Prof. MURAT DURANDURDU

Personal Information

Email: murat.durandurdu@agu.edu.tr
Web: http://people.agu.edu.tr/muratdurandurdu/

International Researcher IDs
ORCID: 0000-0001-5636-3183
Yoksis Researcher ID: 214860

Education Information

Doctorate, Ohio University, College Of Science, United States Of America 1999 - 2002
Postgraduate, Virginia Polytechnic Institute and State University, College Of Engineering, Materials Science And Engineering, United States Of America 1997 - 1999
Masters (Non-Thesis), Rutgers, The State University of New Jersey, College Of Science, Physics, United States Of America 1995 - 1997
Undergraduate, Karadeniz Technical University, Fen Edebiyat Fakultesi, Fizik, Turkey 1988 - 1992

Dissertations

Doctorate, Polyamorphism in Semiconductors, Ohio University, College Of Science, Physics, 2002
Postgraduate, Molecular Statics Simulation in Aluminum ?, Virginia Polytechnic Institute And State University, College Of Engineering , Materials Science And Engineering , 1999

Research Areas

Physics, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Equations of State, Phase Equilibria, and Phase Transitions, Natural Sciences

Academic Titles / Tasks

Professor, Abdullah Gul University, Mühendislik Fakültesi, Nanoteknoloji Mühendisliği, 2017 - Continues
Professor, Charles University, Faculty of Science , Department of Physical and Macromolecular Chemistry, 2020 - 2021
Associate Professor, Abdullah Gul University, Mühendislik Fakültesi, Nanoteknoloji Mühendisliği, 2014 - 2017
Associate Professor, Texas Tech University, College Of Science, Physics, 2011 - 2014
Assistant Professor, University of Texas at El Paso, College Of Science, Physics, 2004 - 2011
Research Assistant PhD, The University of Michigan, College Of Engineering, Materials Science And Engineering, 2002 - 2004
Research Assistant, Ohio University, College Of Science, Physics, 1999 - 2002
Research Assistant, Virginia Polytechnic Institute and State University, College Of Engineering, Materials Science And Engineering, 1997 - 1999
Research Assistant, Karadeniz Technical University, Fen Edebiyat Fakultesi, Fizik, 1993 - 1994

Academic and Administrative Experience

Head of Department, Abdullah Gul University, 2015 - 2022
Head of Department, Abdullah Gul University, İleri Malzemeler Ve Nanoteknoloji, 2015 - 2022
Head of Department, Abdullah Gul University, 2015 - 2022

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Ab initio study of boron-rich amorphous boron carbides**
Yıldız T. A., DURANDURDU M.
Journal of the American Ceramic Society, vol.106, no.5, pp.2862-2874, 2023 (SCI-Expanded)

II. **Possible boron-rich amorphous silicon borides from ab initio simulations**
Karacaoğlan A. Ö. Ç., DURANDURDU M.
Journal of Molecular Modeling, vol.29, no.4, 2023 (SCI-Expanded)

III. **Boron-rich amorphous boron oxides from ab initio simulations**
Karacaoğlan A. Ö. Ç., DURANDURDU M.
Journal of Non-Crystalline Solids, vol.604, 2023 (SCI-Expanded)

IV. **Amorphous BC5 from first principles calculations**
DURANDURDU M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.592, 2022 (SCI-Expanded)

V. **Theoretical investigation of substituent effects on the relative stabilities and electronic structure of [BnXn](2-) clusters**
TAHAOĞLU D., ALKAN F., DURANDURDU M.
JOURNAL OF MOLECULAR MODELING, vol.27, no.12, 2021 (SCI-Expanded)

VI. **Formation of a very high-density amorphous phase of carbon and its crystallization into a simple cubic structure at high pressure**
DURANDURDU M.
COMPUTATIONAL MATERIALS SCIENCE, vol.200, 2021 (SCI-Expanded)

VII. **Amorphous boron phosphide: An ab initio investigation**
BOLAT S., Durandurdu M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.570, 2021 (SCI-Expanded)

VIII. **Amorphous zircon at high pressure**
BOLAT S., DURANDURDU M.
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.153, 2021 (SCI-Expanded)

IX. **A first principles study of amorphous and crystalline silicon tetraboride**
Karacaoglu A. O., DURANDURDU M.
MATERIALS CHEMISTRY AND PHYSICS, vol.258, 2021 (SCI-Expanded)

