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ScopusID: 57194539006

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Research Areas

Biotechnology, Environmental Biology, Microbiology, Natural Sciences, Engineering and Technology

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Chemical Stability and Additive Leach Out in Polyethersulfone Membranes Blended with Dragon Blood Resin: An Investigative Study**
Ambarita A. C., Mulyati S., Arahman N., Bilad M. R., Yavuztürk Gülb, Korkut S., Koyuncu İ.
KOREAN JOURNAL OF CHEMICAL ENGINEERING, vol.41, no.4, pp.1217-1227, 2024 (SCI-Expanded)
- II. **Modification of PAN electrospun nanofiber membranes with g-C₃N₄ nanotubes/carbon dots to enhance MBR performance**
Yavuztürk Gülb, Orhun Teber O., Tuncay G., Pekgenç E., Arabi N., Hemmati-Eslamlu P., Habibi-Yangjeh A., Vatanpour Sarghein V., Koyuncu İ.
Chemosphere, vol.349, 2024 (SCI-Expanded)
- III. **A review of cellulose-based derivatives polymers in fabrication of gas separation membranes: Recent developments and challenges**
Yavuztürk Gülb, Pekgenc E., Vatanpour V., Koyuncu I.
Carbohydrate Polymers, vol.321, 2023 (SCI-Expanded)
- IV. **Landfill leachate treatment with a full-scale membrane bioreactor: impact of leachate characteristics on filamentous bacteria.**
Yavuztuk Gülb, Gulhan H., Soyel S., Kaya R., Ersahin M. E., Ovez S., Koyuncu I.
Environmental science and pollution research international, vol.30, pp.91874-91886, 2023 (SCI-Expanded)
- V. **Biotechnological product potential of Auxenochlorella protothecoides including biologically active compounds (BACs) under nitrogen stress conditions**
Polat E., Yavuztürk Gülb, Ünver H., Altınbaş M.
World journal of microbiology & biotechnology, vol.39, no.8, pp.198, 2023 (SCI-Expanded)
- VI. **A sustainable approach for the removal methods and analytical determination methods of antiviral drugs from water/wastewater: A review**
Eryildiz B., Yavuztürk Gülb, Koyuncu İ.
Journal of Water Process Engineering, vol.49, 2022 (SCI-Expanded)
- VII. **Modification of PVDF membranes by incorporation Fe3O4@Xanthan gum to improve anti-fouling,**

