

Prof. EMEL EMREGÜL

Personal Information

Office Phone: [+90 312 216 8828](tel:+903122168828)

Fax Phone: [+90 312 223 2395](tel:+903122232395)

Email: eemregul@science.ankara.edu.tr

Other Email: eemregul@yahoo.com

Web: <https://avesis.ankara.edu.tr/eemregul>

Address: Ankara Üniversitesi Fen Fakültesi Kimya Bölümü 06100 Ankara/Türkiye

International Researcher IDs

ORCID: 0000-0002-7892-6730

Yoksis Researcher ID: 12150

Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Kimya (Dr), Turkey 1993 - 1999

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Kimya (YI) (Tezli), Turkey 1990 - 1993

Undergraduate, Ankara University, Fen Fakültesi, Kimya Bölümü, Turkey 1985 - 1989

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Enzim içeren polimer filmlerinin hazırlanması ve biyokatalitik enzim elektrotlu geliştirilmesi, Ankara University, Fen Bilimleri Enstitüsü, Kimya (Dr), 1999

Postgraduate, Invertaz ve alfa amilaz enzimlerinin değişik support sistemleri içerisinde çapraz bağlama metodu ile immobilizasyonu, Middle East Technical University, Genel Biyoloji Anabilim Dalı, Kimya (YI) (Tezli), 1993

Research Areas

Biotechnology, Biomaterial, Biosensor, Biochemistry

Academic Titles / Tasks

Professor, Ankara University, Fen Fakültesi, Kimya Bölümü, 2013 - Continues

Associate Professor, Ankara University, Fen Fakültesi, Kimya Bölümü, 2008 - 2013

Research Assistant, Ankara University, Fen Fakültesi, Kimya Bölümü, 1994 - 2008

Academic and Administrative Experience

Courses

KİM443 ANALİTİK BİYOKİMYA, Undergraduate, 2018 - 2019, 2014 - 2015
KİM320 BİYOKİMYA 2, Undergraduate, 2018 - 2019
801300715550 NÜKLEİKASİT METABOLİZMASI I, Postgraduate, 2018 - 2019
KİM445 KLİNİK BİYOKİMYA, Undergraduate, 2018 - 2019
801300716420 Uzmanlık Alanı, Postgraduate, 2018 - 2019
801300715960 NÜKLEİKASİT METABOLİZMASI, Postgraduate, 2018 - 2019
KİM319 BİYOKİMYA 1, Undergraduate, 2018 - 2019
Endokrin Sistem ve Hormonlar, Postgraduate, 2015 - 2016, 2014 - 2015
ANALİTİK BİYOKİMYA, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2009 - 2010, 2008 - 2009, 2007 - 2008
813642 NÜKLEİK ASİT METABOLİZMASI, Doctorate, 2015 - 2016
Biyokimya II, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008
KLİNİK BİYOKİMYA, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012
Biyokimya I, Undergraduate, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008
Nükleikasit Metabolizması, Doctorate, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010
Beslenme Biyokimyası, Undergraduate, 2011 - 2012, 2010 - 2011, 2009 - 2010

Advising Theses

EMREGÜL E., Preparation and characterisation of 3-d bioactive hyaluronic acid-based hydrogels and the analysis of their neuroinductive effects, Postgraduate, S.BİLGİN(Student), 2021
EMREGÜL E., Isolation of subventricular zone (svz) derived exosomes, Postgraduate, C.BERK(Student), 2021
EMREGÜL E., Miyokardiyal hücre dışı matris ile modifiye edilen poli(bütlenadipat-ko-tereftalat) (PBAT) nanofiber yapıda membranlarının kardiyak doku mühendisliğinde kullanım potansiyelinin araştırılması, Postgraduate, E.KARAKAYA(Student), 2021
EMREGÜL E., Kolon kanserinde erken tanı amacıyla belirteç potansiyeli taşıyacak eksozom ve mirna içeriklerinin incelenmesi, Postgraduate, M.SAİT(Student), 2020
EMREGÜL E., Jelatin-aljinat-titanyum dioksit-süperoksit dismutaz biyosensörünün geliştirilmesi ve elektrokimyasal özelliklerinin incelenmesi, Postgraduate, U.KARAKAYA(Student), 2017
EMREGÜL E., Bir multipl skleroz biyobelirteci olan anti-miyelin temel protein için polietilen glikol fonksiyonel karbon nanotüp temelli immünosensörün geliştirilmesi, M.ÖZKAN(Student), 2016
EMREGÜL E., Bir multipl skleroz biyobelirteci olan anti-miyelin temel proteini için polietilen glikol fonksiyonel karbon nanotüp temelli immünosensörün geliştirilmesi, Postgraduate, M.ÖZKAN(Student), 2016
EMREGÜL E., Isolation, characterization, investigation of electrochemical properties and biological applications of biomaterials from natural sources towards to use in aptasensor technology, Doctorate, B.DERKUŞ(Student), 2016
EMREGÜL E., Jelatin ve kitosan biyopolimerlerinin kullanılmasıyla immüno globülin g tayini için protein a immünosensörü geliştirilmesi ve elektrokimyasal özelliklerinin incelenmesi, Postgraduate, G.ÖZBEK(Student), 2014
EMREGÜL E., Aljinat-CuO-GOD temelli amperometrik glukoz biyosensörünün geliştirilmesi ve elektrokimyasal özelliklerinin incelenmesi, Postgraduate, V.BÜK(Student), 2014
EMREGÜL E., Kan ve beyin omurilik sıvısında immüno globülin G tayinine yönelik protein A immünosensörünün geliştirilmesi ve elektrokimyasal özelliklerinin incelenmesi, Postgraduate, S.GEREKÇİ(Student), 2014
EMREGÜL E., Anti-miyelin temelli protein tayini için impedimetrik immünosensör geliştirilmesi, Postgraduate, B.DERKUŞ(Student), 2012

