

Asst. Prof. ÖZLEM EROL

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: GNM-5984-2022

Yoksis Researcher ID: 297743

Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Kimya (Dr), Turkey 2008 - 2014

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), Turkey 2006 - 2008

Undergraduate, Gazi University, Gazi Eğitim Fakültesi, Matematik ve Fen Bilimleri Eğitimi, Turkey 2001 - 2006

Dissertations

Doctorate, Farklı geometrilerde, kendiliğinden düzenlenmeyle yüzeyi modifiye edilmiş TiO₂/iletken polimer çekirdek/kabuk yapılı hibrit nanokompozitlerin kolloidal ve elektroeolojik karakterizasyonu, Gazi University, Fen Bilimleri Enstitüsü, Kimya (Dr), 2014

Postgraduate, Poliindol/montmorillonit nanokompozit sentezi, karakterizasyonu ve elektroeolojik özelliklerinin araştırılması, Gazi University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), 2008

Research Areas

Chemistry, Physical Chemistry, Natural Sciences

Academic Titles / Tasks

Assistant Professor, Gazi University, Fen Fakültesi, Kimya, 2019 - Continues

Lecturer, Baskent University, Faculty Of Engineering, 2018 - 2019

Academic and Administrative Experience

Fakülte Yönetim Kurulu Üyesi, Gazi University, Fen Fakültesi, 2020 - Continues

Deputy Head of Department, Gazi University, Fen Fakültesi, Kimya Bölümü, 2020 - 2023

Fakülte Akademik Kurul Üyesi, Gazi University, Fen Fakültesi, 2019 - 2022

Courses

Postgraduate

Colloid Chemistry, Postgraduate, 2020 - 2021

Undergraduate

Mathematics for Chemist and Comp., Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020

General Chemistry-I, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020

Chemistry Laboratory, Undergraduate, 2023 - 2024

General Chemistry Laboratory, Undergraduate, 2021 - 2022

General Chemistry-II, Undergraduate, 2021 - 2022, 2020 - 2021

Kimya-I, Undergraduate, 2017 - 2018

Genel Kimya Laboratuvarı, Undergraduate, 2017 - 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Electrorheological Fluids Based on Porous Carboxyl-Functionalized Polytriphenylamines**
EROL Ö., Karatayeva U., Faul C. F. J.
ACS Applied Polymer Materials, vol.7, no.3, pp.1205-1216, 2025 (SCI-Expanded)
- II. **The effect of different enzymatic pretreatment processes on the production of nanocellulose from wheat straw Buğday sapından nanoselüloz üretiminde farklı enzimatik ön muamele işlemlerinin etkisi**
Sertkaya S., Arslan R., Tozluoğlu A., Fidan H., EROL Ö., ÜNAL H. İ., CANDAN Z.
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.38, no.4, pp.2055-2067, 2023 (SCI-Expanded)
- III. **Recent advances in bioactive 1D and 2D carbon nanomaterials for biomedical applications**
EROL Ö., Uyan I., Hatip M., Yilmaz C., Tekinay A. B., Guler M. O.
NANOMEDICINE-NANOTECHNOLOGY BIOLOGY AND MEDICINE, vol.14, no.7, pp.2433-2454, 2018 (SCI-Expanded)
- IV. **Biocompatible Electroactive Tetra(aniline)-Conjugated Peptide Nanofibers for Neural Differentiation**
Arioz I., EROL Ö., Bakan G., Dikecoglu F. B., Topal A. E., Urel M., Dana A., Tekinay A. B., Guler M. O.
ACS APPLIED MATERIALS & INTERFACES, vol.10, no.1, pp.308-317, 2018 (SCI-Expanded)
- V. **Core/shell-structured, covalently bonded TiO₂/poly(3,4-ethylenedioxythiophene) dispersions and their electrorheological response: the effect of anisotropy**
EROL Ö., Unal H. İ.
RSC ADVANCES, vol.5, no.125, pp.103159-103171, 2015 (SCI-Expanded)
- VI. **Effects of Different Polymerization Protocols on the Degree of Conversion of Two Dual-Cured Core Buildup Composites Polymerized by Light-Emitting Diode and Halogen Light-Curing Units**
KARAKIŞ D., YILDIRIM BİÇER A. Z., EROL Ö., DOĞAN A.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.131, no.15, 2014 (SCI-Expanded)
- VII. **Effect of surfactant on electrokinetic properties of polyindole/TiO₂-conducting nanocomposites in aqueous and nonaqueous media**
ÜNAL H. İ., Sahan B., EROL Ö.
COLLOID AND POLYMER SCIENCE, vol.292, no.2, pp.499-509, 2014 (SCI-Expanded)
- VIII. **Quaternized-poly(N-yinylimidazole)/montmorillonite nanocomposite: Synthesis, characterization and electrokinetic properties**
ÜNAL H. İ., EROL Ö., Gumus O. Y.
COLLOIDS AND SURFACES A-PHYSCOCHEMICAL AND ENGINEERING ASPECTS, vol.442, pp.132-138, 2014 (SCI-Expanded)
- IX. **Synthesis, characterization and electrorheological properties of biodegradable chitosan/bentonite composites**
Cabuk M., Yavuz M., Unal H. İ., EROL Ö.
CLAY MINERALS, vol.48, no.1, pp.129-141, 2013 (SCI-Expanded)
- X. **Effect of surface properties on the electrorheological response of hematite/silicone oil dispersions**

