

Prof. Kemal ÖZDOĞAN

Personal Information

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Address: Yıldız Teknik Üniversitesi, Fen-Edebiyat Fakültesi Fizik Bölümü E-1007 Davutpaşa Kampüsü Esenler/İSTANBUL

Education Information

Doctorate, Gebze Yüksek Teknoloji Enstitüsü, Fen Bilimleri, Fizik, Turkey 2004 - 2009

Postgraduate, Gebze Yüksek Teknoloji Enstitüsü, Fen Bilimleri, Fizik, Turkey 2001 - 2004

Undergraduate, Karadeniz Technical University, Fen Fakültesi, Fizik, Turkey 1996 - 2000

Research Areas

Physics, Interdisciplinary Physics and Related Science and Technology Areas, Materials Science, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Thermal Properties of Condensed Matter, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Electronic structure of bulk material, Electrical properties of electronic structures, interfaces, thin films and low-dimensional structures, Magnetic Properties and Materials, Electronic transport in condensed matter, Natural Sciences

Academic and Administrative Experience

Deputy Head of Department, Yıldız Technical University, Faculty of Arts & Science, Department of Physics, 2018 - Continues

Courses

Doktora Seminer, Doctorate, 2020 - 2021

Doktora Uzmanlık Alan, Doctorate, 2019 - 2020

Uzmanlık Alan, Postgraduate, 2019 - 2020

Fizik Laboratuvarı 3, Undergraduate, 2019 - 2020

Atom ve Molekül Fiziği Lab, Undergraduate, 2019 - 2020

FİZİK 2, Undergraduate, 2019 - 2020

Uzmanlık Alan Dersi, Postgraduate, 2020 - 2021

Yüksek Lisans Uzmanlık Alan, Postgraduate, 2019 - 2020

Seminer, Doctorate, 2019 - 2020

Doktora Uzmanlık Alan Dersi, Doctorate, 2019 - 2020

Modern Fizik, Undergraduate, 2017 - 2018

FİZİK I (Servis Dersi Grup 3-17), Undergraduate, 2018 - 2019

FİZİK 2 (Servis Dersi Grup 14), Undergraduate, 2017 - 2018

Fizik I (Servis Dersi, Gr: 53), Undergraduate, 2017 - 2018

Manyetik Malzemeler, Postgraduate, 2016 - 2017

FİZİK 2 (Servis Dersi Grup 11-59), Undergraduate, 2016 - 2017
FİZİK I (Servis Dersi Grup 16-37-53), Undergraduate, 2017 - 2018
Modern Fizik Gr1, Undergraduate, 2015 - 2016
FİZİK 2 (Servis Dersi Grup 20-46), Undergraduate, 2014 - 2015
FİZİK 2 (Servis Dersi Grup 20-48), Undergraduate, 2013 - 2014
Fizikte Matematik Yöntemler 1, Undergraduate, 2014 - 2015
FİZİK I (Servis Dersi Grup 13-62), Undergraduate, 2014 - 2015
Bitirme Çalışması, Undergraduate, 2014 - 2015
FİZİK I (Servis Dersi Grup 18), Undergraduate, 2013 - 2014
FİZİK 2 (Servis Dersi Grup 18-21-66), Undergraduate, 2011 - 2012
Undergraduate, 2011 - 2012
FİZİK I (Servis Dersi Grup 52), Undergraduate, 2011 - 2012
Fizikte Matematik Yöntemler 1, Undergraduate, 2011 - 2012
FİZİK I (Servis Dersi Grup 17), Undergraduate, 2011 - 2012

Advising Theses

Özdoğan K., Bazı Manyetik Yarıiletkenlerin Elektronik ve Manyetik Özellikleri Üzerinde Sıkıştırma ve Genleşme Etkisinin İncelenmesi , Postgraduate, Z.Zeki(Student), 2019
ÖZDOĞAN K., Oksit Tabanlı Termoelektrik Malzemelerin Yoğunluk Fonksiyonel Teorisi İle İncelenmesi, Postgraduate, A.AYKARA(Student), 2016

