

Assoc. Prof. AYBEY MOĞULKOÇ

Personal Information

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International Researcher IDs

ScholarID: ZTH85wgAAAAJ

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Publons / Web Of Science ResearcherID: A-6382-2012

ScopusID: 35726987200

Yoksis Researcher ID: 108969

Education Information

Post Doctorate, Radboud University, Institute of Molecules and Materials, Theory of Condensed Matter, Netherlands
2015 - 2016

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 2008 - 2013

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (YI) (Tezli), Turkey 2006 - 2008

Undergraduate, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, Turkey 2001 - 2005

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Grafende elektron-fonon etkileşmesi, Ankara University, Fen Bilimleri Enstitüsü, Fizik (Dr), 2013

Postgraduate, Grafende kütlelessiz dirac fermiyonları gazı, Ankara University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (YI) (Tezli), 2008

Research Areas

Physics, Interdisciplinary Physics and Related Science and Technology Areas, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties

Academic Titles / Tasks

Associate Professor, Ankara University, Fen Fakültesi, Fizik Bölümü, 2021 - Continues

Assistant Professor, Ankara University, Fen Fakültesi, Fizik Bölümü, 2018 - 2021

Research Assistant, Ankara University, Fen Fakültesi, Fizik Bölümü, 2007 - 2018

Research Assistant, Radboud University Nijmegen, Institute For Molecules And Materials, Theory Of Condensed Matter, 2015 - 2016

Academic and Administrative Experience

Coordinator of Faculty Training Program, Ankara University, Fen Fakültesi, Fizik Bölümü, 2023 - Continues
Farabi Değişim Programı Kurum Koordinatörü, Ankara University, Fen Fakültesi, Fizik Bölümü, 2022 - Continues
Mevlana Değişim Programı Kurum Koordinatörü, Ankara University, Fen Fakültesi, Fizik Bölümü, 2022 - Continues
Uluslararası Öğrenci Koordinatörü, Ankara University, Fen Fakültesi, Fizik Bölümü, 2022 - Continues

Courses

İleri Katı Fizik, Doctorate, 2022 - 2023, 2021 - 2022
PHYSICS (Eczacılık), Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Nanofizik, Undergraduate, 2022 - 2023, 2021 - 2022
Özel Konular, Undergraduate, 2022 - 2023, 2021 - 2022
Matematik (İngilizce), Undergraduate, 2023 - 2024
Manyetizma ve Spintronik, Postgraduate, 2023 - 2024, 2022 - 2023
FİZİK (Eczacılık Fakültesi) B grubu, Undergraduate, 2022 - 2023, 2018 - 2019
FİZİK (Eczacılık Fakültesi) A grubu, Undergraduate, 2022 - 2023, 2021 - 2022, 2018 - 2019, 2017 - 2018
Teknolojinin Bilimsel İlkeleri, Associate Degree, 2021 - 2022
Katı Fizik, Postgraduate, 2022 - 2023, 2021 - 2022
FİZ 121 DIŞ HEKİMLİĞİ FAKÜLTESİ FİZİK DERSİ (BAHAR DÖNEMİ), Undergraduate, 2017 - 2018
FİZ 155 Mekanik Laboratuvarı I, Undergraduate, 2018 - 2019
ASO 203 Genel Fizik (B), Undergraduate, 2017 - 2018
PHY 112 Physics (Bahar Dönemi), Undergraduate, 2017 - 2018
ASO 203 Genel Fizik (A), Undergraduate, 2017 - 2018
FİZ 156 Mekanik Laboratuvarı II (Bahar Dönemi), Undergraduate, 2017 - 2018
FİZ 121 Dış Hekimliği Fakültesi Fizik Dersi (Güz ve Bahar Dönemi), Undergraduate, 2016 - 2017
FİZ 258 Optik Laboratuvarı (B Grubu) (Bahar Dönemi), Undergraduate, 2016 - 2017

Advising Theses

Moğulkoç A., Magnetik heterotabakaların fiziksel özelliklerinin incelenmesi, Postgraduate, B.ÇELİK(Student), 2021

Jury Memberships

Doctorate, Doctorate, İhsan Doğramacı Bilkent Üniversitesi, May, 2023

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **The antiferromagnetic phase of a wurtzite nickel sulfide monolayer**
Davoudi Tanha S., Modarresi M., Roknabadi M. R., Hu T., Mogulkoc A.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 2024 (SCI-Expanded)
- II. **Low hydrogen coverage Z2 topological phase transition in plumbene**
Dowlatabadi M., Modarresi M., Roknabadi M. R., MOĞULKOÇ A.
Solid State Communications, vol.371, 2023 (SCI-Expanded)
- III. **Robust ferromagnetism in two-dimensional GeC/CrN heterobilayers**
Ozguven Y., Guler H. E., BİLLUR A. A., MOĞULKOÇ A., Modarresi M.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.25, no.33, pp.22370-22379, 2023 (SCI-Expanded)
- IV. **DMRG analysis of magnetic order in the zigzag edges of hexagonal CrN nanoribbons**

Kupczyński M., Pawłowski J., MOĞULKOÇ A., Modarresi M.

