

HÜSEYİN AVCI

ASSOC. PROF.

Email : havci@ogu.edu.tr

Office Phone : [+90 222 239 3750](tel:+902222393750) Extension: 3688

Address : avcibio.com

International Researcher IDs

ORCID: 0000-0002-2475-1963

ScopusID: 54419396700

Yoksis Researcher ID: 155906

Learning Knowledge

| | |
|------------------------------|---|
| Doctorate 2010 - 2013 | North Carolina State University, Fiber Ve Polimer Bilimi, United States Of America |
| Postgraduate 2008 - 2010 | North Carolina State University {North Carolina}, Tekstil Kimyası, United States Of America |
| Undergraduate 1999 - 2005 | Dokuz Eylul University, Mühendislik Fakültesi, Tekstil Mühendisliği Bölümü, Turkey |

Dissertations

Doctorate, Unusual formation of precursors for crystallization of ultra-high performance polypropylene and poly (ethylene terephthalate) fibers by utilization of ecologically friendly horizontal isothermal bath, North Carolina State University, Fiber Ve Polimer Bilimi, 2013

Postgraduate, Novel approaches to the development and characterization of antimicrobial conventional and nanostructured materials, North Carolina State University {North Carolina}, Tekstil Kimyası, 2010

Academic Titles / Tasks

| | |
|---|--|
| Associate Professor 2019 - Continues | Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, METALURJİ VE MALZEME MÜHENDİSLİĞİ BÖLÜMÜ |
| Assistant Professor 2014 - 2019 | Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, METALURJİ VE MALZEME MÜHENDİSLİĞİ BÖLÜMÜ |
| Research Assistant 2015 - 2016 | Harvard-Mit Health Sciences And Technology |
| Research Assistant 2015 - 2016 | Harvard University, Medical School |

Research Assistant

2013 - 2014

North Carolina State University

Research Assistant

2013 - 2014

Istanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi

Research Assistant

2008 - 2013

North Carolina State University

Supported Projects

1. AVCI H., DOĞAN GÜZEL F., Other International Funding Programs, Tam-Entegre ve Hızlı Bir Çip-Üstü Antibiyotik Duyarlılık Testi - Mikobakterium Tüberküloz İçin Örnek Bir Durum Analizi, 2018 - Continues
2. Atalay E., Özalp O., Uysal O., Ghorbanpoor H., Eroğlu S., Korkmaz O. T., Avcı H., Eker Sarıboyacı A., TUBITAK Project, Plateletten Zengin Plazma, Limbal-Kaynaklı Stromal Mezenkimal Kök Hücre Ve Pro-Rejeneratif Özellikli Eksozom İle Enkapsüle Edilmiş Terapötik Biyomalzeme Uygulamasının Oküler Yüzey Kimyasal Ve Termal Yanıklı Hayvan Modellerinde Klinik Etkinliğinin Araştırılması, 2023 - 2026
3. İstanbullu Ö. B., Yasan Ö. B., Ghorbanpoor H., Demir Cevizlidere B., Avcı H., Eker Sarıboyacı A., TUBITAK Project, Hegzagonal Bor Nitrür ve Tantalum Mikropartikül Takviyesi ile 3D Yazdırılabilir Biyobozunur Malzemeler İçin Hedef Doku ile Mekanik Uyumluluğun ve X-Işınlı Tıbbi Görüntüleme Sistemleri İle Görüntülenebilme Özelliğinin İyileştirilmesi, 2024 - 2025
4. Ghorbanpoor H., Avcı H., Doğan Güzel F., Bütün Şengel S., Semerci Sevimli T., Pat S., Darcan C., Eker Sarıboyacı A., TUBITAK Project, Mikroakışkan Çip İçerisinde Nanolif: Bakteri Duvarının Giderilmesinde Mikro-Filtrasyon Platformunun Geliştirilmesi, 2023 - 2025
5. Avcı H., Uysal O., Eker Sarıboyacı A., Güneş S., Semerci Sevimli T., TUBITAK Project, Klinik Tanılamada Mikroakışkan Çip İçerisinde 3-Boyutlu Karaciğer Kitinin Geliştirilmesi, 2021 - 2025
6. Ghorbanpoor H., Avcı H., Kaya B. M., Doğan Güzel F., Semerci Sevimli T., Eker Sarıboyacı A., TUBITAK Project, Farklı Hücre Besiyeri Ortamlarında Bulunan Ph Değerlerinin Sürekli Bir Şekilde Ve Yüksek Hassasiyette Ölçümü İçin Optik Temelli Ph Sensörünün Geliştirilmesi, 2023 - 2024
7. AVCI H., GASIMZADE N., Project Supported by Higher Education Institutions, ÇİP ÜZERİNDE KARACİĞER KANSERİ PLATFORMUNDA İLACA BAĞLI KARACİĞER ENDOTEL HASARININ İNCELENMESİ, 2023 - 2024
8. Avcı H., Ghorbanpoor H., Doğan Güzel F., Ebrahimi A., Şengel T., Topal A. E., Özel C., Kaya M., Project Supported by Higher Education Institutions, Mikroakışkan Yonga Üzerinde Üç Boyutlu Karaciğer Kanseri Modeli ve Hedefe Yönelik Tanılama ve İlaç Taraması Kitinin Geliştirilmesi, 2022 - 2024
9. Atalay E., Eroğlu S., Avcı H., Uysal O., Güneş S., TUBITAK Project, Oküler Yüzeyin Kimyasal Yaralanmasında Plateletten Zengin Plazma Yüklü Bioadeziv Hidrojel Üretimi; Ico-Reg Hidrojel'In Pre-Klinik Kavram Kanıt Çalışması, 2021 - 2023
10. SEMERCİ SEVİMLİ T., ÇEMREK F., SEVİMLİ M., ŞAHİNTÜRK V., AVCI H., EKER SARIBOYACI A., QOMI EKENEL E., ALTUĞ TASA B., GHORBANI A., GÜNEŞ S., et al., Project Supported by Higher Education Institutions, Küçük Hücreli Dışı Akciğer Kanseri (KHDAK) Kökenli Kanser Kök Hücrelerinde (Stem-Like NSCLC Cells) Epiteyal Mezenkimal Geçişte Borik Asitin Etkilerinin İncelenmesi, 2020 - 2022
11. EKER SARIBOYACI A., GÜNEŞ S., TUNCER S., SEMERCİ SEVİMLİ T., AVCI H., SEVİMLİ M., QOMİ EKENEL E., UYSAL O., Project Supported by Higher Education Institutions, Domoik Asidin İnsan Amniyotik Sıvı Kökenli Mezenkimal Kök Hücrelerin (IAS-MKH) DNA Tamir Mekanizması Üzerine Etkisinin Araştırılması, 2019 - 2022
12. Eker Sarıboyacı A., Avcı H., Uysal O., Özkurt M., TUBITAK Project, Mezenkimal Kök Hücre Yüklü Kompozit Canlı Fibrillerin Saten Dkousmasıyla Üretilen Yapı İskeletlerinde İlaç Kontrolü Salınımın Değerlendirilmesi, 2020 - 2021

