

# Prof. YASEMİN ÇİFTÇİ

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## International Researcher IDs

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Yoksis Researcher ID: 15298

## Education Information

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- I. Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 1996 - 2000
- II. Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey 1993 - 1996
- III. Undergraduate, Gazi University, Fen-Edebiyat Fakültesi, Fizik Pr., Turkey 1989 - 1993

## Foreign Languages

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- I. English, B2 Upper Intermediate

## Research Areas

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Physics, Natural Sciences, Engineering and Technology

## Academic Titles / Tasks

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- I. Professor, Gazi University, Fen Fakültesi, Fizik, 2014 - Continues
- II. Assistant Professor, Gazi University, Fen Fakültesi, Fizik, 2003 - 2008
- III. Research Assistant, Gazi University, Fen Fakültesi, Fizik, 1994 - 2003

## Supervised Theses

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- I. ÇİFTÇİ Y., The Investigation Of Hydrogen Storage On Some Light Elements Decorated Two Dimensional Carbon Allotropes Using Ab-Initio Methods, Doctorate, İALP(Student), 2019
- II. ÇİFTÇİ Y., Lu<sub>X</sub>O<sub>3</sub> (X=Al, Ga, In) perovskit bileşiklerinin temel fiziksel özelliklerinin ab initio yöntemlerle incelenmesi, Postgraduate, G.SÜRÜCÜ(Student), 2018
- III. ÇİFTÇİ Y., Bazı AIIBIVC<sub>2</sub>V tipinde yarıiletken kalkopiritlerin temel fiziksel özelliklerinin ab-initio metot ile incelenmesi, Doctorate, B.KOÇAK(Student), 2016
- IV. ÇİFTÇİ Y., Bazı ikili ve/veya üçlü alaşımaların temel fiziksel özelliklerinin yoğunluk fonksiyoneli teorisi ile incelenmesi, Doctorate, Y.MOĞULKOÇ(Student), 2013
- V. ÇİFTÇİ Y., THE INVESTIGATION SOME THE STRUCTURAL, ELECTRONIC AND ELASTIC PROPERTIES OF Th<sub>X</sub> (X =N, As, P, Sb) BY AB INITIO METHOD, Postgraduate, S.ARSLAN(Student), 2008
- VI. ÇİFTÇİ Y., STRUCTURAL PHASE TRANSITIONS AND ELASTIC STABILITY WITH EMBEDDED ATOM METHOD, Postgraduate, R.YİĞİTER(Student), 2007

- VII. ÇİFTÇİ Y., Embedded-atom modeli ile yapısal faz dönüşümleri ve elastik kararlılık, Postgraduate, R.YİĞİTER(Student), 2007

## Jury Memberships

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- I. Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, University of Engineering and Technology, September, 2022

