

## Res. Asst. ALİ EMRE GENÇ

### Personal Information

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### Education Information

Doctorate, Gazi University, Fen Fakültesi, Fizik, Turkey 2012 - 2019

Post Graduate, Gazi University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey 2008 - 2011

### Foreign Languages

English, C2 Proficiency

### Research Areas

Atomic and Molecular Physics, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Computational Chemistry, Fuel Cells, Surface Chemistry, Catalysis

### Academic Titles / Tasks

Research Assistant, Gazi University, Fen Fakültesi, Fizik Bölümü, 2009 - Continues

### Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Hydrazine decomposition on nickel-embedded graphene**  
GENÇ A. E. , KÜÇÜK H., ALP İ., Akca A.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.45, no.58, pp.33407-33418, 2020 (Journal Indexed in SCI)
- II. **BH<sub>4</sub> dissociation on various metal (111) surfaces: A DFT study**  
Akca A., Genc A. E. , Kutlu B.  
APPLIED SURFACE SCIENCE, vol.473, pp.681-692, 2019 (Journal Indexed in SCI)
- III. **The catalytic effect of the Au(111) and Pt(111) surfaces to the sodium borohydride hydrolysis reaction mechanism: A DFT study**  
Genc A. E. , Akca A., KUTLU B.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.31, pp.14347-14359, 2018 (Journal Indexed in SCI)
- IV. **The estimation of a  $(kT(C)(p)/J, p)$  phase diagram for a two-dimensional site-diluted Ising model using a microcanonical algorithm**  
KUTLU B., GENÇ A. E.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.392, no.3, pp.451-457, 2013 (Journal Indexed in SCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Catalytic activity Au(210) surface for sodium and Lithium borohydride hydrolysis reactions: A DFT study.**  
GENÇ A. E. , AKÇA A., KUTLU B.  
International Symposium on Chemistry and Computation, İstanbul, Turkey, 30 October 2017, pp.65-66
- II. **CATALYTIC ACTIVITY OF LOW-INDEX Au(111), Au(100) AND Au(110) HIGH-INDEX Au(210) SURFACES FOR SODIUM BOROHYDRIDE HYDROLYSIS REACTION**  
GENÇ A. E. , AKÇA A., KUTLU B.  
TFD33, Muğla, Turkey, 6 - 10 September 2017
- III. **dft studt of the hydroxyl ion co-adsorbtion effect on Pt(111)and Au(111) surfaces to sodium borohydride hydrolysis reaction**  
GENÇ A. E. , AKÇA A., KUTLU B.  
TFD33, Muğla, Turkey, 6 September - 10 June 2017
- IV. **Catalitic activity of Pt(111)and Au(111)Surface on sodium borohydride hydrolysis: a dft study**  
AKÇA A., GENÇ A. E. , KUTLU B.  
TFD33, Muğla, Turkey, 6 - 10 September 2017
- V. **Catalysis of sodium borohydride in non catalayed solution**  
GENÇ A. E. , KUTLU B.  
TURKISH PHYSICAL SOCIETY 32. INTERNATIONAL PHYSICS CONGRESS, 6 - 09 September 2016, vol.1, pp.134
- VI. **NaBH<sub>4</sub> Hidrolizinde Au 111 Yüzeyininin Katalitik Etkisis**  
GENÇ A. E. , KUTLU B.  
21. Yoğun Madde Fiziği Ankara Toplantısı, Turkey, 25 December 2015

## Citations

Total Citations (WOS):9

h-index (WOS):2