

Lect. PhD ANIL SERA ÇAKMAK

Personal Information

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Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Biyomühendislik, Turkey 2008 - 2018

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Biyomühendislik, Turkey 2006 - 2008

Undergraduate, Hacettepe University, Fen Fakültesi, Biyoloji, Turkey 2001 - 2005

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Other, I. Kök hücre Kursu ve V. Kök Hücre Sempozyumu, TÜBA, 2010

Other, Temel Hücre Kültürü ve Kök Hücre Teknikleri, Ege Üniversitesi/Biyomühendislik Bölümü, 2009

Other, 1. 8th Advanced Summer Course In Cell-Material Interactions, INEB, 2007

Dissertations

Doctorate, Biyofiziksel ve Biyokimyasal Uyaranlarla Desteklenmiş Doku İskeleleri Mezenkimal Kök Hücrelerin osteojenik Farklılaşmasının İncelenmesi, Hacettepe Üniversitesi, Biyomühendislik, 2014

Postgraduate, Non-manyetik ve Manyetik Lateks Partiküllerin Sentezi, Karakterizasyonu ve Doku Mühendisliği Uygulamaları, Hacettepe Üniversitesi, Biyomühendislik, 2008

Research Areas

Life Sciences, Biotechnology, Biomaterial, Natural Sciences

Academic Titles / Tasks

Lecturer PhD, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği, 2018 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- Enhanced Osteogenic Potential of Noggin Knockout C2C12 Cells on BMP-2 Releasing Silk Scaffolds**
ÇAKMAK A. S., Fuerkai S., KARAGÜZEL D., KARAASLAN İ. Ç., GÜMÜŞDERELİOĞLU M.

ACS Biomaterials Science and Engineering, vol.9, no.11, pp.6175-6185, 2023 (SCI-Expanded)

- II. **Random/aligned electrospun PCL fibrous matrices with modified surface textures: Characterization and interactions with dermal fibroblasts and keratinocytes**
Poyraz Ş., Altınışık Z., ÇAKMAK A. S., ŞİMŞEK M., GÜMÜŞDERELİOĞLU M.
Colloids and Surfaces B: Biointerfaces, vol.218, 2022 (SCI-Expanded)
- III. **Investigation of the synergistic effect of platelet-rich plasma and polychromatic light on human dermal fibroblasts seeded chitosan/gelatin scaffolds for wound healing**
Koyuncu A., KOÇ S., Akdere Ö. E., ÇAKMAK A. S., GÜMÜŞDERELİOĞLU M.
Journal of Photochemistry and Photobiology B: Biology, vol.232, 2022 (SCI-Expanded)
- IV. **Enhanced osteogenic effect in reduced BMP-2 doses with siNoggin transfected pre-osteoblasts in 3D silk scaffolds**
Fuerkaiti S. N., ÇAKMAK A. S., KARAASLAN İ. Ç., GÜMÜŞDERELİOĞLU M.
INTERNATIONAL JOURNAL OF PHARMACEUTICS, vol.612, 2022 (SCI-Expanded)
- V. **Photostimulation of osteogenic differentiation on silk scaffolds by plasma arc light source**
ÇAKMAK A. S., ÇAKMAK S., Vatansever H. S., GÜMÜŞDERELİOĞLU M.
LASERS IN MEDICAL SCIENCE, vol.33, no.4, pp.785-794, 2018 (SCI-Expanded)
- VI. **Sequential IGF-1 and BMP-6 releasing chitosan/alginate/PLGA hybrid scaffolds for periodontal regeneration**
Duruel T., Çakmak A. S., AKMAN A. C., NOHUTCU R. M., GÜMÜŞDERELİOĞLU M.
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol.104, pp.232-241, 2017 (SCI-Expanded)
- VII. **A comparative study on monomer elution and cytotoxicity of different adhesive restoration materials**
Toz T., KIREMITCI A., ÇAKMAK A. S., TAN O., PALASKA E., GÜMÜŞDERELİOĞLU M., Özcan M.
Journal of Adhesion Science and Technology, vol.31, no.4, pp.414-429, 2017 (SCI-Expanded)
- VIII. **Polychromatic light-induced osteogenic activity in 2D and 3D cultures**
ULKER N., ÇAKMAK A. S., KİREMİTÇİ A. S., GÜMÜŞDERELİOĞLU M.
LASERS IN MEDICAL SCIENCE, vol.31, no.8, pp.1665-1674, 2016 (SCI-Expanded)
- IX. **A Silk Fibroin and Peptide Amphiphile-Based Co-Culture Model for Osteochondral Tissue Engineering**
Çakmak S., Çakmak A. S., Kaplan D. L., Gümüşderelioğlu M.
MACROMOLECULAR BIOSCIENCE, vol.16, pp.1212-1226, 2016 (SCI-Expanded)
- X. **Synergistic effect of exogenous and endogenous electrostimulation on osteogenic differentiation of human mesenchymal stem cells seeded on silk scaffolds**
Çakmak A. S., Çakmak S., White J. D., Raja W. K., Kim K., Yigit S., Kaplan D. L., Gümüşderelioğlu M.
JOURNAL OF ORTHOPAEDIC RESEARCH, vol.34, pp.581-590, 2016 (SCI-Expanded)
- XI. **Osteogenic differentiation of electrostimulated human mesenchymal stem cells seeded on silk-fibroin films**
Çakmak A. S., Çakmak S., White J. D., Raja W. K., Kaplan D. L., GÜMÜŞDERELİOĞLU M.
TURKISH JOURNAL OF BIOLOGY, vol.40, no.2, pp.462-472, 2016 (SCI-Expanded)
- XII. **Thermosensitive PHEMA microcarriers: ATRP synthesis, characterization, and usabilities in cell cultures**
GÜMÜŞDERELİOĞLU M., ÇAKMAK S., TIMUCIN H. O., ÇAKMAK A. S.
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, vol.24, no.18, pp.2110-2125, 2013 (SCI-Expanded)
- XIII. **PNIPAAm-grafted thermoresponsive microcarriers: Surface-initiated ATRP synthesis and characterization**
ÇAKMAK S., ÇAKMAK A., Gumusderlioglu M.
Materials Science and Engineering C, vol.33, no.5, pp.3033-3040, 2013 (SCI-Expanded)
- XIV. **RGD-bearing peptide-amphiphile-hydroxyapatite nanocomposite bone scaffold: an in vitro study**
Çakmak S., Çakmak A. S., Gümüşderelioğlu M.
BIOMEDICAL MATERIALS, vol.8, 2013 (SCI-Expanded)
- XV. **Derivation, characterization and expansion of fetal chondrocytes on different microcarriers**