X. **Stoichiometric amorphous boron carbide (BC)**
Yildiz T. A., DURANDURDU M.
JOURNAL OF MATERIALS SCIENCE, vol.55, no.30, pp.14709-14716, 2020 (SCI-Expanded)

XI. **Amorphous silicon hexaboride at high pressure**
DURANDURDU M.
PHILOSOPHICAL MAGAZINE, vol.100, no.14, pp.1818-1833, 2020 (SCI-Expanded)

XII. **Ab initio simulation of amorphous BC3**
DURANDURDU M.
COMPUTATIONAL MATERIALS SCIENCE, vol.178, 2020 (SCI-Expanded)

XIII. **Amorphous silicon triboride: A first principles study**
Ozlem A., Karacaoglan C., DURANDURDU M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.536, 2020 (SCI-Expanded)

XIV. **High pressure modifications in amorphous boron suboxide: An ab initio study**

DURANDURDU M.
CERAMICS INTERNATIONAL, vol.46, no.5, pp.5968-5975, 2020 (SCI-Expanded)

XV. **Amorphous boron carbide from ab initio simulations**
Yildiz T. A., DURANDURDU M.
COMPUTATIONAL MATERIALS SCIENCE, vol.173, 2020 (SCI-Expanded)

XVI. **Tetrahedral amorphous boron nitride: A hard material**
DURANDURDU M.
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, vol.103, no.2, pp.973-978, 2020 (SCI-Expanded)

XVII. **Pressure-induced amorphization, mechanical and electronic properties of zeolitic imidazolate framework (ZIF-8)**
ERKARTAL M., DURANDURDU M.
MATERIALS CHEMISTRY AND PHYSICS, vol.240, 2020 (SCI-Expanded)

XVIII. **Phase transition of ZrN under pressure**
DURANDURDU M.
PHILOSOPHICAL MAGAZINE, vol.99, no.8, pp.942-955, 2019 (SCI-Expanded)

XIX. **Hydrogenated amorphous boron nitride: A first principles study**
Uchoyuk T. A., DURANDURDU M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.502, pp.159-163, 2018 (SCI-Expanded)

XX. **Amorphous zirconia at high pressure**
DURANDURDU M.
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, vol.101, no.12, pp.5411-5418, 2018 (SCI-Expanded)

XXI. **Solute aggregation in Ca72Zn28 metallic glass**
TAHAOĞLU D., DURANDURDU M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.500, pp.410-416, 2018 (SCI-Expanded)

XXII. **Amorphous magnesium silicide**
DURANDURDU M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.498, pp.118-124, 2018 (SCI-Expanded)

XXIII. **An in-depth investigation of Mg-Zn-Ca metallic glasses: A first principles study**
ERKARTAL M., DURANDURDU M.
COMPUTATIONAL MATERIALS SCIENCE, vol.153, pp.326-337, 2018 (SCI-Expanded)

XXIV. **Pressure-Induced Amorphization of MOF-5: A First Principles Study**
ERKARTAL M., DURANDURDU M.
CHEMISTRYSELECT, vol.3, no.28, pp.8056-8063, 2018 (SCI-Expanded)

XXV. **Hard boron rich boron nitride nanoglasses**
Cetin A. O., DURANDURDU M.
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, vol.101, no.5, pp.1929-1939, 2018 (SCI-Expanded)

XXVI. **Permanent densification of amorphous zinc oxide under pressure: A first principles study**
TAHAOĞLU D., DURANDURDU M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.481, pp.27-32, 2018 (SCI-Expanded)

XXVII. **MgCu metallic glass**
DURANDURDU M.
PHILOSOPHICAL MAGAZINE, vol.98, no.8, pp.633-645, 2018 (SCI-Expanded)

XXVIII. **Amorphous silicon hexaboride: a first-principles study**
DURANDURDU M.
PHILOSOPHICAL MAGAZINE, vol.98, no.30, pp.2723-2733, 2018 (SCI-Expanded)

XXIX. **Densification of amorphous boron under pressure**
DURANDURDU M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.471, pp.274-279, 2017 (SCI-Expanded)

XXX. **Two successive amorphous-to-amorphous phase transformations in TiO2**
DURANDURDU M.
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, vol.100, no.9, pp.3903-3911, 2017 (SCI-Expanded)

XXXI. **Amorphous zirconia: ab initio molecular dynamics simulations**
DURANDURDU M.
Philosophical Magazine, vol.97, no.16, pp.1334-1345, 2017 (SCI-Expanded)

XXXII. **High-density amorphous phase of CdO**
DURANDURDU M.
Journal of Non-Crystalline Solids, vol.463, pp.64-67, 2017 (SCI-Expanded)

