

## Assoc. Prof. Süheyla Yüce Emre

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 2004 - 2010

Postgraduate, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey 2002 - 2004

Undergraduate, Middle East Technical University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 1994 - 2001

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Nikel ve kobalt tabanlı heusler alaşımlarının manyetik, ısıl, elektriksel ve manyetokalorik özelliklerinin incelenmesi, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Fizik (Dr), 2010

Postgraduate, Tek kristal x-ışını kırınım yöntemi ile C<sub>15</sub>H<sub>13</sub>N<sub>2</sub>, C<sub>15</sub>H<sub>13</sub>N<sub>2</sub>, C<sub>19</sub>H<sub>15</sub>N<sub>2</sub> kristallerinin yapı analizleri, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 2004

### Research Areas

Equations of State, Phase Equilibria, and Phase Transitions, Structure of Liquids and Solids; Crystallography, Thermal Properties of Condensed Matter

### Academic Titles / Tasks

Research Assistant, Ondokuz Mayıs University, Fen Fakültesi, Fizik Bölümü, 2002 - Continues

### Courses

Fizik I, Undergraduate, 2020 - 2021  
Fizik I, Associate Degree, 2019 - 2020  
Fizik II, Undergraduate, 2019 - 2020

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

- I. **Tuning of the magneto-caloric effects in  $\text{Ni}_{43}\text{Mn}_{46}\text{In}_{11}$  magnetic shape memory alloys by substitution of boron**  
Saritas S., ÇIÇEK M. M., KAVAK E., GURPINAR K., YILDIRIM O., YUCE S., ATAKOL O., EMRE B.  
JOURNAL OF PHYSICS-CONDENSED MATTER, no.7, 2024 (SCI-Expanded)
- II. **Investigation of the inverse magnetocaloric effect with the fraction method**  
Yuce S., Kavak E., Yildirim O., Bruno N. M., Emre B.  
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.35, no.34, 2023 (SCI-Expanded)
- III. **Investigation of the complex magnetic behavior of  $\text{Ni}_{46.86}\text{Co}_{2.91}\text{Mn}_{38.17}\text{Sn}_{12.06}$  (at%) magnetic shape memory alloy at low temperatures**  
Yildirim O., Yüce Emre S., Bruno N. M., Kilit Doğan E., YURTSEVEN H. H., DUMAN E., Emre B.  
PHYSICA SCRIPTA, vol.97, no.8, 2022 (SCI-Expanded)
- IV. **On the instability of the giant direct magnetocaloric effect in  $\text{CoMn}_{0.915}\text{Fe}_{0.085}\text{Ge}$  at. % metamagnetic compounds**  
Bruno N. M., Yüce Emre S.  
SCIENTIFIC REPORTS, vol.10, no.1, 2020 (SCI-Expanded)
- V. **Martensitic transformation and magnetocaloric properties of  $\text{NiCoMnSn}$  magnetic shape memory alloys**  
Emre B., Yüce Emre S., Bruno N. M., Karaman I.  
INTERMETALLICS, vol.106, pp.65-70, 2019 (SCI-Expanded)
- VI. **Analysis of Magnetization as a Function of Temperature for  $\text{CoMn}_{1-x}\text{Fe}(x)\text{Ge}$**   
Yüce Emre S., Kilit Doğan E., Emre B., Bruno N. M., Karaman I., YURTSEVEN H. H.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.30, no.12, pp.3587-3594, 2017 (SCI-Expanded)
- VII. **Accessibility investigation of large magnetic entropy change in  $\text{CoMn}_{1-x}\text{Fe}_x\text{Ge}$**   
Yüce Emre S., Bruno N. M., Emre B., Karaman I.  
JOURNAL OF APPLIED PHYSICS, vol.119, no.13, 2016 (SCI-Expanded)
- VIII. **Tailoring barocaloric and magnetocaloric properties in low-hysteresis magnetic shape memory alloys**  
Stern-Taulats E., Planes A., Lloveras P., Barrio M., Tamarit J., Pramanick S., Majumdar S., Yüce Emre S., Emre B., Frontera C., et al.  
ACTA MATERIALIA, vol.96, pp.324-332, 2015 (SCI-Expanded)
- IX. **Enhancement of magnetocaloric effect in  $\text{CoMn}_{0.9}\text{Fe}_{0.1}\text{Ge}$  alloy**  
YÜZÜAK E., Dincer I., Elerman Y., Dumkow I., Heger B., Emre S.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.641, pp.69-73, 2015 (SCI-Expanded)
- X. **Effect of niobium addition on the martensitic transformation and magnetocaloric effect in low hysteresis  $\text{NiCoMnSn}$  magnetic shape memory alloys**  
Emre B., Bruno N. M., Yüce Emre S., Karaman I.  
APPLIED PHYSICS LETTERS, vol.105, no.23, 2014 (SCI-Expanded)
- XI. **Barocaloric effect in metamagnetic shape memory alloys**  
Manosa L., Stern-Taulats E., Planes A., Lloveras P., Barrio M., Tamarit J., Emre B., Yüce Emre S., Fabbri S., Albertini F.  
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, vol.251, no.10, pp.2114-2119, 2014 (SCI-Expanded)
- XII. **The Effect of Cr doping on the Magnetic and Magnetocaloric Properties of  $\text{MnCoGe}$  Alloys**  
Emre S.  
JOURNAL OF MAGNETICS, vol.18, no.4, pp.405-411, 2013 (SCI-Expanded)