Physical Review B, vol.107, no.20, 2023 (SCI-Expanded)

- V. **Efficient discovery of room temperature magnetic transition metal monolayers assisted by artificial neural network**
Mahmoodabadi A. N., Modarresi M., Roknabadi M. R., MOĞULKOÇ A.
Computational Materials Science, vol.224, 2023 (SCI-Expanded)
- VI. **New stable ultrawide bandgap As₂O₃ semiconductor materials**
Abdullahi Y. Z., Caglayan R., MOĞULKOÇ A., MOĞULKOÇ Y., Ersan F.
JPhys Materials, vol.6, no.2, 2023 (SCI-Expanded)
- VII. **Effect of magnon-magnon interaction on ferromagnetism in hexagonal manganese pnictide monolayers**
Memarzadeh S., Caglayan R., MOĞULKOÇ Y., Modarresi M., MOĞULKOÇ A.
Physical Review B, vol.107, no.14, 2023 (SCI-Expanded)
- VIII. **Magnetic phase transition in a machine trained spin model: A study of hexagonal CrN monolayer**
Golafrooz Shahri S., Evazzade I., Modarresi M., MOĞULKOÇ A.
Physica A: Statistical Mechanics and its Applications, vol.615, 2023 (SCI-Expanded)
- IX. **Room-temperature antiferromagnetic order in monolayer Fe₂C**
Fathizadeh N., Modarresi M., Roknabadi M., Pawłowski J., Moğulkoç A.
Physical Review B, vol.106, no.17, 2022 (SCI-Expanded)
- X. **Easy-axis rotation in ferromagnetic monolayer CrN induced by fluorine and chlorine functionalization**
Caglayan R., MOĞULKOÇ Y., MOĞULKOÇ A., Modarresi M., Rudenko A. N.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.24, no.41, pp.25426-25433, 2022 (SCI-Expanded)
- XI. **Characterization of two dimensional ferromagnetic binary and Janus manganese dichalcogenides**
Azmoonfar M., Roknabadi M. R., Modarresi M., Mogulkoc A.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.556, 2022 (SCI-Expanded)
- XII. **Design of nanoscale capacitors based on metallic borophene and insulating boron nitride layers**
MOĞULKOÇ Y., MOĞULKOÇ A., GÜLER H., Durgun E.
Physical Review Materials, vol.5, no.12, 2021 (SCI-Expanded)
- XIII. **Role of charge doping and strain in the stabilization of in-plane ferromagnetism in monolayer VSe₂ at room temperature**
Memarzadeh S., Roknabadi M. R., Modarresi M., MOĞULKOÇ A., Rudenko A. N.
2D MATERIALS, vol.8, no.3, 2021 (SCI-Expanded)
- XIV. **Prediction of monoclinic single-layer Janus Ga₂TeX (X = S and Se): Strong in-plane anisotropy**
Yagmurcukardes M., Mogulkoc Y., Akgenc B., MOĞULKOÇ A., Peeters F. M.
PHYSICAL REVIEW B, vol.104, no.4, 2021 (SCI-Expanded)
- XV. **Two-Dimensional Chromium Bismuthate: A Room-Temperature Ising Ferromagnet with Tunable Magneto-Optical Response**
MOĞULKOÇ A., Modarresi M., Rudenko A. N.
PHYSICAL REVIEW APPLIED, vol.15, no.6, 2021 (SCI-Expanded)
- XVI. **Two-dimensional chromium pnictides CrX (X =P, As, Sb): Half-metallic ferromagnets with high Curie temperature**
MOĞULKOÇ A., Modarresi M., Rudenko A. N.
PHYSICAL REVIEW B, vol.102, no.2, 2020 (SCI-Expanded)
- XVII. **Phase-dependent electronic and magnetic properties of Ti₂C monolayers**
Akgenc B., MOĞULKOÇ A., Durgun E.
JOURNAL OF APPLIED PHYSICS, vol.127, no.8, 2020 (SCI-Expanded)
- XVIII. **Characterization of two-dimensional Ga_{1-x}Al_xN ordered alloys with varying chemical composition**
Kanli M., Onen A., MOĞULKOÇ A., Durgun E.
COMPUTATIONAL MATERIALS SCIENCE, vol.167, pp.13-18, 2019 (SCI-Expanded)
- XIX. **Semiconducting defect-free polymorph of borophene: Peierls distortion in two dimensions**