XXXIII. **Ferromagnetism in amorphous MgO**
DURANDURDU M.
PHILOSOPHICAL MAGAZINE, vol.97, no.24, pp.2129-2141, 2017 (SCI-Expanded)

XXXIV. **Nanosegregated amorphous AlBN2 alloy**
DURANDURDU M.
Philosophical Magazine, vol.96, no.30, pp.3200-3210, 2016 (SCI-Expanded)

XXXV. **Polyamorphism in Aluminum Nitride: A First Principles Molecular Dynamics Study**
DURANDURDU M.
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, vol.99, no.5, pp.1594-1600, 2016 (SCI-Expanded)

XXXVI. **n-type conductivity in Si-doped amorphous AlN: an ab initio investigation**
DURANDURDU M.
PHILOSOPHICAL MAGAZINE, vol.96, no.11, pp.1110-1121, 2016 (SCI-Expanded)

XXXVII. **Pressure-induced phase transformations in amorphous arsenic**
DURANDURDU M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.437, pp.6-9, 2016 (SCI-Expanded)

XXXVIII. **Local structure of As2O3 glass from first principles simulations**
DURANDURDU M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.436, pp.18-21, 2016 (SCI-Expanded)

XXXIX. **Amorphous boron nitride at high pressure**
DURANDURDU M.
PHILOSOPHICAL MAGAZINE, vol.96, no.18, pp.1950-1964, 2016 (SCI-Expanded)

XL. **Hexagonal nanosheets in amorphous BN: A first principles study**
Durandurdu M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.427, pp.41-45, 2015 (SCI-Expanded)

XLI. **Novel high-pressure phase of ZrO2: An ab initio prediction**
Durandurdu M.
JOURNAL OF SOLID STATE CHEMISTRY, vol.230, pp.233-236, 2015 (SCI-Expanded)

XLII. **High-pressure phase transitions of TiN: an ab initio constant pressure study**
Durandurdu M.
PHILOSOPHICAL MAGAZINE, vol.95, no.22, pp.2376-2384, 2015 (SCI-Expanded)

XLIII. **Liquid boron and amorphous boron: An ab initio molecular dynamics study**
Durandurdu M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.417, pp.10-14, 2015 (SCI-Expanded)

XLIV. **Uncovering Nanoclusters in Amorphous AlN: An Ab Initio Study**
Durandurdu M.
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, vol.98, no.4, pp.1095-1098, 2015 (SCI-Expanded)

XLV. **Atomic structure of amorphous CdO from first principles simulations**
Durandurdu M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.412, pp.11-15, 2015 (SCI-Expanded)

XLVI. **New high-pressure phase of MgH2: An ab initio constant-pressure study**
Durandurdu M.
EPL, vol.105, no.4, 2014 (SCI-Expanded)

XLVII. **Atomic structure of amorphous Mg40Cu35Ti25 alloy: An ab initio molecular dynamics study**
Durandurdu M.
SOLID STATE COMMUNICATIONS, vol.154, pp.30-33, 2013 (SCI-Expanded)

XLVIII. **Ab initio modeling of metallic Pd80Si20 glass**
Durandurdu M.
COMPUTATIONAL MATERIALS SCIENCE, vol.65, pp.44-47, 2012 (SCI-Expanded)

XLIX. **Nanoscale icosahedral packing in amorphous Mg50Ni50: An ab initio study**
Tetik E., Durandurdu M., KARADAĞ F.
EPL, vol.100, no.2, 2012 (SCI-Expanded)

L. **Nanosize icosahedral quasicrystal in Mg90Ca10 glass: An ab initio molecular dynamics study**
Durandurdu M.
JOURNAL OF CHEMICAL PHYSICS, vol.137, no.3, 2012 (SCI-Expanded)

LI. **Formation of Cotunnite Phase in ZrO2 under Uniaxial Stress: A First Principles Study**
Ozturkz H., Durandurdu M.
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, vol.94, no.3, pp.932-937, 2011 (SCI-Expanded)

LII. **Formation of a two-dimensional layered structure in silica under shear stresses: An ab initio study**
Durandurdu M.
PHYSICAL REVIEW B, vol.81, no.17, 2010 (SCI-Expanded)

LIII. **Ab initio molecular dynamics study of pressure-induced phase transformation in KCl**
Durandurdu M.
COMPUTATIONAL MATERIALS SCIENCE, vol.48, no.3, pp.672-676, 2010 (SCI-Expanded)

