

Res. Asst. PhD SEMİH ÇALAMAK

Personal Information

Office Phone: [+90 312 305 4018](tel:+903123054018)

Email: semihcalamak@hacettepe.edu.tr

Web: <https://avesis.hacettepe.edu.tr/semihcalamak>

International Researcher IDs

ORCID: 0000-0002-0989-6400

Yoksis Researcher ID: 55229

Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Nanoteknoloji Ve Nanotıp, Turkey 2012 - 2018

Doctorate, Stanford University, School Of Medicine, Radiology Department, Canary Center At Stanford For Cancer Early Detection, United States Of America 2014 - 2015

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Nanoteknoloji Ve Nanotıp, Turkey 2010 - 2012

Undergraduate, Gazi University, Fen Edebiyat Fakültesi, Kimya, Turkey 2007 - 2010

Undergraduate, Gazi University, Fen Edebiyat Fakültesi, Biyoloji, Turkey 2006 - 2010

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Prostat kanseri biyobelirteçlerinin tayini için nanoplazmonik platformların hassasiyetinin artırılması, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Nanoteknoloji Ve Nanotıp, 2018

Postgraduate, Yara örtüsü olarak ipek bazlı antibakteriyel biyonanotekstillerin üretimi, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Nanoteknoloji Ve Nanotıp Anabilim Dalı (Disiplinlerarası), 2012

Research Areas

Life Sciences, Biochemistry, Biomolecules, Natural Sciences

Academic Titles / Tasks

Research Assistant PhD, Hacettepe University, Eczacılık Fakültesi, Temel Eczacılık Bilimleri Bölümü, 2012 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

1. In situ silver nanoparticle synthesis on 3D-printed polylactic acid scaffolds for biomedical applications

ÇALAMAK S., Ermis M.

JOURNAL OF MATERIALS RESEARCH, vol.36, no.1, pp.166-175, 2021 (SCI-Expanded)

- II. **Design of circulating microfluidic bioreactor for circulating tumor cells research and shear stress effects on breast cancer (MDA-MB-231) cell viability**

ÇALAMAK S.

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.36, no.1, pp.395-406, 2021 (SCI-Expanded)

- III. **Development of besifloxacin HCl loaded nanofibrous ocular inserts for the treatment of bacterial keratitis: In vitro, ex vivo and in vivo evaluation**

POLAT H. K., Pehlivan S. B., Ozkul C., ÇALAMAK S., Ozturk N., AYTEKİN E., FIRAT A., ULUBAYRAM K., KOCABEYOĞLU S., Irkeç M., et al.

INTERNATIONAL JOURNAL OF PHARMACEUTICS, vol.585, 2020 (SCI-Expanded)

- IV. **Liposome-based combination therapy for acne treatment**

EROĞLU İ., Aslan M., Yaman U., Gultekinoglu M., ÇALAMAK S., KART D., ULUBAYRAM K.

JOURNAL OF LIPOSOME RESEARCH, vol.30, no.3, pp.263-273, 2020 (SCI-Expanded)

- V. **A Circulating Bioreactor Reprograms Cancer Cells Toward a More Mesenchymal Niche**

Calamak S., Ermis M., Sun H., Islam S., Sikora M., Nguyen M., Hasirci V., Steinmetz L. M., Demirci U.

ADVANCED BIOSYSTEMS, vol.4, no.2, 2020 (SCI-Expanded)

- VI. **Polyethylenimine-mediated gold nanoparticle arrays with tunable electric field enhancement for plasmonic applications**

ÇALAMAK S., ULUBAYRAM K.

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.30, no.10, pp.10013-10023, 2019 (SCI-Expanded)

- VII. **Controlled synthesis of multi-branched gold nanodendrites by dynamic microfluidic flow system**
ÇALAMAK S., ULUBAYRAM K.