13. Avcı H., Moralı U., Erol S., Project Supported by Higher Education Institutions, Geliştirilecek Yüksek Hassasiyetteki Elektrokimyasal Sensör Sistemi ile Ülkemiz Deniz Canlılarında Domoik Asidin ve Deniz Kirliliğinin İncelenmesi, 2018 - 2021
14. Avcı H., TUBITAK Project, Geliştirilen Çevre Dostu Yöntem ile Yeni Nesil Yüksek Performanslı ve Fonksiyonel Polietilen Bazlı Fiberlerin Geliştirilmesi, 2018 - 2020
15. Nurbaş M., Avcı H., Project Supported by Higher Education Institutions, Fonksiyonel çekirdek/kabuk nanolif esaslı biyomalzemelerin geliştirilmesi, 1998 - 2020
16. Nurbaş M., Avcı H., Ghorbanpoor H., Project Supported by Higher Education Institutions, Geliştirilmiş Üç Boyutlu (3D) Fiber Takviyeli Çevre Dostu Biyo-Kompozit Yapıların Tasarımı, 2016 - 2018
17. AVCI H., Project Supported by Higher Education Institutions, Çevre Dostu ve Doğal İçerikli Bileşikleri İçeren Antibakteriyel Nanofiber ve Yara İyileştirici Örtü Eldesi, 2015 - 2017
18. Nurbaş M., Avcı H., Project Supported by Higher Education Institutions, Gelişmiş Üç Boyutlu (3B) Çevre Dostu Fiberle Güçlendirilmiş Biyo-Kompozit Yapıların Tasarımı, 2015 - 2017
19. Ghorbanpoor H., Nurbaş M., Avcı H., Project Supported by Higher Education Institutions, Design of Advanced Three-Dimensional (3D) Eco-Friendly Fiber Reinforced Bio-Composite Structures., 2015 - 2017
20. Ghorbanpoor H., Avcı H., Project Supported by Higher Education Institutions, Termoplastik Elastomer olan Poly styrene b ethylene co butylene b styrene nin dinamik manipulasyonla fonksiyonel elektrospun nanofiber mühendisliği, 2015 - 2016
21. AVCI H., BAKSAN B., Project Supported by Higher Education Institutions, Termoplastik Elastomer olan Poly styrene b ethylene co butylene b styrene nin dinamik manipulasyonla fonksiyonel elektrospun nanofiber mühendisliği, 2015 - 2016
22. Other International Funding Programs, Novel Melt Spun Melt Ordered Process for Producing High Performance Polyester Fibers, 2010 - 2013

Published journal articles indexed by SCI, SSCI, and AHCI

1. **A novel green Microfiltration approach by developing a Lab-on-a-Chip System: A case study for Escherichia coli**
Javanifar R., Dabagh S., Kaya M., Bütün Şengel S., Ebrahimi A., Ghorbanpoor H., Avcı H.
Separation and Purification Technology, vol.353, 2025 (SCI-Expanded)
2. **Molecular Separation by Using Active and Passive Microfluidic chip Designs: A Comprehensive Review**
Ebrahimi A., İÇÖZ K., Didarian R., Shih C., Tarim E. A., Nasseri B., AKPEK A., Cecen B., Bal-Ozturk A., Güleç K., et al.
Advanced Materials Interfaces, vol.11, no.2, 2024 (SCI-Expanded)
3. **Advances in xenogeneic donor decellularized organs: A review on studies with sheep and porcine-derived heart valves**
Inal M. S., AVCI H., Hassan S., DARCAN C., Shin S. R., AKPEK A.
Bioengineering and Translational Medicine, 2024 (SCI-Expanded)
4. **High-throughput microfluidic chip with silica gel-C18 channels for cyclotide separation**
Ebrahimi A., Didarian R., GHORBANPOOR H., DOĞAN GÜZEL F., Hashempour H., AVCI H.
Analytical and Bioanalytical Chemistry, vol.415, no.27, pp.6873-6883, 2023 (SCI-Expanded)
5. **Simple and low-cost antibiotic susceptibility testing for Mycobacterium tuberculosis using screen-printed electrodes**
GHORBANPOOR H., AKÇAKOCA İ., Norouz Dizaji A., Butterworth A., Corrigan D., Kocagoz T., Ebrahimi A., AVCI H., DOĞAN GÜZEL F.
Biotechnology and Applied Biochemistry, vol.70, no.3, pp.1397-1406, 2023 (SCI-Expanded)
6. **CLINICAL-GRADE HUMAN SYNOVIAL FLUID-DERIVED MESENCHYMAL STEM CELLS FOR DEGENERATIVE MENISCUS THERAPY**
Uysal O., Avcı H., Bagis S. G., Semerci Sevimli T., Ozel C., Cevizlidere B., Soykan M. N., Kara S. G., Ekenel E. Q., Tasa B. A., et al.

CYTOTHERAPY, no.6, 2023 (SCI-Expanded)

7. **Revealing the single-channel characteristics of OprD (OccAB1) porins from hospital strains of *Acinetobacter baumannii***
Ebrahimi A., Ergün T., KAYGUSUZ İZGÖRDÜ Ö., DARCAN C., AVCI H., Öztürk B., GÜNER H. R., GHORBANPOOR H., DOĞAN GÜZEL F.
European Biophysics Journal, vol.52, no.3, pp.131-143, 2023 (SCI-Expanded)
8. **A multifunctional sateen woven dressings for treatment of skin injuries**
Ozel C., Apaydin E., EKER SARIBOYACI A., Tamayol A., AVCI H.
Colloids and Surfaces B: Biointerfaces, vol.224, 2023 (SCI-Expanded)
9. **On chip microfluidic separation of cyclotides**
Didarian R., EBRAHIMI A., GHORBANPOOR H., Bagheroghli H., GÜZEL F. D., faradpour m., Lotfibakhshaiesh N., Hashempour H., AVCI H.
Turkish Journal of Chemistry, vol.47, no.1, pp.253-262, 2023 (SCI-Expanded)
10. **Improvement of polyethylene fiber wettability and mechanical properties through an environmentally sustainable spinning process**
Seyhan A., Gunaydin B. N., Polat Y., Kılıç A., Demir A., AVCI H.
International Journal of Adhesion and Adhesives, vol.119, 2022 (SCI-Expanded)
11. **Immunomodulating Hydrogels as Stealth Platform for Drug Delivery Applications**
Rezaei Z., Yilmaz-Aykut D., Tourk F. M., Bassous N., Barroso-Zuppa M., Shawl A. I., Ashraf S. S., AVCI H., Hassan S.
Pharmaceutics, vol.14, no.10, 2022 (SCI-Expanded)
12. **Developing an in-Line method to improve mechanical and flame retardancy performance of polyethylene fiber**
Gunaydin B., Seyhan A., Polat Y., Kilic A., Demir A., Ureyen M. E., Avci H.
JOURNAL OF INDUSTRIAL TEXTILES, vol.52, no.1, pp.1-15, 2022 (SCI-Expanded)
13. **A fully integrated rapid on-chip antibiotic susceptibility test-A case study for *Mycobacterium smegmatis***
Ghorbanpoor H., Dizaji A. N., Akçakoca İ., Blair E. O., Ozturk Y., Hoskisson P., Kocagoz T., Avci H., Corrigan D. K., Doğan Güzel F.
SENSORS AND ACTUATORS A-PHYSICAL, vol.339, 2022 (SCI-Expanded)
14. **An electrochemical biosensor with integrated microheater to improve the sensitivity of electrochemical nucleic acid biosensors**
AKÇAKOCA İ., GHORBANPOOR H., Blair E., Ozturk Y., Dizaji A. N., Kocagoz T., AVCI H., Corrigan D., DOĞAN GÜZEL F.
JOURNAL OF MICROMECHANICS AND MICROENGINEERING, vol.32, no.4, 2022 (SCI-Expanded)
15. **Investigation of electrochemical behavior of potassium ferricyanide/ferrocyanide redox probes on screen printed carbon electrode through cyclic voltammetry and electrochemical impedance spectroscopy**
Koç Y., Morali U., Erol S., Avci H.
Turkish Journal Of Chemistry, vol.45, no.6, pp.1895-1915, 2021 (SCI-Expanded)
16. **Label-free molecular detection of antibiotic susceptibility for *Mycobacterium smegmatis* using a low cost electrode format**
Guzel F. D., Ghorbanpoor H., Dizaji A. N., Akçakoca İ., Ozturk Y., Kocagoz T., Corrigan D. K., Avci H.
BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY, vol.68, no.6, pp.1159-1166, 2021 (SCI-Expanded)
17. **Electrochemical-based “antibiotsensor” for the whole-cell detection of the vancomycin-susceptible bacteria**
Norouz Dizaji A., Ali Z., Ghorbanpoor H., Ozturk Y., Akçakoca İ., Avci H., Doğan Güzel F.
Talanta, vol.234, 2021 (SCI-Expanded)
18. **Determination of therapeutic agents efficiencies of microsatellite instability high colon cancer cells in post-metastatic liver biochip modeling**
Bayir Garbioglu D., DEMİR N., Ozel C., AVCI H., DİNCER M.
FASEB Journal, vol.35, no.9, 2021 (SCI-Expanded)
19. **Current strategies for the regeneration of skeletal muscle tissue**

