

Asst. Prof. NURİ BURAK KİREMİTLER

Personal Information

Email: nuriburak@erciyes.edu.tr

Web: <https://avesis.erciyes.edu.tr/nuriburak/>

Address: erciyes üniversitesi mühendislik fakültesi malzeme bilimi ve mühendisliği

International Researcher IDs

ScholarID: jZHM1XgAAAAJ

ORCID: 0000-0001-6065-4899

Publons / Web Of Science ResearcherID: AAO-9316-2021

ScopusID: 57003603600

Yoksis Researcher ID: 185218

Education Information

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, --, Turkey 2016 - 2019

Postgraduate, Erciyes University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği, Turkey 2013 - 2016

Undergraduate, Anadolu University, Mühendislik Mimarlık Fakültesi, Malzeme Bilimi Ve Mühendisliği (İngilizce, Turkey 2006 - 2012

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Elektroeğirme ile Yüzeyler Üzerinde Nano Boyutta Kimyasal Desenlerin Üretimi, Erciyes University, Fen Bilimleri Enstitüsü, 2019

Postgraduate, ELEKTROEĞİRME YÖNTEMİYLE NANO GÜMÜŞ KATKILI POLİKAPROLAKTON HİDROKSİAPATİT (PCL/HA-AG) NANOLİF ÜRETİMİ VE KARAKTERİZASYONU, Erciyes Üniversitesi, Malzeme Bilimi Ve Mühendisliği, Malzeme Bilimi Ve Mühendisliği, 2016

Research Areas

Metallurgical and Materials Engineering, Material science and engineering, Ceramic Materials, Composites, Polymeric Materials, Biomaterials, Nanomaterials, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Erciyes University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği, 2013 - Continues

Academic and Administrative Experience

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Coffee-Ring Mediated Thinning and Thickness-Dependent Dewetting Modes in Printed Polymer Droplets Coupled with Assembly of Quantum Dots for Anti-Counterfeiting**
TÖRÜN İ., Huang C., KİREMİTLER N. B., KALAY M., Shim M., ÖNSES M. S.
SMALL, 2024 (SCI-Expanded)
- II. **Tattoo-Like Multi-Color Physically Unclonable Functions**
KİREMİTLER N. B., Esidir A., Drake G. A., YAZICI A. F., Sahin F., TÖRÜN İ., Kalay M., KELEŞTEMUR Y., Demir H. V., Shim M., et al.
Advanced Optical Materials, vol.12, no.12, 2024 (SCI-Expanded)
- III. **Addressable and stable physically unclonable functions based on cross-linked poly(2-vinylpyridine)**
Kalay M., Esidir A., Ruzi M., KİREMİTLER N. B., ÖNSES M. S.
EUROPEAN POLYMER JOURNAL, vol.202, 2024 (SCI-Expanded)
- IV. **Inkjet Printing of Aqueous Silver Inks on Water-Soluble Fabrics for Transient Electronics Applications**
Gozutok Onses Z., KİREMİTLER N. B., Ozbasaran A., Huang X., ÖNSES M. S., Usta H.
ACS Applied Electronic Materials, 2024 (SCI-Expanded)
- V. **TiO₂ and Ag NPs modified polyacrylonitrile NFs: Antimicrobial, self-cleaning and SERS sensing capabilities for protective clothing applications**
Ceylan A., Karagoz S., Tekin S., Kayaci N., Pekdemir S., Salem S., Gokduman E. M., Demirci E., Sahmetlioglu E., Onses M. S., et al.
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS, vol.678, 2023 (SCI-Expanded)
- VI. **Food-Grade Physically Unclonable Functions**
Esidir A., Kayaci N., KİREMİTLER N. B., Kalay M., Sahin F., SEZER G., Kaya M., ÖNSES M. S.
ACS Applied Materials and Interfaces, vol.15, no.35, pp.41373-41384, 2023 (SCI-Expanded)
- VII. **Unclonable Features via Electrospraying of Bulk Polymers**
Esidir A., KİREMİTLER N. B., Kalay M., BAŞTÜRK A., ÖNSES M. S.
ACS APPLIED POLYMER MATERIALS, vol.4, no.8, pp.5952-5964, 2022 (SCI-Expanded)
- VIII. **Nanostructures for the Prevention, Diagnosis, and Treatment of SARS-CoV-2: A Review**
Kiremitler N. B., Kemerli M. Z., Kayaci N., Karagoz S., Pekdemir S., Sarp G., Sanduvaç S., Önses M. S., Yılmaz E.
ACS APPLIED NANO MATERIALS, vol.5, no.5, pp.6029-6054, 2022 (SCI-Expanded)
- IX. **Natural Wax-Stabilized Perovskite Nanocrystals as Pen-on-Paper Inks and Doughs**
Karabel Ocal S., KİREMİTLER N. B., YAZICI A. F., ÇELİK N., MUTLUGÜN E., ÖNSES M. S.
ACS APPLIED NANO MATERIALS, vol.5, no.5, pp.6201-6212, 2022 (SCI-Expanded)
- X. **Organic Light-Emitting Physically Unclonable Functions**
Kayaci N., Ozdemir R., Kalay M., KİREMİTLER N. B., USTA H., ÖNSES M. S.
ADVANCED FUNCTIONAL MATERIALS, vol.32, no.14, 2022 (SCI-Expanded)
- XI. **Waxing the soot: Practical fabrication of all-organic superhydrophobic coatings from candle soot and carnauba wax**
ÇELİK N., KİREMİTLER N. B., Ruzi M., ÖNSES M. S.
PROGRESS IN ORGANIC COATINGS, vol.153, 2021 (SCI-Expanded)
- XII. **Rapid fabrication of high-performance transparent electrodes by electrospinning of reactive silver ink containing nanofibers**
KİREMİTLER N. B., Esidir A., Gozutok Z., ÖZDEMİR A. T., ÖNSES M. S.
JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY, vol.95, pp.109-119, 2021 (SCI-Expanded)
- XIII. **Antibacterial, Antiviral, and Self-Cleaning Mats with Sensing Capabilities Based on Electrospun Nanofibers Decorated with ZnO Nanorods and Ag Nanoparticles for Protective Clothing Applications**
Karagoz S., Burak Kiremitler N. B., Sarp G., Pekdemir S., Salem S., Goksu A., Serdar Onses M. S., Sözdutmaz İ.,