- XIII. **Large reversible entropy change at the inverse magnetocaloric effect in Ni-Co-Mn-Ga-In magnetic shape memory alloys**  
Emre B., Yuce S., Stern-Taulats E., Planes A., Fabbri S., Albertini F., Manosa L.  
JOURNAL OF APPLIED PHYSICS, vol.113, no.21, 2013 (SCI-Expanded)
- XIV. **Barocaloric effect in the magnetocaloric prototype Gd<sub>5</sub>Si<sub>2</sub>Ge<sub>2</sub>**  
Yüce Emre S., Barrio M., Emre B., Stern-Taulats E., Planes A., Tamarit J., Mudryk Y., Gschneidner K. A., Pecharsky V. K., Manosa L.  
APPLIED PHYSICS LETTERS, vol.101, no.7, 2012 (SCI-Expanded)
- XV. **(Z)-6-[[1,3-dihydroxy-2-(hydroxy-methyl)propan-2-yliminio]methyl] 2-ethoxyphenolate, (Z)-6-[[1,3-dihydroxy-2-(hydroxymethyl)propan-2-yliminio]methyl]-4-nitratocyclohexa-2,4-dienone monohydrate and (R,E)-2-[(1-hydroxybutan-2-ylimino)methyl]phenol**  
Yüce Emre S., Albayrak C., Odabasoglu M., Buyukgungor O.  
ACTA CRYSTALLOGRAPHICA SECTION C-CRYSTAL STRUCTURE COMMUNICATIONS, vol.62, 2006 (SCI-Expanded)
- XVI. **2-Hydroxy-6-[(1-naphthylamino)methylene]-cyclohexa-2,4-dien-1-one**  
Ozek A., Yüce Emre S., Albayrak C., Odabasoglu M., Buyukgungor O.  
ACTA CRYSTALLOGRAPHICA SECTION E-CRYSTALLOGRAPHIC COMMUNICATIONS, vol.61, 2005 (SCI-Expanded)
- XVII. **Structures of Some Hydroxynaphthaldehyde Schiff Bases**  
Ozek A., Yüce Emre S., Albayrak C., Odabasoglu M., Buyukgungor O.  
ACTA CRYSTALLOGRAPHICA A-FOUNDATION AND ADVANCES, vol.61, 2005 (SCI-Expanded)
- XVIII. **1-[(5-Chloro-2-hydroxyphenylamino)methylene]-naphthalen-2(1H)-one**  
Ozek A., Yüce Emre S., Albayrak C., Odabasoglu M., Buyukgungor O.  
ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.60, 2004 (SCI-Expanded)
- XIX. **1-[(4-acetylphenylamino)methylene]naphthalen-2(1H)-one**  
Yüce Emre S., Ozek A., Albayrak C., Odabasoglu M., Buyukgungor O.  
ACTA CRYSTALLOGRAPHICA SECTION E-CRYSTALLOGRAPHIC COMMUNICATIONS, vol.60, 2004 (SCI-Expanded)
- XX. **1-[(2-hydroxy-5-methylphenylamino)-methylene]naphthalen-2(1H)-one**  
Ozek A., Yüce Emre S., Albayrak C., Odabasoglu M., Buyukgungor O.  
ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.60, 2004 (SCI-Expanded)
- XXI. **3-(4-Acetylphenyliminomethyl)-1,2-dihydroxy-benzene**  
Yüce Emre S., Ozek A., Albayrak C., Odabasoglu M., Buyukgungor O.  
ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.60, 2004 (SCI-Expanded)
- XXII. **1-[(4-Nitrophenylamino)methylene]naphthalen-2(1H)-one**  
Ozek A., Yüce Emre S., Albayrak C., Buyukgungor O.  
ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.60, 2004 (SCI-Expanded)
- XXIII. **A redetermination of 1-[4-[(2-hydroxybenzylidene)amino]phenyl]ethanone**  
Yüce Emre S., Ozek A., Albayrak C., Odabasoglu M., Buyukgungor O.  
ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.60, 2004 (SCI-Expanded)
- XXIV. **1-[(3-hydroxypyridin-2-ylamino)methylene]naphthalen-2(1 H)-one**  
Ozek A., Yüce Emre S., Albayrak C., Odabasoglu M., Buyukgungor O.  
ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.60, 2004 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Revealing the low and high temperature magnetic behavior of Ni<sub>46.86</sub>Co<sub>2.91</sub>Mn<sub>38.17</sub>Sn<sub>12.06</sub> shape memory compound**  
YÜCE EMRE S., KİLİT DOĞAN E., DUMAN E., Yıldırım O., EMRE Ş. B.  
INTERNATIONAL EURASIAN CONFERENCE ON SCIENCE, ENGINEERING AND TECHNOLOGY (EURASIAN SCIENTECH 2018), 22 - 23 November 2018
- II. **Magnetic Structure and Phase Transition of Ni<sub>45</sub>Co<sub>5</sub>Mn<sub>39</sub>Sn<sub>11</sub> Magnetic Shape memory Compound**  
Yıldırım O., YÜCE EMRE S., ERDOĞAN V., DUMAN E., EMRE Ş. B.