## Published journal articles indexed by SCI, SSCI, and AHCI

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- I. **Electronic, thermodynamic, and optical characterization of schiff base compound (C<sub>11</sub>H<sub>7</sub>IN2O2S)**  
Evecen M., ÇİFTÇİ Y.  
Physica Scripta, vol.100, no.3, 2025 (SCI-Expanded)
- II. **Understanding the pressure effect on the physical properties of half-Heusler semiconductor LiCaX (X = As, Sb, N) compounds from Ab-initio calculations**  
ÇİFTÇİ Y., Kocak B., Ateser E.  
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.186, 2025 (SCI-Expanded)
- III. **Predicting of structural, elastic, vibration, and thermodynamic properties of XThSn (X = Pt and Ni) thermoelectric materials**  
ÇİFTÇİ Y., Bioud N., KARS DURUKAN İ.  
Physica Scripta, vol.100, no.1, 2025 (SCI-Expanded)
- IV. **Investigation of the structural, mechanical, anisotropic, thermal conductivity, electronic, and phonon properties of RhTiZ(Z: As, sb) half heusler compounds under high pressure: A DFT study**  
KARS DURUKAN İ., ÇİFTÇİ Y.  
Physica B: Condensed Matter, vol.694, 2024 (SCI-Expanded)
- V. **Pressure effects on the structural, electronic, elastic, optical, and vibrational properties of YMg intermetallic compounds: a first-principles study**  
ÇİFTÇİ Y., Çatıkkaş B.  
Physica Scripta, vol.99, no.6, 2024 (SCI-Expanded)
- VI. **Computational analysis of the physical properties of AlNi intermetallic compound: pressure effect**  
KARS DURUKAN İ., Oztekin Ciftci Y.  
Indian Journal of Physics, vol.98, no.3, pp.889-901, 2024 (SCI-Expanded)
- VII. **Emergent properties resulting from type-II band alignment in a new lateral ( $\alpha$ -PbO/ $\alpha$ -SnO) heterostructure**  
Bakhtatou A., Hamidani A., Zanat K., ÇİFTÇİ Y., Durukan İ., Ersan F.  
Journal of Physics and Chemistry of Solids, vol.183, 2023 (SCI-Expanded)
- VIII. **Computational study of effects of doping Ni and Pd on CoAl for hydrogen storage capacity, elastic and electronic properties**  
ÇİFTÇİ Y., Corbacı G.  
Materials Today Communications, vol.37, 2023 (SCI-Expanded)
- IX. **Investigation of Tungsten-Based Seleno-Chevrel Compounds with Different Compositions for Efficient Water Splitting**  
Dag T. S., Sürütçü G., Gencer A., Surucu O., Ozel F., Ciftci Y.  
Advanced Theory and Simulations, vol.6, no.11, 2023 (SCI-Expanded)
- X. **Thermodynamics evaluation of half-metallic ferromagnetism in N-doped XTiO<sub>3</sub> (X = Ca, Sr, and Ba) systems: DFT calculations**  
Elahi I., ÇİFTÇİ Y., Akbar W.  
Materials Today Communications, vol.34, 2023 (SCI-Expanded)