Jury Memberships

Doctorate, Doctorate, Gebze Teknik Üniversitesi, July, 2016
Doctorate, Doctorate, Gebze Teknik Üniversitesi, July, 2016
Doctorate, Doctorate, Gebze Teknik Üniversitesi, July, 2016
Doctorate, Doctorate, Gebze Teknik Üniversitesi, June, 2016
Doctoral Examination, Doctoral Examination, Gebze Teknik Üniversitesi, June, 2015

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Stability of spin-gapless semiconducting behavior in Ti_2CoSi , Ti_2MnAl , and Ti-2 VAs Heusler compounds**
ÖZDOĞAN K., Galanakis I.
PHYSICAL REVIEW MATERIALS, vol.5, no.2, 2021 (Peer-Reviewed Journal)
- II. **Oxygen vacancies induced photoluminescence in $SrZnO_2$ nanophosphors probed by theoretical and experimental analysis**
Manju M., Jain M., Madas S., Vashishtha P., Rajput P., Gupta G., Kahaly M. U. , Özdoğan K., Vij A., Thakur A.
SCIENTIFIC REPORTS, vol.10, 2020 (Peer-Reviewed Journal)
- III. **High spin polarization in all-3d-metallic Heusler compounds: the case of $Fe(2)CrZ$ and $Co(2)CrZ$ ($Z = Sc, Ti, V$)**
ÖZDOĞAN K., Maznichenko I., Ostanin S., Sasioglu E., Ernst A., Mertig I., Galanakis I.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.52, no.20, 2019 (Journal Indexed in SCI)
- IV. **Thermoelectric response of quaternary Heusler compound $CrVNbZn$**
Kara H., KAHALY M. U. , ÖZDOĞAN K.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.735, pp.950-958, 2018 (Journal Indexed in SCI)
- V. **Itinerant G-type antiferromagnetism in $D0(3)$ -type $V(3)Z$ ($Z = Al, Ga, In$) compounds: A first-**

principles study

Galanakis I., Tirpanci S., ÖZDOĞAN K., SASIOGLU E.

PHYSICAL REVIEW B, vol.94, no.6, 2016 (Journal Indexed in SCI)

- VI. **Spin-filter and spin-gapless semiconductors: The case of Heusler compounds**
GALANAKIS I., ÖZDOĞAN K., SASIOGLU E.
AIP ADVANCES, vol.6, no.5, 2016 (Journal Indexed in SCI)
- VII. **TEMPO-functionalized zinc phthalocyanine: synthesis, magnetic properties, and its utility for electrochemical sensing of ascorbic acid**
KORKUT S., Akyuz D., ÖZDOĞAN K., YERLİ Y., KOCA A., ŞENER M. K.
DALTON TRANSACTIONS, vol.45, no.7, pp.3086-3092, 2016 (Peer-Reviewed Journal)
- VIII. **Ab-initio investigation of electronic and magnetic properties of the 18-valence-electron fully-compensated ferrimagnetic (CrV)XZ Heusler compounds: A prototype for spin-filter materials**
ÖZDOĞAN K., SASIOGLU E., Galanakis I.
COMPUTATIONAL MATERIALS SCIENCE, vol.110, pp.77-82, 2015 (Journal Indexed in SCI)