- anti-bacterial, and separation performance**
Koyuncu İ., Gul B., Esmaeli M. S., Pekgenç E., Teber O. O., Tuncay G., Karimi H., Parvaz S., Maleki A., Vatanpour V.
Journal of Environmental Chemical Engineering, vol.10, no.3, 2022 (SCI-Expanded)
- VIII. Polysaccharides in fabrication of membranes: A review**
Vatanpour V., Yavuztürk Gülb., Zeytuncu B., Korkut S., İlyasoğlu G., Türken T., Badawi M., Koyuncu İ., Saeb M. R.
CARBOHYDRATE POLYMERS, vol.281, 2022 (SCI-Expanded)
- IX. Investigation of boron nitride/silver/graphene oxide nanocomposite on separation and antibacterial improvement of polyethersulfone membranes in wastewater treatment**
Vatanpour V., Keskin B., Naziri Mehrabani S. A., Karimi H., Arabi N., Behroozi A. H., Shokrollahi-far A., Yavuztürk Gülb., Koyuncu İ.
Journal of Environmental Chemical Engineering, vol.10, no.1, 2022 (SCI-Expanded)
- X. Biocatalytic membranes in anti-fouling and emerging pollutant degradation applications: Current state and perspectives**
Pekgenç E., Yavuztürk Gülb., Vatanpour V., Koyuncu İ.
Separation and Purification Technology, vol.282, 2022 (SCI-Expanded)
- XI. Mechanisms, diagnosis, and monitoring of biofouling in membrane processes: A review**
Saffarimandoab F., Yavuztürk Gülb., Tasdemir R. S., Mutlu B., İlter S. E., Ünal S., TUNABOYLU B., Menceloglu Y. Z., Vatanpour V., Koyuncu İ.
Desalination and Water Treatment, vol.247, pp.40-63, 2022 (SCI-Expanded)
- XII. A review on membrane fouling: Membrane modification**
Saffarimandoab F., Yavuztürk Gülb., Tasdemir R. S., İlter S. E., Ünal S., TUNABOYLU B., Menceloglu Y. Z., Koyuncu İ.
Desalination and Water Treatment, vol.216, pp.47-70, 2021 (SCI-Expanded)
- XIII. APPLICATIONS OF CERAMIC MEMBRANE BIOREACTORS IN WATER TREATMENT**
Koyuncu İ., Şengür Taşdemir R., Erşahin M. E., Özgün Erşahin H., Köse Mutlu B., Türken T., Kaya R., Yavuztürk Gülb.
CURRENT TRENDS AND FUTURE DEVELOPMENTS ON (BIO-) MEMBRANES: CERAMIC MEMBRANE BIOREACTORS, pp.141-176, 2020 (SCI-Expanded)
- XIV. Evaluation of biofouling behavior of zwitterionic silane coated reverse osmosis membranes fouled by marine bacteria**
Saffarimandoab F., Gülb., Erkoc-İlter S., Güçlü S., ÜNAL S., Tunaboylu B., MENCELOĞLU Y. Z., Koyuncu İ.
PROGRESS IN ORGANIC COATINGS, vol.134, pp.303-311, 2019 (SCI-Expanded)
- XV. Selection of quorum quenching (QQ) bacteria for membrane biofouling control: effect of different Gram-staining QQ bacteria, *Bacillus* sp T5 and *Delftia* sp T6, on microbial population in membrane bioreactors**
Gul B., İmer D. Y., Park P., Koyuncu İ.
WATER SCIENCE AND TECHNOLOGY, vol.78, no.2, pp.358-366, 2018 (SCI-Expanded)
- XVI. Evaluation of a novel anti-biofouling microorganism (*Bacillus* sp T5) for control of membrane biofouling and its effect on bacterial community structure in membrane bioreactors**
Gul B., İmer D. Y., Park P., Koyuncu İ.
WATER SCIENCE AND TECHNOLOGY, vol.77, no.4, pp.971-978, 2018 (SCI-Expanded)
- XVII. Assessment of new environmental quorum quenching bacteria as a solution for membrane biofouling**
GUL B., Koyuncu İ.
PROCESS BIOCHEMISTRY, vol.61, pp.137-146, 2017 (SCI-Expanded)
- XVIII. *Halomonas smyrnensis* sp nov., a moderately halophilic, exopolysaccharide-producing bacterium**
Poli A., Nicolaus B., Denizci A. A., Yavuzturk B., KAZAN D.
INTERNATIONAL JOURNAL OF SYSTEMATIC AND EVOLUTIONARY MICROBIOLOGY, vol.63, pp.10-18, 2013 (SCI-Expanded)

Articles Published in Other Journals

- I. **Polyethersulfone membrane coated with Dragon blood resin: Effect of input parameters and optimization using response surface methodology**
Ambarita A. C., Arahman N., Bilad M. R., Gülb, Korkut S., Yüksekdağ A., Teber O. O., Koyuncu İ., Mulyati S.
South African Journal of Chemical Engineering, vol.45, pp.30-41, 2023 (Scopus)
- II. **Synergistic Effect of Polymer Beads Used as Scraper and Different Aeration Intensities on Membrane Fouling**
Yavuztürk Gülb, koyuncu İ.
Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.25, no.75, pp.585-595, 2023 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Quorum Quenching for Biofouling Control in Membrane Bioreactors**
Yavuztürk Gülb, Köse Mutlu B., Park P. K., Lee C., Koyuncu İ.
in: Encyclopedia of Water: Science, Technology, and Society, Patricia Maurice, Editor, John Wiley & Sons, West Sussex, UK , New Jersey, pp.1899-1912, 2020
- II. **Applications of Ceramic Membrane Bioreactors in Water Treatment**
Koyuncu İ., Şengür Taşdemir R., Erşahin M. E., Özgün Erşahin H., Köse Mutlu B., Türkmen T., Kaya R., Yavuztürk Gülb.
in: Current Trends and Future Developments on (Bio-) Membranes, Angelo Basile,Kamran Ghasemzadeh,Elham Jalilnejad, Editor, Elsevier Science, Oxford/Amsterdam , Oxford, pp.141-176, 2020
- III. **Advanced biomethane processes**
Aydın S., Yavuztürk Gülb, Shahi A.
in: Sustainable Energy Technologies, Eduardo Rincón-Mejía,Alejandro de las Heras, Editor, CRC, New York , Florida, pp.343-356, 2017