- XI. **The mechanical, dynamical, thermodynamical properties and elastic anisotropies of cubic YbAu compound under pressure**  
 KARS DURUKAN İ., EVECEN M., ÇİFTÇİ Y.  
 MATERIALS TODAY COMMUNICATIONS, vol.33, 2022 (SCI-Expanded)
- XII. **A first-principles prediction on the structural, electronic, elastic, phonon, and transport properties of BaSiN<sub>2</sub>**  
 ÇİFTÇİ Y., ALP İ.  
 INDIAN JOURNAL OF PHYSICS, vol.96, no.14, pp.4131-4141, 2022 (SCI-Expanded)
- XIII. **Pressure effects on structural, electronic and anisotropic elastic properties of Si doped RuGe compound with different concentrations by first-principles calculations**  
 ÇİFTÇİ Y., COBAN C., EVECEN M., Durukan I. K.  
 MATERIALS CHEMISTRY AND PHYSICS, vol.291, 2022 (SCI-Expanded)
- XIV. **Systematic study of optoelectronic and thermoelectric properties of new lead-free halide double perovskites A(2)KGa(6)(A = Cs, Rb) for solar cell applications via ab-initio calculations**  
 Mukhtar M. W., Ramzan M., Rashid M., Hussain A., Naz G., ÇİFTÇİ Y., Dahshan A., Znaidia S.  
 MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, vol.285, 2022 (SCI-Expanded)
- XV. **Equiatomic Quaternary CoXCrAl (X = V, Nb, and Ta) Heusler Compounds: Insights from DFT Calculations**  
 Dag T. S., Gencer A., Ciftci Y., Sürücü G.  
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.560, pp.169620-169631, 2022 (SCI-Expanded)
- XVI. **First-principles study on B2 based XAl(X = Rh, Ru)compounds**  
 KARS DURUKAN İ., ÇİFTÇİ Y.  
 PHYSICA SCRIPTA, vol.96, no.12, 2021 (SCI-Expanded)
- XVII. **First-principles calculations of vibrational and optical properties of half-Heusler NaScSi**  
 Kars Durukan İ., Oztekin Ciftci Y.  
 INDIAN JOURNAL OF PHYSICS, vol.95, no.11, pp.2303-2312, 2021 (SCI-Expanded)
- XVIII. **Ab-initio study on physical properties of intermetallic LiPb compound**  
 Durukan İ., ÇİFTÇİ Y.  
 Journal of Computational Science, vol.54, 2021 (SCI-Expanded)
- XIX. **Band Alignment in Monolayer Boron Phosphide with Janus MoSSe Heterobilayers under Strain and Electric Field**  
 Mogulkoc Y., Caglayan R., Çiftci Y.  
 PHYSICAL REVIEW APPLIED, vol.16, no.2, 2021 (SCI-Expanded)
- XX. **Mechanical and dynamic properties of stable two-dimensional boron-substituted ThMoB4-type graphene: First-Principles Study**  
 Aydin S., Çiftci Y.  
 MATERIALS TODAY COMMUNICATIONS, vol.27, 2021 (SCI-Expanded)
- XXI. **Ligand-free fabrication of Au/TiO<sub>2</sub> nanostructures for plasmonic hot-electron-driven photocatalysis: Photoelectrochemical water splitting and organic-dye degradation**  
 Celebi N., Aydin M. Y., Soysal F., Çiftci Y., Salimi K.  
 JOURNAL OF ALLOYS AND COMPOUNDS, vol.860, 2021 (SCI-Expanded)
- XXII. **Pressure effects on electronic, elastic, and vibration properties of metallic antiperovskite PbNCa<sub>3</sub> by ab initio calculations**  
 Ciftci Y., Evecen M., Alp İ.  
 Journal of Molecular Modeling, vol.27, no.1, 2021 (SCI-Expanded)
- XXIII. **Theoretical investigation of the electronic structure, elastic, dynamic properties of intermetallic compound NiBe under pressure**  
 Evecen M., ÇİFTÇİ Y.  
 EUROPEAN PHYSICAL JOURNAL B, vol.94, no.1, 2021 (SCI-Expanded)
- XXIV. **The pressure effect on optoelectronic and mechanical properties of chalcopyrite BeSiN<sub>2</sub>**

