

## Lect. Gökhan HARDAL

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Metallurgical And Materials Engineering, Turkey 2015 - Continues

Postgraduate, İstanbul University, Institute of Graduate Studies In Sciences, Metalurji Ve Malzeme Mühendisliği Abd, Turkey 2012 - 2015

Undergraduate, İstanbul University, Mühendislik Fakültesi, Metalurji Ve Malzeme Mühendisliği, Turkey 2008 - 2012

### Dissertations

Postgraduate, Çeşitli Oksit Bileşiklerinin Çinko Oksit'in Mikroyapı Özelliklerine Etkisi, İstanbul University, Mühendislik Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü, 2015

### Research Areas

Metallurgical and Materials Engineering, Material science and engineering, Ceramic Materials, Electrical and Magnetic Properties, Material Characterization, Engineering and Technology

### Academic Titles / Tasks

Lecturer, İstanbul University, Teknoloji Transfer Uygulama Ve Araştırma Merkezi, Teknoloji Transfer Ofisi, 2017 - Continues

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

- I. **Influence of V2O5 and B2O3 addition on the sintering behaviour and physical properties of ZnO ceramics**  
Yüksel Price B., Hardal G., Kınacı B.  
Processing and Application of Ceramics, vol.16, no.1, pp.48-54, 2022 (SCI-Expanded)
- II. **Influence of V2O5 and B2O3 addition on the sintering behaviour and physical properties of ZnO ceramics**  
YÜKSEL PRICE B., HARDAL G., KINACI B.  
Processing and Application of Ceramics, vol.16, no.1, pp.48-54, 2022 (SCI-Expanded)

- III. **Electrical properties of Ni<sub>0.5</sub>Co<sub>0.8</sub>Mn<sub>1.7</sub>O<sub>4</sub> and Ni<sub>0.5</sub>Co<sub>1.1</sub>Mn<sub>1.4</sub>O<sub>4</sub> negative temperature coefficient ceramics doped with B<sub>2</sub>O<sub>3</sub>**  
YÜKSEL PRICE B., Hardal G.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.7, pp.8983-8990, 2021 (SCI-Expanded)
- IV. **Preparation and characterization of Ni-Co-Zn-Mn-O negative temperature coefficient thermistors with B<sub>2</sub>O<sub>3</sub> addition**  
PRICE B. Y., Hardal G.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.30, no.18, pp.17432-17439, 2019 (SCI-Expanded)
- V. **The Effect of TiO<sub>2</sub> and B<sub>2</sub>O<sub>3</sub> Additions on the Grain Growth of ZnO**  
Hardal G., Price B.  
METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE, no.4, pp.2090-2098, 2017 (SCI-Expanded)
- VI. **Influence of B<sub>2</sub>O<sub>3</sub> addition on the electrical and microstructure properties of Ni<sub>0.5</sub>Co<sub>0.5</sub>Cu<sub>x</sub>Mn<sub>2-x</sub>O<sub>4</sub> (0 ≤ x ≤ 0.3) NTC thermistors without calcination**  
Yüksel Price B., HARDAL G.  
Journal of Materials Science: Materials in Electronics, vol.27, no.9, pp.9226-9232, 2016 (SCI-Expanded)
- VII. **INFLUENCE OF NANO-SIZED COBALT OXIDE ADDITIONS ON THE STRUCTURAL AND ELECTRICAL PROPERTIES OF NICKEL-MANGANITE-BASED NTC THERMISTORS**  
Hardal G., Price B. Y.  
MATERIALI IN TEHNOLOGIJE, vol.50, no.6, pp.923-928, 2016 (SCI-Expanded)
- VIII. **Effects of MnO doping on the electronic properties of zinc oxide: 406GHz electron paramagnetic resonance spectroscopy and Newman superposition model analysis**  
Price B. Y., Hardal G., AÇIKGÖZ M., Repp S., Erdem E.  
JOURNAL OF APPLIED PHYSICS, vol.118, no.17, 2015 (SCI-Expanded)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Preparation and Structural Characterization of NiMn<sub>2</sub>O<sub>4</sub> Ceramics**  
Yüksel Price B., Hardal G.  
20th International Metallurgy and Materials Congress, İstanbul, Turkey, 10 - 12 June 2021, pp.635
- II. **A Microstructural Investigation of 1 mol% H<sub>3</sub>BO<sub>3</sub> and 0.5 mol% MnO Added ZnO Ceramics**  
Yüksel Price B., Hardal G.  
20th International Metallurgy and Materials Congress, İstanbul, Turkey, 10 - 12 June 2021, pp.634
- III. **Effect of Co addition on the electrical properties of Ni-Mn-O NTC thermistors**  
HARDAL G., YÜKSEL PRICE B.  
International Conference on Engineering Technology and Innovation, Saraybosna, Bosnia And Herzegovina, 22 - 26 March 2017, pp.4
- IV. **Aging Behaviour in Ni<sub>0.5</sub>CoxMn<sub>2.5-x</sub>O<sub>4</sub> (x=0.5, 0.8 and 1.1) Thermistors**  
HARDAL G., YÜKSEL PRICE B.  
146th Annual Meeting & Exhibition (TMS 2017), San Diego, United States Of America, 26 February - 02 March 2017, pp.85-89
- V. **Electrical and Microstructural Investigation of Ni<sub>0.5</sub>Co<sub>0.5</sub>Cu<sub>0.3</sub>Zn<sub>0.3</sub> Mn<sub>1.4</sub>O<sub>4</sub> Temperature Sensors**  
Hardal G., Price B. Y.  
TMS Annual Meeting and Exhibition / Symposium on Characterization of Minerals, Metals, and Materials, California, United States Of America, 01 January 2017, pp.139-144
- VI. **Aging Behaviour in Ni<sub>0.5</sub>Cox Mn<sub>2.5-x</sub>O<sub>4</sub> (x=0.5, 0.8 and 1.1) Thermistors**  
Hardal G., Price B. Y.  
TMS Annual Meeting and Exhibition / Symposium on Characterization of Minerals, Metals, and Materials, California,