- IX. **Voids-driven breakdown of the local-symmetry and Slater-Pauling rule in half-metallic Heusler compounds**
Galanakis I., Sasioglu E., Bluegel S., ÖZDOĞAN K.
PHYSICAL REVIEW B, vol.90, no.6, 2014 (Journal Indexed in SCI)
- X. **Effect of disorder on the magnetic properties of cubic Mn₂Ru_xGa compounds: A first-principles study**
Galanakis I., ÖZDOĞAN K., Sasioglu E., Bluegel S.
JOURNAL OF APPLIED PHYSICS, vol.116, no.3, 2014 (Journal Indexed in SCI)
- XI. **Conditions for spin-gapless semiconducting behavior in Mn₂CoAl inverse Heusler compound**
Galanakis I., ÖZDOĞAN K., Sasioglu E., Bluegel S.
JOURNAL OF APPLIED PHYSICS, vol.115, no.9, 2014 (Journal Indexed in SCI)
- XII. **High-T-C fully compensated ferrimagnetic semiconductors as spin-filter materials: the case of CrVXAl (X = Ti, Zr, Hf) Heusler compounds**
Galanakis I., ÖZDOĞAN K., Sasioglu E.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.26, no.8, 2014 (Journal Indexed in SCI)
- XIII. **A proposal for an alternative class of spin filter materials: Hybridization-induced high-T-C ferromagnetic semiconductors CoVXAl (X = Ti, Zr, Hf)**
Galanakis I., ÖZDOĞAN K., Sasioglu E.
APPLIED PHYSICS LETTERS, vol.103, no.14, 2013 (Peer-Reviewed Journal)
- XIV. **Slater-Pauling behavior in LiMgPdSn-type multifunctional quaternary Heusler materials: Half-metallicity, spin-gapless and magnetic semiconductors**
ÖZDOĞAN K., SASIOGLU E., Galanakis I.
JOURNAL OF APPLIED PHYSICS, vol.113, no.19, 2013 (Journal Indexed in SCI)
- XV. **Generalized Slater-Pauling rule for the inverse Heusler compounds**
Skaftouros S., ÖZDOĞAN K., Sasioglu E., Galanakis I.
PHYSICAL REVIEW B, vol.87, no.2, 2013 (Peer-Reviewed Journal)
- XVI. **Search for spin gapless semiconductors: The case of inverse Heusler compounds**
Skaftouros S., ÖZDOĞAN K., Sasioglu E., Galanakis I.
APPLIED PHYSICS LETTERS, vol.102, no.2, 2013 (Journal Indexed in SCI)
- XVII. **Half-metallic perovskite superlattices with colossal thermoelectric figure of merit**
Kahaly M. U., Ozdogan K., Schwingenschloegl U.
JOURNAL OF MATERIALS CHEMISTRY A, vol.1, no.29, pp.8406-8410, 2013 (Journal Indexed in SCI)
- XVIII. **Half-metallic antiferromagnetism in Cr_{2+x}Se (0 ≤ x ≤ 1): A first-principles study**
Galanakis I., ÖZDOĞAN K., Sasioglu E.
PHYSICAL REVIEW B, vol.86, no.13, 2012 (Journal Indexed in SCI)
- XIX. **Robustness and stability of half-metallic ferromagnetism in alkaline-earth metal mononitrides against doping and deformation**

