

Prof. MUZAFFER BALBAŐI

Personal Information

Office Phone: [+90 582 351 2](tel:+905823512)

Fax Phone: [+90 312 230 8434](tel:+903122308434)

Email: mbalbasi@gazi.edu.tr

Other Email: mbalbasi@gmail.com

Web: <https://avesis.gazi.edu.tr/mbalbasi>

International Researcher IDs

ScholarID: ABwuaMwAAAAJ

ORCID: 0000-0003-0424-3424

Publons / Web Of Science ResearcherID: C-1345-2009

ScopusID: 6508316313

Yoksis Researcher ID: 101739

Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Kimya Mühendisliđi (Dr), Turkey 1988 - 1995

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Kimya Mühendisliđi (YI) (Tezli), Turkey 1985 - 1988

Undergraduate, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliđi Bölümü, Turkey 1981 - 1985

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, ZSM-39 zeolitinin sentez kinetiđi ve karakterizasyonu, Gazi University, Fen Bilimleri Enstitüsü, Kimya Mühendisliđi (Dr), 1994

Postgraduate, Katodik koruma sistemlerinde kullanılan çinko anotların akım kapasitelerinin incelenmesi, Gazi University, Fen Bilimleri Enstitüsü, Kimya Mühendisliđi (YI) (Tezli), 1988

Research Areas

Engineering and Technology

Academic Titles / Tasks

Professor, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliđi, 2017 - Continues

Associate Professor, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliđi, 2011 - 2017

Assistant Professor, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliđi, 1998 - 2011

Research Assistant, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliđi, 1985 - 1998

Academic and Administrative Experience

Deputy Head of Department, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2013 - 2016
Gazi University, Fen Bilimleri Enstitüsü, Kazaların Çevresel Ve Teknik Araştırması Anabilim Dalı (Disiplinlerarası), 2010 - 2012

Courses

Numerical Analysis in Chemical Engineering, Doctorate, 2015 - 2016
Optimization, Doctorate, 2013 - 2014
Solar Energy Technology, Undergraduate, 2011 - 2012
Experimental Design for Chemical Engineers, Doctorate, 2012 - 2013
Control Engineering Problems, Undergraduate, 2010 - 2011
Corrosion and Protection from Corrosion, Undergraduate, 2010 - 2011
Numerical Analysis Methods, Undergraduate, 2010 - 2011
Dynamic Simulation and Control of Chemical Processes, Undergraduate, 2009 - 2010
Mathematical Modelling, Undergraduate, 2009 - 2010
Computer Applications in Chemical Engineering, Undergraduate, 2009 - 2010

Advising Theses

BALBAŞI M., Preparation Of The Mps Structures And The Investigation Of Dielectric Properties As A Function Of Frequency And Voltage, Postgraduate, S.KARADAŞ(Student), 2020
BALBAŞI M., Katı polimer elektrolitlerin sentezlenmesi karakterizasyonu ve süper kapasitörlere uygulanması, Postgraduate, D.BÜŞRA(Student), 2020
BALBAŞI M., Optimization Studies Of Gold Recycling Process From Gold Mine Waste, Postgraduate, A.GÜN(Student), 2019
BALBAŞI M., Fabrication Of Conductive Polymer Composite Supercapacitor Electrode And Investigation Of Its Electrochemical Performanc, Postgraduate, M.ÖZBAKIŞ(Student), 2019
BALBAŞI M., Mikron altı boyutlarda küresel karbon partiküllerin sentezi ve süperkapasitör elektrotlarında kullanımı, Postgraduate, N.YILDIRIM(Student), 2017
BALBAŞI M., Prepearation Metal/Semiconductor (Ms) Structures With Interlayer And Investigation Their Electrical And Dielectric Properties In Wide Range Of Frequency And Voltage, Doctorate, S.ALTINDAL(Student), 2017
BALBAŞI M., Synthesis Of Spherical Carbon Particulates In Sub-Micron Sizes And Their Usage In Supercapacitor'S Electrodes, Postgraduate, N.Yıldırım(Student), 2017
BALBAŞI M., Protection of type-304 stainless steel against to corrosion by conducting polymer coatings, Postgraduate, B.PALA(Student), 2013
BALBAŞI M., POLYVINYL ALCOHOL BASED PROTON CONDUCTOR MEMBRANE SYNTHESIS AND CHARACTERIZATIONS, Postgraduate, D.ORUÇ(Student), 2010
BALBAŞI M., Polivinil alkol bazlı proton iletken membran sentezi ve karakterizasyonu, Postgraduate, D.ORUÇ(Student), 2010
BALBAŞI M., İletken polimer sentezi ve karakterizasyonu, Postgraduate, A.DİLEK(Student), 2010
BALBAŞI M., AR İ., DEVELOPMENT OF HETEROGENEOUS CATALYSTS FOR BIODIESEL PRODUCTION, Postgraduate, A.BARTAN(Student), 2009
BALBAŞI M., VIRTUAL TEAM APPLICATIONS IN SCIENTIFIC WORKS, Postgraduate, M.OZAN(Student), 2008
BALBAŞI M., ANALYSIS OF FILMS AND GELS BASED ON POLYVINYL ALCOHOL HAVING THERMOCHROMIC PROPERTIES WITH METHODS OF UV AND IMPEDANCE SPECTROSCOPY, Postgraduate, B.YILMAZ(Student), 2007
BALBAŞI M., PRODUCTION AND CHARACTERIZATION OF ANORTHITE USING VOLCANIC TUFF, Postgraduate, M.KÖSEÇAVUŞ(Student), 2007
BALBAŞI M., Termokromik özellik gösteren polivinil alkol bazlı jel ve filmlerin UV ve empedans spektroskopisi yöntemleriyle incelenmesi, Postgraduate, B.YILMAZ(Student), 2007