Sahmetlioglu E., Ozkara E. S., et al.

ACS APPLIED MATERIALS & INTERFACES, vol.13, no.4, pp.5678-5690, 2021 (SCI-Expanded)

- XIV. **Writing chemical patterns using electrospun fibers as nanoscale inkpots for directed assembly of colloidal nanocrystals**
Kiremitter N. B., TÖRÜN İ., ALTINTAS Y., Patarroyo J., Demir H. V., Puntos V. F., Mutlugun E., ÖNSES M. S.
NANOSCALE, vol.12, no.2, pp.895-903, 2020 (SCI-Expanded)
- XV. **Synthesis of Ag and TiO₂ modified polycaprolactone electrospun nanofibers (PCL/TiO₂-Ag NFs) as a multifunctional material for SERS, photocatalysis and antibacterial applications**
Karagoz S., KİREMİTLER N. B., ŞAKİR M., Salem S., ÖNSES M. S., Sahmetlioglu E., CEYLAN A., YILMAZ E.
ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY, vol.188, 2020 (SCI-Expanded)
- XVI. **Plasmonic assemblies of gold nanorods on nanoscale patterns of poly (ethylene glycol): Application in surface-enhanced Raman spectroscopy**
Ocal S. K., Patarroyo J., Kiremitler N. B., Pekdemir S., Puntos V. F., Önses M. S.
JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol.532, pp.449-455, 2018 (SCI-Expanded)
- XVII. **FRET enabled light harvesting within quantum dot loaded nanofibers**
Altıntaş Y., KİREMİTLER N. B., GENÇ S., ÖNSES M. S., MUTLUGÜN E.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.51, no.6, 2018 (SCI-Expanded)
- XVIII. **Modulating the Kinetics of Nanoparticle Adsorption for Simple and High-Yield Fabrication of Plasmonic Heterostructures as SERS Substrates**
Pekdemir S., Karabel S., Kiremitler N. B., Liu X., Nealey P. F., Önses M. S.
CHEMPHYSICHEM, vol.18, pp.2114-2122, 2017 (SCI-Expanded)
- XIX. **Assembly of Plasmonic Nanoparticles on Nanopatterns of Polymer Brushes Fabricated by Electrospin Nanolithography**
Kiremitler N. B., Pekdemir S., Patarroyo J., Karabel S., Torun İ., Puntos V. F., Önses M. S.
ACS MACRO LETTERS, vol.6, pp.603-608, 2017 (SCI-Expanded)
- XX. **Ambient, rapid and facile deposition of polymer brushes for immobilization of plasmonic nanoparticles**
Yılmaz H., Pekdemir S., İpekci H. H., Kiremitler N. B., Hancer M., Önses M. S.
APPLIED SURFACE SCIENCE, vol.385, pp.299-307, 2016 (SCI-Expanded)
- XXI. **Self-Assembled Nanoparticle Arrays on Chemical Nanopatterns Prepared Using Block Copolymer Lithography**
ÖNSES M. S., WAN L., Liu X., KİREMİTLER N. B., Yılmaz H., NEALEY P. F.
ACS MACRO LETTERS, vol.4, no.12, pp.1356-1361, 2015 (SCI-Expanded)