- ÖZDOĞAN K., SASIOGLU E., Galanakis I.
JOURNAL OF APPLIED PHYSICS, vol.111, no.11, 2012 (Journal Indexed in SCI)
- XX. **Anomalous enhancement of the thermoelectric figure of merit by V co-doping of Nb-SrTiO₃**
Ozdogan K., KAHALY M. U., ALSHAREEF H. N., SCHWINGENSCHLOEGL U.
APPLIED PHYSICS LETTERS, vol.100, no.19, 2012 (Peer-Reviewed Journal)
- XXI. **Influence of the annealing atmosphere on structural, optical and magnetic properties of Co-doped ZnO microrods**
Aksu S., BACAŞIZ E., YILMAZ Ş., POLAT İ., Altunbas M., Turksoy M., Topkaya R., ÖZDOĞAN K.
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.44, pp.1244-1249, 2012 (Journal Indexed in SCI)
- XXII. **Enhanced carrier density in Nb-doped SrTiO₃ thermoelectrics**
Ozdogan K., KAHALY M. U., KUMAR S. R. S., ALSHAREEF H. N., SCHWINGENSCHLOGL U.
JOURNAL OF APPLIED PHYSICS, vol.111, no.5, 2012 (Peer-Reviewed Journal)
- XXIII. **Structural, optical and magnetic properties of Mn diffusion-doped CdS thin films prepared by vacuum evaporation**
Aksu S., BACAŞIZ E., PARLAK M., YILMAZ Ş., POLAT İ., Altunbas M., Turksoy M., Topkaya R., ÖZDOĞAN K.
MATERIALS CHEMISTRY AND PHYSICS, vol.130, pp.340-345, 2011 (Journal Indexed in SCI)
- XXIV. **Effect of order on the half-metallic gap in Heusler compounds**
ÖZDOĞAN K., Galanakis I.
JOURNAL OF APPLIED PHYSICS, vol.110, no.7, 2011 (Journal Indexed in SCI)
- XXV. **Violation of Hund's third rule in structurally disordered ferromagnets**
Kapaklis V., Korelis P. T., HJORVARSSON B., VLACHOS A., GALANAKIS I., POULOPOULOS P., ÖZDOĞAN K., ANGELAKERIS M., WILHELM F., ROGALEV A.
PHYSICAL REVIEW B, vol.84, no.2, 2011 (Journal Indexed in SCI)
- XXVI. **Half-metallic ferrimagnetism in the [Sc_{1-x}V_x]C and [Sc_{1-x}V_x]Si alloys adopting the zincblende and wurtzite structures from first-principles**
Ozdogan K., SASIOGLU E., Galanakis I.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.322, no.1, pp.46-50, 2010 (Journal Indexed in SCI)
- XXVII. **First-principles electronic and magnetic properties of the half-metallic antiferromagnet Cr₂MnSb**
Ozdogan K., Galanakis I.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.321, no.15, 2009 (Peer-Reviewed Journal)
- XXVIII. **Optimizing the hydrogen storage in boron nitride nanotubes by defect engineering**
Ozdogan K., Berber S.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.34, no.12, pp.5213-5217, 2009 (Journal Indexed in SCI)
- XXIX. **Tuning the magnetic properties of half-metallic semi-Heusler alloys by sp-electron substitution: the case of AuMnSn_{1-x}Sb_x quaternary alloys**
Ozdogan K., SASIOGLU E., Galanakis I.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.42, no.8, 2009 (Peer-Reviewed Journal)
- XXX. **Ab initio electronic and magnetic properties of half-metallic NiCrSi and NiMnSi Heusler alloys: The role of defects and interfaces**
Galanakis I., Ozdogan K., SASIOGLU E.
JOURNAL OF APPLIED PHYSICS, vol.104, no.8, 2008 (Journal Indexed in SCI)
- XXXI. **Magnetic phase transition in half-metallic CoMnSb and NiMnSb semi-Heusler alloys upon Cu doping: First-principles calculations**
Galanakis I., Sasioglu E., Oezdogan K.
PHYSICAL REVIEW B, vol.77, no.21, 2008 (Journal Indexed in SCI)
- XXXII. **Ferrimagnetism and antiferromagnetism in half-metallic Heusler alloys**
Galanakis I., Ozdogan K., Sasioglu E., Aktas B.
PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE, vol.205, no.5, pp.1036-1039, 2008 (Journal Indexed in SCI)
- XXXIII. **Role of the presence of transition-metal atoms at the antisites in CrAs, CrSe and VAs zinc-blende**

