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Publons / Web Of Science ResearcherID: AAE-6923-2019

ScopusID: 57190799866

Yoksis Araştırmacı ID: 270883

### Eğitim Bilgileri

Doktora, Clemson University, Amerika Birleşik Devletleri 2010 - 2015

Yüksek Lisans, Clemson University {South Carolina}, Makine Mühendisliği, Amerika Birleşik Devletleri 2007 - 2010

Lisans, İzmir Yüksek Teknoloji Enstitüsü, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Türkiye 2001 - 2006

### Yaptığı Tezler

Doktora, Synthesis and Characterization of Fluorinated Polyester Coatings, Clemson University, 2015

Yüksek Lisans, Monitoring CO Gas in Fuel Cell by Using Nano-mechanical Cantilever Sensor, Clemson University {South Carolina}, Makine Mühendisliği, 2009

### Araştırma Alanları

Temel Bilimler, Mühendislik ve Teknoloji

### Akademik Unvanlar / Görevler

Araştırma Görevlisi Dr., Ankara Üniversitesi, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2017 - Devam Ediyor

### Verdiği Dersler

Yeni Malzemeler, Lisans, 2020 - 2021

### SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- Toward Water and Oil Repellent Coating: Synthesis of Fluorinated Methacrylate-Glycidyl Methacrylate Copolymers**  
ÖZKAN HÜKÜM K., Çalışkan T., Caykara T., DEMİREL G.

- ACS Omega, cilt.9, sa.32, ss.34650-34660, 2024 (SCI-Expanded)
- II. **Long-term antifouling surfaces for urinary catheters**  
Tüfekçi M., Hamarat S., Demir Çalışkan T., Özgüzar H. F., Meydan A. E., Göçmen J. S., Evren Yurtcu E., Gökçe M. İ., Göktaş H.  
JOURNAL OF MATERIALS CHEMISTRY B, sa.12, ss.5711-5721, 2024 (SCI-Expanded)
- III. **Toward the Replacement of Long-Chain Perfluoroalkyl Compounds: Perfluoropolyether-Based Low Surface Energy Grafted Nanocoatings**  
Caliskan T., ÖZKAN HÜKÜM K., Caykara T., Luzinov I.  
ACS APPLIED POLYMER MATERIALS, cilt.4, sa.2, ss.980-986, 2022 (SCI-Expanded)
- IV. **Towards a Long-Chain Perfluoroalkyl Replacement: Water and Oil Repellent Perfluoropolyether-Based Polyurethane Oligomers**  
Wei L., Caliskan T., Brown P. J., Luzinov I.  
POLYMERS, cilt.13, sa.7, 2021 (SCI-Expanded)
- V. **Perfluoropolyether-based oleophobic additives: Influence of molecular weight distribution on wettability of polyethylene terephthalate films**  
Caliskan T., Wei L., Luzinov I.  
JOURNAL OF FLUORINE CHEMISTRY, cilt.244, 2021 (SCI-Expanded)
- VI. **Highly Oil-Repellent Thermoplastic Boundaries via Surface Delivery of CF<sub>3</sub> Groups by Molecular Bottlebrush Additives**  
Wei L., Caliskan T., Tu S., Choudhury C. K., Kuksenok O., Luzinov I.  
ACS APPLIED MATERIALS & INTERFACES, cilt.12, sa.34, ss.38626-38637, 2020 (SCI-Expanded)
- VII. **Effect of number of -CF<sub>3</sub> groups in tails of polyester on surface wettability of coatings: synthesis and characterization of PFPE based polyesters with three -CF<sub>3</sub> groups in tails**  
Caliskan T., Luzinov I.  
JOURNAL OF POLYMER RESEARCH, cilt.27, sa.5, 2020 (SCI-Expanded)
- VIII. **Micro-cantilever sensors for monitoring carbon monoxide concentration in fuel cells**  
Caliskan T., Bruce D. A., Daqaq M. F.  
JOURNAL OF MICROMECHANICS AND MICROENGINEERING, cilt.30, sa.4, 2020 (SCI-Expanded)
- IX. **Key-and-lock commodity self-healing copolymers**  
Urban M. W., Davydovich D., Yang Y., DEMİR ÇALIŞKAN T., Zhang Y., Casabianca L.  
SCIENCE, cilt.362, sa.6411, ss.220-225, 2018 (SCI-Expanded)
- X. **Attainment of Water and Oil Repellency for Engineering Thermoplastics without Long-Chain Perfluoroalkyls: Perfluoropolyether-Based Triblock Polyester Additives**  
Wei L., DEMİR ÇALIŞKAN T., Grant A., Tsukruk V., Brown P. J., Luzinov I.  
LANGMUIR, cilt.34, sa.43, ss.12934-12946, 2018 (SCI-Expanded)
- XI. **Toward a Long-Chain Perfluoroalkyl Replacement: Water and Oil Repellency of Polyethylene Terephthalate (PET) Films Modified with Perfluoropolyether-Based Polyesters**  
DEMİR ÇALIŞKAN T., Wei L., Nitta N., Yushin G., Brown P. J., Luzinov I.  
ACS APPLIED MATERIALS & INTERFACES, cilt.9, sa.28, ss.24318-24330, 2017 (SCI-Expanded)