The International Conference on Material Science and Technology in Cappadocia(IMSTEC 2018), 17 - 19 September 2018

- III. **Calorimetric Study of Hysteresis Effects on the Magnetocaloric Effect in NiCoMnSn Alloys**  
EMRE Ş. B., Stern Taulat E., YÜCE EMRE S., Bruno N., Planes A., Manosa L., Karaman I.  
5. CIMTEC 5th International Conference "Smart and Multifunctional Materials, Structures and Systems, 5 - 09 June 2016
- IV. **The effect of the thermo mechanical treatments on mechanical and superelastic properties of 74 8Ti 25 2Nb at alloys**  
YÜCE EMRE S., BABACAN N., ATLI K. C., KOÇKAR B.  
10th European Symposium on Martensitic Transformations (ESOMAT), 14 - 18 September 2015
- V. **Martensitic transformation and effect of hysteresis on the magnetocaloric properties of NiCoMnSn magnetic shape memory alloys**  
EMRE Ş. B., YÜCE EMRE S., Nick B., Ibrahim K.  
10th European Symposium on Martensitic Transformations (ESOMAT), 14 - 18 September 2015
- VI. **MAGNETOCALORIC EFFECT AND TUNING TRANSITION TEMPERATURES on CoMn<sub>1-x</sub>FexGe SYSTEM**  
YÜCE EMRE S., Nick B., Ibrahim K.  
4th International Conference on Superconductivity and Magnetism, 27 April - 02 May 2014
- VII. **Calorimetric Study of Barocaloric and Magnetocaloric Effects in Gd<sub>5</sub>Si<sub>2</sub>Ge<sub>2</sub>**  
YÜCE S., EMRE Ş. B., ENRICH S., ANTONI P., MARIA B., JOSEPH T., LLUIS M., GSCHNEIDNER K. A., MUDRYK Y., PECHARKSY V.  
THERMAG V, 17 - 20 September 2012
- VIII. **Calorimetric study of the barocaloric and magnetocaloric effects in Ni Co Mn Ga In**  
YÜCE S., EMRE Ş. B., STERN E., PLANES A., BARRIO M., TAMARIT J., ALBERTINI F., FABBRICI S., MANOSA L.  
JEMS12 Joint European Magnetic Symposia, 4 - 09 September 2012
- IX. **Magnetic Magnetocaloric Properties and Landau Theory Application on the La<sub>0.55</sub>Ce<sub>0.45</sub>Mn<sub>2</sub>Si<sub>2</sub> Compound**  
EMRE Ş. B., YÜCE S., DİNÇER İ., ELERMAN H. Y.  
Türk Fizik Derneği 25. Uluslararası Kongresi, 27 - 29 August 2010
- X. **Investigation of structure and magnetic properties of CoMn<sub>1-x</sub>CrxGe**  
YÜCE S., YÜZÜAK E., ELERMAN H. Y.  
JEMS10 Joint European Magnetism Symposia, 23 - 28 August 2010
- XI. **The structure of some salicylaldehyde compounds**  
YÜCE S., ALBAYRAK KAŞTAŞ Ç., ODABAŞOĞLU M., BÜYÜKGÜNGÖR O.  
13. Yoğun Madde Fiziği - Ankara Toplantısı, Turkey, 3 - 05 November 2006
- XII. **Z 6 1 3 Dihydroxy 2 hydroxymethyl propan 2 yliminio methyl 2 ethoxyphenolate Z 6 1 3 dihydroxy 2 hydroxymethyl propan 2 yliminio methyl 4 nitratocyclohexa 2 4 dienone monohydrate and R E 2 1 hydroxybutan 2 ylimino methyl phenol**  
YÜCE S., ALBAYRAK KAŞTAŞ Ç., ODABAŞOĞLU M., BÜYÜKGÜNGÖR O.  
2ND TURKISH CRYSTALLOGRAPHIC MEETING, Turkey, 17 - 19 May 2006
- XIII. **Structures of Some Hydroxyanthraldehyde Schiff Bases**  
ÖZEK YILDIRIM A., YÜCE S., ALBAYRAK KAŞTAŞ Ç., ODABAŞOĞLU M., BÜYÜKGÜNGÖR O.  
XX IUCr International Union of Crystallography Twentieth General Assembly and International Congress of Crystallography, 23 - 31 August 2005
- XIV. **1 4 2 3 Dihydroxy Benzylidene Amino Phenyl Ethadone Schiff Baz Kristalinin Sentezi ve Yapısı**  
YÜCE S., ÖZEK YILDIRIM A., ALBAYRAK KAŞTAŞ Ç., ODABAŞOĞLU M., BÜYÜKGÜNGÖR O.  
Türk Fizik Derneği 22. Fizik Kongresi, 14 - 17 September 2004
- XV. **1-[4-[(2,3-Dihydroxy-benzylidene)-amino]-phenyl]-ethanone**  
YÜCE EMRE S., ÖZEK YILDIRIM A., ALBAYRAK KAŞTAŞ Ç., ODABAŞOĞLU M., BÜYÜKGÜNGÖR O.  
22. Avrupa Kristalografi Toplantısı, 26 - 31 August 2004
- XVI. **Schiff Bazların Sentezlenmesi**  
YÜCE EMRE S., ÖZEK YILDIRIM A., ALBAYRAK KAŞTAŞ Ç., ODABAŞOĞLU M., BÜYÜKGÜNGÖR O.

