

Personal Information

Email: uysale15@itu.edu.tr

Web: <https://avesis.itu.edu.tr/uysale15>

International Researcher IDs

ORCID: 0000-0002-2358-0162

Yoksis Researcher ID: 372413

Education Information

Doctorate, Istanbul Technical University, Kimya-Metalurji, Metalurji Ve Malzeme Mühendisliği, Turkey 2023 - Continues

Postgraduate, Istanbul Technical University, Kimya-Metalurji, Metalurji Ve Malzeme Mühendisliği, Turkey 2021 - 2023

Undergraduate, Istanbul Technical University, Kimya-Metalurji, Metalurji Ve Malzeme Mühendisliği, Turkey 2016 - 2021

Foreign Languages

English, C1 Advanced

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Development of a Near-Zero-Waste Valorization Concept for Waste NdFeB Magnets: Production of Antimicrobial Fe Alginate Beads via Adsorption and Recovery of High-Purity Rare-Earth Elements**
Emil-Kaya E., Uysal E., Dikmetaş D. N., Karbancıoğlu Güler H. F., Gürmen S., Friedrich B.
ACS Omega, vol.9, no.6, pp.6442-6454, 2024 (SCI-Expanded)
- II. **Pulse ultrasonication leaching approach for selective Li leaching from spent LFP cathode material**
Uysal E., Yeşiltepe Özçelik D., Gürmen S.
CANADIAN METALLURGICAL QUARTERLY, vol.1, no.1, pp.1, 2023 (SCI-Expanded)
- III. **Comparison of production of mixed rare earth oxide (Nd/Pr oxide) powders by different precipitation agents from NdFeB magnets' water leaching**
Emil E., Uysal E., Gürmen S.
CANADIAN METALLURGICAL QUARTERLY, vol.1, no.1, pp.1, 2023 (SCI-Expanded)
- IV. **Nd Recovery from Wastewater with Magnetic Calcium Alginate ((1,4)-β-d-Mannuronic Acid and α-L-Guluronic Acid) Hydrogels**
Uysal E., Emil E., Yeşiltepe Özçelik D., Gürmen S.
ACS OMEGA, vol.1, no.1, pp.1-17, 2023 (SCI-Expanded)
- V. **The production of pH indicator Ca and Cu alginate ((1,4)- β -d-mannuronic acid and α -l-guluronic acid) cryogels containing anthocyanin obtained via red cabbage extraction for monitoring chicken fillet freshness**
Dikmetaş D. N., Uysal E., Karbancıoğlu Güler H. F., Gürmen S.
International Journal of Biological Macromolecules, vol.231, 2023 (SCI-Expanded)
- VI. **Hydrometallurgical recycling of waste NdFeB magnets: design of experiment, optimisation of low concentrations of sulphuric acid leaching and process analysis**
Uysal E., Al S., Emil-Kaya E., Stopic S., Gürmen S., Friedrich B.

CANADIAN METALLURGICAL QUARTERLY, vol.62, no.1, pp.107-118, 2023 (SCI-Expanded)

VII. **Synthesis of calcium, copper and iron alginate hydrogels doped with Ag nanoparticles produced by chemical reduction method**

Uysal E., Ateş S., Safaltın Ş., Dikmetaş D. N., Devocioğlu D., Karbancıoğlu Güler H. F., Gürmen S.

MATERIALS CHEMISTRY AND PHYSICS, vol.281, 2022 (SCI-Expanded)

Articles Published in Other Journals

I. **Silver-doped alginate cryogels as new generation current collectors for lithium-ion batteries: Structural and electrochemical analysis**

Cetin Y. C., Dursun H. N., Demir P., Uysal E., Ozcelik-Yesiltepe D., Ates M. N., Gürmen S.

Energy Storage, vol.6, no.2, 2024 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

I. **IRON REMOVAL FROM NDFEB WASTE MAGNET SOLUTIONS USING SODIUM ALGINATE SOLUTION**

Uysal E., Emil E., Al S., Gürmen S.

21 International Metallurgy and Materials Congress, İstanbul, Turkey, 6 October - 08 November 2022, pp.112-113

II. **RECYCLING OF CORRODED NDFEB MAGNETS BY HYDROMETALLURGICAL ROUTE**

Emil E., Uysal E., Stopic S., Gürmen S., Friedrich B.

INTERNATIONAL SOLVENT EXTRACTION CONFERENCE 2022, Gothenburg, Sweden, 26 - 30 September 2022, pp.1

Supported Projects

Gürmen S., TÜBİTAK International Multi-Cooperation Project, Sustainable Recovery of Rare Earth Elements (Nd, Dy,Pr) from spent NdFeB magnets, 2021 - 2023

Metrics

Publication: 10

Citation (WoS): 1

Citation (Scopus): 20

H-Index (WoS): 1

H-Index (Scopus): 3