United States Of America, 01 January 2017, pp.85-89

- VII. **Investigation of microstructure properties in Al<sub>2</sub>O<sub>3</sub> and Al<sub>2</sub>O<sub>3</sub>-B<sub>2</sub>O<sub>3</sub> doped ZnO ceramics**  
HARDAL G., YÜKSEL PRICE B.  
40th International Conference and Expo on Advanced Ceramics and Composites, Daytona Beach, United States Of America, 24 - 29 January 2016, pp.83
- VIII. **Electrical and microstructural properties of NiMn<sub>2</sub>O<sub>4</sub> NTC thermistors by doping 0.1 mol B<sub>2</sub>O<sub>3</sub> without calcination**  
HARDAL G., YÜKSEL PRICE B.  
40th International Conference and Expo on Advanced Ceramics and Composites, Daytona Beach, United States Of America, 24 - 29 January 2016, pp.83
- IX. **Influence of Nano-Sized Cobalt Oxide Addition on the Structural and Electrical Properties of Nickel Manganite Based Ntc Thermistors**  
HARDAL G., YÜKSEL PRICE B.  
23RD INTERNATIONAL CONFERENCE ON MATERIALS AND TECHNOLOGY, Portoroz, Slovenia, 27 - 30 September 2015, pp.260
- X. **The Grain Growth Kinetics of 0.5 mol% B<sub>2</sub>O<sub>3</sub>-1 mol% TiO<sub>2</sub>-doped ZnO Ceramics**  
Hardal G., Yuksel B.  
Symposium on Characterization of Minerals, Metals, and Materials held during The-Minerals-Metals-and-Materials-Society Annual Meeting and Exhibition (TMS), California, United States Of America, 16 - 20 February 2014, pp.637-644
- XI. **Microstructural and Electrical Properties of 0.5 mol% Al<sub>2</sub>O<sub>3</sub>-0.1 mol% B<sub>2</sub>O<sub>3</sub> doped ZnO Ceramics**  
Yuksel B., Hardal G.  
Symposium on Characterization of Minerals, Metals, and Materials held during The-Minerals-Metals-and-Materials-Society Annual Meeting and Exhibition (TMS), California, United States Of America, 16 - 20 February 2014, pp.55-61
- XII. **Microstructure Characteristics Of 0.5 Mol% B<sub>2</sub>O<sub>3</sub>-Doped ZnO-1 Mol% TiO<sub>2</sub> Ceramics**  
HARDAL G., YÜKSEL PRICE B.  
Advanced Materials World Congress (AMWC 2013), İzmir, Turkey, 16 - 19 September 2013, pp.171