EROL Ö., Ramos-Tejada M. d. M., ÜNAL H. İ., Delgado A. V.

JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol.392, pp.75-82, 2013 (SCI-Expanded)

- XI. **The negative and positive electrorheological behavior and vibration damping characteristics of colemanite and polyindene/colemanite conducting composite**
Cetin B., Unal H. İ., EROL Ö.
SMART MATERIALS AND STRUCTURES, vol.21, no.12, 2012 (SCI-Expanded)
- XII. **Electrokinetic and electrorheological properties of poly(vinyl chloride)/polyindole conducting composites**
Koyuncu K., Ünal H. İ., Gumus O. Y., Erol Ö., Sarı B., Ergin T.
POLYMERS FOR ADVANCED TECHNOLOGIES, vol.23, no.11, pp.1464-1472, 2012 (SCI-Expanded)
- XIII. **Electrorheological properties of polyaniline/K-feldspar conducting composite**
EROL Ö., Karakısla M., ÜNAL H. İ., SAÇAK M.
JOURNAL OF COMPOSITE MATERIALS, vol.46, no.11, pp.1295-1304, 2012 (SCI-Expanded)
- XIV. **Polyindene/organo-montmorillonite conducting nanocomposites. II. electrorheological properties**
Guzel S., EROL Ö., ÜNAL H. İ.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.124, no.6, pp.4935-4944, 2012 (SCI-Expanded)
- XV. **SYNTHESIS, CHARACTERIZATION, AND ELECTROKINETIC PROPERTIES OF POLYINDENE/COLEMANITE CONDUCTING COMPOSITE**
Cetin B., ÜNAL H. İ., EROL Ö.
CLAYS AND CLAY MINERALS, vol.60, no.3, pp.300-314, 2012 (SCI-Expanded)
- XVI. **Investigation of electrokinetic and electrorheological properties of polyindole prepared in the presence of a surfactant**
ÜNAL H. İ., Sahan B., EROL Ö.
MATERIALS CHEMISTRY AND PHYSICS, vol.134, no.1, pp.382-391, 2012 (SCI-Expanded)
- XVII. **Polyindene/organo-montmorillonite conducting nanocomposites. I. Synthesis, characterization, and electrokinetic properties**
Guzel S., ÜNAL H. İ., EROL Ö., SARI B.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.123, no.5, pp.2911-2922, 2012 (SCI-Expanded)
- XVIII. **Electrorheology and creep-recovery behavior of conducting polythiophene/poly(oxymethylene)-blend suspensions**
EROL Ö., ÜNAL H. İ., SARI B.
CHINESE JOURNAL OF POLYMER SCIENCE, vol.30, no.1, pp.16-25, 2012 (SCI-Expanded)
- XIX. **Polythiophene/Borax Conducting Composite II: Electrorheology and Industrial Applications**
Gumus O. Y., EROL Ö., ÜNAL H. İ.
POLYMER COMPOSITES, vol.32, no.5, pp.756-765, 2011 (SCI-Expanded)
- XX. **Synthesis, Characterization, and Colloidal Properties of Polythiophene/Borax Conducting Composite**
Gumus O. Y., ÜNAL H. İ., EROL Ö., SARI B.
POLYMER COMPOSITES, vol.32, no.3, pp.418-426, 2011 (SCI-Expanded)
- XXI. **Synthesis, Electrorheology, and Creep Behaviors of In Situ Intercalated Polyindole/Organo-Montmorillonite Conducting Nanocomposite**
EROL Ö., ÜNAL H. İ., SARI B.
POLYMER COMPOSITES, vol.31, no.3, pp.471-481, 2010 (SCI-Expanded)
- XXII. **Electrorheological behavior of biodegradable modified corn starch/corn oil suspensions**
YAVUZ M., TILKI T., Karabacak C., EROL Ö., ÜNAL H. İ., Uluturk M., Cabuk M.
CARBOHYDRATE POLYMERS, vol.79, no.2, pp.318-324, 2010 (SCI-Expanded)
- XXIII. **Synthesis, electrorheology and creep behavior of polyindole/polyethylene composites**
SARI B., Yavas N., Makulogullari M., EROL Ö., ÜNAL H. İ.
REACTIVE & FUNCTIONAL POLYMERS, vol.69, no.11, pp.808-815, 2009 (SCI-Expanded)

