Assoc. Prof. MEHMET GÖKHAN ŞENSOY

Personal Information

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Education Information

Doctorate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Graduate School Of Natural And Applied Sciences, Turkey 2011 - 2017
Postgraduate, Balikesir University, Fen-Bilimleri Enstitüsü, Fizik Bölümü, Turkey 2008 - 2010
Undergraduate, Balikesir University, Necatibey Faculty Of Educatıon, Fizik Öğretmenliği, Turkey 2003 - 2008

Dissertations

Doctorate, Ab initio modelling of materials properties for catalytic and device applications, Middle East Technical University, Türk-İslam Düşüncesi Tarihi Anabilim Dalı, Fizik Bölümü, 2017
Postgraduate, Manyetik karakteristikteki malzemelerin manyetik alanda oluşturdukları anomali ile belirlenmesi ve oluşan anomaliye göre manyetik malzemenin karakterizasyonu, Recep Tayyip Erdogan University, Fen Bilimleri Enstitüsü, Fizik Bölümü, 2010

Research Areas

Metallurgical and Materials Engineering, Material science and engineering, Nanomaterials, Physics, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Surfaces, Interfaces, Thin Films and Nanosystems, Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Recep Tayyip Erdogan University, Fen Edebiyat Fakültesi, Fizik Bölümü, 2017 - Continues
Research Assistant, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Physics, 2011 - 2017

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Manipulating the electrical properties of conductive substoichiometric titanium oxides**
Sensoy M. G., Carpick R. W., Srolovitz D. J., Rappe A. M.
Physical Review B, vol.109, no.6, 2024 (SCI-Expanded)
II. **Formaldehyde Selectivity in Methanol Partial Oxidation on Silver: Effect of Reactive Oxygen Species, Surface Reconstruction, and Stability of Intermediates**
Karatok M., ŞENSOY M. G., Vovk E., TOFFOLİ H., Toffoli D., ÖZENSOY E.

ACS CATALYSIS, vol.11, no.10, pp.6200-6209, 2021 (SCI-Expanded)

III. **Density Functional Theory Investigation of Oxidation Intermediates on Gold and Gold-Silver Surfaces**
Sensoy M. G., Montemore M. M.
JOURNAL OF PHYSICAL CHEMISTRY C, vol.124, no.16, pp.8843-8853, 2020 (SCI-Expanded)

IV. **First-principles investigation of CO and CO2 adsorption on gamma-Al2O3 supported monoatomic and diatomic Pt clusters**
Sensoy M. G., Ustunel H., Toffoli D.
APPLIED SURFACE SCIENCE, vol.499, 2020 (SCI-Expanded)

V. **Magnetic properties of the spin-5/2 Blume-Capel chain in a magnetic field**
Sensoy M. G., Bati M.
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.113, pp.21-24, 2019 (SCI-Expanded)

VI. **First-principles study of coupled effect of ripplocations and S-vacancies in MoS2**
Tritsaris G. A., Sensoy M. G., Shirodkar S. N., Kaxiras E.
JOURNAL OF APPLIED PHYSICS, vol.126, no.8, 2019 (SCI-Expanded)

VII. **The influence of vacancy-induced local strain on the transport properties in armchair and zigzag graphene nanoribbons**
Sensoy M. G.
MATERIALS RESEARCH EXPRESS, vol.6, no.4, 2019 (SCI-Expanded)

VIII. **Accurate formation energies of charged defects in solids: A systematic approach**
Vinichenko D., Sensoy M. G., Friend C. M., Kaxiras E.
PHYSICAL REVIEW B, vol.95, no.23, 2017 (SCI-Expanded)

IX. **Structural and electronic properties of bulk and low-index surfaces of zincblende PtC**
Sensoy M. G., TOFFOLI D., Ustunel H.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.29, no.12, 2017 (SCI-Expanded)

X. **Strain effects on the behavior of isolated and paired sulfur vacancy defects in monolayer MoS2**
Sensoy M. G., Vinichenko D., Chen W., Friend C. M., Kaxiras E.
PHYSICAL REVIEW B, vol.95, no.1, 2017 (SCI-Expanded)