JOURNAL OF MATERIALS SCIENCE, vol.54, no.10, pp.7541-7552, 2019 (SCI-Expanded)

- VIII. **Gold nano-decorated aligned polyurethane nanofibers for enhancement of neurite outgrowth and elongation**

DEMİR U. S., SHAHBAZI R., ÇALAMAK S., ÖZTÜRK Ş., GÜLTEKİNOĞLU M., ULUBAYRAM K.

JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A, vol.106, no.6, pp.1604-1613, 2018 (SCI-Expanded)

- IX. **Curcumin-loaded electrospun PHBV nanofibers as potential wound-dressing material**

MUTLU G., ÇALAMAK S., ULUBAYRAM K., GÜVEN E.

JOURNAL OF DRUG DELIVERY SCIENCE AND TECHNOLOGY, vol.43, pp.185-193, 2018 (SCI-Expanded)

- X. **Hydrogels as a New Platform to Recapitulate the Tumor Microenvironment**

Ermis M., Calamak S., Kocal G. C., Guven S., Durmus N. G., Rizvi I., Hasan T., HASIRCI N., Hasirci V., Demirci U.

HANDBOOK OF NANOMATERIALS FOR CANCER THERANOSTICS, pp.463-494, 2018 (SCI-Expanded)

- XI. **An overview of nanofiber-based antibacterial drug design**

ÇALAMAK S., SHAHBAZI R., EROĞLU İ., Gultekinoglu M., ULUBAYRAM K.

EXPERT OPINION ON DRUG DISCOVERY, vol.12, no.4, pp.391-406, 2017 (SCI-Expanded)

- XII. **In vivo tissue distribution and efficacy studies for cyclosporin A loaded nano-decorated subconjunctival implants**

Yavuz B., Pehlivan S., Kaffashi A., ÇALAMAK S., ULUBAYRAM K., PALASKA E., Cakmak H. B., Unlu N.

DRUG DELIVERY, vol.23, no.9, pp.3279-3284, 2016 (SCI-Expanded)

- XIII. **Integrating Cell Phone Imaging with Magnetic Levitation (i-LEV) for Label-Free Blood Analysis at the Point-of-Living**

Baday M., Calamak S., Durmus N. G., Davis R. W., Steinmetz L. M., Demirci U.

SMALL, vol.12, no.9, pp.1222-1229, 2016 (SCI-Expanded)

- XIV. **Immobilization of heparin on chitosan-grafted polyurethane films to enhance anti-adhesive and antibacterial properties**

Kara F., AKSOY E. A., ÇALAMAK S., HASIRCI N., Aksoy S.

JOURNAL OF BIOACTIVE AND COMPATIBLE POLYMERS, vol.31, no.1, pp.72-90, 2016 (SCI-Expanded)