## Supported Projects

Kürtüncü M., Şeker Ş. E., Gündüz T., Ertürk M. A., Nizam Özoğur H., Hardal G., Meral G., Project Supported by Higher Education Institutions, Multipl Sklerozda Beyin Manyetik Rezonans Görüntülemeledeki Demiyelinizan Lezyon Yaşının Derin Öğrenme ile Belirlenmesi, 2024 - 2025

Gül A., Hardal G., Cevher E., Üresin A. Y., Abacı N., Sırma Ekmekci S., Özgülner N., Tan N., Özhan G., Akbıyık M., et al., TUBITAK Project, İnflamazom Aracılı Otoenflamatuvar Hastalıkların Takip ve Tedavisine Yönelik Biyogösterge ve İleri Teknoloji Ürünü İlaçların Geliştirilmesi , 2021 - 2025

Yüksel Price B., Hardal G., Project Supported by Higher Education Institutions, V2O5 katkısının Ni-Co-Cr-Mn oksit NTC termistörlerin elektriksel ve mikroyapı özelliklerine etkisi, 2015 - 2020

Yüksel Price B., Hardal G., Project Supported by Higher Education Institutions, 0.1 mol Cr<sub>2</sub>O<sub>3</sub> Katkılı Ni-Mn-Co-O termistörlerin elektriksel yaşlanma davranışının belirlenmesi , 2016 - 2019

YÜKSEL PRICE B., HARDAL G., Project Supported by Higher Education Institutions, Molce % 0.5 V2O5 ve molce % 0.5 B<sub>2</sub>O<sub>3</sub> katkılı çinko oksit seramiklerin mikroyapı karakterizasyonu, 2014 - 2017

Yüksel Price B., TUBITAK Project, Bor Oksit Katkısının Mn-Ni-Co-Cu-Zn Oksit NTC Termistörlerin Elektriksel ve Mikroyapı Özelliklerine Etkisi, 2014 - 2016

YÜKSEL PRICE B., HARDAL G., Project Supported by Higher Education Institutions, Çeşitli Oksit Bileşiklerinin Çinko Oksit'in Mikroyapı Özelliklerine Etkisi, 2014 - 2015

## **Memberships / Tasks in Scientific Organizations**

THE ROYAL SOCIETY OF CHEMISTRY, Member, 2017 - Continues  
The Minerals, Metals and Materials Society, Member, 2016 - Continues  
ASM International - The Materials Information Society, Member, 2016 - Continues  
AIST - Association for Iron & Steel Technology, Member, 2016 - Continues  
Material Advantage, Member, 2016 - Continues  
ACerS - The American Ceramic Society, Member, 2016 - Continues  
The Minerals, Metals and Materials Society, Member, 2014 - 2014

## **Metrics**

Publication: 20  
Citation (WoS): 36  
Citation (Scopus): 40  
H-Index (WoS): 3  
H-Index (Scopus): 4

## **Congress and Symposium Activities**

20th International Metallurgy and Materials Congress, Attendee, İstanbul, Turkey, 2021  
International Conference on Engineering Technology and Innovation, Attendee, Sarajevo, Bosnia And Herzegovina, 2017  
146th Annual Meeting & Exhibition, Attendee, California, United States Of America, 2017  
40th International Conference and Expo on Advanced Ceramics and Composites, Attendee, Florida, United States Of America, 2016  
23RD INTERNATIONAL CONFERENCE ON MATERIALS AND TECHNOLOGY, Attendee, Piran, Slovenia, 2015  
143th Annual Meeting and Exhibition, Attendee, California, United States Of America, 2014  
Advanced Materials World Congress (AMWC 2013), Attendee, İzmir, Turkey, 2013