- Ciftci Y., Alp İ.  
MATERIALS TODAY COMMUNICATIONS, vol.24, 2020 (SCI-Expanded)
- XXV. **Anisotropic Elastic, Electronic and Vibrational Properties of the Semiconductor AgScX (X = Ge, C) Compounds**  
Kars Durukan İ., Çiftci Y.  
JOURNAL OF ELECTRONIC MATERIALS, vol.49, no.3, pp.1849-1856, 2020 (SCI-Expanded)
- XXVI. **A Theoretical Study of Pressure-Induced Effects on Phase Transition and Elastic Properties of AsTh Compound**  
ÇİFTÇİ Y., ATEŞER E.  
JOURNAL OF ELECTRONIC MATERIALS, vol.49, no.3, pp.2086-2094, 2020 (SCI-Expanded)
- XXVII. **Green-Emitting Lead-Free Cs<sub>4</sub>SnBr<sub>6</sub> Zero-Dimensional Perovskite Nanocrystals with Improved Air Stability**  
Chiara R., ÇİFTÇİ Y., Queloz V. I. E., Nazeeruddin M. K., Grancini G., Malavasi L.  
JOURNAL OF PHYSICAL CHEMISTRY LETTERS, vol.11, no.3, pp.618-623, 2020 (SCI-Expanded)
- XXVIII. **Exploring the role of halide mixing in lead-free BZA(2)SnX(4) two dimensional hybrid perovskites**  
Pisanu A., Coduri M., Morana M., ÇİFTÇİ Y., Rizzo A., Listorti A., Gaboardi M., Bindi L., Queloz V. I. E., Milanese C., et al.  
JOURNAL OF MATERIALS CHEMISTRY A, vol.8, no.4, pp.1875-1886, 2020 (SCI-Expanded)
- XXIX. **Physical properties of ternary thallium chalcogenes T<sub>1</sub>(2)MQ(3) (M = Zr, Hf; Q = S, Se, Te) via ab-initio calculations**  
ATEŞER E., Okvuran O., ÇİFTÇİ Y., ÖZİŞIK H., DELİGÖZ E.  
CHINESE PHYSICS B, vol.28, no.10, 2019 (SCI-Expanded)
- XXX. **The Effect of Pressure on Elastic Anisotropy, Vibration and Optical Properties of a AgScSi Compound**  
Durukan İ., Ciftci Y.  
JOURNAL OF ELECTRONIC MATERIALS, vol.48, no.6, pp.4050-4056, 2019 (SCI-Expanded)
- XXXI. **Analysis of the structural, electronic, elastic and thermodynamic properties of CuAl<sub>2</sub>X<sub>4</sub> (X = O, S) spinel structure**  
Obeid M. M., Mogulkoc Y., Edrees S. J., Ciftci Y., Shukur M. M., Al-Marzooqee M. M. H.  
MATERIALS RESEARCH BULLETIN, vol.108, pp.255-265, 2018 (SCI-Expanded)
- XXXII. **First principle study of structural, electronic, mechanical, dynamic and optical properties of half-Heusler compound LiScSi under pressure**  
ÇİFTÇİ Y., EVECEN M.  
PHASE TRANSITIONS, vol.91, no.12, pp.1206-1222, 2018 (SCI-Expanded)
- XXXIII. **First-principles hydrogen adsorption properties of Li-decorated ThMoB<sub>4</sub>-type graphene**  
Alp İ., AYDIN S., ÇİFTÇİ Y.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.33, pp.16117-16127, 2018 (SCI-Expanded)
- XXXIV. **Physical Properties of Superhard Diamond-Like BC<sub>5</sub> from a First-Principles Study**  
Alp İ., ÇİFTÇİ Y.  
JOURNAL OF ELECTRONIC MATERIALS, vol.47, no.1, pp.272-284, 2018 (SCI-Expanded)
- XXXV. **DFT-based ab-initio study of half-Heusler KCaP compound**  
Mogulkoc Y., Ciftci Y., Surucu G.  
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.20, no.1-2, pp.61-68, 2018 (SCI-Expanded)
- XXXVI. **A density functional study of chalcopyrite MgGeSb<sub>2</sub>**  
Kocak B., ÇİFTÇİ Y.  
INDIAN JOURNAL OF PHYSICS, vol.91, no.12, pp.1487-1492, 2017 (SCI-Expanded)
- XXXVII. **First principle and tight-binding study of strained SnC**  
Mogulkoc Y., Modarresi M., Mogulkoc A., Ciftci Y., Alkan B.  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.111, pp.458-463, 2017 (SCI-Expanded)
- XXXVIII. **Structural phase transition, electronic, elastic, and vibrational properties of LiAl intermetallic compound: insights from first-principles calculations**  
Mogulkoc Y., Ciftci Y., Surucu G.  
CANADIAN JOURNAL OF PHYSICS, vol.95, no.8, pp.691-698, 2017 (SCI-Expanded)