compounds

- Oezdogan K., Galanakis I., SASIOGLU E., Aktas B.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.320, pp.197-203, 2008 (Journal Indexed in SCI)
- XXXIV. **Engineering the electronic, magnetic, and gap-related properties of the quaternary half-metallic Heusler alloys**
Ozdogan K., SASIOGLU E., Galanakis I.
JOURNAL OF APPLIED PHYSICS, vol.103, no.2, 2008 (Journal Indexed in SCI)
- XXXV. **Vacancy-induced minority-spin states in half-metallic Heusler alloys**
Oezdogan K., SASIOGLU E., GALANAKIS I.
PHYSICA STATUS SOLIDI-RAPID RESEARCH LETTERS, vol.1, no.5, pp.184-186, 2007 (Journal Indexed in SCI)
- XXXVI. **EPR of VO₂⁺ in double format, Ba₂Zn(HCOO)₆(H₂O)₄ single crystals**
Yerli Y., Zerentuerk A., Oezdogan K.
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.68, no.1, pp.147-149, 2007 (Journal Indexed in SCI)
- XXXVII. **Magnetic anisotropies in ultrathin iron films grown on the surface-reconstructed GaAs substrate**
Aktas B., Heinrich B., Woltersdorf G., Urban R., Tagirov L. R. , Yildiz F., Oezdogan K., Oezdemir M., Yalcin O., Rameev B. Z.
JOURNAL OF APPLIED PHYSICS, vol.102, no.1, 2007 (Journal Indexed in SCI)
- XXXVIII. **Defects-driven appearance of half-metallic ferrimagnetism in Co-Mn-based Heusler alloys**
Ozdogan K., GALANAKIS I., SASIOGLU E., AKTAS B.
SOLID STATE COMMUNICATIONS, vol.142, no.9, pp.492-497, 2007 (Journal Indexed in SCI)
- XXXIX. **Defect-induced ferrimagnetism in the half-metallic Co₂CrAl and Co₂CrSi compounds**
Ozdogan K., GALANAKIS I., SASIOGLU E., AKTAS B.
PHYSICA STATUS SOLIDI-RAPID RESEARCH LETTERS, vol.1, no.3, pp.95-97, 2007 (Peer-Reviewed Journal)
- XL. **Ab initio design of half-metallic fully compensated ferrimagnets: The case of Cr(2)MnZ (Z=P, As, Sb, and Bi)**
Galanakis I., Ozdogan K., Sasioglu E., Aktas B.
PHYSICAL REVIEW B, vol.75, no.17, 2007 (Journal Indexed in SCI)
- XLI. **Influence of mixing the low-valent transition metal atoms (Y, Y*=Cr, Mn, Fe) on the properties of the quaternary Co-2[Y_{1-x}Y_x]*Z (Z=Al, Ga, Si, Ge, or Sn) Heusler compounds**
Ozdogan K., AKTAS B., GALANAKIS I., SASIOGLU E.
JOURNAL OF APPLIED PHYSICS, vol.101, no.7, 2007 (Journal Indexed in SCI)
- XLII. **Doping of Mn₂VAl and Mn₂VSi Heusler alloys as a route to half-metallic antiferromagnetism**
Galanakis I., Ozdogan K., Sasioglu E., Aktas B.
PHYSICAL REVIEW B, vol.75, no.9, 2007 (Journal Indexed in SCI)
- XLIII. **Doping and disorder in the Co₂MnAl and Co₂MnGa half-metallic Heusler alloys**
Ozdogan K., Sasioglu E., Aktas B., Galanakis I.
PHYSICAL REVIEW B, vol.74, no.17, 2006 (Journal Indexed in SCI)
- XLIV. **Defects in CrAs and related compounds as a route to half-metallic ferrimagnetism**
Galanakis I., Ozdogan K., Sasioglu E., Aktas B.
PHYSICAL REVIEW B, vol.74, no.14, 2006 (Journal Indexed in SCI)
- XLV. **Effect of doping and disorder on the half metallicity of full Heusler alloys**
Galanakis I., Ozdogan K., Aktas B., Sasioglu E.
APPLIED PHYSICS LETTERS, vol.89, no.4, 2006 (Peer-Reviewed Journal)
- XLVI. **Search for half-metallic ferrimagnetism in V-based heusler alloys Mn(2)VZ (Z = Al, Ga, In, Si, Ge, Sn)**
Ozdogan K., Galanakis I., Sasioglu E., Aktas B.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.18, no.10, pp.2905-2914, 2006 (Journal Indexed in SCI)

- I. **First-principles computed electronic and magnetic properties of zincblende alkaline-earth pnictides**
Özdoğan K., Galanakis I.
Journal of Advanced Physics, vol.1, no.1, pp.69-77, 2012 (Refereed Journals of Other Institutions)

Books & Book Chapters

- I. **Fundamentals of half-metallic Full-Heusler alloys "Spintronics: Materials and Applications"**
Özdoğan K., Galanakis I., Şaşıoğlu E.
in: Spintronics Materials Applications and Devices, , Editor, NOVA Science Publishers Inc. , New-York, pp.213-226, 2009
- II. **Role of Defects and Disorder in the Half-Metallic Full-Heusler Compounds**
Özdoğan K., Galanakis I., Sasioğlu E.
in: Advances in Nanoscale Magnetism, B. Aktaş,F. Mikailov, Editor, Springer-Verlag , Berlin, pp.1-16, 2008
- III. **Magnetic anisotropies in ultra-thin iron films grown on the surface-reconstructed GaAs substrate**
Özdoğan K., Aktaş B., Heinrich B., Woltersdorf G., Urban R., Tagirov L. R. , Yıldız F., Özdemir M., Yalçın O., Rameev B.
in: Magnetic Nanostructures, B. Aktas,L. R. Tagirov,and F. Mikailov, Editor, Springer-Verlag , Berlin, pp.167-184, 2007
- IV. **Magnetic anisotropies in the ultra-thin iron film grown on the GaAs substrate**
Özdoğan K., Aktaş B., Heinrich B., Woltersdorf G., Urban R., Tagirov L. R. , Yıldız F., Özdemir M., Yalçın O.
in: Nanostructured Magnetic Materials and their Applications, B.Aktas,L.Tagirov,F.Mikailov, Editor, Kluwer Academic Publishers, Amsterdam, pp.213-227, 2004