- XV. **Preparation and in vitro/in vivo evaluation of cyclosporin A-loaded nanodecorated ocular implants for subconjunctival application**
PEHLIVAN S., Yavuz B., ÇALAMAK S., ULUBAYRAM K., KAFFASHI A., VURAL İ., Cakmak H. B., DURGUN M. E., DENKBAŞ E. B., UNLU N.
Journal of Pharmaceutical Sciences, vol.104, no.5, pp.1709-1720, 2015 (SCI-Expanded)
- XVI. **Bioprinted Microfluidic 3 D Cancer Microenvironments for Detection of Histone Modification and Cell Migration**
ÇALAMAK S., DEMİRTAŞ T. T., GÜVEN S., ÖZEN M. O., İNCİ F., SEKAR T., MALLICK P., PAULMURUGAN R., DEMİRCİ U.
TISSUE ENGINEERING PART A, vol.21, pp.1-413, 2015 (SCI-Expanded)
- XVII. **Multitarget, quantitative nanoplasmonic electrical field-enhanced resonating device ((NERD)-R-2) for diagnostics**
Inci F., Filippini C., Baday M., Ozen M. O., Calamak S., Durmus N. G., Wang S., Hanhauser E., Hobbs K. S., Juillard F., et al.
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol.112, no.32, 2015 (SCI-Expanded)
- XVIII. **Remote control CPAs delivery via cryonanoliposomes**
TESSIER S. N., ÇALAMAK S., ARAMPATZIDOU M., FISHER D., EISENBERG D. P.
Cryobiology, vol.71, pp.178-179, 2015 (SCI-Expanded)
- XIX. **Ag/silk fibroin nanofibers: Effect of fibroin morphology on Ag⁺ release and antibacterial activity**
ÇALAMAK S., AKSOY E. A., Ertas N., ERDOĞDU C., SAĞIROĞLU M., ULUBAYRAM K.
EUROPEAN POLYMER JOURNAL, vol.67, pp.99-112, 2015 (SCI-Expanded)
- XX. **Silver nanoparticle containing silk fibroin bionanotextiles**
ÇALAMAK S., AKSOY E. A., ERDOĞDU C., SAĞIROĞLU M., ULUBAYRAM K.
JOURNAL OF NANOPARTICLE RESEARCH, vol.17, no.2, 2015 (SCI-Expanded)
- XXI. **Nanofibers Based Antibacterial Drug Design, Delivery and Applications**
ULUBAYRAM K., ÇALAMAK S., SHAHBAZI R., Eroglu İ.
CURRENT PHARMACEUTICAL DESIGN, vol.21, no.15, pp.1930-1943, 2015 (SCI-Expanded)
- XXII. **Silk fibroin based antibacterial bionanotextiles as wound dressing materials**
ÇALAMAK S., Erdogdu C., Ozalp M., ULUBAYRAM K.
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.43, pp.11-20, 2014 (SCI-Expanded)

Books & Book Chapters

- I. **Hydrogels as a New Platform to Recapitulate the Tumor Microenvironment**
Çalamak S.
in: Handbook of Nanomaterials for Cancer Theranostics, Jao Conde, Editor, Elsevier Science, Oxford/Amsterdam , Amsterdam, pp.463-494, 2018
- II. **Antibakteriyel Biyomalzemeler**
ÇALAMAK S., GÜLTEKİNOĞLU M., ULUBAYRAM K.
in: İLERİ BİYOMALZEMELER: BİYOMALZEME VE NANOMALZEME UYGULAMALARI, Filiz Kuralay, Editor, Palme, 2018

Refereed Congress / Symposium Publications in Proceedings

- I. **Development of Besifloxacin HCl Loaded Insert Formulations for the Treatment of Bacterial Keratitis**
POLAT H. K., ÇALAMAK S., AYTEKİN E., PEHLİVAN S., ULUBAYRAM K., ÇALIŞ S.
8th BBBB International Conference on Pharmaceutical Sciences, Turkey, 14 - 16 October 2019
- II. **In Vitro Evaluation of Ocular Insert Formulations Containing Besifloxacin HCl**

POLAT H. K., ÇALAMAK S., AYTEKİN E., PEHLİVAN S., ULUBAYRAM K., ÇALIŞ S.

8th BBBB International Conference on Pharmaceutical Sciences, Turkey, 14 - 16 October 2019