Articles Published in Other Journals

- I. **Genotoxicity of Two Nanoparticles: Titanium Dioxide and Zinc Oxide**
ÜNAL F., Demirtas Korkmaz F., Suludere Z., EROL Ö., YÜZBAŞIOĞLU D.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.34, no.4, pp.948-958, 2021 (ESCI)

Books

- I. **Recent Developments in the Use of Polyaniline-Based Materials for Electric and Magnetic Field Responsive Smart Fluids**
Erol Ö.
in: Trends and Developments in Modern Applications of Polyaniline, Florin Năstase, Editor, IntechOpen, Rijeka, pp.1-28, 2023
- II. **Assembly of Non-Aqueous Colloidal Dispersions under External Electric Field**
Ünal H. I., Erol Ö., Ersöz M.
in: Colloid and Interface Chemistry for Nanotechnology, Peter Kralchevsky, Reinhard Miller, Francesca Ravera, Editor, CRC, New York, Florida, pp.167-176, 2014

Papers Published in Refereed Scientific Meetings

- I. **Preparation and self-assembly of bio-conjugated electroactive tetra(aniline)**
Erol Ö., Faul C. F.
3rd International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2021), Ankara, Turkey, 15 - 17 December 2021, pp.477-483
- II. **Genotoxicity Of Two Nanoparticles: Titanium Dioxide And Zinc Oxide**
Ünal F., Korkmaz F. D., Suludere Z., Erol Ö., Yüzbaşıoğlu D.
ICMATSE 2020 International Conference On Advanced Materials Science & Engineering And High Tech Device Applications, 2 - 04 October 2020, pp.48-49
- III. **In vitro genotoxic effects of cerium oxide nanopartices by comet assay.**
Saygılı Y., Ünal F., Suludere Z., Erol Ö., Yüzbaşıoğlu D.
3rd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2020), Ankara, Turkey, 19 - 20 March 2020
- IV. **Effect of Defibrillation on Electric Field Response of Sepiolite**
EROL Ö., ÜNAL H. İ.
The Porous and Powder Materials Symposium and Exhibitions, Muğla, Turkey, 9 - 11 October 2019
- V. **Assesment of Iron Oxide Nanoparticle Genotoxicity in Human Peripheral Lymphocytes In vitro**
YASEMİN S., ÜNAL F., SULUDERE Z., EROL Ö., YÜZBAŞIOĞLU D.
11th Nanoscience and Nanotechnology Conference, 22 June - 25 November 2015
- VI. **Assessment of Iron Oxide Nanoparticle Genotoxicity in Human Peripheral Lymphocytes in vitro**
SAYGILI Y., ÜNAL F., SULUDERE Z., EROL Ö., YÜZBAŞIOĞLU D.
11th Nanoscience and Nanotechnology Conference (Nano TR-11), 23 - 25 June 2015
- VII. **Bakır Oksit Nanopartiküllerinin İnsan Lenfositlerinde In Vitro Genotoksik Etkileri**
YASEMİN S., ÜNAL F., SULUDERE Z., EROL Ö., YÜZBAŞIOĞLU D.
22. Ulusal Biyoloji Kongresi, Turkey, 23 - 27 June 2014
- VIII. **Genotoxicity Induced by Amorphous Silica Nanoparticles**
YASEMİN S., ÜNAL F., SULUDERE Z., EROL Ö., YÜZBAŞIOĞLU D.
3rd International Molecular Biology and Biotechnology Congress, Sarajevo Bosnia, 2 - 06 June 2014
- IX. **Genotoxic Effect of Copper Oxide Nanoparticles on Human Lymphocytes by Comet Assay**
YASEMİN S., ÜNAL F., EROL Ö., SULUDERE Z., YÜZBAŞIOĞLU D.