## **Diğer Dergilerde Yayınlanan Makaleler**

- I. **Synthesis of Polymer Brushes by Surface-Initiated Controlled/Living Free Radical Polymerization Techniques**  
ÖZKAN HÜKÜM K., MUTLUTÜRK E., DEMİR ÇALIŞKAN T., ÇAYKARA T.  
Haceteppe Journal of Biology and Chemistry, cilt.48, sa.5, ss.395-405, 2020 (Hakemli Dergi)

## **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **Investigation of Antifouling Effect of PEG-Coated Urinary Catheter Surfaces Against Proteus mirabilis**  
TÜFEKÇİ M., HAMARAT S., DEMİR ÇALIŞKAN T., Özgüzar F., GÖÇMEN J. S., EVREN E., GÖKCE M. İ., GÖKTAŞ H.  
Turkish Physical Society 39th International Physics Congress, Bodrum, Türkiye, 31 Ağustos - 04 Eylül 2023
- II. **Synthesis of Polymeric Thin Films for Biomedical Applications**  
HAMARAT S., TÜFEKÇİ M., Özgüzar F., DEMİR ÇALIŞKAN T., GÖÇMEN J. S., EVREN E., GÖKCE M. İ., GÖKTAŞ H.  
Turkish Physical Society 39th International Physics Congress, Bodrum, Türkiye, 31 Ağustos - 04 Eylül 2023
- III. **PEG-based Antimicrobial/Antifouling PECVD Coatings**  
Göktaş H., Gökce M. İ., Demir Çalışkan T., Sedef Göçmen J., Tüfekçi M., Hamarat S., Özgüzar H. F., Evren Yurtcu E.  
HUMBOLDT KOLLEG 2023 Recent Advances in Material Science: Perspectives from Physics, Chemistry and Biology,  
Ankara, Türkiye, 12 - 14 Nisan 2023, ss.44
- IV. **Towards a long-chain perfluoroalkyl replacement: wettability of polymer films modified with perfluoropolyethers-based triblock copolymers**  
Wei L., DEMİR ÇALIŞKAN T., Luzinov I., Brown P.  
255th National Meeting and Exposition of the American-Chemical-Society (ACS) - Nexus of Food, Energy, and Water, Louisiana, Amerika Birleşik Devletleri, 18 - 22 Mart 2018, cilt.255
- V. **Block copolymers containing fluorinated polyurethanes as hydrophobic/oleophobic additives to thermoplastics**  
Wei L., DEMİR ÇALIŞKAN T., Brown P., Luzinov I.  
254th National Meeting and Exposition of the American-Chemical-Society (ACS) on Chemistry's Impact on the Global Economy, Washington, Kiribati, 20 - 24 Ağustos 2017, cilt.254
- VI. **Towards fibers that will possess hydrophobic/oleophobic properties for an extended period of time**  
Wei L., DEMİR ÇALIŞKAN T., Brown P., Luzinov I.  
253rd National Meeting of the American-Chemical-Society (ACS) on Advanced Materials, Technologies, Systems, and Processes, San-Francisco, Kostarika, 2 - 06 Nisan 2017, cilt.253
- VII. **Fabrication of low wettable perfluoro-polyisophthaloyl ester with PET coatings**  
DEMİR ÇALIŞKAN T., Brown P., Luzinov I.  
247th National Spring Meeting of the American-Chemical-Society (ACS), Texas, Amerika Birleşik Devletleri, 16 - 20 Mart 2014, cilt.247
- VIII. **Oleophobic perfluoro polyester films**  
DEMİR ÇALIŞKAN T., Galabura Y., Brown P., Luzinov I.  
247th National Spring Meeting of the American-Chemical-Society (ACS), Texas, Amerika Birleşik Devletleri, 16 - 20 Mart 2014, cilt.247
- IX. **Surface modification with perfluoro substituted isophthalic acid for reduction of surface wettability with non-aqueous liquids**  
DEMİR ÇALIŞKAN T., Seeber M., Galabura Y., Zdyrko B., Luzinov I.  
244th National Fall Meeting of the American-Chemical-Society (ACS), Pennsylvania, Amerika Birleşik Devletleri, 19 - 23 Ağustos 2012, cilt.244
- X. **Grafted layer for reduction of surface wettability with non-aqueous liquids**  
DEMİR ÇALIŞKAN T., Korneva G., Zdyrko B., Kornev K., Luzinov I.  
242nd National Meeting of the American-Chemical-Society (ACS), Colorado, Amerika Birleşik Devletleri, 28 Ağustos - 01 Eylül 2011, cilt.242

## Desteklenen Projeler

Göktaş H., Gökce M. İ., Evren Yurtcu E., Demir Çalışkan T., TÜBİTAK Projesi, Üriner Kateterler İçin Antifouling İnce Film Sentezi ve Bakteriyel Etkileşimlerinin İncelenmesi, 2022 - 2024

Demirel G., Demir Çalışkan T., Özkan Hüküm K., Yükseköğretim Kurumları Destekli Proje, TERSİNİR KATILMA-AYRILMA ZİNCİR TRANSFER RAFT POLİMERİZASYONU İLE KENDİ KENDİNİ TEMİZLEYEN AKILLI KAPLAMALARIN SENTEZLENMESİ, 2021 - 2023

## **Metrikler**

Yayın: 22

Atıf (WoS): 305

Atıf (Scopus): 301

H-İndeks (WoS): 5

H-İndeks (Scopus): 5