Ipek S., Kilic M. E., MOĞULKOÇ A., Cahangirov S., Durgun E.
PHYSICAL REVIEW B, vol.98, no.24, 2018 (SCI-Expanded)

- XX. **Electronic structure and optical properties of novel monolayer gallium nitride and boron phosphide heterobilayers**
MOĞULKOÇ A., Mogulkoc Y., Modarresi M., Alkan B.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.20, no.44, pp.28124-28134, 2018 (SCI-Expanded)
- XXI. **The effect of strain and functionalization on the optical properties of borophene**
MOĞULKOÇ A., Mogulkoc Y., Kecik D., Durgun E.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.20, no.32, pp.21043-21050, 2018 (SCI-Expanded)
- XXII. **Electronic and optical properties of boron phosphide/blue phosphorus heterostructures**
MOĞULKOÇ Y., Modarresi M., MOĞULKOÇ A., Alkan B.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.20, no.17, pp.12053-12060, 2018 (SCI-Expanded)
- XXIII. **First principle and tight-binding study of strained SnC**
Mogulkoc Y., Modarresi M., MOĞULKOÇ A., ÇİFTÇİ Y., Alkan B.
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.111, pp.458-463, 2017 (SCI-Expanded)
- XXIV. **Effect of long-range structural corrugations on magnetotransport properties of phosphorene in tilted magnetic field**
MOĞULKOÇ A., Modarresi M., Rudenko A. N.
PHYSICAL REVIEW B, vol.96, no.8, 2017 (SCI-Expanded)
- XXV. **Electronic and optical properties of bilayer blue phosphorus**
Mogulkoc Y., Modarresi M., MOĞULKOÇ A., ÇİFTÇİ Y.
COMPUTATIONAL MATERIALS SCIENCE, pp.23-29, 2016 (SCI-Expanded)
- XXVI. **Polaronic effects in monolayer black phosphorus on polar substrates**
MOĞULKOÇ A., Mogulkoc Y., Rudenko A. N., Katsnelson M. I.
PHYSICAL REVIEW B, vol.93, no.8, 2016 (SCI-Expanded)
- XXVII. **Magnetotransport properties of corrugated stanene in the presence of electric modulation and tilted magnetic field**
MOĞULKOÇ A., Modarresi M., KANDEMİR B. S., Roknabadi M. R.
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, vol.253, no.2, pp.300-307, 2016 (SCI-Expanded)
- XXVIII. **Effects of electron-acoustic phonon interaction in the presence of spin-orbit couplings in graphene**
MOĞULKOÇ A.
PHYSICA B-CONDENSED MATTER, vol.473, pp.20-25, 2015 (SCI-Expanded)
- XXIX. **Chiral symmetry breaking by a magnetic field in graphene**
KANDEMİR B. S., MOĞULKOÇ A.
PHYSICS LETTERS A, vol.379, no.36, pp.2120-2124, 2015 (SCI-Expanded)
- XXX. **Possible polaron formation of zigzag graphene nano-ribbon in the presence of Rashba spin-orbit coupling**
Modarresi M., MOĞULKOÇ A., Roknabadi M. R., Shahtahmasebi N.
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.66, pp.303-308, 2015 (SCI-Expanded)
- XXXI. **Spin-dependent polaron formation in pristine graphene**
MOĞULKOÇ A., Modarresi M., KANDEMİR B. S.
EUROPEAN PHYSICAL JOURNAL B, vol.88, no.2, 2015 (SCI-Expanded)
- XXXII. **The role of electron-phonon interaction on the transport properties of graphene based nano-devices**
MOĞULKOÇ A., Modarresi M., KANDEMİR B. S., Roknabadi M. R., Shahtahmasebi N., Behdani M.
PHYSICA B-CONDENSED MATTER, vol.446, pp.85-91, 2014 (SCI-Expanded)
- XXXIII. **Study of the electron-photon interaction on the spin-dependent transport in nano-structures**
Modarresi M., MOĞULKOÇ A., Roknabadi M. R., Behdani M.
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.57, pp.76-82, 2014 (SCI-Expanded)
- XXXIV. **Zone-boundary phonon induced mini band gap formation in graphene**
KANDEMİR B. S., MOĞULKOÇ A.