- Alarçin E., Bal-Öztürk A., Avcı H., Ghorbanpoor H., Guzel F. D., Akpek A., Yesiltas G., Canak-İpek T., Avcı-Adali M. International Journal of Molecular Sciences, vol.22, no.11, 2021 (SCI-Expanded)
20. **Electrochemical Investigation of Gold Based Screen Printed Electrodes: An Application for a Seafood Toxin Detection**
Koc Y., Morali U., Erol S., Avcı H.
Electroanalysis, vol.33, no.4, pp.1033-1048, 2021 (SCI-Expanded)
 21. **On-chip label-free impedance-based detection of antibiotic permeation**
Kaur J., Ghorbanpoor H., Öztürk Y., Kaygusuz Ö., Avcı H., Darcan C., Trabzon L., Güzel F. D.
IET Nanobiotechnology, vol.15, no.1, pp.100-106, 2021 (SCI-Expanded)
 22. **Tissue adhesives: From research to clinical translation**
Bal-Ozturk A., Cecen B., Avcı-Adali M., Topkaya S. N., ALARÇIN E., YAŞAYAN G., Li Y. E., Bulkurcuoglu B., Akpek A., AVCI H., et al.
Nano Today, vol.36, 2021 (SCI-Expanded)
 23. **Investigation of the Effect of Channel Structure and Flow Rate on On-Chip Bacterial Lysis**
Dizaji A. N., Ozturk Y., Ghorbanpoor H., Cetak A., AKÇAKOCA İ., Kocagoz T., AVCI H., Corrigan D., Guzel F. D.
IEEE Transactions on Nanobioscience, vol.20, no.1, pp.86-91, 2021 (SCI-Expanded)
 24. **Self-assembled fibrillar polyethylene crystals with tunable properties**
Seyhan A., Gunaydin B. N., POLAT Y., Kiliç A., Demir A., AVCI H.
POLYMER ENGINEERING AND SCIENCE, vol.60, no.9, pp.2176-2189, 2020 (SCI-Expanded)
 25. **Recent Advances in 4D Bioprinting**
AKPEK A., BAL ÖZTÜRK A., ALARÇIN E., AVCI H., avci adali m.
Research Journal of Biomedical and Biotechnology, vol.1, no.1, pp.20-23, 2020 (SCI-Expanded)
 26. **Flexible poly(styrene-ethylene-butadiene-styrene) hybrid nanofibers for bioengineering and water filtration applications**
Avcı H., Akkulak E., Gergeroglu H., Ghorbanpoor H., Uysal O., Eker Sarıboyacı A., Demir B., Soykan M. N., Pat S., Mohammadigharehbagh R., et al.
Journal of Applied Polymer Science, vol.137, no.26, 2020 (SCI-Expanded)
 27. **Decellularized inner body membranes for tissue engineering: a review**
Inci I., Norouz Dizaji A., Ozel C., MORALI U., Dogan Guzel F., Avcı H.
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, vol.31, no.10, pp.1287-1368, 2020 (SCI-Expanded)
 28. **Customizable Composite Fibers for Engineering Skeletal Muscle Models**
Fallahi A., Yazdi I. K., Serex L., Leshi E., Faramarzi N., Tarlan F., Avcı H., Costa-Almeida R., Sharifi F., Rinoldi C., et al.
ACS BIOMATERIALS SCIENCE & ENGINEERING, vol.6, no.2, pp.1112-1123, 2020 (SCI-Expanded)
 29. **Synergistic effects of plant extracts and polymers on structural and antibacterial properties for wound healing**
AVCI H., Gergeroglu H.
POLYMER BULLETIN, vol.76, no.7, pp.3709-3731, 2019 (SCI-Expanded)
 30. **Preparation of origanum minutiflorum oil-loaded core-shell structured chitosan nanofibers with tunable properties**
Avcı H., Ghorbanpoor H., Nurbaş M.
Polymer Bulletin, vol.75, no.9, pp.4129-4144, 2018 (SCI-Expanded)
 31. **Reversible Redox Activity by Ion-pH Dually Modulated Duplex Formation of i-Motif DNA with Complementary G-DNA**
Chang S., Kilic T., Lee C. K., AVCI H., Bae H., Oskui S. M., Jung S. M., Shin S. R., Kim S. J.
NANOMATERIALS, vol.8, no.4, 2018 (SCI-Expanded)
 32. **Cell-laden composite suture threads for repairing damaged tendons**
Costa-Almeida R., Domingues R. M. A., Fallahi A., Avcı H., Yazdi I. K., Akbari M., Reis R. L., Tamayol A., Gomes M. E., Khademhosseini A.
JOURNAL OF TISSUE ENGINEERING AND REGENERATIVE MEDICINE, vol.12, no.4, pp.1039-1048, 2018 (SCI-Expanded)
 33. **Fabrication of Nanopores in an Ultra-Thin Polyimide Membrane for Biomolecule Sensing**

- Guzel F. D., Avci H.
IEEE SENSORS JOURNAL, vol.18, no.7, pp.2641-2646, 2018 (SCI-Expanded)
34. **Rapid prototyping of whole-thermoplastic microfluidics with built-in microvalves using laser ablation and thermal fusion bonding**
Shaegh S. A. M., Pourmand A., Nabavina M., Avci H., Tamayol A., Mostafalu P., Ghavifekr H. B., Aghdam E. N., Dokmeci M. R., Khademhosseini A., et al.
SENSORS AND ACTUATORS B-CHEMICAL, vol.255, pp.100-109, 2018 (SCI-Expanded)
35. **A Review of Cellulose and Cellulose Blends for Preparation of Bio-derived and Conventional Membranes, Nanostructured Thin Films, and Composites**
Douglass E. F., AVCI H., Boy R., Rojas O. J., Kotek R.
POLYMER REVIEWS, vol.58, no.1, pp.102-163, 2018 (SCI-Expanded)
36. **Recent advances in organ-on-a-chip technologies and future challenges: a review**
AVCI H., Dogan Guzel F., EROL S., Akpek A.
TURKISH JOURNAL OF CHEMISTRY, vol.42, no.3, pp.587-610, 2018 (SCI-Expanded)
37. **An eco-friendly approach to synthesis and characterization of magnetite (Fe₃O₄) nanoparticles using Platanus Orientalis L. leaf extract**
Nurbas M., Ghorbanpoor H., Avci H.
Digest Journal of Nanomaterials and Biostructures, vol.12, no.4, pp.993-1000, 2017 (SCI-Expanded)
38. **Label-Free and Regenerative Electrochemical Microfluidic Biosensors for Continual Monitoring of Cell Secretomes**
Shin S. R., Kilic T., Zhang Y. S., Avci H., Hu N., Kim D., Branco C., Aleman J., Massa S., Silvestri A., et al.
ADVANCED SCIENCE, vol.4, no.5, 2017 (SCI-Expanded)
39. **Multisensor-integrated organs-on-chips platform for automated and continual in situ monitoring of organoid behaviors**
Zhang Y. S., Aleman J., Shin S. R., Kilic T., Kim D., Shaegh S. A. M., Massa S., Riahi R., Chae S., Hu N., et al.
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol.114, no.12, 2017 (SCI-Expanded)
40. **Investigation and recycling of paint sludge with cement and lime for producing lightweight construction mortar**
Avci H., Ghorbanpoor H., Topçu İ. B., Nurbaş M.
Journal of Environmental Chemical Engineering, vol.5, no.1, pp.861-869, 2017 (SCI-Expanded)
41. **Development of High-Tenacity, High-Modulus Poly(ethylene terephthalate) Filaments via a Next Generation Wet-Melt-Spinning Process**
Yoon J. H., AVCI H., Najafi M., Nasri L., Hudson S. M., Kotek R.
POLYMER ENGINEERING AND SCIENCE, vol.57, no.2, pp.224-230, 2017 (SCI-Expanded)
42. **Aptamer-Based Microfluidic Electrochemical Biosensor for Monitoring Cell-Secreted Trace Cardiac Biomarkers**
Shin S. R., Zhang Y. S., Kim D., Manbohi A., Avci H., Silvestri A., Aleman J., Hu N., Kilic T., Keung W., et al.
ANALYTICAL CHEMISTRY, vol.88, no.20, pp.10019-10027, 2016 (SCI-Expanded)
43. **Photophysical properties of phosphorescent elastomeric composite nanofibers**
ÇALIŞIR M. D., Erol M., Kılıç A., AVCI H.
DYES AND PIGMENTS, vol.125, pp.95-99, 2016 (SCI-Expanded)
44. **Highly crystalline and oriented high-strength poly(ethylene terephthalate) fibers by using low molecular weight polymer**
Avci H., Najafi M., Kılıç A., Kotek R.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.132, no.45, 2015 (SCI-Expanded)
45. **High-performance filaments by melt spinning low viscosity nylon 6 using horizontal isothermal bath process**
Najafi M., AVCI H., Kotek R.
POLYMER ENGINEERING AND SCIENCE, vol.55, no.11, pp.2457-2464, 2015 (SCI-Expanded)
46. **Controlling of Threadline Dynamics via a Novel Method to Develop Ultra-High Performance**