- III. **DETECTION OF PROSTATE CANCER BIOMARKERS VIA IN-SITU GOLD NANOPARTICLE GROWTH ON LSPR SURFACES**
ÇALAMAK S., ULUBAYRAM K.
International Pharmaceutical Technology Symposium (IPTS-2018), 17 - 19 September 2018
- IV. **Silk Fibroin Based Antibacterial Bionanotextiles**
ÇALAMAK S., ULUBAYRAM K.
22. International Biomedical Sciences and Technologies Symposium (BIOMED), 12 - 14 May 2017
- V. **Development of Electrospun Nanofiber-Based Implants Coated with Different Polymers for Topical Ocular Therapy**
POLAT H. K., ÇALAMAK S., AYTEKİN E., PEHLİVAN S., ULUBAYRAM K., ÇALIŞ S.
The 22nd Biomedical Science and Technology Symposium, 12 - 14 May 2017
- VI. **In vivo evaluation of cyclosporin a loaded nano-decorated subconjunctival implants**
YAVUZ B., PEHLİVAN S., KAFFASİ A., ÇALAMAK S., ULUBAYRAM K., PALASKA E., ÜNLÜ N.
22. International Biomedical Sciences and Technologies Symposium (BIOMED), 12 - 15 May 2017
- VII. **Polyelectrolyte Microstructured Scaffolds Modified with Hyaluronic Acid**
MANAP G., YAĞCI B. S., ÇALAMAK S., AKSOY E. A., ULUBAYRAM K.
22nd International Biomedical Science and Technology Symposium, 12 - 14 May 2017
- VIII. **Strontium and Zinc Decorated Polysaccharide Composite Gel Fibers**
YAĞCI B. S., MANAP G., ÇALAMAK S., AKSOY E. A., ULUBAYRAM K.
22 International Biomedical Science and Technology Symposium, 12 - 14 May 2017
- IX. **Dexamethasone Loaded Electrospun Nanofiber Based Implants for Topical Ocular Therapy**
POLAT H. K., ÇALAMAK S., AYTEKİN E., PEHLİVAN S., ULUBAYRAM K., ÇALIŞ S.
18th International Pharmaceutical Technology Symposium, 18 - 21 September 2016
- X. **Monitoring drug responses of blood cells using cellphone based magnetic levitation system**
SAYLAN Y., BADAY M., SAHAN A., ÇALAMAK S., DURMUŞ N. G., İNCİ F., DAVIS R. W., STEINMETZ L., DEMİRCİ U.
Canary Summit 2016, 04 May 2016
- XI. **Micropatterned Substratesfor Cell Cycle Synchronization in MDA MB 231 Breast Carcinoma Cell Line**
ERMİŞ ŞEN M., ÇALAMAK S., CHEN P., ULUBAYRAM K., HASIRCI V. N., DEMİRCİ U.
21st International Biomedical Science and Technology Symposium, 22 - 24 October 2015
- XII. **Enhancement of Neuronal Outgrowth By Gold Nanoparticles Decorated Polyurethane Nanofiber Scaffolds**
DEMİR Ü. S., SHAHBAZI R., ÇALAMAK S., ÖZTÜRK Ş., ULUBAYRAM K.
Tissue Engineering and Regenerative Medicine (TERMIS 2015), 8 - 11 September 2015
- XIII. **Genomic Analysis of Flow Induced EMT in Colorectal Cancer Cells**
ÇALIBAŞI G., GÜVEN S., DURMUŞ N. G., ÇALAMAK S., CHEN P., BASKIN Y., DEMİRCİ U.
Canary Symposium, 5 - 07 May 2015
- XIV. **A rapid quantitative device for monitoring oncogenic viral load and circulating tumorcells in a multiplexed manner**
İNCİ F., İNAN H., ÖZEN M. Ö., ÇALAMAK S., DEMİRCİ U.
Canary Symposium, 5 - 07 May 2015
- XV. **Effects of Different Stimulating Factors on Axonal Elongation of PC12 Cells Seeded on Gold Nanoparticle Modified Scaffolds**
DEMİR Ü. S., SHAHBAZI R., ÇALAMAK S., ÖZTÜRK Ş., ULUBAYRAM K.
21st International Biomedical Science and Technology, 22 - 24 October 2015

Supported Projects

EROĞLU İ., ULUBAYRAM K., AKSOY E. A., GÜLTEKİNOĞLU BAYRAM M., ÇALAMAK S., Project Supported by Higher

Education Institutions, Kombine Etkili Nanolipozomların Geliştirilmesi, 2017 - 2018

Scientific Refereeing

Materials Science and Engineering C, SCI Journal, March 2016

Metrics

Publication: 40

Citation (WoS): 577

Citation (Scopus): 687

H-Index (WoS): 14

H-Index (Scopus): 14