- XXXIX. **First-principles calculations of Mg<sub>1-x</sub>Cu<sub>x</sub>SiP<sub>2</sub> alloys with x=0.0, 0.25, 0.5, 0.75 and 1.0**  
 Kocak B., Ciftci Y.  
 JOURNAL OF ALLOYS AND COMPOUNDS, vol.705, pp.211-217, 2017 (SCI-Expanded)
- XL. **First-Principles Study on the Structural, Elastic, Electronic and Vibrational Properties of Scandium Based Intermetallic Compounds (ScX, X = Co, Rh and Ir) Under Pressure**  
 EVECEN M., ÇİFTÇİ Y.  
 JOURNAL OF NANOELECTRONICS AND OPTOELECTRONICS, vol.12, no.2, pp.100-108, 2017 (SCI-Expanded)
- XLI. **Structural and Thermoelectronic Properties of Chalcopyrite MgSiX<sub>2</sub> (X = P, As, Sb)**  
 Kocak B., Ciftci Y., Surucu G.  
 JOURNAL OF ELECTRONIC MATERIALS, vol.46, no.1, pp.247-264, 2017 (SCI-Expanded)
- XLII. **The structural, elastic, electronic and dynamical properties of chalcopyrite semiconductor BeGeAs<sub>2</sub> from first-principles calculations**  
 ÇİFTÇİ Y., EVECEN M., ALDIRMAZ E.  
 APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.123, no.1, 2017 (SCI-Expanded)
- XLIII. **Electronic and optical properties of bilayer blue phosphorus**  
 Mogulkoc Y., Modarresi M., Mogulkoc A., Ciftci Y.  
 COMPUTATIONAL MATERIALS SCIENCE, vol.124, pp.23-29, 2016 (SCI-Expanded)
- XLIV. **Structural, electronic, elastic, optical, and vibrational properties of Hf<sub>x</sub>Sb (X = Co, Rh, Ru) half-Heusler compounds: an ab initio study**  
 Coban C., Ciftci Y., Colakoglu K.  
 INDIAN JOURNAL OF PHYSICS, vol.90, no.11, pp.1233-1241, 2016 (SCI-Expanded)
- XLV. **The Structural, Elastic, Electronic, Thermodynamic and Vibrational Properties of Protactinium Monocarbide (PaC) from First-Principles Calculations**  
 Ciftci Y., Coban C., AYDIN S., Tatar A., Evecen M.  
 JOURNAL OF NANOELECTRONICS AND OPTOELECTRONICS, vol.11, no.4, pp.506-513, 2016 (SCI-Expanded)
- XLVI. **Effect of pressure on structural, electronic, mechanical and optical properties of ruthenium diboride with oP(12)-type structure**  
 AYDIN S., Ciftci Y., Mogulkoc Y., Tatar A.  
 INDIAN JOURNAL OF PHYSICS, vol.90, no.7, pp.767-779, 2016 (SCI-Expanded)
- XLVII. **Unraveling Thermal and Dynamical Properties of the Cubic BaVO<sub>3</sub> Perovskite from First-Principles Calculation**  
 Mebrouki M., Ouahrani T., Ciftci Y.  
 INTERNATIONAL JOURNAL OF THERMOPHYSICS, vol.37, no.7, 2016 (SCI-Expanded)
- XLVIII. **Determination of the basic physical properties of semiconductor chalcopyrite type MgSnT<sub>2</sub> (T = P, As, Sb) from first-principles calculations**  
 Kocak B., ÇİFTÇİ Y.  
 JOURNAL OF MATERIALS RESEARCH, vol.31, no.10, pp.1518-1531, 2016 (SCI-Expanded)
- XLIX. **Ab-initio calculations of semiconductor MgGeP<sub>2</sub> and MgGeAs<sub>2</sub>**  
 Kocak B., Ciftci Y.  
 Materials Research Bulletin, vol.77, pp.300-306, 2016 (SCI-Expanded)
- L. **Electronic structure and thermoelectric properties of half-Heusler compounds with eight electron valence count-KScX (X = C and Ge)**  
 ÇİFTÇİ Y., Mahanti S. D.  
 JOURNAL OF APPLIED PHYSICS, vol.119, no.14, 2016 (SCI-Expanded)
- LI. **Some new members of MAX family including light-elements: Nanolayered Hf<sub>2</sub>XY (X= Al, Si, P and Y=B, C, N)**  
 AYDIN S., Tatar A., ÇİFTÇİ Y.  
 SOLID STATE SCIENCES, vol.53, pp.44-55, 2016 (SCI-Expanded)
- LII. **Electronic structure and elastic properties of AgZn under pressure from first-principles calculations**  
 ÇİFTÇİ Y.  
 CANADIAN JOURNAL OF PHYSICS, vol.94, no.3, pp.328-333, 2016 (SCI-Expanded)

