

BURCU GÖKÇAL KAPUCU

Personal Information

Email: burcugokcal@hacettepe.edu.tr

Web: <https://avesis.hacettepe.edu.tr/14756>

International Researcher IDs

ORCID: 0000-0002-3364-9100

Yoksis Researcher ID: 345754

Education Information

Doctorate, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 2020 - Continues

Postgraduate, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 2017 - 2020

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 2010 - 2015

Research Areas

Chemical Engineering and Technology

Academic Titles / Tasks

Research Assistant, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2020 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A Facile and Efficient Protocol for Phospholipid Enrichment in Synovial Joint Fluid: Monodisperse-Mesoporous SiO₂ Microspheres as a New Metal Oxide Affinity Sorbent**
Aladag S., Demirdis I., GÖKÇAL KAPUCU B., Koc E., KAPLAN O., AKTAŞ B. E., ÇELEBİER M., Tuncel A., KORKUSUZ F. SEPARATIONS, no.9, 2024 (SCI-Expanded)
- II. **Formic acid dehydrogenation catalyzed by bimetallic nanoalloys supported by monodisperse-porous microspheres: Catalytic and visible light driven photocatalytic hydrogen generation**
Demir M. C., Demir M., Tümer B., Gökçal B., Tuncel A.
International Journal of Hydrogen Energy, vol.51, pp.111-132, 2024 (SCI-Expanded)
- III. **Monodisperse-porous silica microspheres with flexible phenylboronic acid functionalized-polycationic molecular brushes as a sorbent for teamed boronate affinity chromatography in batch and capillary column systems**
GÖKÇAL B., Kip Ç., Tuncel A.
Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.676, 2023 (SCI-Expanded)
- IV. **Porous, Oxygen Vacancy Enhanced CeO_{2-x} Microspheres with Efficient Enzyme-Mimetic and Photothermal Properties**
Akdogan C. Z. S., GÖKÇAL B., POLAT M., HAMALOĞLU K. Ö., Kip C., Tuncel A.
ACS SUSTAINABLE CHEMISTRY & ENGINEERING, vol.10, pp.9492-9505, 2022 (SCI-Expanded)
- V. **A new nanozyme with peroxidase-like activity for simultaneous phosphoprotein isolation and detection based on metal oxide affinity chromatography: Monodisperse-porous cerium oxide**

microspheres

YILDIRIM D., Gokcal B., BÜBER E., KIP C., DEMİR M., TUNCEL A.

CHEMICAL ENGINEERING JOURNAL, vol.403, 2021 (SCI-Expanded)

- VI. **Glutathione detection in human serum using gold nanoparticle decorated, monodisperse porous silica microspheres in the magnetic form**
Gökçal B., Hamaloğlu K. Ö., Kip Ç., Güngör S., Büber E., Tuncel A.
ANALYTICAL METHODS, vol.12, no.43, pp.5219-5228, 2020 (SCI-Expanded)
- VII. **One-pot, direct glucose detection in human whole blood without using a dilution factor by a magnetic nanozyme with dual enzymatic activity**
Gokcal B., Kip C., Tuncel A.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.843, 2020 (SCI-Expanded)
- VIII. **Colorimetric determination of tumor cells via peroxidase-like activity of a cell internalizable nanozyme: Hyaluronic acid attached-silica microspheres containing accessible magnetite nanoparticles**
Kip C., ÇETİN E., Gokcal B., Savas B. O., Onur M. A., Tuncel A.
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS, vol.598, 2020 (SCI-Expanded)
- IX. **Silica microspheres functionalized with the iminodiacetic acid/copper(II) complex as a peroxidase mimic for use in metal affinity chromatography-based colorimetric determination of histidine-tagged proteins**
Gokcal B., Kip C., Sahinbas D., Celik E., Tuncel A.
MICROCHIMICA ACTA, vol.187, no.2, 2020 (SCI-Expanded)
- X. **Aggregation-resistant nanozyme containing accessible magnetite nanoparticles immobilized in monodisperse-porous silica microspheres for colorimetric assay of human genomic DNA**
Ogut E., Kip C., Gokcal B., Tuncel A.
JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol.550, pp.90-98, 2019 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Ion exchange membranes with enhanced antifouling properties to produce energy from renewable sources**
GÜLER E., Eti M., Cihanoğlu A., Altok E., HAMALOĞLU K. Ö., Gökçal B., TUNCEL S. A., KABAY N.
Proceedings of the 6th International Symposium on Green and Smart Technologies for a Sustainable Society, 9 - 10 December 2021
- II. **Antibacterial Behaviour of Novel Anion Exchange Membranes Synthesized for Reverse Electrodialysis**
Eti M., Cihanoğlu A., HAMALOĞLU K. Ö., Gökçal B., GÜLER E., TUNCEL S. A., KABAY N.
16th International Conference Student Conference on Advanced Science and Technology, ICAST 2021, 2 - 03 December 2021
- III. **Synthesis and characterization of composite antibiofouling anion exchange membranes for reverse electrodialysis applications**
Eti M., Gökçal B., HAMALOĞLU K. Ö., Cihanoğlu A., GÜLER E., TUNCEL S. A., KABAY N.
V. International Ege Composite Materials Symposium, KOMPEGE 2021, 4 - 06 November 2021
- IV. **Colorimetric Method for insulin detection using a new magnetic nanozyme**
Gökçal B., HAMALOĞLU K. Ö.
7th International Conference on New Trends in Chemistry, 25 - 26 September 2021
- V. **Kirlenmeye Dirençli Membranlar: Gümüş Nanopartikül İmmobilize Edilmiş Poliepioklorhidrin Esaslı Anyon Değiştirici Membranların Sentezi**
Hamaloğlu K. Ö., Gökçal B., Tuncel S. A., Kabay N.
UKMK 2020, 14. Ulusal Kimya Mühendisliği Kongresi, Konya, Turkey, 10 July 2021, pp.1
- VI. **Monodisperse-porous metal oxide microspheres with peroxidase/oxidase mimetic activity as a new**

tool for biomolecule determination

Gökçal B., ÖĞÜT S. E., Babacan R., KİP F. Ç., HAMALOĞLU K. Ö., TUNCEL S. A.

XXVII.Balkan Clinical LaboratoryFederation Meeting and XXX.National Congress of theTurkish Biochemical SocietyTBS 2019, 27 - 31 October 2019

Metrics

Publication: 16

Citation (WoS): 72

Citation (Scopus): 128

H-Index (WoS): 5

H-Index (Scopus): 6