3rd International Molecular Biology and Biotechnology Congress, 2 - 06 June 2014

- X. **Geneotoxic Effect of Copper Oxide Nanoparticles on Human Lymphocytes by Comet Assay**
SAYGILI Y., ÜNAL F., EROL Ö., SULUDERE Z., YÜZBAŞIOĞLU D.

3rd International Molecular Biology and Biotechnology Congress, 2 - 06 June 2014

- XI. **Genotoxicity Induced by Silica Nanoparticles**
SAYGILI Y., ÜNAL F., SULUDERE Z., EROL Ö., YÜZBAŞIOĞLU D.

3rd International Molecular Biology and Biotechnology Congress, Saray Bosna, Bosnia And Herzegovina, 2 - 06 June 2014

- XII. **Electrorheological response of polyindene/colemanite conducting composite**
Unal H. İ., Cetin B., EROL Ö.

13th International Conference on Electrorheological Fluids and Magnetorheological Suspensions (ERMR), Ankara, Turkey, 2 - 06 July 2012, vol.412

- XIII. **Titanyum dioksit nanopartiküllerinin in vitro insan lenfositlerindeki genotoksik etkileri**
DEMİRTAŞ KORKMAZ F., ÜNAL F., EROL Ö., SULUDERE Z., YÜZBAŞIOĞLU D.

The First International Biology Congress, Bishkek, Kyrgyzstan, 24 - 26 September 2012

- XIV. **Genotoxicity of zinc oxide nanoparticles in human lymphocytes assessed by comet assay**
DEMİRTAŞ KORKMAZ F., ÜNAL F., EROL Ö., SULUDERE Z., YÜZBAŞIOĞLU D.

40th Annual Meeting of the European Environmental Mutagen Society, Oslo, Norway, 15 - 18 September 2010

- XV. **Titanium dioxide (TiO₂) genotoxicity in human lymphocytes assessed by the alkaline comet assay**
DEMİRTAŞ KORKMAZ F., ÜNAL F., SULUDERE Z., EROL Ö., ÜNAL H. İ., YÜZBAŞIOĞLU D., TANER G.

Nanobilim ve Nanoteknoloji Konferansı (NanoTR6), İzmir, Turkey, 15 - 18 June 2010

- XVI. **Politiyofen/Boraks Kompozitin Sentezi ve Karakterizasyonu**
Gümüş Ö. Y., Erol Ö., Sarı B., Ünal H. İ.

23. Ulusal Kimya Kongresi, Sivas, Turkey, 16 - 20 June 2009, pp.386

- XVII. **Poliindol/Polietilen Kompozitin Elektroeolojik Özelliklerinin İncelenmesi**
Makuloğulları M., Erol Ö., Ünal H. İ., Sarı B.

23. Ulusal Kimya Kongresi, Sivas, Turkey, 16 - 20 June 2009, pp.88

Supported Projects

Ünal H. İ., TÜBİTAK - AB COST Project, Yüzeyi modifiye edilmiş farklı geometrilerde TiO₂ üzerinde iletken polimerlerin kendiliğinden düzenlenmesiyle oluşan merkez-kabuk yapıları hibrit nanotaneçiklerin koloidal ve elektroeolojik özelliklerinin araştırılması, 2012 - 2014

Sarı B., Yavuz M., Ünal H. İ., TÜBİTAK Project, Çeşitli İletken Polimer Nano-kompozitlerin Elektroeolojik Özelliklerinin İncelenmesi ve Endüstriyel Uygulanabilirliğinin Araştırılması, 2008 - 2010

Memberships / Tasks in Scientific Organizations

Turkish Chemical Society, Member, 2023 - Continues, Turkey

Peer Reviews in Scientific Publications

JOURNAL OF COMPOSITE MATERIALS, SCI Journal, October 2023

RSC ADVANCES, Journal Indexed in SCI-E, March 2017

RSC ADVANCES, Journal Indexed in SCI-E, October 2016

Scientific Consultations

Gazi University, Project Consultancy, Gazi University, Fen Fakültesi, Kimya, Turkey, 2022 - Continues

Metrics

Publication: 51

Citation (WoS): 514

Citation (Scopus): 535

H-Index (WoS): 14

H-Index (Scopus): 14

Non Academic Experience

University of Bristol, School of Chemistry, Doktora Sonrası Araştırmacı