- LIII. **Ab Initio Calculations on the Structural, Mechanical, Electronic, Dynamic, and Optical Properties of Semiconductor Half-Heusler Compound ZrPdSn**  
 ÇİFTÇİ Y., ÇOBAN C.  
 ZEITSCHRIFT FÜR NATURFORSCHUNG SECTION A-A JOURNAL OF PHYSICAL SCIENCES, vol.71, no.2, pp.135-143, 2016 (SCI-Expanded)
- LIV. **Thermo-Elastic and Lattice Dynamical Properties of Pd<sub>3</sub>X (X = Ti, Zr, Hf) Alloys: An Ab Initio Study**  
 Surucu G., Colakoglu K., Ciftci Y., Ozisik H. B., Deligoz E.  
 BRAZILIAN JOURNAL OF PHYSICS, vol.45, no.6, pp.604-614, 2015 (SCI-Expanded)
- LV. **First principles study of the structural, mechanical, phonon, optical, and thermodynamic properties of half-Heusler (HH) compound NbFeSb**  
 Coban C., Colakoglu K., Ciftci Y.  
 PHYSICA SCRIPTA, vol.90, no.9, 2015 (SCI-Expanded)
- LVI. **First-principles calculations of the mechanic and vibration properties of AgRE (RE = Ho, Er, Tm) intermetallic compounds under pressure**  
 Mogulkoc Y., Ciftci Y., Colakoglu K., Deligoz E.  
 PHYSICA SCRIPTA, vol.90, no.2, 2015 (SCI-Expanded)
- LVII. **First principles investigations on the mechanical and vibrational properties for the selected B2-AgRE (RE=Sc, Y, La, Ce) intermetallics**  
 Coban C., Ciftci Y., Colakoglu K.  
 PHYSICA B-CONDENSED MATTER, vol.457, pp.22-29, 2015 (SCI-Expanded)
- LVIII. **Dynamical and anisotropic behavior of the MSiP<sub>2</sub> (M = Be, Mg, Cd, Zn and Hg) compounds**  
 Ouahrani T., ÇİFTÇİ Y., Mebrouki M.  
 JOURNAL OF ALLOYS AND COMPOUNDS, vol.610, pp.372-381, 2014 (SCI-Expanded)
- LIX. **First principles prediction of structural stability, elastic, lattice dynamical and thermal properties of osmium carbides**  
 Deligoz E., Ozisik H. B., Colakoglu K., Ciftci Y.  
 MATERIALS SCIENCE AND TECHNOLOGY, vol.30, no.7, pp.842-849, 2014 (SCI-Expanded)
- LX. **First principles LDA+U and GGA+U study of HfO<sub>2</sub>: Dependence on the effective U parameter**  
 ÇİFTÇİ Y., Ergün A., Çolakoğlu K., Deligöz E.  
 Gazi University Journal of Science, vol.27, no.1, pp.627-636, 2014 (SCI-Expanded)
- LXI. **Ab initio study of the structural, elastic, thermodynamic, electronic and vibration properties of TbMg intermetallic compound**  
 Mogulkoc Y., Ciftci Y., Kabak M., Colakoglu K.  
 Superlattices and Microstructures, vol.71, pp.46-61, 2014 (SCI-Expanded)
- LXII. **Structural, electronic and mechanical properties of W<sub>1-x</sub>TcxB<sub>2</sub> alloys**  
 Surucu G., Colakoglu K., Deligoz E., Ciftci Y.  
 SOLID STATE COMMUNICATIONS, vol.171, pp.1-4, 2013 (SCI-Expanded)
- LXIII. **Pressure depended elastic, vibration and optical properties of NbIrSn from first principles calculations**  
 Kocak B., Ciftci Y., Colakoglu K., Deligoz E., Tatar A.  
 MATERIALS SCIENCE AND TECHNOLOGY, vol.29, no.8, pp.925-930, 2013 (SCI-Expanded)
- LXIV. **The structural, electronic, elastic, vibration and thermodynamic properties of GdMg**  
 Mogulkoc Y., Ciftci Y., Colakoglu K., Deligoz E.  
 SOLID STATE SCIENCES, vol.16, pp.168-174, 2013 (SCI-Expanded)
- LXV. **Structural, elastic, thermodynamic and lattice dynamic properties of PrX (X = Sb, Bi)**  
 Kocak B., ÇİFTÇİ Y., Colakoglu K., DELİGÖZ E.  
 INTERNATIONAL JOURNAL OF MATERIALS RESEARCH, vol.104, no.1, pp.99-108, 2013 (SCI-Expanded)
- LXVI. **A theoretical study for thorium monocarbide (ThC)**  
 AYDIN S., Tatar A., Ciftci Y.  
 JOURNAL OF NUCLEAR MATERIALS, vol.429, pp.55-69, 2012 (SCI-Expanded)
- LXVII. **Lattice dynamical and thermodynamical properties of ReB<sub>2</sub>, RuB<sub>2</sub>, and OsB<sub>2</sub> compounds in the ReB<sub>2</sub>**

