

Res. Asst. PhD BUĞRA YILDIZ

Personal Information

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Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği A.B.D., Turkey 2010 - 2016

Post Graduate, Hacettepe Üniversitesi, Fen Bilimleri, Fizik Mühendisliği, Turkey 2008 - 2010

Under Graduate, Hacettepe Üniversitesi, Mühendislik Fakültesi, Fizik Mühendisliği, Turkey 2003 - 2008

Foreign Languages

English, C2 Proficiency

Dissertations

Doctorate, CMS deneyinde tek lepton kanalında süpersimetri arayışları, Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2016

Post Graduate, Kuantum dolaşıklık ve eşevresizlik, Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2010

Research Areas

Physics, Quantum Mechanics, Fields Theory and Relativity, Basic Particles and Areas, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Natural Sciences

Academic Titles / Tasks

Research Assistant, Hacettepe Üniversitesi, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2008 - Continues

Courses

Physics 1, Under Graduate, 2019 - 2020

Physics 2, Under Graduate, 2019 - 2020

Physics, Under Graduate, 2018 - 2019, 2019 - 2020

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. The investigation of electronic nature and mechanical properties under spin effects for new half-

metallic ferromagnetic chalcogenides Ag_3CrX_4 ($X = S, Se, \text{ and } Te$)

Erkisi A., YILDIZ B., Wang X., Isik M., Ozcan Y., Surucu G.

Journal of Magnetism and Magnetic Materials, vol.519, 2021 (Journal Indexed in SCI Expanded)

II. The investigation of electronic, anisotropic elastic and lattice dynamical properties of MAB phase nanolaminated ternary borides: M_2AlB_2 ($M=Mn, Fe \text{ and } Co$) under spin effects

Surucu G., YILDIZ B., Erkisi A., Wang X., Surucu O.

Journal of Alloys and Compounds, vol.838, 2020 (Journal Indexed in SCI)

III. First-principles studies of $Tin+1Si_n$ ($n = 1, 2, 3$) MAX phase

Surucu G., Gullu H. H. , Candan A., YILDIZ B., Erkisi A.

Philosophical Magazine, 2020 (Journal Indexed in SCI)

IV. First principles study on new half-metallic ferromagnetic ternary zinc-based sulfide and telluride (Zn_3VS_4 and Zn_3VTe_4)

ERKİŞİ A., YILDIZ B., DEMİR K., SÜRÜCÜ G.

MATERIALS RESEARCH EXPRESS, vol.6, 2019 (Journal Indexed in SCI)

Articles Published in Other Journals

I. [The Theoretical Investigation on Electronic Behavior and Mechanical Properties of Ferromagnet Silver-Based Telluride: Ag_3FeTe_4]

ERKİŞİ A., YILDIZ B.

Karaelmas Science and Engineering Journal, vol.10, pp.202-212, 2020 (Other Refereed National Journals)

Refereed Congress / Symposium Publications in Proceedings

I. INVESTIGATION of MECHANICAL PROPERTIES and the ELECTRONIC and MAGNETIC BEHAVIOR of SILVER-BASED FERRITE CHALCOGENIDES Ag_3FeCh_4 ($Ch = S \text{ and } Se$)

YILDIZ B., SÜRÜCÜ G., ERKİŞİ A.

TURKISH PHYSICAL SOCIETY 36th INTERNATIONAL PHYSICS CONGRESS, 04 September 2020

II. THERMAL AND GROUND STATE ENTANGLEMENT OF ISING SPIN CHAIN WITH THE PRESENCE OF MAGNETIC FIELD

YILDIZ B., Gündüç Y.

ULUSLARARASI BİLİM, TEKNOLOJİ VE SOSYAL BİLİMLERDE GÜNCEL GELİŞMELER SEMPOZYUMU, 20 - 22 December 2019, vol.2

III. An ab initio Study of Cr and Mn Doped MAX Phase $TiMSiB$

YILDIZ B., ERKİŞİ A., SÜRÜCÜ G.

2019 3rd International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), Ankara, Turkey, Turkey, 11 - 13 October 2019

IV. The mechanical and electronic properties of spinel oxides VX_2O_4 ($X = Mn \text{ and } Fe$) by first principle calculations

YILDIZ B., ERKİŞİ A., SÜRÜCÜ G.

Turkish Physical Society 35.nd International Physics Congress, Bodrum, Turkey, Turkey, 4 - 08 September 2019

V. Investigation of Electronic, Magnetic and Mechanical Properties of Ternary MAB Phase Cr_2AlB_2 Compound: An Ab-Initio

YILDIZ B., SÜRÜCÜ G., ERKİŞİ A.

6.International Congress on Mathematics, Engineering and Natural Sciences, Adana, Turkey, 8 - 10 March 2019, pp.152

Supported Projects

Supported Projects

BOZ M., ÇILDIROĞLU H. Ö., ŞEN S., GÜMÜŞ M. K., YILDIZ B., AĞARAS M. N., ÖZŞİMŞEK Ö. M., Project Supported by Higher Education Institutions, CERN-LHC-CMS Projesi Çerçevesinde Hacettepe-CERN Bilimsel İşbirliğine İlk Adım, 2015 - 2018

YILDIZ B., ŞEN S., Project Supported by Other Official Institutions, LHC CMS deneyinde Faz II yenileme çalışmaları ve Standart Model ötesi yeni parçacıkların aranması, 2014 - 2017