Articles Published in Other Journals

- I. **Cu Nanoparçacık İçeren Polikaprolakton Nanofiberlerin Antimikrobiyal Aktiviteleri**
ŞAKİR M., KİREMİTLER N. B., CEYLAN A.
İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.13, no.3, pp.1937-1945, 2023 (Peer-Reviewed Journal)
- II. **Fully transparent and superhydrophobic electrodes enabled by soft interfaces**
Törün İ., Çelik N., Kiremitler N. B., Huang X., Önses M. S.
SURFACES AND INTERFACES, vol.36, 2023 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **A New Electrospun Material for Photocatalytic, SERS and Antibacterial Applications**
KARAGÖZ S., KİREMİTLER N. B., ŞAKİR M., SALEM S., ÖNSES M. S., ŞAHMETLİOĞLU E., CEYLAN A., YILMAZ E.
6th International Conference on Materials Science and Nanotechnology For Next Generation (MSNG2019), Turkey, 16 October 2019

- II. **Directed Assembly of Colloid Nanocrystals by Unique Uses of Electrospun Nanofibers and Their Electronic, Optoelectronic, Plasmonic Applications**
KİREMİTLER N. B., ÖNSES M. S.
Nanotechnology and Nanomaterials (Nano-2019), Lviv, Ukraine, 27 - 30 August 2019
- III. **Fabrication and Versatile Use of Spatially Defined Electrospun Nanofibers for Nanopatterning of Functional Materials for Nanolithographic and Nanoplasmonic Applications**
Kiremitler N. B., Önses M. S.
Nanotechnologies and Nanomaterials NANO-2018, Kyiv, Ukraine, 27 August - 30 September 2018, pp.20
- IV. **Assemblies of Plasmonic Nanoparticles on Patterns of End-grafted Poly(ethylene Glycol) Layers Fabricated by Electrohydrodynamic Jet Printing”, 14th NANOSCIENCE AND NANOTECHNOLOGY CONFERENCE**
PEKDEMİR S., KİREMİTLER N. B., TÖRÜN İ., ÖNSES M. S.
NANOTR14, İzmir, Turkey, 22 - 25 September 2018
- V. **Electrospinnanolitography (ESP NL): Versatile and Novel Use of Electrospun Nanofibers for Nanolithography Applications**
Kiremitler N. B., Önses M. S.
VII. Polymer Science & Technology Congress with International Participation, Eskişehir, Turkey, 9 - 12 September 2018, pp.102
- VI. **Fabrication and applications of spatially defined nanopatterns of functional materials generating by electrospun nanofibers**
KİREMİTLER N. B., ÖNSES M. S.
2nd International Conference on Material Science and Technology in Cappadocia (IMSTEC), Nevşehir, Turkey, 11 October 2017 - 13 January 2018, pp.598
- VII. **A novel method for nanopatterning of functional materials by electrospinnanolitography (ESP NL)**
KİREMİTLER N. B., ÖNSES M. S.
NANOTR13, 22 - 25 October 2017
- VIII. **The Effect of Substrate Hydrophobicity on the Resolution of the Chemical Patterns Fabricated by Electrospinning**
TÖRÜN İ., KİREMİTLER N. B., ÖNSES M. S.
13th NANOSCIENCE AND NANOTECHNOLOGY CONFERENCE (NANOTR13), Antalya, Turkey, 22 - 25 October 2017
- IX. **Reinventing Electrospinning for Nanolithography Applications**
KİREMİTLER N. B., PEKDEMİR S., ÖNSES M. S.
NANOTR-13, Antalya, Turkey, 22 - 25 October 2017
- X. **Fabrication of polymer brush nanoribbons (PBNRs) by electrospinnanolitography (ESP NL)**
KİREMİTLER N. B., PEKDEMİR S., karabel s., ÖNSES M. S.
Frontiers in Polymer Science, Sevilla, Spain, 17 - 19 May 2017
- XI. **Quantum Dot Integrated Nanofibers for White LEDs**
MUTLUGÜN E., ALTINTAS Y., KİREMİTLER N. B., GENÇ S., ÖNSES M. S.
2017 MRS Spring Meeting Exhibit, Arizona, United States Of America, 17 - 21 April 2017
- XII. **Electrospun nanofibers as templates for surface patterning**
KİREMİTLER N. B., PEKDEMİR S., HANÇER M., ÖNSES M. S.
12th Nanoscience and Nanotechnology Conference (NanoTR-12), Kocaeli, Turkey, 3 - 05 June 2016, pp.422
- XIII. **In-situ biomineralization of hydroxyapatite grafted polycaprolactone silver (PCL/HA-Ag) nanofiber biocomposites via electrospinning in saturated SBF characterised by QCM-D**
KİREMİTLER N. B., HANÇER M.
4th International Conference on Multifunctional Hybrid Nanomaterials, Barselona, Spain, 9 - 13 March 2015, pp.1-5