**structure**

- Deligoz E., Colakoglu K., Ciftci Y.  
CHINESE PHYSICS B, vol.21, no.10, 2012 (SCI-Expanded)
- LXVIII. **Lattice dynamical properties of TcB<sub>2</sub> compound**  
Deligoz E., Colakoglu K., Ozisik H. B., Ciftci Y.  
SOLID STATE SCIENCES, vol.14, no.7, pp.794-800, 2012 (SCI-Expanded)
- LXIX. **Ab initio calculations on the structural and lattice dynamical properties of TmX (X=As, P) compounds**  
Coban C., Colakoglu K., Ciftci Y.  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.73, no.7, pp.917-924, 2012 (SCI-Expanded)
- LXX. **First principles studies of elastic, electronic and optical properties of chalcopyrite semiconductor ZnSnP<sub>2</sub>**  
Sahin S., Ciftci Y., Colakoglu K., Korozlu N.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.529, pp.1-7, 2012 (SCI-Expanded)
- LXXI. **Superhard transition metal tetranitrides: XN<sub>4</sub> (X=Re, Os, W)**  
AYDIN S., ÇİFTÇİ Y., Tatar A.  
JOURNAL OF MATERIALS RESEARCH, vol.27, no.13, pp.1705-1715, 2012 (SCI-Expanded)
- LXXII. **Structural, electronic, elastic, thermodynamic and vibration properties of TbN compound from first principles calculations**  
Ciftci Y., Ozayman M., Surucu G., Colakoglu K., Deligoz E.  
SOLID STATE SCIENCES, vol.14, no.3, pp.401-408, 2012 (SCI-Expanded)
- LXXIII. **The structural, elastic and thermodynamic properties of intermetallic compound CeGa<sub>2</sub>ÇİFTÇİ Y., Colakoglu K., ÇOBAN C., DELİGÖZ E.**  
CENTRAL EUROPEAN JOURNAL OF PHYSICS, vol.10, no.1, pp.197-205, 2012 (SCI-Expanded)
- LXXIV. **First-Principles Calculations on Structure, Elastic and Thermodynamic Properties of Al<sub>2</sub>X (X=Sc, Y) under Pressure**  
ÇİFTÇİ Y., Colakoglu K., DELİGÖZ E., Bayhan U.  
JOURNAL OF MATERIALS SCIENCE & TECHNOLOGY, vol.28, no.2, pp.155-163, 2012 (SCI-Expanded)
- LXXV. **A first-principle study of the structural, elastic, lattice dynamical and thermodynamic properties of PrX (X=P, As)**  
Kocak B., Ciftci Y., Colakoglu K., Deligoz E.  
PHYSICA B-CONDENSED MATTER, vol.407, no.3, pp.316-323, 2012 (SCI-Expanded)
- LXXVI. **A Molecular Dynamics Study on Au**  
ÇİFTÇİ Y., Colakoglu K., ÖZGEN S.  
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## Supported Projects

