

MD Ümran AYDEMİR SEZER

Personal Information

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Education Information

Doctorate, Sakarya University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, Turkey 2012 - 2017

Post Graduate, Middle East Technical University, Fen-Edebiyat Fakültesi, Biyomedikal Mühendisliği, Turkey 2009 - 2012

Under Graduate, Middle East Technical University, Fen-Edebiyat Fakültesi, Kimya, Turkey 2004 - 2009

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, PERİFERİK SİNİR SİSTEMİ REJENERASYONU İÇİN İLETKEN MATERYALLERİN GELİŞTİRİLMESİ ve ETKİNLİĞİNİN DEĞERLENDİRİLMESİ , Sakarya University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, 2017

Post Graduate, PREPARATION AND CHARACTERIZATION OF BIODEGRABLE COMPOSITE SYSTEMS AS HARD TISSUE SUPPORTS: BONE FILLERS, BONE REGENERATION MEMBRANES AND SCAFFOLDS, Middle East Technical University, Fen Bilimleri Enstitüsü, Biyomedikal Mühendisliği, 2012

Research Areas

Health Sciences, Pharmacology and Therapeutics, Pharmaceutics Technology, Pharmaceutical Technology, Metallurgical and Materials Engineering, Material science and engineering, Biomaterials, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Suleyman Demirel University, Tıp Fakültesi, Dahili Tıp Bilimleri, 2018 - Continues

Research Assistant, Atılım University, Mühendislik Fakültesi, Kimya Mühendisliği Ve Uygulamalı Kimya Bölümü, 2009 - 2013

Professional Experience

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **Cost-effective synthesis of polyricinoleate: Investigation of coating characteristics, in vitro degradation, and antibacterial activity**

Tonta M. M. , AYDEMİR SEZER Ü., Olmez H., GÜREK A. G. , SEZER S.

JOURNAL OF APPLIED POLYMER SCIENCE, vol.136, 2019 (Journal Indexed in SCI)

- **Cytotoxicity, bactericidal and hemostatic evaluation of oxidized cellulose microparticles: Structure and oxidation degree approach**

AYDEMİR SEZER Ü., Sahin I., Aru B., Olmez H., YANIKKAYA DEMİREL G., SEZER S.

CARBOHYDRATE POLYMERS, vol.219, pp.87-94, 2019 (Journal Indexed in SCI)