Refereed Congress / Symposium Publications in Proceedings

- I. **Extremophiles from Camaltı Saltern Area in Turkey**
Yavuzturk B., Oner E., Denizci A., Kazan D.
12th European Congress on Biotechnology (ECB 12), Copenhagen, Denmark, 21 - 24 August 2005, vol.118

Supported Projects

- Yavuztürk Gülb, Demir M. E., TUBITAK Project, Biyokütle Yoğunlaştırıcılı Hibrit Fotosentetik Mikrobiyal Yakıt Hücresi ile Enerji Üretimi ve Yararlı Ürün Geri Kazanımı, 2023 - 2025
- Yavuztürk Gülb, TUBITAK Project, Ters Osmoz Membranlarında Biyotikanma Kontrolü Amacıyla Biyokatalitik Membran Üretimi', 2022 - 2024
- Yavuztürk Gülb, Yüksekdağ A., Project Supported by Higher Education Institutions, Tekstil Endüstrisi Atıksularında Sıfır Deşarjlı Hibrid Membran Sistemi ile Su ve Kimyasal Geri Kazanımının Araştırılması , 2022 - 2024
- Yavuztürk Gülb, POLAT E., Sayı Yazgan A., Eryıldız B., Project Supported by Higher Education Institutions, COVID-19 Pandemisinde Atıksularda SARS-CoV-2 ve Antiviral İlaç Varlığının İzlenmesi ve Ekotoksikolojik Etkilerinin Araştırılması, 2021 - 2023
- Yavuztürk Gülb, Koyuncu İ., Project Supported by Higher Education Institutions, Quorum Quenching Bakterilerinin Çevresel Kaynaklardan İzolasyonu ve Biyofilm Gelişiminin Önlenmesi Amacıyla Membran Biyoreaktörlerde Kullanılması, 2016 - 2018
- Yavuztürk Gülb, Koyuncu İ., TÜBİTAK International Bilateral Joint Cooperation Program Project, Study On Hydraulic Factors In Membrane Bioreactors Controlled By Quorum Quenching Technology, 2015 - 2017
- Yavuztürk Gülb, Koyuncu İ., TUBITAK Project, Yüksek Performanslı İleri Osmoz Membranı Üretimi ve Bu Membranlar ile

Patent

Koyuncu İ., Kara Ö., Yavuztürk Gül B., Paşaoğlu M. E., Korkut S., HERBAL ABSORBENT MATERIAL FOR COMBATING OIL AND OIL SPILLS, Patent, CHAPTER A Human Needs, The Invention Recourse Number: PCT/TR2023/050267 , Standard Registration, 2023

Metrics

Publication: 25

Citation (WoS): 285

Citation (Scopus): 314

H-Index (WoS): 10

H-Index (Scopus): 10

Awards

Koyuncu İ., Yavuztürk Gül B., Paşaoğlu M. E., Korkut S., ISIF'22, Patent Ödülü-Gümüş madalya, Bilim Sanayi Ve Teknoloji Bakanlığı, March 2022

Yavuztürk Gül B., En iyi tez ödülü, İstanbul Teknik Üniversitesi, June 2019

Non Academic Experience

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Ulusal Membran Teknolojileri Araştırma Merkezi (MEM-TEK)

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