kristaller 112T820, 2013 - 2015

Metrics

Publication: 33

Citation (WoS): 411

Citation (Scopus): 308

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H-Index (Scopus): 10