- Process optimisation, biocompatibility and anti-cancer efficacy of curcumin loaded gelatine microparticles cross-linked with dialdehyde carboxymethyl cellulose**
 Kocer Z., Aru B., AYDEMİR SEZER Ü., YANIKKAYA DEMİREL G., Beker U., SEZER S.
 JOURNAL OF MICROENCAPSULATION, vol.36, pp.485-499, 2019 (Journal Indexed in SCI)
- A versatile method for the synthesis of poly(glycolic acid): high solubility and tunable molecular weights**
 Sanko V., Sahin I., AYDEMİR SEZER Ü., SEZER S.
 POLYMER JOURNAL, vol.51, pp.637-647, 2019 (Journal Indexed in SCI)
- Polypropylene composite hernia mesh with anti-adhesion layer composed of polycaprolactone and oxidized regenerated cellulose**
 AYDEMİR SEZER Ü., Sanko V., Gulmez M., Aru B., Sayman E., Aktekin A., Aker F. V. , YANIKKAYA DEMİREL G., SEZER S.
 MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.99, pp.1141-1152, 2019 (Journal Indexed in SCI)
- Oxidized regenerated cellulose cross-linked gelatin microparticles for rapid and biocompatible hemostasis: A versatile cross-linking agent**
 SEZER U. A. , KOCER Z., SAHIN I., Aru B., Demirel G. Y. , SEZER S.
 CARBOHYDRATE POLYMERS, vol.200, pp.624-632, 2018 (Journal Indexed in SCI)
- A Polypropylene-Integrated Bilayer Composite Mesh with Bactericidal and Antiadhesive Efficiency for Hernia Operations**
 Aydemir Sezer U., SANKO V., GULMEZ M., SAYMAN E., Aru B., Yuksekdog Z. N. , AKTEKIN A., VARDAR AKER F., Sezer S.
 ACS Biomaterials Science and Engineering, vol.3, pp.3662-3674, 2017 (Journal Indexed in SCI)
- Zero valent zinc nanoparticles promote neuroglial cell proliferation: A biodegradable and conductive filler candidate for nerve regeneration**
 Sezer U. A. , Ozturk K., Aru B., Demirel G. Y. , Sezer S., Bozkurt M. R.
 JOURNAL OF MATERIALS SCIENCE-MATERIALS IN MEDICINE, vol.28, 2017 (Journal Indexed in SCI)
- Carboxymethyl cellulose/oxidized regenerated cellulose hydrogels as adhesion barriers: comparative study with different molecular weights and substitution degrees**
 AKTEKIN A., SAHIN I., Aydemir Sezer U., GULMEZ M., OZKARA S., Sezer S.
 Cellulose, vol.23, pp.3145-3156, 2016 (Journal Indexed in SCI)
- Use of oxidized regenerated cellulose as bactericidal filler for food packaging applications**
 Sezer U. A. , Sanko V., Yuksekdog Z. N. , Uzundag D., Sezer S.
 CELLULOSE, vol.23, pp.3209-3219, 2016 (Journal Indexed in SCI)
- Combination of gelatin and tranexamic acid offers improved haemostasis and safe use on internal hemorrhage control**
 Sezer U. A. , Kocer Z., Aru B., Demirel G. Y. , Gulmez M., Aktekin A., Ozkara S., Sezer S.
 RSC ADVANCES, vol.6, pp.95189-95198, 2016 (Journal Indexed in SCI)
- Development of Metal Ion Binded Oxidized Regenerated Cellulose Powder as Hemostatic Agent: A Comparative Study with in Vivo Performance**
 Demirekin Z. B. , Sezer U. A. , Karatopuk D. U. , Sezer S.
 INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.54, pp.4906-4914, 2015 (Journal Indexed in SCI)
- Heparin/Chitosan/Alginate Complex Scaffolds as Wound Dressings: Characterization and Antibacterial Study Against Staphylococcus epidermidis**
 AKSOY E. A. , Sezer U. A. , Kara F., HASIRCIN.
 JOURNAL OF BIOMATERIALS AND TISSUE ENGINEERING, vol.5, pp.104-113, 2015 (Journal Indexed in SCI)
- In Vivo Performance of Poly(epsilon-caprolactone) Constructs Loaded with Gentamicin Releasing Composite Microspheres for Use in Bone Regeneration**
 Sezer U. A. , Billur D., HURİ G., Huri P. Y. , AKSOY E. A. , Terzioglu H., Konukseven E., Hasirci V., HASIRCIN.
 JOURNAL OF BIOMATERIALS AND TISSUE ENGINEERING, vol.4, pp.786-795, 2014 (Journal Indexed in SCI)
- Poly(epsilon-caprolactone) Composite Scaffolds Loaded with Gentamicin-Containing beta-Tricalcium Phosphate/Gelatin Microspheres for Bone Tissue Engineering Applications**
 Sezer U. A. , Arslantunali D., Aksoy E. A. , Hasirci V., HASIRCIN.
 JOURNAL OF APPLIED POLYMER SCIENCE, vol.131, 2014 (Journal Indexed in SCI)

- **Poly(epsilon-caprolactone) composites containing gentamicin-loaded beta-tricalcium phosphate/gelatin microspheres as bone tissue supports**
Sezer U. A. , Aksoy E. A. , Hasirci V., HASIRCIN.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.127, pp.2132-2139, 2013 (Journal Indexed in SCI)
- **Semi-IPN chitosan/polyvinylpyrrolidone microspheres and films: sustained release and property optimisation**
Ozerkan T., Sezer U. A. , Gurhan I. D. , Iz S. G. , HASIRCIN.
JOURNAL OF MICROENCAPSULATION, vol.30, pp.762-770, 2013 (Journal Indexed in SCI)
- **Semi-IPN Chitosan/PEG Microspheres and Films for Biomedical Applications: Characterization and Sustained Release Optimization**
Gunbas I. D. , Sezer U. A. , Iz S. G. , Gurhan I. D. , HASIRCIN.
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.51, pp.11946-11954, 2012 (Journal Indexed in SCI)
- **Gentamicin loaded beta-tricalcium phosphate/gelatin composite microspheres as biodegradable bone fillers**
Sezer U. A. , Aksoy E. A. , DURUCAN C., HASIRCIN.
POLYMER COMPOSITES, vol.33, pp.1644-1651, 2012 (Journal Indexed in SCI)

Book & Book Chapters

- **Cellulose- Based hydrogels as Biomaterials**
SEZER S., AYDEMİR SEZER Ü.
in: Cellulose-Based Superabsorbent Hydrogels, Ibrahim H. Mondal , Editor, Springer Nature Publishing Group, Cham, pp.1-27, 2018
- **cellulose-based hydrogeks as biomaterials**
AYDEMİR SEZER Ü., SEZER S., SEZER S.
in: Cellulose-based superabsorbent hydrogels, Mondal İ. H., Editor, Springer Nature Publishing Group, Cham, pp.1-27, 2018

Citations

Total Citations (WOS):107

h-index (WOS):6