CETINKAYA G., Kahraman A. S., GÜMÜŞDERELİOĞLU M., ARAT S., ONUR M. A.

CYTOTECHNOLOGY, vol.63, no.6, pp.633-643, 2011 (SCI-Expanded)

XVI. **Cellular interactions of monodisperse poly(GDMA) latex particles-containing DMAEM brushes**

ÇAKMAK A. S.

COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS, vol.384, pp.90-97, 2011 (SCI-Expanded)

XVII. **LIF-immobilized nonwoven polyester fabrics for cultivation of murine embryonic stem cells**

Cetinkaya G., Turkoglu H., Arat S., Odaman H., Onur M. A., Gumusderelioglu M., Tumer A.

JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A, no.4, pp.911-919, 2007 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

I. **Fotostimülasyon varlığında mezenkimal kök hücrelerin osteojenik farklılaşmasının doku iskelelerinde incelenmesi**

ÇAKMAK A. S., ÇAKMAK S., Vatansever H. S., GÜMÜŞDERELİOĞLU M.

23. Biyomedikal Bilim ve Teknoloji Sempozyumu, Turkey, 15 - 16 December 2018

Other Publications

I. **Doku Mühendisliğinde Nanoteknoloji**

ÇAKMAK A. S.

Other, pp.1-20, 2007

Supported Projects

ÇAKMAK A. S., Akdere Ö. E., Koyuncu A., KOÇ S., Project Supported by Higher Education Institutions, Fotoaktive Edilmiş Trombositten Zengin Plazma (PRP)'nin Yara İyileşmesi Üzerindeki Etkisinin İncelenmesi, 2021 - 2022

ÇAKMAK S., GÜMÜŞDERELİOĞLU M., ÇAKMAK A. S., Project Supported by Higher Education Institutions, Biyomühendislik Anabilim Dalı Doku Mühendisliği Laboratuvarı HücreSEL Görüntüleme ve Biyoanalitik Ölçüm Altyapısının Geliştirilmesi, 2020 - 2022

GÜMÜŞDERELİOĞLU M., ÇAKMAK A. S., Turgut S. N., KARAASLAN İ. Ç., Project Supported by Higher Education Institutions, NOG GEN İ-FADESİ- SUSTURULMUS, HU- CRELERİ- N OLUS, TURULMASI VE İ- PEK DOKU İ- SKELELERİ- U- ZERİ- NDE OSTEOJENİ- K FARKLILAS, MALARININ İ- NCELENMESİ-, 2018 - 2021

ÇAKMAK A. S., TUBITAK Project, CRISPR/Cas9 Sistemi ile Modifiye Edilmiş Hücrelerin Kontrollü BMP-2 Salan Doku İskelelerinde Osteojenik Farklılaşmalarının İncelenmesi, 2019 - 2020

Metrics

Publication: 19

Citation (WoS): 131

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