Polypropylene Filaments

Avci H., Kotek R., Toliver B.

POLYMER ENGINEERING AND SCIENCE, vol.55, no.2, pp.327-339, 2015 (SCI-Expanded)

47. **Characterization and Development of a New Method for Determination Charge Density of 3-(Trimethoxysilyl)-propyldimethyloctadecyl Ammonium Chloride Coatings on Polyester Surfaces**
Avci H., Monticello R., Kotek R.
AATCC JOURNAL OF RESEARCH, vol.1, no.3, pp.1-10, 2014 (SCI-Expanded)
48. **Characterization of Degradation of Polypropylene Nonwovens Irradiated by gamma-Ray**
Keene B., Bourham M., Viswanath V., Avci H., Kotek R.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.131, no.4, 2014 (SCI-Expanded)
49. **Developing an ecologically friendly isothermal bath to obtain a new class high-tenacity and high-modulus polypropylene fibers**
Avci H., Kotek R., Yoon J.
JOURNAL OF MATERIALS SCIENCE, vol.48, no.22, pp.7791-7804, 2013 (SCI-Expanded)
50. **Preparation of antibacterial PVA and PEO nanofibers containing Lawsonia Inermis (henna) leaf extracts**
Avci H., Monticello R., Kotek R.
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, vol.24, no.16, pp.1815-1830, 2013 (SCI-Expanded)
51. **Properties of Antibacterial Polypropylene/Nanometal Composite Fibers**
Gawish S. M., Avci H., Ramadan A. M., Mosleh S., Monticello R., Breidt F., Kotek R.
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, vol.23, pp.43-61, 2012 (SCI-Expanded)

Articles Published in Other Journals

1. **The Concept of Taqwa in the Poems of the Turkish Poet Zamakhsharî from Khwarezm**
AVCI H.
Yakın Doğu Üniversitesi İlahiyat Fakültesi dergisi (Online), vol.10, no.1, pp.232-256, 2024 (Peer-Reviewed Journal)
2. **INVESTIGATION OF GOLD NANOPARTICLE MODIFICATION ON SCREEN PRINTED GOLD ELECTRODE BY ELECTROCHEMICAL IMPEDANCE SPECTROSCOPY**
Koc Y., Avci H.
Journal of Engineering and Architecture Faculty of Eskisehir Osmangazi University, vol.30, no.3, pp.389-396, 2022 (Peer-Reviewed Journal)
3. **The Smallest Workers in Regenerative Medicine: Stem Cell-Derived Exosomes**
Öner Ö., Kara S. G., Karakaya İ., Eker Sarıboyacı A., Uysal O., Güneş S., Avci H.
vol.3, no.2, pp.58-67, 2022 (Peer-Reviewed Journal)
4. **Four-Dimensional Printing Technology at the Frontier of Advanced Modeling and Applications in Brain Tissue Engineering**
SOYKAN M. N., ŞENGEL T., Ebrahimi A., ALTUĞ TASA B., GHORBANPOOR H., UYSAL O., EKER SARIBOYACI A., AVCI H.
Journal of Medical Innovation and Technology, vol.3, no.2, pp.46-57, 2021 (Peer-Reviewed Journal)
5. **Design Alginate Based Blends for Living Composite Fibers to Promote Wound Healing**
Özel C., Şengel T., Ebrahimi A., Apaydın E., Ghorbanpoor H., Eker Sarıboyacı A., Uysal O., Özkurt M., Avci H.
Eskişehir Technical University Journal of Science and Technology A - Applied Sciences and Engineering, vol.22, no.SPECIAL ISSUE 2021, pp.98-111, 2021 (Peer-Reviewed Journal)
6. **Investigation of 3D Culture of Human Adipose Tissue-Derived Mesenchymal Stem Cells in a Microfluidic Platform**
Özel C., Koç Y., Topal A. E., Ebrahimi A., Şengel T., Ghorbanpoor H., Doğan Güzel F., Uysal O., Eker Sarıboyacı A., Avci H.
Eskişehir Technical University Journal of Science and Technology A - Applied Sciences and Engineering, vol.22, no.SPECIAL ISSUE 2021, pp.85-97, 2021 (Peer-Reviewed Journal)
7. **HIGHLY SENSITIVE LABEL-FREE ELECTROCHEMICAL DETECTION OF HEAT SHOCK PROTEIN WITH**

LOW-COST SCREEN-PRINTED ELECTRODES

Doğan Güzel F., Akçakoca İ., Ghorbanpoor H., Norouz Dizaji A., Öztürk Y., Blair E., Kocagöz Z. T., K Corrigan D., Avci H.

Eskişehir Technical University Journal of Science and Technology A - Applied Sciences and Engineering, vol.22, no.4, pp.344-352, 2021 (Peer-Reviewed Journal)