Refereed Congress / Symposium Publications in Proceedings

- I. **Investigation of Thermoelectric Properties of FeVTiAl Heusler Alloy for Sustainable Energy Research**
KARA H., ÖZDOĞAN K.
3rd International Conference on Advances in Mechanical Engineering, Konya, Turkey, 19 - 21 December 2017
- II. **Material Prediction for Heat Management by Computational Method: The Evaluation of CoFeMnSi Half-Metallic Ferromagnet**
KARA H., ÖZDOĞAN K.
3rd International Conference on Advances in Mechanical Engineering, Konya, Turkey, 19 - 21 December 2017
- III. **Importance of Power Factor on Defining Energy Conversion Efficiency of CoFeCrAs Alloy in Thermoelectric Material Research**
KARA H., ÖZDOĞAN K.
3rd International Conference on Advances in Mechanical Engineering, Konya, Turkey, 19 November - 21 December 2017
- IV. **A first-principles study on the effect of lattice parameter and atomic order on magnetic and electronic properties of quaternary Heusler alloys CrV(Ti,Zr,Hf)Al**
Tanrıverdi Z. Z. , ÖZDOĞAN K.
International Advanced Researches and Engineering Congress 2017(IAREC' 17), 16 - 18 November 2017
- V. **Energy Conversion Efficiency for Renewable Waste Heat in Dynamic Electric Form: Full-Heusler Co₂TiAl Material**
KARA H., ÖZDOĞAN K.
5th International Symposium on Development of KOP Region, Konya, Turkey, 26 - 28 October 2017
- VI. **Thermopower Effect on Thermoelectric Renewable Energy Research: Ferromagnetic Co₂ScGe Compound**
KARA H., ÖZDOĞAN K.
5th International Symposium on Development of KOP Region, Konya, Turkey, 26 - 28 October 2017
- VII. **Computational Thermoelectric Study of Experimentally Synthesized Half-Metallic Co₂TiGe Alloy for**

Solar-Thermal Electric Technologies

KARA H., ÖZDOĞAN K.

5th International Symposium on Development of KOP Region, Konya, Turkey, 26 - 28 October 2017

- VIII. **Consideration of Co₂VGe Heusler Alloy for Next Generation Energy Materials Using Free Heat as an Electrical Source**
KARA H., ÖZDOĞAN K.
5th International Symposium on Development of KOP Region, Konya, Turkey, 26 - 28 October 2017
- IX. **Evaluation of Thermopower on Co₂MnGe Heusler Alloy for Thermoelectric Renewable Energy Systems**
KARA H., ÖZDOĞAN K.
4th International TURK-PAK Conference on Chemical Sciences, Konya, Turkey, 26 - 28 October 2017
- X. **Transport Properties in Ferromagnetic Co₂MnSi for Future Thermoelectric Energy Materials**
KARA H., ÖZDOĞAN K.
4th International TURK-PAK Conference on Chemical Sciences, Konya, Turkey, 26 - 28 October 2017
- XI. **Searching Magnetic Phase, Electronic Structure and Thermoelectric Properties of Ti₂MnAl Heusler Material**
KARA H., ÖZDOĞAN K.
24. WIEN2k Workshop, Viyana, Austria, 18 - 22 September 2017
- XII. **A DFT Based Thermoelectric Energy Research: Co₂MnSn Heusler Alloy as a Direct Thermal Energy Conversion Material**
KARA H., ÖZDOĞAN K.
24. WIEN2k Workshop, Viyana, Austria, 18 - 22 September 2017
- XIII. **Energy Transfer Ability of Half-Metallic Co₂CrAl Full-Heusler Alloy**
KARA H., ÖZDOĞAN K.
International Congress on Semiconductor Materials and Devices (ICSMD-2017), Konya, Turkey, 17 - 19 August 2017
- XIV. **Evulation of Transport Properties of Co₂CrIn Magnetic Heusler Alloy in Material Research for Thermoelectric Power Modules**
KARA H., ÖZDOĞAN K.
International Congress on Semiconductor Materials and Devices (ICSMD-2017), Konya, Turkey, 17 - 19 August 2017
- XV. **Influence of Electrical Conductivity on Energy Transfer Efficiency of Co₂CrGe Heusler Alloy**
KARA H., ÖZDOĞAN K.
International Congress on Semiconductor Materials and Devices (ICSMD-2017), Konya, Turkey, 17 - 19 August 2017
- XVI. **Effect of Power Factor on Obtaining Electric Current by Using Waste Heat in Ferromagnetic Co₂CrGa Alloy**
KARA H., ÖZDOĞAN K.
International Congress on Semiconductor Materials and Devices (ICSMD-2017), Konya, Turkey, 17 - 19 August 2017
- XVII. **The contribution of thermopowers to energy conversion in Ti₂XAl(X =Cu,Ni) Heusler alloys**
KARA H., ÖZDOĞAN K.
INTERNATIONAL CONFERENCE ON ENERGY AND THERMAL ENGINEERING: ISTANBUL 2017, 25 - 28 April 2017
- XVIII. **The electrical conductivity supplement to the figure of merit for ferromagnetic X₂VAl(X=Sc,Ti) in clean energy research**
KARA H., ÖZDOĞAN K.
INTERNATIONAL CONFERENCE ON ENERGY AND THERMAL ENGINEERING: ISTANBUL 2017, 25 - 28 April 2017
- XIX. **Computational determination of Hall coefficients for the comparison of charge carrier densities between X₂CrAl(X=Sc,Ti)**
KARA H., ÖZDOĞAN K.
INTERNATIONAL CONFERENCE ON ENERGY AND THERMAL ENGINEERING: ISTANBUL 2017, 25 - 28 April 2017