- BALBAŞI M., INVESTIGATION OF APPLICATION OF POLI(VINYL ALCOHOL) (PVA) BASED MEMBRANES TO FUEL CELLS, Postgraduate, B.GÖZÜTOK(Student), 2007
- BALBAŞI M., İnfrared yansımali kamuflaj boya formülasyonu ve pigmentlerin etkisinin incelenmesi, Postgraduate, Y.ARDAHANLIOĞLU(Student), 2006
- BALBAŞI M., İnfrared kamuflaj boyanın hazırlanması ve yansımali özellikleri üzerine silisyum dioksitin etkisi, Postgraduate, A.İNAL(Student), 2006
- BALBAŞI M., HZSM-5 katalizörü üzerinde etanolün hidrokarbonlara dönüşümünün deneysel tasarım yöntemiyle incelenmesi, Postgraduate, C.BEŞER(Student), 2005
- BALBAŞI M., Dispers sarı 3 boyarmaddesinin polyester elyafa uygulanabilirliği üzerine dispergator miktarının etkisi, Postgraduate, S.ERTUĞRUL(Student), 2004

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Analysis of admittance measurements of Al/Gr-PVA/p-Si (MPS) structure**
Ata D., Yeriskin S., Tataroglu A., Balbasi M.
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.169, 2022 (SCI-Expanded)
- II. **Complex dielectric, complex electric modulus, and electrical conductivity in Al/(Graphene-PVA)/p-Si (metal-polymer-semiconductor) structures**
Karadas S., Yeriskin S., BALBAŞI M., Azizian-Kalandaragh Y.
Journal of Physics and Chemistry of Solids, vol.148, 2021 (SCI-Expanded)
- III. **Dielectric, ac conductivity and electric modulus studies at MPS structure with (Cu₂O-CuO)-doped PVA interfacial layer**
Buyukbas-Ulusan A., Yeriskin S., Tataroglu A., Balbasi M., Azizian-Kalandaragh Y.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, no.5-6, pp.256-260, 2020 (SCI-Expanded)
- IV. **Electrical and impedance properties of MPS structure based on (Cu₂O-CuO-PVA) interfacial layer**
Buyukbas-Ulusan A., Yeriskin S. A., TATAROĞLU A., Balbasi M., Kalandaragh Y.
Journal of Materials Science: Materials in Electronics, vol.29, no.10, pp.8234-8243, 2018 (SCI-Expanded)
- V. **The effects of (graphene doped-PVA) interlayer on the determinative electrical parameters of the Au/n-Si (MS) structures at room temperature**
Yeriskin S., BALBAŞI M., Orak I.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, no.18, pp.14040-14048, 2017 (SCI-Expanded)
- VI. **Frequency dependent electrical characteristics and origin of anomalous capacitance-voltage (C-V) peak in Au/(graphene-doped PVA)/n-Si capacitors**
Yeriskin S. A., Balbasi M., Orak I.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.28, no.11, pp.7819-7826, 2017 (SCI-Expanded)
- VII. **Temperature and voltage dependence of barrier height and ideality factor in Au/0.07 graphene-doped PVA/n-Si structures**
Yeriskin S., Balbasi M., Demirezen S.
INDIAN JOURNAL OF PHYSICS, no.4, pp.421-430, 2017 (SCI-Expanded)
- VIII. **Frequency and voltage dependence of dielectric properties, complex electric modulus, and electrical conductivity in Au/7% graphene doped-PVA/n-Si (MPS) structures**
Yeriskin S., BALBAŞI M., TATAROĞLU A.
JOURNAL OF APPLIED POLYMER SCIENCE, no.33, 2016 (SCI-Expanded)
- IX. **The investigation of dielectric properties and ac conductivity of Au/GO-doped PrBaCoO nanoceramic/n-Si capacitors using impedance spectroscopy method**
Kaya A., Aliyalı S., Demirezen S., Balbasi M., Yeriskin S., Aytimur A.
CERAMICS INTERNATIONAL, no.2, pp.3322-3329, 2016 (SCI-Expanded)
- X. **Frequency and voltage dependent profile of dielectric properties, electric modulus and ac electrical**