LIV. **Vibrational properties of amorphous germanium under pressure and its thermal expansion and Gruneisen parameters**
Durandurdu M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.356, pp.977-981, 2010 (SCI-Expanded)

LV. **Formation of a Cmcm phase in SnS at high pressure; an ab initio constant pressure study**
Alptekin S., Durandurdu M.
SOLID STATE COMMUNICATIONS, vol.150, pp.870-874, 2010 (SCI-Expanded)

LVI. **Formation of Anatase Phase in HfO2 in Tensile Stress: An Ab Initio Study**
Durandurdu M.
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, vol.93, no.5, pp.1467-1469, 2010 (SCI-Expanded)

LVII. **Orthorhombic intermediate phases for the wurtzite-to-rocksalt phase transformation of CdSe: An ab initio constant pressure study**
Durandurdu M.
CHEMICAL PHYSICS, vol.369, pp.55-58, 2010 (SCI-Expanded)

LVIII. **Pressure-induced phase transformation of BaS: An ab initio constant pressure study**
Durandurdu M.
CHEMICAL PHYSICS, vol.367, pp.80-82, 2010 (SCI-Expanded)

LIX. **First principles study of structural phase stability of wide-gap semiconductors MgTe, MgS and MgSe**
Gokoglu G., Durandurdu M., Gulseren O.
COMPUTATIONAL MATERIALS SCIENCE, vol.47, no.2, pp.593-598, 2009 (SCI-Expanded)

LX. **Expanded phase of ZrO2: An ab initio constant-pressure study**
Durandurdu M.
EPL, vol.88, no.6, 2009 (SCI-Expanded)

LXI. **New transformation mechanism for a zinc-blende to rocksalt phase transformation in MgS**
Durandurdu M.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.21, no.45, 2009 (SCI-Expanded)

LXII. **Fcc-to-bct phase transformation of aluminum under triaxial stresses: an ab initio constant pressure study**
Durandurdu M.
EUROPEAN PHYSICAL JOURNAL B, vol.72, no.2, pp.241-245, 2009 (SCI-Expanded)

LXIII. **Pressure-induced phase transition in AlN: An ab initio molecular dynamics study**
Durandurdu M.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.480, no.2, pp.917-921, 2009 (SCI-Expanded)

LXIV. **Formation of an anataselike phase in silica under anisotropic stress: An ab initio constant-pressure study**
Durandurdu M.
PHYSICAL REVIEW B, vol.80, no.2, 2009 (SCI-Expanded)

LXV. **High-density amorphous phase of GeS2 glass under pressure**
Durandurdu M.
PHYSICAL REVIEW B, vol.79, no.20, 2009 (SCI-Expanded)

LXVI. **High-pressure phases of ZrO2: An ab initio constant-pressure study**
Oezturk H., Durandurdu M.
PHYSICAL REVIEW B, vol.79, no.13, 2009 (SCI-Expanded)

LXVII. **The structural phase transition of ZnSe under hydrostatic and nonhydrostatic compressions: an ab initio molecular dynamics study**
Durandurdu M.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.21, no.12, 2009 (SCI-Expanded)

LXVIII. **Pressure-induced phase transition of BeO**
ALPTEKIN S., Durandurdu M.
SOLID STATE COMMUNICATIONS, vol.149, pp.345-348, 2009 (SCI-Expanded)

LXIX. **Pressure-induced phase transition in wurtzite ZnS: An ab initio constant pressure study**
Durandurdu M.
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.70, pp.645-649, 2009 (SCI-Expanded)

LXX. **An ab initio constant-pressure study of pressure-induced phase transition of MgSe**
Oezduran M., Durandurdu M.
EPL, vol.84, no.5, 2008 (SCI-Expanded)

LXXI. **Pressure-induced phase transition of zinc-blende AlN: An ab initio molecular dynamics study**
Durandurdu M.
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.69, no.11, pp.2894-2897, 2008 (SCI-Expanded)

LXXII. **Phase transformation of 6H-SiC at high pressure: An ab initio constant-pressure study**
Eker S., Durandurdu M.
EPL, vol.84, no.2, 2008 (SCI-Expanded)

LXXIII. **Diamond to beta-Sn phase transition of silicon under hydrostatic and nonhydrostatic compressions**
Durandurdu M.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.20, no.32, 2008 (SCI-Expanded)