8. **Biologically modified microelectrode sensors provide enhanced sensitivity for detection of nucleic acid sequences from Mycobacterium tuberculosis**
Blair E. O., Hannah S., Vezza V., AVCI H., Kocagoz T., Hoskisson P. A., Güzel F. D., Corrigan D. K.
Sensors and Actuators Reports, vol.2, no.1, pp.100008, 2020 (ESCI)
9. **Impedance testing of porous Si3N4 scaffolds for skeletal implant applications**
Akbulut S. O., Ghorbanpoor H., Iptec B. O., Butterworth A., Avcioglu G., Kozaci L. D., Topates G., Corrigan D. K., Avci H., Guzel F. D.
SN Applied Sciences, vol.2, no.5, 2020 (ESCI)
10. **GÜÇ TUTUŞUR POLİPROPİLEN POLİMERİ VE LİF UYGULAMALARINDA SON GELİŞMELER VE GELECEK BEKLENTİLERİ**
AVCI H., ÜREYEN M. E., KILIÇ A., Sağlam E. A., DEMİR A.
Uludağ University Journal of The Faculty of Engineering, vol.24, no.2, pp.609-632, 2019 (Peer-Reviewed Journal)
11. **HIGH PERFORMANCE FIBERS: A REVIEW ON CURRENT STATE OF ART AND FUTURE CHALLENGES**
AVCI H., Hassanin A., Hamouda T., KILIÇ A.
Eskişehir Osmangazi Üniversitesi Mühendislik ve Mimarlık Fakültesi Dergisi, vol.27, no.2, pp.130-155, 2019 (Peer-Reviewed Journal)
12. **PRODUCTION AND ANALYSIS OF FUNCTIONAL SEBS NANOFIBERS BY ELECTROSPINNING**
Avci H., Akkulak E., Gergeroglu H., Ghorbanpoor H., Baksan B., Doğan Güzel F.
Eskişehir Osmangazi Üniversitesi Mühendislik ve Mimarlık Fakültesi Dergisi, vol.26, no.2, pp.40-46, 2018 (Peer-Reviewed Journal)
13. **A NOVEL APPROACH FOR WATER TREATMENT BY USING ACTIVATED CARBON : APRICOT KERNEL SHELL**
Adhami S., Ghorbanpoor H., Azak B., Kapucu S., Nurbaş M., Avci H.
Eskişehir Osmangazi Üniversitesi Mühendislik ve Mimarlık Fakültesi Dergisi, vol.26, no.1, pp.1-7, 2018 (Peer-Reviewed Journal)
14. **FUNCTIONAL COMPOSITE NANOFIBERS DERIVED FROM NATURAL EXTRACT OF SATUREJA HORTENSIS**
GERGEROĞLU H., AVCI H.
Anadolu University Journal of Science and Technology-A Applied Sciences and Engineering, vol.18, no.5, pp.908-918, 2017 (Peer-Reviewed Journal)
15. **Sustainable Approach to Produce Polyurethane Composite Foams with Natural Materials**
AVCI H., Ozdemir A. U.
Celal Bayar Üniversitesi Fen Bilimleri Dergisi, 2017 (Peer-Reviewed Journal)
16. **Atık Boya Çamuru ile Üretilen Betonların özellikleri**
Ghorbanpoor H., TOPÇU İ. B., AVCI H., NURBAŞ M.
yapı dünyası, vol.252, pp.42-45, 2017 (Peer-Reviewed Journal)
17. **Investigation Of 3D Bio-Composite Structures Using Vacuum Infusion Method Via Chicken Feathers Fibers**
Nurbaş M., Ghorbanpoor H., Avci H.
Journal of Advanced Research in Engineering Technology, vol.1, no.2, pp.5-10, 2017 (Peer-Reviewed Journal)
18. **Effects of Reinforced Materials on Mechanical Properties of 3D Composite Structure**
Ghorbanpoor H., Nurbaş M., Avci H.
International Journal of Mechanical and Production Engineering, vol.5, 2016 (Peer-Reviewed Journal)
19. **Effect of Reinforced Materials on Mechanical Properties of 3D Composite Structure**
Ghorbanpoor H., NURBAŞ M., AVCI H.
International Journal of Mechanical And Production Engineering, 2016 (Peer-Reviewed Journal)

20. **Effective Commercial Additives for Improving Poly-Propylene Fibres Properties by The Melt Extrusion Process**
Gawish S., Kotek R., Monticello R., Ramadan A., AVCI H., Mosleh M.
Al-Azhar Bulletin of Science, 2010 (Peer-Reviewed Journal)

Books & Book Chapters

1. **Polimerler: Özellikleri ve Uygulamaları**
Avcı H. (Editor)
Üniversite Yayınları, Eskişehir, 2021
2. **Polimer Yapısı ve Özelliklerine Giriş**
AVCI H., ŞENGEL T., Ebrahimi A.
in: Polimerler: Özellikleri ve Uygulamaları, Avcı, Hüseyin, Editor, Eskişehir Osmangazi Üniversitesi Yayınları, Eskişehir, pp.1-27, 2021
3. **LİF VE LİFLİ MALZEMELER**
AVCI H., ŞENGEL T., Ebrahimi A.
in: Polimerler: Özellikleri ve Uygulamaları, Avcı, Hüseyin, Editor, Eskişehir Osmangazi Üniversitesi Yayınları, Eskişehir, pp.28-69, 2021
4. **Production of polyolefins**
Kotek R., Afshari M., Avcı H., Najafi M.
in: Polyolefin Fibres: Structure, Properties and Industrial Applications, S C O Ugbole, Editor, Woodhead Publishing Limited , Birmingham, pp.187-264, 2017
5. **Development of antimicrobial materials**
AVCI H.
Saarbrücken: VDM Verlag Dr Müller, 2011

Refereed Congress / Symposium Publications in Proceedings

1. **Integration of Microfluidic Devices with Screen-Printed Electrodes for Electrochemical Sensing**
GHORBANPOOR H., AVCI H.
3. BİLSEL INTERNATIONAL WORLD SCIENCE AND RESEARCH CONGRESS, 17 - 18 February 2024
2. **Investigation of vascular damage in liver-cancer-on-chip model.**
GASIMZADE, N., Özel C., Tomsuk Ö., Ebrahimi A., GHORBANPOOR H., ABDULLAYEVA, N., EKER SARIBOYACI A., UYSAL O., AVCI H.
6th international eurasian conference on biological and chemical sciences eurasianbiochem, 11 - 13 October 2023
3. **Exploring anti-cancer drug activities by 3-dimensional liver cancer on a chip**
ABDULLAYEVA, N., Tomsuk Ö., Özel C., GHORBANPOOR H., Ebrahimi A., GASIMZADE, N., EKER SARIBOYACI A., AVCI H.
6th international eurasian conference on biological and chemical sciences eurasianbiochem, 11 - 13 October 2023
4. **Next generation in vitro technologies: Organ-on-a-chip**
Avcı H.
Systems Biology and Bioinformatics Society Cooperation Meetings – III, İstanbul, Turkey, 24 December 2022
5. **Menekşe Bitkisinin Ekstraktından Siklotidlerin Mikroakışkan Çip Yoluyla Eldesi**
Didarian R., Ebrahimi A., GHORBANPOOR H., Zende Z., DOĞAN GÜZEL F., AVCI H.
INTERNATIONAL Congress of Health Research, 08 December 2022
6. **Çok yönlü ultra kararlı bir mikro protein olan siklotidlerin antikanser özelliklerin incelenmesi**
Didarian R., Ebrahimi A., GHORBANPOOR H., Zende Z., DOĞAN GÜZEL F., LOTFIBAKHSHAYESH N., HASHEMPOUR H., AVCI H.
4th International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2022), 14