SOLID STATE COMMUNICATIONS, vol.177, pp.80-83, 2014 (SCI-Expanded)

XXXV. **Variational approach for the effects of periodic modulations on the spectrum of massless Dirac fermion**

KANDEMİR B. S., MOĞULKOÇ A.

EUROPEAN PHYSICAL JOURNAL B, vol.74, no.3, pp.391-396, 2010 (SCI-Expanded)

XXXVI. **Boundaries of subcritical Coulomb impurity region in gapped graphene**

KANDEMİR B. S., MOĞULKOÇ A.

EUROPEAN PHYSICAL JOURNAL B, vol.74, no.4, pp.535-541, 2010 (SCI-Expanded)

Articles Published in Other Journals

I. **Effects of Quartic Wave-Vectors on Continuum Model of Phosphorene**

MOĞULKOÇ A.

Cumhuriyet Science Journal, vol.38, no.3, pp.435-443, 2017 (Peer-Reviewed Journal)

II. **Electron-Acoustic Phonon Interaction in Graphene**

MOĞULKOÇ A.

Cumhuriyet Science Journal, vol.35, no.1, pp.21-30, 2014 (Peer-Reviewed Journal)

III. **Massless Dirac Fermions in the Presence of Both Periodically Modulated Electric and Magnetic Fields**

MOĞULKOÇ A., KANDEMİR B. S.

Balkan Physics Letters, vol.16, no.161006, 2009 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. **İki Boyutlu GeC/CrN Heteroyapısında Güçlü Ferromagnetizma**

Güler H. E., ÖZGÜVEN Y., BİLLUR A. A., MOĞULKOÇ A., Modarresi M.

28. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 22 December 2023

II. **İki-boyutlu Ferromagnetlerde Anharmonik Etkiler**

MOĞULKOÇ A.

28. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 22 December 2023

III. **Üç Katmanlı İki Boyutlu Heteroyapılarda Kiral Magnetik Yapıların İncelenmesi**

Çağlayan R., Moğulkoç A., Moğulkoç Y.

28. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 22 December 2023, pp.23

IV. **Effect of magnon-magnon interaction on the ferromagnetism in hexagonal manganese pnictide monolayers**

Memarzadeh S., Modarresi M., Caglayan R., Moğulkoç Y., Moğulkoç A.

The European Conference PHYSICS OF MAGNETISM 2023, Poznan, Poland, 26 - 30 June 2023, pp.39

V. **THE EFFECT OF FUNCTIONALIZATION ON MAGNETIC ANISOTROPY OF 2D MAGNETIC MATERIALS**

Caglayan R., Moğulkoç Y., Moğulkoç A., Modarresi M., Rudenko A.

THE 8th INTERNATIONAL CONFERENCE on SUPERCONDUCTIVITY and MAGNETISM, Muğla, Turkey, 4 - 11 May 2023, pp.294

VI. **İki-boyutlu Ferromagnetik CrN Kristali**

Güler H. E., Çelik B., MOĞULKOÇ A.

26. Yoğun Madde Fiziği Toplantısı Ankara, Ankara, Turkey, 24 December 2021

VII. **İki Boyutlu BSb/CrP Heteroyapısının Elektronik Özellikleri**

Leloğlu D., MOĞULKOÇ A., MOĞULKOÇ Y.

26. Yoğun Madde Fiziği Toplantısı Ankara, Ankara, Turkey, 24 December 2021

VIII. **Two-Dimensional (2D) Magnetic Materials**

MOĞULKOÇ A.

Amirkabir University of Technology Summer school, Tahran, Iran, 13 - 17 September 2021