- XX. **Thermal conductivity effect on the yield of waste heat recovery systems in Sc₂MnAl and Ti₂ZnAl materials**
KARA H., ÖZDOĞAN K.
INTERNATIONAL CONFERENCE ON ENERGY AND THERMAL ENGINEERING: ISTANBUL 2017, 25 - 28 April 2017
- XXI. **To regenerate electricity from waste heat: The comparison of power factors in X₂CoAl(X=Sc,Ti) compounds**
KARA H., ÖZDOĞAN K.
INTERNATIONAL CONFERENCE ON ENERGY AND THERMAL ENGINEERING: ISTANBUL 2017, 25 - 28 April 2017
- XXII. **Finding of Seebeck coefficients by DFT calculations for X₂FeAl(X=Sc,Ti) for thermoelectric energy conversion systems**
KARA H., ÖZDOĞAN K.
INTERNATIONAL CONFERENCE ON ENERGY AND THERMAL ENGINEERING: ISTANBUL 2017, 25 - 28 April 2017
- XXIII. **FROM HEAT TO ELECTRICITY ENERGY CONVERSION ABILITY OF Sc₂XAl X Ti V Cr HEUSLER COMPOUNDS**
KARA H., ÖZDOĞAN K.
Second International Conference on Energy Systems, (ICES-2016) Yildiz Technical University, December 21-23, 2016, Istanbul, Turkey, 21 - 23 December 2016
- XXIV. **EVALUATION OF THERMOELECTRIC PERFORMANCE OF Sc₂XAl X Cu Zn BY USING AB INITIO CALCULATIONS**
KARA H., ÖZDOĞAN K.
Second International Conference on Energy Systems, (ICES-2016) Yildiz Technical University, December 21-23, 2016, Istanbul, Turkey, 21 - 23 December 2016
- XXV. **SrMO₃ (M=Sc,Y,Lu) Bileşiklerinin Termoelektrik Özelliklerinin İncelenmesi**
Özdoğan K., Kara H., Aykara A.
Adım Fizik Günleri V, Eskişehir, Turkey, 21 - 23 April 2016, pp.67
- XXVI. **SrTiO₃ ve SrVO₃ Bileşiklerinin Elektronik ve Termoelektrik Özelliklerinin İlk Prensip Hesaplamaları ile İncelenmesi**
Özdoğan K., Kara H., Aykara A.
Adım Fizik Günleri V, Eskişehir, Turkey, 21 - 23 April 2016, pp.142
- XXVII. **Thermoelectric Properties of SrYO₃ Y V Nb Ta First Principles Calculations**
Aykara A., KARA H., ÖZDOĞAN K.
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