XI. **New magnetic measurement system for determining metal covered mines by detecting magnetic anomaly using a sensor network**
Ege Y., KAKİLLİ A., Citak H., KALENDER O., Nazlibilek S., Sensoy M. G.
INDIAN JOURNAL OF PURE & APPLIED PHYSICS, vol.53, no.3, pp.199-211, 2015 (SCI-Expanded)

XII. **A new wireless asynchronous data communications module for industrial applications**
Ege Y., Sensoy M. G., KALENDER O., Nazlibilek S., Citak H.
MEASUREMENT, vol.46, no.8, pp.2672-2681, 2013 (SCI-Expanded)

XIII. **Identification of materials with magnetic characteristics by neural networks**
Nazlibilek S., Ege Y., KALENDER O., Sensoy M. G., Karacor D., Sazh M. H.
MEASUREMENT, vol.45, no.4, pp.734-744, 2012 (SCI-Expanded)

XIV. **Numerical Analysis for Remote Identification of Materials With Magnetic Characteristics**
Ege Y., ŞENSOY M. G., KALENDER O., Nazlibilek S.
IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, vol.60, no.9, pp.3140-3152, 2011 (SCI-Expanded)

Articles Published in Other Journals

I. **Ab initio atomistic thermodynamics modeling of adsorption of oxygen on gold and gold-silver surfaces**
Sensoy M. G.
TURKISH JOURNAL OF PHYSICS, vol.43, no.5, pp.502-515, 2019 (ESCI)

II. **Investigation of Magnetic Properties of Spin 5/2 Ising Chain by Using Transfer Matrix Method**
ŞENSOY M. G., BATI M.

SAKARYA UNİVERSİTY JOURNAL OF SCİENCE, vol.22, no.6, pp.1, 2018 (Peer-Reviewed Journal)

III. **Investigation of Magnetic Properties of Spin 5/2 Ising Chain by Using Tranfer Matrix Method**
ŞENSOY M. G., BATI M.
Sakarya University Journal of Science, vol.22, no.6, pp.1901-1906, 2018 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. **Investigation of Adsorption Properties of Oxidation Intermediates on Ag(111) Surface: A Density Functional Theory Study**
ŞENSOY M. G.
2nd International Conference on Physical Chemistry and Functional Materials (PCFM'19), Nevşehir, Turkey, 25 - 27 June 2019

II. **First-principles investigation of O, CO, CH3O and OH adsorption on gold-silver surfaces**
ŞENSOY M. G.
National Catalysis Conference-7, Denizli, Turkey, 9 - 12 September 2018

III. **Magnetic properties and plateaus behavior of the spin-5/2 chain compounds: A Blume-Capel model**
BATI M., ŞENSOY M. G.
34th International Physics Conference of Turkish Physical Society, Muğla, Turkey, 5 - 09 September 2018, pp.541

IV. **Magnetic properties and plateaus behavior of the spin-5/2 chain compounds: A Blume-Capel model**
BATI M., ŞENSOY M. G.
34th International Physics Conference of Turkish Physical Society, Muğla, Turkey, 5 - 09 September 2018, pp.541

V. **Density Functional Theory Investigation of the Structural, Electronic and Adsorption Properties of (100), (110) and (111)Surfaces of Zincblende PtC**
ŞENSOY M. G., TOFFOLİ H., TOFFOLI D.
NanoTR-11, Ankara, 23 - 25 June 2015

VI. **Density Functional Theory Investigation of Adsorption Properties of CO, CO2 and H2O on gamma-Al2O3 Supported Pt Clusters**
ŞENSOY M. G., TOFFOLİ H., TOFFOLI D.
APS March Meeting, 3 - 07 March 2014

VII. **Density functional theory investigation of CO, CO2 and H2O activation on gamma-Al2O3 Supported Pt Clusters**
ŞENSOY M. G., TOFFOLİ H., TOFFOLI D.
NanoTR-9, Erzurum, 24 - 28 June 2013

Scientific Refereeing

Journal of Physics Communications, SCI Journal, July 2017

Metrics

Publication: 24
Citation (WoS): 127
Citation (Scopus): 130
H-Index (WoS): 6
H-Index (Scopus): 6

Scholarships

Yurt Dışı Doktora Sırası Araştırma Burs Programı, TUBITAK, 2015 - 2016

Awards

ŞENSOY M. G., Bölüm Birinciliği, Balıkesir Üniversitesi, June 2010