- IX. **ELECTRONIC PROPERTIES OF TWO-DIMENSIONAL BAS/CrP HETEROSTRUCTURE**
Leloğlu D., MOĞULKOÇ A., MOĞULKOÇ Y., ALKAN Ş. B.
1ST INTERNATIONAL CONFERENCE OF PHYSICS, Ankara, Turkey, 17 August 2021, pp.109-116
- X. **Boron phosphide based 2D heterostructures**
MOĞULKOÇ Y., MOĞULKOÇ A., MODARRESI M.
Graphene and 2DM Fundamental Research Insights 2020, 07 July 2020
- XI. **2D Van der Waals Lateral Spin Valve**
MOĞULKOÇ A., MOĞULKOÇ Y., Modarresi M., Rudenko A.
Graphene and 2DM Industrial Forum, Spain, 27 May 2020
- XII. **Characterization and Stability of Janus TiXY (X/Y= S, Se, and Te) Monolayers**
MOĞULKOÇ A., MOĞULKOÇ Y., Jahangirov S., DURGUN E.
Workshop on Computational Physics and Materials Science: Total Energy and Force Methods 2020, San Sebastián, Spain, 8 - 10 January 2020
- XIII. **Si/InS 2D Heteroyapılarının Optoelektronik Özellikleri**
Çağlayan R., MOĞULKOÇ Y., MOĞULKOÇ A., ALKAN Ş. B.
25. YOĞUN MADDE FİZİĞİ ANKARA TOPLANTISI, Turkey, 20 December 2019
- XIV. **İki-boyutlu van der Waals p-n eklemi**
MOĞULKOÇ Y., MODARRESI M., MOĞULKOÇ A., ALKAN Ş. B.
25. YOĞUN MADDE FİZİĞİ ANKARA TOPLANTISI, Turkey, 20 December 2019
- XV. **Phase Dependent Electronic and Magnetic Properties of Two-Dimensional ti_2c (Mxene) by First-Principle Calculations**
AKGENÇ B., MOĞULKOÇ A., DURGUN E.
15th Nanoscience and Nanotechnology Conference of Turkey, Antalya, Turkey, 3 - 06 November 2019
- XVI. **Borofenin Optik Özelliklerine Zorlamanın ve Fonksiyonelleştirmenin Etkisi**
MOĞULKOÇ A., MOĞULKOÇ Y., Keçik D., DURGUN E.
24. Yoğun Madde Fiziği-Ankara Toplantısı, Turkey, 21 December 2018
- XVII. **Bor Fosfid/Mavi Fosforen Heteroyapının Elektronik ve Optik Özellikleri**
MOĞULKOÇ Y., MODARRESI M., MOĞULKOÇ A., ALKAN Ş. B.
24. Yoğun Madde Fiziği-Ankara Toplantısı, Turkey, 21 December 2018
- XVIII. **Characterization of 2D $Ga_{1-x}Al_xN$ Alloys with Varying Chemical Composition**
Muammer K., Önen A., MOĞULKOÇ A., DURGUN E.
14th Nanoscience and Nanotechnology Conference, İzmir, Turkey, 22 - 25 September 2018
- XIX. **Değişken Kimyasal Kompozisyona Sahip İki Boyutlu $Ga_{1-x}Al_xN$ Alaşımlarının Karakterizasyonu**
Muammer K., Önen A., MOĞULKOÇ A., DURGUN E.
24. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 21 January 2018
- XX. **Angle Dependent Landau Levels and Magnetotransport in Corrugated Phosphorene**
MOĞULKOÇ A., Modarresi M., Rudenko A.
Turkish Physical Society 33rd International Physics Congress, 6 - 10 September 2017
- XXI. **ELECTRONIC AND OPTICAL PROPERTIES OF SINGLE-LAYER STRAINED SNC**
MOĞULKOÇ Y., MODARRESI M., MOĞULKOÇ A., ÇİFTÇİ Y., ALKAN Ş. B.
TURKISH PHYSICAL SOCIETY 33rd INTERNATIONAL PHYSICS CONGRESS, Muğla, Turkey, 6 - 10 September 2017
- XXII. **Tek tabaka fosforda polaronik etki**
MOĞULKOÇ A., MOĞULKOÇ Y., Rudenko A., Katsnelson M.
22. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 16 December 2016
- XXIII. **Tek Tabaka Siyah Fosforda Polaronik Etki**
MOĞULKOÇ A., MOĞULKOÇ Y., Rudenko A., Katsnelson M.
22. Yoğun Madde Fiziği Ankara Toplantısı, Turkey, 16 December 2016
- XXIV. **Electronic and Optical Properties of Stack Depended Blue Phosphorous**
MOĞULKOÇ Y., MODARRESI M., MOĞULKOÇ A., ÇİFTÇİ Y.
TURKISH PHYSICAL SOCIETY 32nd INTERNATIONAL PHYSICS CONGRESS, Muğla, Turkey, 6 - 09 September 2016