December 2022

7. **Adsorption challenge in the PDMS-based microfluidic systems for drug screening application**
Mohammadigharehbagh R., Tomsuk O., Ghorbanpoor H., Doğan Güzel F., Eker Sarıboyacı A., Avcı H.
11. Uluslararası Lif ve Polimer Araştırmaları Sempozyumu, Bursa, Turkey, 4 - 05 November 2022, pp.222-226
8. **Biomimetic Approaches to Engineer Materials for Medicine and Health Research**
Avcı H.
11th ULPAS, Bursa, Turkey, 4 - 05 November 2022, pp.205-206
9. **Human Organ on a Chip: New Paradigm for Medicine and Health Research**
Avcı H.
AIJU Technological Institute, Valencia, Spain, 16 May 2022
10. **Investigation of Vigno 1-5 Cyclotides Separation from Viola Ignobilis Through Microfluidic Chip**
AVCI H., Didarian R., Ebrahimi A., GHORBANPOOR H., HASHEMPOUR H., DOĞAN GÜZEL F.
INTERNATIONAL EUROASIA Congress on Scientific Researches and Recent Trends 9, 18 February 2022
11. **Microfluidic integration onto microelectrode and its effect on electrochemistry**
Ali Z., Uçar A., Ghorbanpoor H., Avcı H., Doğan Güzel F.
4th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem), Ankara, Turkey, 24 - 26 November 2021, pp.48-49
12. **Cytotoxic, Apoptotic and Wound Healing Effects of Boric Acid on Colon Cancer Cells.**
UYSAL O., APAYDIN E., SOYKAN M. N., GHORBANPOOR H., AVCI H.
2. International Health and Medical Sciences Conference, Muş, Turkey, 18 September 2021, pp.98-99
13. **The Effect of Wnt/Beta-Catenin Signaling Pathway in Osteogenic Differentiation Stages of Human Adipose Tissue Derived Mesenchymal Stem Cells.**
Eker Sarıboyacı A., Uysal O., Avcı H., Semerci Sevimli T., Ghorbani A., Koç Y.
6. Uluslararası Erciyes Bilimsel Araştırmalar Kongresi, Kayseri, Turkey, 01 September 2021, pp.4-6
14. **The Role of TGF-B Signaling Pathway in Osteogenic Differentiation Stages of Mesenchymal Stem Cells of Human Adipose Tissue Origin**
Eker Sarıboyacı A., Avcı H., Uysal O., Qomı Ekenel E., Ghorbanpoor H., Karakaya İ. B.
6. Uluslararası Erciyes Bilimsel Araştırmalar Kongresi, Kayseri, Turkey, 01 September 2021, pp.7-9
15. **İNSAN YAĞ DOKUSU KÖKENLİ MEZENKİMAL KÖK HÜCRELERİNOSTEOJENİK FARKLILAŞMA EVRELERİNDE WNT/BETA-KATENİN SİNYALYOLAĞININ ETKİSİ**
Eker Sarıboyacı A., Uysal O., Avcı H., Semerci Sevimli T., Ghorbani A., Koç Y.
6. ULUSLARARASI ERCİYES BİLİMSEL ARAŞTIRMALAR KONGRESİ, Kayseri, Turkey, 1 - 03 September 2021, pp.4-6
16. **Ekran Baskılı Altın Elektrot Yüzeyine Altın Nanopartikül Modifikasyonu ve Elektrokimyasal Empedans Spektroskopisi Yöntemi İle İncelenmesi**
KOÇ Y., MORALI U., AVCI H.
14. Ulusal Kimya Mühendisliği Kongresi, Turkey, 10 June 2021
17. **Cost effective alginate blend and its antibiotic release properties: Wound healing approaches.**
ÖZEL C., ŞENGEL T., EKER SARIBOYACI A., UYSAL O., ÖZKURT M., AVCI H.
VIIIth International Fiber and Polymer Research Symposium, Bursa, Turkey, 18 June 2021, pp.61-62
18. **Investigation of Mesenchymal cells in the Microfluidic Cell Culture Device**
Özel C., Koç Y., Topal A. E., Ebrahimi A., ŞENGEL T., GHORBANPOOR H., DOĞAN GÜZEL F., UYSAL O., EKER SARIBOYACI A., AVCI H.
VIII. INTERNATIONAL FIBER and POLYMER RESEARCH SYMPOSIUM, 18 - 19 June 2021
19. **Investigation of Polar and Nonpolar Cyclotides Separation from Violet Extract Through Microfluidic Chip**
Didarian R., Ebrahimi A., GHORBANPOOR H., Norouz Dizaji A., DOĞAN GÜZEL F., AVCI H.
VIII. INTERNATIONAL FIBER and POLYMER RESEARCH SYMPOSIUM, 18 - 19 June 2021
20. **A novel microheater integrated microelectrode enhances the sensitivity of conventional electrochemical nucleic acid biosensors**
Akçakoca I., Ghorbanpoor H., Ozturk Y., Norouz Dizaji A., Blair E., Kocagoz T., Corrigan D., AVCI H., DOĞAN GÜZEL F.
International Eurasian Conference on Biotechnology and Biochemistry, 16 - 18 December 2020

21. **Çeşitli Redoks Problemlerinin Ekran Baskılı Karbon Elektrodun Elektrokimyasal Davranışı Üzerindeki Etkisinin Dönüşümlü Voltametri Yöntemi ile İncelenmesi**
KOÇ Y., MORALI U., EROL S., AVCI H.
32. Ulusal Kimya Kongresi, Turkey, 17 - 19 September 2020
22. **Investigation of Hot Drawing on Chain Orientation Using Linear Low-Density Polyethylene Fibers**
Seyhan A., Tepekiran B., POLAT Y., KILIÇ A., DEMİR A., AVCI H.
VII. International Fiber and Polymer Research Symposium, 25 - 26 September 2020
23. **Organ on a Chip: Opportunities and Challenges**
AVCI H.
BioTürkiye, 5 - 07 March 2020
24. **Synergistic engineering of organoids: A platform for drug discovery and personalized medicine**
AVCI H.
V. Life Sciences Congress, Turkey, 21 - 22 February 2020
25. **Biomimetic approaches to tissue engineering of organoids**
AVCI H.
VI. International Fiber and Polymer Research Symposium, 24 - 25 January 2020
26. **Surface modification of polyethylene by a simple post-treatment method**
Seyhan A., Tepekiran B. N., POLAT Y., KILIÇ A., DEMİR A., AVCI H.
VI. International Fiber and Polymer Research Symposium, 24 - 25 January 2020
27. **Improving flame retardancy of PE with halogen-free materials**
Tepekiran B. N., Seyhan A., POLAT Y., KILIÇ A., DEMİR A., AVCI H.
VI. International Fiber and Polymer Research Symposium, 24 - 25 January 2020
28. **Investigation of immobilization process of screen printed carbon electrode for an advanced biosensor: A detailed characterization**
Koc Y., Morali U., Erol S., Avci H.
IV. International Scientific and Vocational Studies Congress – Engineering, Ankara, Turkey, 7 - 10 November 2019, pp.174-177
29. **Impedance Testing of Porous Si₃N₄ Scaffolds for Skeletal Implant Applications**
Akbulut O., Özbek B., Butterworth A., Ghorbanpoor H., Avcioglu G., KOZACI L. D., TOPATEŞ G., Corrigan D., AVCI H., DOĞAN GÜZEL F.
5th International Conference on Engineering Sciences, 19 September 2019
30. **Developing Biosensors for Food Safety Analysis**
AVCI H., ANIL H., KOÇ Y., MORALI U., EROL S.
4th International Congress on Biosensors, Çanakkale, Turkey, 8 - 11 July 2019
31. **Developing Biosensors for Food Safety Analysis**
AVCI H., Anil H., Koc Y., MORALI U., EROL S.
4th International Congress on Biosensors, 8 - 11 July 2019
32. **Development of Crystal Cleavage for Low Molecular Weight Linear Polymer**
Seyhan A., Tepekiran B., POLAT Y., KILIÇ A., DEMİR A., AVCI H.
5th International Fiber and Polymer Research Symposium, Turkey, 2 - 03 May 2019
33. **A Novel Microfluidic Liver on a Chip Platform for Prediction of Drug Toxicity**
Kilic T., Shin S. R., Zhang Y. S., AVCI H., Dokmeci M., Ali K.
VII. Polymer Science Technology Congress with International Participation, 9 - 12 September 2018
34. **Production of Core–Shell Nanofibers for Controlled Drug Delivery for Their Potential Application in Wound Healing**
AVCI H., Ghorbanpoor H., NURBAŞ M.
VII. Polymer Science Technology Congress with International Participation, 9 - 12 September 2018
35. **Anti-Diyabetik Kontrollü İlaç Taşıyıcı Sistemler İçin Elektroçekim Çekirdek/Kabuk Nanoliflerinin Geliştirilmesi**
Kara Magden G., AVCI H., NURBAŞ M.
VII. Polymer Science Technology Congress with International Participation, 9 - 12 September 2018