4. Uluslararası Balkan Çalıştayı, 25 - 27 September 2003

XVII. 1-5-Choloro 2-hydroxyphenylamino methylene naphthalen 2 1H one

ÖZEK YILDIRIM A., YÜCE EMRE S., ALBAYRAK KAŞTAŞ Ç., ODABAŞOĞLU M., BÜYÜKGÜNGÖR O.

5.Balkan Fizik Birliği Konferansı, 24 - 29 August 2003

## Supported Projects

Yüce Emre S., Project Supported by Higher Education Institutions, PdMn Tabanlı Şekil Hafıza Alasimlerinin Üretilmesi ve Isıl-Mekanik Olarak İncelenmesi, 2016 - 2016

Yüce Emre S., TUBITAK Project, Medikal Uygulamalara Yönelik Yeni Nesil Ti Tabanlı Şekil Hafıza Alaşımaları, 2014 - 2016

Yüce Emre S., Project Supported by Higher Education Institutions, Avrupa Martensitik Gecis Sempozyumu (The European Symposium on Martensitic Transformations), 2015 - 2015

Yüce Emre S., Project Supported by Higher Education Institutions, PdMn Tabanlı Malzemelerin Üretilmesi ve Termo Mekaniksel Olarak İncelenmesi, 2013 - 2013

Yüce Emre S., Project Supported by Higher Education Institutions, Ferromanyetik Ni ve Co Tabanlı Heusler Alaşımalarının Yapısal Isısal Elektriksel ve Spintronik Özelliklerinin İncelenmesi, Proje No: 08B4343005, 2007 - 2010

Yüce Emre S., TÜBİTAK International Bilateral Joint Cooperation Program Project, Nadir yer elementi grup 4 sistemlerinin manyetik manyetokalorik etkileri ve yapısal karakterlerini incelenmesi, 2005 - 2008