conductivity in the PrBaCoO nanofiber capacitors

Demirezen S., Kaya A., Yeriskin S., Balbasi M., Uslu I.

Results in Physics, pp.180-185, 2016 (SCI-Expanded)

- XI. **Dielectric, conductivity and modulus analysis of AuGe/SiO₂/p-Si/AuGe capacitor**
Buyukbas A., TATAROĞLU A., Balbasi M.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.17, pp.1134-1138, 2015 (SCI-Expanded)
- XII. **SYMMETRICAL SUPERCAPACITOR APPLICATION WITH LOW ACTIVATED CARBON CONTENT**
BALBAŞI M., ŞAHİN A.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.30, no.4, pp.683-692, 2015 (SCI-Expanded)
- XIII. **Analysis of Electrical Characteristics of Metal-Oxide-Semiconductor Capacitor by Impedance Spectroscopy**
Buyukbas A., TATAROĞLU A., Balbasi M.
JOURNAL OF NANOELECTRONICS AND OPTOELECTRONICS, vol.9, no.4, pp.515-519, 2014 (SCI-Expanded)
- XIV. **ENZYMATIC ACTIVITY ON CORROSION POTENTIAL OF STEEL**
BALBAŞI M., Tosun A., Tamirci M., Ergun M.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.29, no.2, pp.253-259, 2014 (SCI-Expanded)
- XV. **Application of full factorial design method to silicalite synthesis**
Balbasi M.
MATERIALS RESEARCH BULLETIN, vol.48, no.8, pp.2908-2914, 2013 (SCI-Expanded)
- XVI. **Development of Low Cost Heterogeneous Catalysts for Biodiesel Processes**
Balbasi M., Bartan A., Ar I., Guru M.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.33, no.11, pp.1035-1047, 2011 (SCI-Expanded)
- XVII. **SYNTHESIS AND CHARACTERIZATION OF PHOSPHONATED POLY(VINYL ALCOHOL) BASED MEMBRANE WITH SILICA SUPPORT**
ŞAHİN A., Aktan H., AR İ., BALBAŞI M.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.25, no.4, pp.693-699, 2010 (SCI-Expanded)
- XVIII. **Pigmentation of a Camouflage Dye and Investigation of Its Colour and Reflectance Properties**
BALBAŞI M., Ardahanlioglu Y.
ASIAN JOURNAL OF CHEMISTRY, vol.22, no.1, pp.787-796, 2010 (SCI-Expanded)
- XIX. **Poly(vinyl alcohol)-colloidal silica composite membranes for fuel cells**
BALBAŞI M., Gozutok B.
SYNTHETIC METALS, vol.160, pp.150-155, 2010 (SCI-Expanded)
- XX. **SYNTHESIS AND CHARACTERIZATION OF SULPHONATED POLYSTYRENE/POLYVINYL ALCOHOL COMPOSITE MEMBRANE WITH BORIC ACID AND BORON PHOSPHATE SUPPORT**
ŞAHİN A., BALBAŞI M., AR İ.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.24, no.1, pp.137-144, 2009 (SCI-Expanded)
- XXI. **The use of experimental design method for the investigation of pitting potential of aluminum**
Tosun A., Ergun M., BALBAŞI M., Tamirci M.
MATERIALS AND CORROSION-WERKSTOFFE UND KORROSION, vol.58, no.7, pp.502-505, 2007 (SCI-Expanded)
- XXII. **Manufacturing low density boards from waste cardboards containing aluminium**
Murathan A. M., Murathan A. S., Guerue M., Balbaşı M.
MATERIALS & DESIGN, vol.28, no.7, pp.2215-2217, 2007 (SCI-Expanded)
- XXIII. **Correlation model of aluminium pitting potential variation with environmental conditions**
Ergun M., BALBAŞI M., Tosun A.
BRITISH CORROSION JOURNAL, vol.32, no.2, pp.117-120, 1997 (SCI-Expanded)
- XXIV. **MATHEMATICAL-MODEL FOR PITTING POTENTIAL OF FE-16-PERCENT CHROMIUM STEEL**