- XXV. **Effects of vacancies on the in plane stiffness of graphene**
MOĞULKOÇ A., Rudenko A., Katsnelson M.
Physics@FOM Veldhoven 2016, Veldhoven, Netherlands, 19 - 20 January 2016
- XXVI. **Magnetik Alan Altındaki Grafende Kritik altı Coulomb Safsızlığının Sınırları**
MOĞULKOÇ A., KANDEMİR B. S.
17. Yoğun Madde Fiziği Ankara Toplantısı, Turkey, 06 November 2010
- XXVII. **Massless Dirac Fermions in the Presence of Both Periodically Modulated Electric and Magnetic Fields**
KANDEMİR B. S., MOĞULKOÇ A.
Türk Fizik Derneği 25. Uluslararası Fizik Kongresi, 25 - 29 August 2008

Supported Projects

- Moğulkoç Y., Moğulkoç A., Rudenko A., Modarresi M., TUBITAK Project, Magnetism and Spin-Orbit Effects in Heavy Two-Dimensional Materials, 2023 - 2025
- Moğulkoç Y., Moğulkoç A., Horizon Europe Project, 2d Manyetik Bellekler: Ölçeklenebilir Büyüme Ve Hibrit Elektrik Çalışması (Proje no: 221N400), 2022 - 2025
- Moğulkoç A., Moğulkoç Y., Modarresi M., Rudenko A., TUBITAK Project, İki-Boyutlu Yapılarda Kuantum Magnetizması: İki-Boyutlu Ferromagnetlerin Magnetik Özelliklerinin Yoğunluk Fonksiyoneli Teorisi ile İncelenmesi, 2020 - 2022
- MOĞULKOÇ Y., MOĞULKOÇ A., Project Supported by Higher Education Institutions, Simülasyon ve Nümerik Hesaplamaların Yapılması İçin Yüksek Performanslı Bilgisayar Merkezinin Kurulması, 2017 - 2020
- Moğulkoç A., Kandemir B. S., AKAY D., TUBITAK Project, Grafende masa üstü parçacık fiziği ve gravitasyon, 2013 - 2016
- Moğulkoç A., Kandemir B. S., Project Supported by Higher Education Institutions, Karbon nano yapılar grafen dot grafen anti dot ve Karbon nanotüpler, 2012 - 2013

Scientific Refereeing

- ACS APPLIED NANO MATERIALS, SCI Journal, December 2022
- PHYSICAL REVIEW APPLIED, SCI Journal, December 2022
- PHYSICS LETTERS A, SCI Journal, November 2022
- PHYSICAL REVIEW B - CONDENSED MATTER AND MATERIALS PHYSICS, SCI Journal, October 2022
- ACS APPLIED NANO MATERIALS, SCI Journal, October 2022
- PHYSICAL REVIEW B - CONDENSED MATTER AND MATERIALS PHYSICS, SCI Journal, September 2022
- SOLID STATE COMMUNICATIONS, SCI Journal, August 2022
- PHYSICAL REVIEW MATERIALS, SCI Journal, July 2022
- APPLIED SURFACE SCIENCE, SCI Journal, July 2022
- JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, Journal Indexed in SCI-E, July 2022
- ACS APPLIED NANO MATERIALS, SCI Journal, July 2022
- PHYSICAL REVIEW B - CONDENSED MATTER AND MATERIALS PHYSICS, SCI Journal, June 2022
- JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, SCI Journal, May 2022
- JOURNAL OF PHYSICS CONDENSED MATTER, SCI Journal, April 2022
- PHYSICS LETTERS A, SCI Journal, April 2022
- APPLIED SURFACE SCIENCE, Journal Indexed in SCI-E, March 2022
- APPLIED SURFACE SCIENCE, Journal Indexed in SCI-E, February 2022
- PHYSICAL REVIEW LETTERS, SCI Journal, February 2022

Mobility Activity

Other, Scientific Research, Radboud(Katholieke) University Nijmegen, Netherlands, 2024 - 2024

Other, Scientific Research, Radboud(Katholieke) University Nijmegen, Netherlands, 2023 - 2023

Other, Scientific Research, Universitat Autònoma de Barcelona, Spain, 2022 - 2022

Metrics

Publication: 68

Citation (WoS): 606

Citation (Scopus): 620

H-Index (WoS): 15

H-Index (Scopus): 15

Invited Talks

Anharmonic Effects in Two-Dimensional Ferromagnets, Conference, İhsan Doğramacı Bilkent Üniversitesi, Turkey, December 2023

Scholarships

2219-International Postdoctoral Research Fellowship Program for Turkish Citizens, TÜBİTAK, 2015 - 2016