36. **Novel Nanofibre Integrated SiN Scaffolds for Skeletal Implant Applications**
Akbulut S. O., Ozbek Iptec B., Butterworth A., Ghorbanpoor H., Avcioglu G., Akbas Y., Oksuz S., KOZACI L. D., TOPATEŞ G., DOĞAN GÜZEL F., et al.
14th Nanoscience and Nanotechnology Conference, 22 - 25 September 2018
37. **Production of Magnetic Electrospun Nanofibers for Use in Cancer Therapy**
Gergeroglu H., AVCI H., Ghorbanpoor H., NURBAŞ M.
X. International RD Brokerage Event, 8 - 09 March 2018
38. **Doğal Antibakteriyel Ajanlar ile Immobilize Edilmiş Elektrospun Nanofiberleri Kullanarak In vitro Yara İyileşmesi**
AVCI H., Gergeroglu H.
3rd International Fiber and Polymer Research Symposium, 8 - 09 March 2018
39. **İlaç Keşfi İçin Mikroakışkan Teknolojili Çip İçerisinde Kalp**
AVCI H., Shin S. R., Zhang Y. S., Dokmeci M., Khademhosseini A.
3rd International Fiber and Polymer Research Symposium, 8 - 09 March 2018
40. **Label-Free Glucose-Sensitive Optical Hydrogel Fibers**
Haider B., AVCI H.
X. International RD Brokerage Event, 8 - 09 March 2018
41. **Robotic Microactuator-Controlled Catheters for Minimally Invasive Surgery**
AVCI H., Shin S.
X. International RD Brokerage Event, 8 - 09 March 2018
42. **Rapid Prototyping of Whole-Thermoplastic Microfluidics**
Mousavi Shaegh S. A., AVCI H., Pourmand A., Zhang Y. S., Khademhosseini A.
3rd International Fiber and Polymer Research Symposium, 8 - 09 March 2018
43. **Wearable Optical Fiber Sensor for Prolonged Continuous Glucose Monitoring at Point of Care**
Haider B., AVCI H.
X. International RD Brokerage Event, 8 - 09 March 2018
44. **Development of Ballistic Hybrid Nonwovens by Impregnated with Nanocrystalline Particles**
AVCI H., Gergeroglu H.
X. International RD Brokerage Event, 8 - 09 March 2018
45. **Microfluidic Biosensor Integrated Organ-on-a-Chip System for Drug Discovery**
AVCI H.
International Congress on Chemistry and Materials Science, 5 - 07 October 2017
46. **Application of Activated Carbon to the Removal of Methylene Blue in Drinking Water**
Adhami S., Ghorbanpoor H., NURBAŞ M., AVCI H.
International Congress on Chemistry and Materials Science, 5 - 07 October 2017
47. **Coaxial-Electrospun Core-Shell Nanofibers for Medical Application**
NURBAŞ M., Ghorbanpoor H., AVCI H.
13th Nanoscience and Nanotechnology Conference, 22 - 25 October 2017
48. **An Effective Natural Approach to Synthesize Magnetic Nanoparticles**
Ghorbanpoor H., AVCI H., NURBAŞ M.
International Congress on Chemistry And Materials Science, 5 - 07 October 2017
49. **Kayıp Çekirdek Kabuğundan Suyun Temizlenmesine Yolculuk: Aktif Karbon**
ADHAMİ S., GHORBANPOOR H., AVCI H., NURBAŞ M.
ESOGU Project Exhibition Event, 08 May 2017
50. **Production of Fiber Reinforced Lightweight Construction Material by Recycling of Paint Sludge**
Avci H., Ghorbanpoor H., Topçu İ. B., Nurbaş M.
IX. International RD Brokerage Event, Bursa, Turkey, 27 - 28 April 2017
51. **3D Örgülü ve Tavuk Tüyü Takviyeli Biyokompozitler**
NURBAŞ M., Ghorbanpoor H., AVCI H.
2nd International Fiber and Polymer Research Symposium, 27 - 28 April 2017
52. **3D Örgülü Ve Tavuk Tüyü Takviyeli Biyokompozitler**

- NURBAŞ M., Ghorbanpoor H., AVCI H.
2nd International Fiber and Polymer Research Symposium, 27 - 28 April 2017
53. **Green and Sustainable Approach for Design of Antibacterial Wound Care Dressings**
AVCI H., Gergeroglu H., Akkulak E., Toptas Y., ÇABUK A.
International Conference on Engineering Technology and Innovation, 22 - 26 March 2017
54. **Boya Çamurunun Geri Dönüşümü ile Isı ve Ses İzolasyonlu Hafif Konut İnşaat Yapısının Üretimi**
NURBAŞ M., GHORBANPOOR H., AVCI H.
Endüstriyel Simbiyoz Konferansı ve Proje Pazarı, 01 February 2017
55. **Design of antibacterial and eco friendly wound dressings by using natural additives substance**
NURBAŞ M., ghorbanpoor H., AVCI H.
6th International Congress on Nanoscience & Nanotechnology, 26-28 October 2016, Tehran, Iran, 26 - 28 October 2016
56. **Fiber Textile Technology for Musculoskeletal Tissue Engineering Applications**
Yazdi I., Fallahi A., Costa Almeida R., AVCI H., Tamayol A., Khademhosseini A.
Biomedical Engineering Society (BMES) Annual Meeting, 5 - 08 October 2016
57. **Investigation of 3d Bio Composite Structures Using Vacuum Infusion Method via Chicken Feathers Fibers**
NURBAŞ M., ghorbanpoor H., AVCI H.
" IAARHIES 28th International Conference on Engineering & Technology ICET, 18-19 September 2016, Shanghai, China, 18 - 20 September 2016
58. **DEVELOPMENT OF COMPOSITE POLYURETHANE FOAM USING ENVIRONMENTALLY FRIENDLY MATERIALS**
Ozdemir A. U., Gergeroglu H., AVCI H.
28. Ulusal Kimya Kongresi, Turkey, 15 - 21 August 2016
59. **Study of Paint Sludge Emissions from Polymeric Composites**
ghorbanpoor H., Akkulak e., Gergeroglu h., civan I., NURBAŞ M., AVCI H.
46th IUPAC World Polymer Congress, 17-21 July 2016, Istanbul, Turkey., 17 - 21 July 2016
60. **Textile Platform for Musculoskeletal Tissue Engineering**
Yazdi I., Fallahi A., AVCI H., Tamayol A., Khademhosseini A.
NIH- Training Grantees Meeting, 11 - 12 July 2016
61. **A textile platform using mechanically reinforced hydrogel fibres towards engineering tendon niche**
Almeida R., Tamayol A., Yazdi I., AVCI H., Fallahi A., Annabi N., Reis R., Gomes M., Khademhosseini A.
TERMIS-EU 2016, 28 June - 01 July 2016
62. **Production of Antibacterial and Wound Healing Nano Fibers Containing Eco Friendly and Natural Compounds**
Gergeroğlu H., Akkulak E., Ghorbanpoor H., BAKSAN B., NURBAŞ M., AVCI H.
12th International Nanoscience and Nanotechnology Conference, Kocaeli, 3-5 June 2016, Turkey., 3 - 05 June 2016
63. **Dynamic Manipulation of Thermoplastic Elastomer of Poly styrene b ethylene cobutylene b styrene for Engineering Functional Electrospun Nanofibers**
Akkulak E., Gergeroğlu h., ghorbanpoor H., BAKSAN B., NURBAŞ M., AVCI H.
12th International Nanoscience and Nanotechnology Conference, Kocaeli, 3-5 June 2016, Turkey., 3 - 05 June 2016
64. **Textile Tissue Engineering: A Path Towards Organ Weaving**
Ali T., Iman Y., Afsoon F., Mahboubeh N., AVCI H., Raquel C., Grissel S., Mario A., Mohsen A., Nasim A., et al.
10th World Biomaterials Congress, 17 - 22 May 2016, vol.4
65. **Design of Transparent and Antimicrobial PM2.5 Air Filter by Using Electrospun Nanofibers**
NURBAŞ M., ghorbanpoor H., AVCI H.
VIII. International R&D Brokerage Event, Bursa, 12-13 May 2016, Turkey., 12 - 13 May 2016
66. **Mechanically Reinforced Hydrogel Fibers for Tendon Tissue Engineering**
CostaAlmeida R., Tamayol A., Yazdi I., AVCI H., Fallahi A., Annabi N., Reis L., Gomes M., Khademhosseini A.
5th Portuguese Young Chemists Meeting (5th PYChem) and 1st European Young Chemists Meeting (1st EYChem), 26 - 29 April 2016