ERGUN M., BALBAŞI M.

CORROSION SCIENCE, vol.36, no.9, pp.1569-1574, 1994 (SCI-Expanded)

Articles Published in Other Journals

- I. **Illumination Response of Impedance Properties of Al/Gr-PVA/p-Si (MPS) Device**
Ata D., Balbasi M., TATAROGLU A.
Gazi University Journal of Science Part A: Engineering and Innovation, vol.10, no.1, pp.89-96, 2023 (Peer-Reviewed Journal)
- II. **Electrochemical Performance of Activated Carbon PANI Supercapacitor Composite Electrodes**
ÖZBAKIŞ M., BALBAŞI M., ŞAHİN A.
Yüzüncü Yıl Üniversitesi Fen Bilimleri Enstitüsü Dergisi, no.24, pp.53-58, 2019 (Peer-Reviewed Journal)
- III. **Biosorption of Copper II from Aqueous Solution by Saccharomyces cerevisiae Kinetics and Thermodynamics**
TOSUN A., Öznur A., BALBAŞI M., ERGUN M.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.25, no.3, pp.783-791, 2012 (Scopus)
- IV. **A study on disperse azo black textile dye**
AKKURT F., BENLİ S., BALBAŞI M., ALICILAR A.
Trends in Chemical Engineering, vol.11, pp.73-76, 2008 (Peer-Reviewed Journal)
- V. **Kinizarin eldesi işleminin sıcaklık optimizasyonu üzerine bir çalışma,,**
Alicilar A., Murathan A. M., Balbaşı M.
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.6, pp.259-261, 2000 (Peer-Reviewed Journal)

Supported Projects

- BALBAŞI M., Project Supported by Higher Education Institutions, Metal/polymer/yarıiletken (MPS) yapılarda temel elektrik-dielektrik parametrelerin frekans ve sıcaklığa bağlı incelenmesi ve MS yapılarla kıyaslanması, 2018 - 2019
- BALBAŞI M., Project Supported by Higher Education Institutions, İletken polimer/karbon kompozit süperkapasitör elektrotların elektrokimyasal performanslarının incelenmesi, 2018 - 2019
- BALBAŞI M., Project Supported by Higher Education Institutions, İletken polimerlerin yakıt hücresi uygulamalarında kullanımı, 2009 - 2011
- BALBAŞI M., Project Supported by Higher Education Institutions, Biyodizel Üretimi İçin Katalizör Geliştirilmesi, 2008 - 2009
- BALBAŞI M., Project Supported by Higher Education Institutions, Proton İletken Kompozit Membran Sentezi ve Yakıt Hücresi Sistemine Uygulanması, 2007 - 2008
- BALBAŞI M., Project Supported by Higher Education Institutions, HZSM-5 Katalizörünün asit sayısının belirlenmesi, 2003 - 2004
- BALBAŞI M., Project Supported by Higher Education Institutions, HZSM-5 ve TFA/HZSM zeolitleri üzerinde etanolden etilene dönüşüm sıcaklıklarının karşılaştırılması, 2002 - 2003
- BALBAŞI M., Project Supported by Higher Education Institutions, Etanolün HZSM-5 üzerinde hidrokarbonlara dönüşümünün incelenmesi, 2000 - 2001
- BALBAŞI M., Project Supported by Higher Education Institutions, Mikrokristal katalizör yapımı ve karakterizasyonu, 1998 - 1998

Tasks In Event Organizations

Murathan A. M., Gürü M., Dilsiz N., Ar İ., Doğan Ö. M., Özkan G., Balbaşı M., Yaşyerli N., Altınten A., Mutlu S. F., 9. ULUSAL

Metrics

Publication: 35

Citation (WoS): 580

Citation (Scopus): 587

H-Index (WoS): 11

H-Index (Scopus): 11