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- I. ÇİFTÇİ Y., Project Supported by Higher Education Institutions, TIX(X= Br, I, N, Pb, Se) bileşiklerinin yapısal, elastik, elektronik, termodinamik, titreşimsel ve optik özelliklerinin ab-initio yöntemlerle incelenmesi, 2012 - 2015
- II. ÇİFTÇİ Y., Project Supported by Higher Education Institutions, REC2 (RE= La, Ce, Pr, Pa, U) nadir toprak karbür bileşiklerinin temel fiziksel özelliklerinin ab-initio yöntemlerle incelenmesi, 2012 - 2015
- III. ÇİFTÇİ Y., Project Supported by Higher Education Institutions, Tb pniktidlerinin yapısal, mekaniksel, elektronik ve titreşimsel özelliklerinin ab-initio yöntemlerle incelenmesi, 2010 - 2012
- IV. ÇİFTÇİ Y., Project Supported by Higher Education Institutions, Bazı AB ve AB<sub>2</sub> tür bileşiklerin yapısal, elastik, elektronik ve titreşimsel özelliklerinin ab-initio yöntemlerle incelenmesi, 2010 - 2011
- V. ÇİFTÇİ Y., Project Supported by Higher Education Institutions, DİKKAT! Bu projenin 13.300.-'lik kısmı 05/2009-55 kodlu proje ile birleşmiştir. PrX(X=N, P, As,Sb,Bi ) BİLEŞİKLERİNİN ELASTİK , ELEKTRONİK, YAPISAL VE TİTREŞİMSEL ÖZELLİKLERİNİN AB-INITIO YÖNTEMLERLE İNCELENMESİ PrX(X=N, P, As,Sb,Bi ) BİLEŞİKLERİNİN ELASTİK , ELEKTRONİK, YAPISAL VE TİTREŞİMSEL ÖZELLİKLERİNİN AB-INITIO YÖNTEMLERLE İNCELENMESİ, 2009 - 2010
- VI. ÇİFTÇİ Y., Project Supported by Higher Education Institutions, Bazı Bileşiklerinin Elastik, Elektronik ve Yapısal Özelliklerinin Ab-İnitio Yöntemlerle İncelenmesi, 2008 - 2009
- VII. ÇİFTÇİ Y., Project Supported by Higher Education Institutions, TIX(X=N,As,Sb,P) ve TİX(X=N,C) Bileşiklerinin Elastik, Elektronik ve Yapısal Özelliklerinin AB-INITIO Yöntemlerle İncelenmesi, 2007 - 2008

## Tasks In Event Organizations

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- I. Altindal Ş., Çiftci Y., Şahingöz R., Şafak Asar Y., Çetinkaya H. G., Altindal Yerişkin S., Özdemir E. G., Bucurgat M., Erbilen Tanrikulu E., Ulusoy M., et al., 9th International Conference on Materials Science and Nanotechnology for Next Generation (MSNG-2022), Scientific Congress, Ankara, Turkey, Eylül 2022

## Metrics

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Publication: 307  
Citation (WoS): 1767  
Citation (Scopus): 2035  
H-Index (WoS): 23  
H-Index (Scopus): 24

## Congress and Symposium Activities

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- I. 9th International Conference on Materials Science and Nanotechnology for Next Generation, Attendee, Ankara, Turkey, 2022
- II. 9th International Conference on Materials Science and Nanotechnology for Next Generation, Attendee, Ankara, Turkey, 2022
- III. 9th International Conference on Materials Science and Nanotechnology for Next Generation, Attendee, Ankara, Turkey, 2022
- IV. Nanotechnology Research and Applications, Attendee, Praha, Czech Republic, 2021
- V. International Conference on Advanced Materials Science and Engineering and High Tech Device Applications (ICMATSE 20), Invited Speaker, Ankara, Turkey, 2020

## **Coaching Duties**

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## **Refereeing Duties**

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