LXXIV. **New B2O3 crystals predicted from concurrent molecular dynamics simulations and first-principles calculations**
HUANG L., Durandurdu M., KIEFFER J.
JOURNAL OF PHYSICAL CHEMISTRY C, vol.111, no.37, pp.13712-13720, 2007 (SCI-Expanded)

LXXV. **Structural phase transition of gold under uniaxial, tensile, and triaxial stresses: An ab initio study**
Durandurdu M.
PHYSICAL REVIEW B, vol.76, no.2, 2007 (SCI-Expanded)

LXXVI. **Ab initio simulations of the structural phase transformation of 2H-SiC at high pressure**
Durandurdu M.
PHYSICAL REVIEW B, vol.75, no.23, 2007 (SCI-Expanded)

LXXVII. **Transformation pathways of silica under high pressure**
HUANG L., Durandurdu M., KIEFFER J.
NATURE MATERIALS, vol.5, no.12, pp.977-981, 2006 (SCI-Expanded)

LXXVIII. **Ab initio molecular dynamics study of pressure-induced phase transition in ZnS**
MARTINEZ I., Durandurdu M.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.18, no.41, pp.9483-9491, 2006 (SCI-Expanded)

LXXIX. **Transition pathway in GaAs under uniaxial stress: an ab initio study**
Durandurdu M.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.18, no.20, pp.4887-4894, 2006 (SCI-Expanded)

LXXX. **Electronic and mechanical properties of wurtzite type SiC nanowires**
Durandurdu M.
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, vol.243, no.5, 2006 (SCI-Expanded)

LXXXI. **Ab initio modeling of small diameter silicon nanowires**
Durandurdu M.
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, vol.243, no.2, 2006 (SCI-Expanded)

LXXXII. **Ab initio simulation of polyamorphic phase transition in hydrogenated silicon**
Durandurdu M.
PHYSICAL REVIEW B, vol.73, no.3, 2006 (SCI-Expanded)

LXXXIII. **Phase transition of GeSe2 at high pressure**
Durandurdu M.
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, vol.242, no.15, pp.3085-3090, 2005 (SCI-Expanded)

LXXXIV. **Cmcm phase of GeS at high pressure**
Durandurdu M.
PHYSICAL REVIEW B, vol.72, no.14, 2005 (SCI-Expanded)

LXXXV. **Ab initio simulation of the rhombohedral-to-simple-cubic transition in arsenic**
Durandurdu M.
PHYSICAL REVIEW B, vol.72, no.7, 2005 (SCI-Expanded)

LXXXVI. **Structural phase transition of germanium under uniaxial stress: An ab initio study**
Durandurdu M.
PHYSICAL REVIEW B, vol.71, no.5, 2005 (SCI-Expanded)

LXXXVII. **Mechanically controlled, seeded formation of a nanoscale metastable phase in ionic compounds**
Palko J., Durandurdu M., Kıeffer J.
NANO LETTERS, vol.4, no.9, pp.1769-1773, 2004 (SCI-Expanded)

LXXXVIII. **Pressure-induced amorphous-to-amorphous phase transition in GaAs**
Durandurdu M.
PHYSICAL REVIEW B, vol.70, no.8, 2004 (SCI-Expanded)

LXXXIX. **High-pressure phases of amorphous and crystalline silicon**
Durandurdu M., DRABOLD D.
PHYSICAL REVIEW B, vol.67, no.21, 2003 (SCI-Expanded)

XC. **Pressure-induced structural phase transition of paracrystalline silicon**
Durandurdu M., DRABOLD D.
PHYSICAL REVIEW B, vol.66, no.20, 2002 (SCI-Expanded)

XCI. **Ab initio simulation of pressure-induced low-energy excitations in amorphous silicon**
Durandurdu M., DRABOLD D.
PHYSICAL REVIEW B, vol.66, no.15, 2002 (SCI-Expanded)

XCII. **First-order pressure-induced polyamorphism in germanium**
Durandurdu M., DRABOLD D.
Physical Review B - Condensed Matter and Materials Physics, vol.66, no.4, pp.412011-412014, 2002 (SCI-Expanded)

XCIII. **Ab initio simulation of high-pressure phases of GaAs**
Durandurdu M., DRABOLD D.
PHYSICAL REVIEW B, vol.66, no.4, 2002 (SCI-Expanded)

XCIV. **Simulation of pressure-induced polyamorphism in a chalcogenide glass GeSe2**
Durandurdu M., DRABOLD D.
PHYSICAL REVIEW B, vol.65, no.10, 2002 (SCI-Expanded)

XCV. **Ab initio simulation of first-order amorphous-to-amorphous phase transition of silicon**
Durandurdu M., DRABOLD D.
PHYSICAL REVIEW B, vol.64, no.1, 2001 (SCI-Expanded)

XCVI. **Approximate ab initio calculations of electronic structure of amorphous silicon**
Durandurdu M., DRABOLD D., MOUSSEAU N.