Supported Projects

KİREMİTLER N. B., KILIÇ DOKAN F., ERTUĞRUL İ., Project Supported by Higher Education Institutions, Nanoyapılı Bazı Metal Sülfürlerin Sentezi Karakterizasyonu Ve Süperkapasitör Özelliklerinin İncelenmesi, 2023 - Continues

KİREMİTLER N. B., ERTUĞRUL T., KILIÇ DOKAN F., KILIÇ DOKAN F., Project Supported by Higher Education Institutions, Spinel Kobaltit Tabanlı Süperkapasitörlerin Üretimi ve Uygulamaları, 2023 - 2024

ÖNSES M. S., KİREMİTLER N. B., BAŞTÜRK A., USTA H., TUBITAK Project, Organic Pi-Conjugated Molecular Microcrystals for Unclonable Surfaces , 2022 - 2024

KİREMİTLER N. B., ŞAHMETLİOĞLU E., DOKAN KILIÇ F., ÖNSES M. S., YETİMAN S., Project Supported by Higher Education Institutions, Metal Oksit Tabanlı Yüksek Pseudo Kapasitans Verimine Sahip Süperkapasitör Hücrelerinin Geliştirilmesi, 2022 - 2024

ÖNSES M. S., KALAY M., KİREMİTLER N. B., Project Supported by Higher Education Institutions, Nanomalzeme Esaslı Klonlanamayan Yüzeylerin Üretimi ve Görüntü Doğrulama Analizleri, 2021 - 2023

ÖNSES M. S., KİREMİTLER N. B., TÖRÜN İ., ÇELİK N., Project Supported by Higher Education Institutions, Buzlanma giderici ve yansıtma önleyici saydam süperhidrofobik yüzeylerin geliştirilmesi, 2021 - 2023

ÖNSES M. S., KILIÇ DOKAN F., ŞAHMETLİOĞLU E., YILMAZ E., ÖZDEMİR A. T., KİREMİTLER N. B., Project Supported by Higher Education Institutions, Nanoyapılı Esnek Enerji Depolama Sistemlerinin Üretilmesine Yönelik Altyapı Geliştirilmesi, 2020 - 2022

KİREMİTLER N. B., ŞAKİR M., TUBITAK Project, Yeni Nesil Saydam Elektrot Uygulamaları İçin İletken Nanoşerit Dizilerinin Elektrohüdrodinamik Doğrudan Fiber Yazım Tekniği İle Üretilmesi, 2019 - 2020

ÖNSES M. S., KİREMİTLER N. B., ŞAKİR M., Project Supported by Higher Education Institutions, Saydam elektrot uygulamaları için Elektrosplenmiş Nanofiberler üzerinde İletken Ağların Üretilmesi, 2018 - 2020

ÖNSES M. S., ÖÇSOY I., KİREMİTLER N. B., YILMAZ H., Project Supported by Higher Education Institutions, Polistiren-poli(etilen glikol) ikili polimer fırça sistemiyle modifiye edilmiş fonksiyonel yüzeylerin üretilmesi, karakterizasyonu ve metalik nanopartiküllerin sabitleştirilmesinde kullanımı, 2014 - 2016

Metrics

Publication: 36

Citation (WoS): 487

Citation (Scopus): 516

H-Index (WoS): 12

H-Index (Scopus): 13