67. **Effects of Reinforced Materials on Mechanical Properties of 3D Composite Structure**
GHORBANPOOR H., NURBAŞ M., AVCI H.
23rd IIER International Conference on Chemical and Biochemical Engineering (ICCBE), 11 May - 11 December 2015
68. **Effect of Reinforced Materials on Mechanical Properties of 3D Composite Structure**
NURBAŞ M., AVCI H., Ghorbanpoor H.
International Conference of Chemical and Biochemical Engineering, 11 December 2015, pp.7-10
69. **Effects of Reinforced Materials on Mechanical Properties of 3D Composite Structure**
Ghorbanpoor H., Nurbaş M., Avci H.
23rd IIER International Conference on Chemical and Biochemical Engineering (ICCBE), Barcelona, Spain, 11 December 2015
70. **Bioactive Composite Living Fibers for Organ Weaving**
Tamayol A., Yazdi I., Nabavinia M., Fallahi A., Khoshakhlagh P., Akbari M., AVCI H., Mostafalu P., Nejat H., Najafabadi Z., et al.
Discover Brigham, Boston, United States Of America, 07 October 2015, pp.3
71. **Development of Advanced 3D Knitted Fabric Based Green Composite For New Generation Automotive**
NURBAŞ M., GHORBANPOOR H., AVCI H., Gergeroglu H., Soykan M. N., Akkulak E.
VII. International R&D Brokerage Event, 27 May 2015
72. **Development of New Generation Radiation Shielding Ecofriendly 3D Knitted Biocomposites**
NURBAŞ M., GHORBANPOOR H., AVCI H., Gergeroglu H., Akkulak E.
VII. International R&D Brokerage Event, Bursa, 27 May 2015
73. **Production of New Generation Functional Fiber By Ecofriendly Isothermal Bath**
AVCI H., Ghorbanpoor H., Gergeroglu H., Cengiz M., NURBAŞ M., Kotek R., Saylan E.
VII. International RD Brokerage Event, 27 - 29 May 2015, pp.341-342
74. **Development of an Alternative Carbon Fiber Precursor via Eco-Friendly Methods**
AVCI H., GHORBANPOOR H., Gergeroglu H., NURBAŞ M., kotek R., Akkulak E.
VII. International R&D Brokerage Event, 27 May 2015
75. **Development of an alternative carbon fiber precursor via eco friendly method**
AVCI H., Ghorbanpoor H., Gergeroglu H., Cengiz M., NURBAŞ M., Kotek R., Saylan E.
VII. International RD Brokerage Event, 27 - 29 May 2015, pp.696-697
76. **Development of Novel 3D Reinforced Composites for Advanced Materials**
Nurbaş M., Avci H., Hamed G., İnce M. E.
Proceedings of the 6th World Conference on 3D Fabrics and their Applications, South Carolina, United States Of America, 26 - 28 May 2015, pp.124-128
77. **Design of Advanced Green 3D Fiber Reinforced Composite Structures**
Nurbaş M., Ghorbanpoor H., Avci H.
6th World Conference on 3D Fabrics and their Applications, North Carolina, United States Of America, 26 - 28 May 2015
78. **A New Generation of High Performance Functional Composite Fibers**
AVCI H., Kotek R.
1st International Conference of Sustainable Composite Technologies, 3 - 05 November 2014
79. **Design Strategy For Novel Nanohybrid Photocatalytic Cabin Air Filters**
Kucuksari A., AVCI H., CEBECİ H., KILIÇ A.
14th World Textile Conference, AUTEX, 26 - 28 May 2014
80. **Unique Polyamide Fibers by hIB Process**
Najafi M., Kotek R., AVCI H.
The Fiber Society, 21 - 23 May 2014
81. **Modifying Mechanical Properties of Nylon 6 Multifilament Yarn by Eco friendly Isothermal Bath**
Najafi M., AVCI H., Boy R., Kotek R.
127th NC ACS Sectional Conference, United States Of America, 01 November 2013

82. **Investigation on the Effect of Precursors on the Formation of Crystallization for Ultra High Performance Fibers**
AVCI H., Yoon J., Kotek R.
The Fiber Society, 23 - 25 October 2013
83. **Development and Testing of Nanofiber Filtration System for Removal of Volatile Organic Compounds VOC in Aircraft Cabins**
Kucuksari A., AVCI H., CEBECİ H., KILIÇ A.
Nanotechnology Student Conference NanoTR-Student, Turkey, 22 October 2013
84. **Developing an Unusual Formation of a Precursor for Crystallization of High Performance PET Fibers Using a Low Molecular Weight Polymer**
AVCI H., Yoon J., Kotek R.
245th ACS National Meeting and Exposition, United States Of America, 7 - 11 April 2013
85. **Green Engineering for Obtaining a New Class of High Performance Nylon Polyester Yarns**
AVCI H., Hudson S., Kotek R.
V. International RD Brokerage Event, 4 - 05 April 2013
86. **Green Engineering for Obtaining a New Class of High Performance Polyolefin Nylon Polyester Nonwovens**
AVCI H., Hudson S., Kotek R.
V. International RD Brokerage Event, 4 - 05 April 2013
87. **Green Engineering for Obtaining a New Class of High Performance Polyolefin Yarns**
AVCI H., Hudson S., Kotek R.
V. International RD Brokerage Event, 4 - 05 April 2013
88. **Green Engineering for Obtaining a New Class of High Performance Fibers**
AVCI H., Kotek R.
The 8th Annual NC State University Graduate Student Research Symposium, United States Of America, 19 March 2013
89. **Determination of skin friction drag force in the modified melt spinning process of ultra high tenacity PET fibers**
Yoon J., AVCI H., Kotek R., Hudson S.
The Southeastern Regional Meeting of the American Chemical Society (SERMACS), United States Of America, 14 - 17 November 2012
90. **Developing an Environmentally Friendly Isothermal Bath to Obtain a New Class of High Performance Fibers**
AVCI H., Yoon J., Kotek R.
The Fiber Society, United States Of America, 7 - 09 November 2012
91. **Melt Spinning of High Performance Poly ethylene terephthalate PET Yarn via Utilizing a Horizontal Isothermal Bath HIB in the Threadline**
Yoon J., AVCI H., Kotek R.
4th Triangle Soft Matter Workshop, United States Of America, 14 May 2012
92. **A New Approach to Produce Eco friendly Natural Based Antibacterial PVA and PEO Nanofibers Mats**
AVCI H.
COT, NC State University-Wednesday Seminar, United States Of America, 22 February 2012
93. **Preparation of Antibacterial PVA and PEO Nanofibers Containing Lawsonia Inermis henna Leaf Extracts**
Yoon J., AVCI H., Kotek R., Hudson S.
10th World Textile Conference, Autex, 21 - 23 June 2010

Courses

NANO POLİMERİK MALZEMELERİN YAPISI VE ÖZELLİKLERİ, Postgraduate, 2017 - 2018, 2016 - 2017

POLİMER MÜHENDİSLİĞİNİN TEMELLERİ, Postgraduate, 2017 - 2018

KLİNİK DOKU MÜHENDİSLİĞİ, Doctorate, 2017 - 2018

LİF VE LİFLİ YAPILARIN ÖZELLİKLERİ VE KULLANIMI, Doctorate, 2017 - 2018, 2016 - 2017

Polimer Malzemeler, Undergraduate, 2017 - 2018, 2016 - 2017

POLİMER MALZEMELER VE TASARIM, Undergraduate, 2017 - 2018, 2016 - 2017

İLERİ BİYOMALZEMELER VE UYGULAMALARI, Postgraduate, 2017 - 2018, 2016 - 2017

Metrics

Publication: 172

Citation (WoS): 702

Citation (Scopus): 1862

H-Index (WoS): 13

H-Index (Scopus): 18

Research Areas

Material science and engineering

Non Academic Experience

Kadifeteks Mensucat

Calik Denim-Gap Güneydoğu Tekstil

Superhome Tekstil-Sanko