PHYSICAL REVIEW B, vol.62, no.23, pp.15307-15310, 2000 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

I. **Derivative Structures of Closo Boron Hydride Cluster, B16X16:A DFT Study**
TAHAOĞLU D., DURANDURDU M.
CSC2018: International Computational Science Congress, 26 - 28 October 2018

II. **CMCM INTERMEDIATE PHASE FOR THE HCP-TO-BCC PHASE TRANSITION IN MAGNESIUM**
DURANDURDU M., Çetin A. Ö., Üçhöyük T. A.
3.ULUSLARARASI MALZEME BILIMI VE TEKNOLOJISI KONFERANSI (KAPADOKYA), 17 - 19 September 2018

III. **Stability Investigation of B16H162- Derivatives by DFT Calculations**
TAHAOĞLU D., DURANDURDU M.
International Conference on Materilas Science and Technology in Cappadocia, 17 - 19 September 2018

IV. **Effects of Production Methods on Structural and Mechanical Properties for Metallic Ca72Zn28 Glass-A DFT Study**
TAHAOĞLU D., DURANDURDU M.
The Internatınonal Conference On Materials Science Mechanical And Automation Engineerings And Technology (IMSMATEC'18), 10 - 12 April 2018

V. **Polyamorphism in TiO2**
DURANDURDU M.
ncon-International Congress on Chemistry and Materials Science, 5 - 07 October 2017

VI. **Metallic Ca72Zn28 Glass from First Principle Molecular Dynamics Simulations**
TAHAOĞLU D., DURANDURDU M.
International Congress on Chemistry and Materials Science, Ankara, Turkey, 5 - 07 October 2017

VII. **Investigation of Phase Transformation of Amorphous Zinc Oxide under Pressure: a DFT Study**
TAHAOĞLU D., DURANDURDU M.
Türk Fizik Derneği 33. Uluslararası Fizik Kongresi, Bodrum, Turkey, 6 - 10 September 2017

VIII. **POLYAMORPHIC PHASE TRANSITION IN ALUMINUM NITRIDE**
DURANDURDU M.
Uluslararası Malzeme Bilimi ve Teknolojisi Konferansı Kapadokya (IMSTEC'16), 6 - 08 April 2016

IX. **Hidden Nanoclusters in Amorphous AlN A First Principles Study**
DURANDURDU M.
International Semiconductor Science and Technology Conference 2015 (ISSTC2015), 11 - 13 May 2015

Supported Projects

Durandurdu M., TUBITAK Project, Bor zengini amorf malzemeler, 2017 - 2020
DURANDURDU M., ERKARTAL M., Project Supported by Higher Education Institutions, Kristal Kusur Mühendisliği ile Metal-Organik Kafes Yapıların (MOF) Karbondioksit (CO2) Yakalama ve Depolama Özelliklerinin İyileştirilmesi, 2017 - 2019
DURANDURDU M., TUBITAK Project, Yeni Bor ve Nitrojen Esaslı Amorf Malzemerin Tahmini, 2014 - 2016
DURANDURDU M., Project Supported by Other Official Institutions, Pressure-induced phase transformation of metallic glasses, 2010 - 2011
DURANDURDU M., Project Supported by Other Official Institutions, Materials World Modules, 2004 - 2007

Activities in Scientific Journals

Conference Papers in Physics , Committee Member, 2010 - 2015

Scientific Refereeing

Phys. Rev. Letters, National Scientific Refreed Journal, January 2002

Metrics

Publication: 105
Citation (WoS): 875
Citation (Scopus): 1086
H-Index (WoS): 15
H-Index (Scopus): 18

Congress and Symposium Activities

APS March Meeting, Attendee, Indiana, United States Of America, 2002

Invited Talks

First Principles Study of Amorphous Boron Suboxide and its High- Pressure Behavior , Conference, MSRC-2022 Kyiv, Ukraine, Ukraine, May 2022

Scholarships

BİDEP 2232, TUBITAK, 2014 - 2016
BİDEP 2221, TUBITAK, 2009 - 2009
BİDEP 2221, TUBITAK, 2008 - 2008
1416, Ministry of Education, 1994 - 2000
Eğitim Bursu, University, 1989 - 1993