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Human periodontal ligament stem cells-derived exosomes-loaded hybrid hydrogel enhances the calvarial defect regeneration in middle-age rats**
Isik M., VARGEL İ., ÖZGÜR E., Cam S. B., KORKUSUZ P., EMREGÜL E., ODABAŞ S., DERKUŞ B.
Materials Today Communications, vol.36, 2023 (SCI-Expanded)
- II. **Decellularized Bone Extracellular Matrix-Coated Electrospun PBAT Microfibrous Membranes with Cell Instructive Ability and Improved Bone Tissue Forming Capacity**
Karakaya E., ERDOĞAN Y. K., Arslan T. S., ARSLAN Y. E., ODABAŞ S., ERCAN B., EMREGÜL E., DERKUŞ B.
MACROMOLECULAR BIOSCIENCE, vol.22, no.12, 2022 (SCI-Expanded)
- III. **Tuning the Cell-Adhesive Properties of Two-Component Hybrid Hydrogels to Modulate Cancer Cell Behavior, Metastasis, and Death Pathways**
Isik M., Okesola B. O., Eylem C. C., Kocak E., NEMUTLU E., EMREGÜL E., D'Este M., DERKUŞ B.
BIOMACROMOLECULES, vol.23, no.10, pp.4254-4267, 2022 (SCI-Expanded)
- IV. **Omics technologies for high-throughput-screening of cell-biomaterial interactions**
Sari B., Isik M., Eylem C. C., Bektas C., Okesola B. O., Karakaya E., EMREGÜL E., NEMUTLU E., DERKUŞ B.
MOLECULAR OMICS, vol.18, no.7, pp.591-615, 2022 (SCI-Expanded)
- V. **Xenogenic Neural Stem Cell-Derived Extracellular Nanovesicles Modulate Human Mesenchymal Stem Cell Fate and Reconstruct Metabolomic Structure**
Derkuş B., Isik M., Eylem C. C., Ergin İ., Camci C. B., Bilgin S., Elbuken C., Arslan Y. E., Akkulak M., Adalı O., et al.
ADVANCED BIOLOGY, vol.6, no.6, 2022 (SCI-Expanded)
- VI. **Mechanically robust hybrid hydrogels of photo-crosslinkable gelatin and laminin-mimetic peptide amphiphiles for neural induction**
Isik M., Eylem C. C., Hacıfendioglu T., YILDIRIM E., Sari B., NEMUTLU E., EMREGÜL E., Okesola B. O., DERKUŞ B.
BIOMATERIALS SCIENCE, vol.9, no.24, pp.8270-8284, 2021 (SCI-Expanded)
- VII. **Ultrasonics-Assisted Effective Isolation and Characterization of Exosomes from Whole Organs**
DERKUŞ B., EMREGÜL E.
SUPRAMOLECULES IN DRUG DISCOVERY AND DRUG DELIVERY, vol.2207, pp.25-34, 2021 (SCI-Expanded)
- VIII. **Untargeted multi-omic analysis of colorectal cancer-specific exosomes reveals joint pathways of colorectal cancer in both clinical samples and cell culture**
Eylem C. C., YILMAZ M., DERKUŞ B., NEMUTLU E., Camci C. B., YILMAZ E., TÜRKOĞLU M. A., Aytac B., Ozyurt N., EMREGÜL E.
CANCER LETTERS, vol.469, pp.186-194, 2020 (SCI-Expanded)
- IX. **Sophisticated Biocomposite Scaffolds from Renewable Biomaterials for Bone Tissue Engineering**
ARSLAN Y. E., ÖZÜDOĞRU E., Arslan T. S., Derkus B., EMREGÜL E., EMREGÜL K. C.
REGENERATIVE MEDICINE AND PLASTIC SURGERY: ELEMENTS, RESEARCH CONCEPTS AND EMERGING TECHNOLOGIES, pp.17-31, 2019 (SCI-Expanded)
- X. **An experimental and theoretical approach towards understanding the inhibitive behavior of a nitrile substituted coumarin compound as an effective acidic media inhibitor**
Fitoz A., NAZIR H., Ozgur (nee Yakut) M., EMREGÜL E., EMREGÜL K. C.
CORROSION SCIENCE, vol.133, pp.451-464, 2018 (SCI-Expanded)
- XI. **Fabrication of human hair keratin/jellyfish collagen/eggshell-derived hydroxyapatite osteoinductive biocomposite scaffolds for bone tissue engineering: From waste to regenerative medicine products**
Arslan Y. E., Arslan T. S., Derkuş B., Emregül E., Emregül K. C.
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.154, pp.160-170, 2017 (SCI-Expanded)
- XII. **Alginate copper oxide nano-biocomposite as a novel material for amperometric glucose biosensing**
Buk V., EMREGÜL E., EMREGÜL K. C.

MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.74, pp.307-314, 2017 (SCI-Expanded)

- XIII. **A new approach in stem cell research-Exosomes: Their mechanism of action via cellular pathways**
Derkuş B., Emregül K. C., Emregül E.
CELL BIOLOGY INTERNATIONAL, vol.41, no.5, pp.466-475, 2017 (SCI-Expanded)
- XIV. **Simultaneous quantification of Myelin Basic Protein and Tau proteins in cerebrospinal fluid and serum of Multiple Sclerosis patients using nanoimmunosensor**
Derkuş B., Bozkurt P., Tülü M., Emregül K. C., Yücesan C., Emregül E.
Biosensors and Bioelectronics, vol.89, pp.781-788, 2017 (SCI-Expanded)
- XV. **Enhancement of aptamer immobilization using egg shell-derived nano-sized spherical hydroxyapatite for thrombin detection in neuroclinic**
Derkuş B., Arslan Y. E., Emregül K. C., Emregül E.
TALANTA, vol.158, pp.100-109, 2016 (SCI-Expanded)
- XVI. **Development of a novel aptasensor using jellyfish collagen as matrix and thrombin detection in blood samples obtained from patients with various neurodisease**
Derkuş B., Arslan Y. E., Bayraç A. T., Kantarcioğlu I., Emregül K. C., Emregül E.
SENSORS AND ACTUATORS B-CHEMICAL, vol.228, pp.725-736, 2016 (SCI-Expanded)
- XVII. **Single frequency analysis for clinical immunosensor design**
Derkuş B., Ozkan M., Emregül K. C., Emregül E.
RSC ADVANCES, vol.6, no.1, pp.281-289, 2016 (SCI-Expanded)
- XVIII. **Evaluation of protein immobilization capacity on various carbon nanotube embedded hydrogel biomaterials**
DERKUŞ B., EMREGÜL K. C., EMREGÜL E.
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.56, pp.132-140, 2015 (SCI-Expanded)
- XIX. **Copper-zinc alloy nanoparticle based enzyme-free superoxide radical sensing on a screen-printed electrode**
DERKUŞ B., EMREGÜL E., EMREGÜL K. C.
TALANTA, vol.134, pp.206-214, 2015 (SCI-Expanded)
- XX. **Protein A immunosensor for the detection of immunoglobulin G by impedance spectroscopy**
DERKUŞ B., EMREGÜL K. C., MAZI H., EMREGÜL E., YUMAK T., SINAĞ A.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.37, no.5, pp.965-976, 2014 (SCI-Expanded)
- XXI. **Alginate and alginate-titanium dioxide nanocomposite as electrode materials for anti-myelin basic protein immunosensing**
DERKUŞ B., EMREGÜL E., EMREGÜL K. C., YÜCESAN C.
SENSORS AND ACTUATORS B-CHEMICAL, vol.192, pp.294-302, 2014 (SCI-Expanded)
- XXII. **Evaluation of different isotherm models, kinetic, thermodynamic, and copper biosorption efficiency of *Lobaria pulmonaria* (L.) Hoffm.**
Kilic Z., ATAKOL O., Aras S., CANSARAN DUMAN D., Celikkol P., EMREGÜL E.
JOURNAL OF THE AIR & WASTE MANAGEMENT ASSOCIATION, vol.64, no.1, pp.115-123, 2014 (SCI-Expanded)
- XXIII. **Biosorption properties of zinc(II) from aqueous solutions by *pseudevernia furfuracea* (L.) zopf**
Kilic Z., Atako O., Aras S., CANSARAN DUMAN D., EMREGÜL E.
Journal of the Air and Waste Management Association, vol.64, no.10, pp.1112-1121, 2014 (SCI-Expanded)
- XXIV. **Detection of superoxide radicals in tomato plants exposed to salinity, drought, cold and heavy metal stress using CMC-G-SOD biosensor**
Kocabay O., EMREGÜL E., Aydin S. S., Aras S.
ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY, vol.41, no.5, pp.352-358, 2013 (SCI-Expanded)
- XXV. **Myelin basic protein immunosensor for multiple sclerosis detection based upon label-free electrochemical impedance spectroscopy**
DERKUŞ B., EMREGÜL E., YÜCESAN C., EMREGÜL K. C.
BIOSENSORS & BIOELECTRONICS, vol.46, pp.53-60, 2013 (SCI-Expanded)

- XXVI. **A novel carboxymethylcellulose-gelatin-titanium dioxide-superoxide dismutase biosensor; electrochemical properties of carboxymethylcellulose-gelatin-titanium dioxide-superoxide dismutase**
EMREGÜL E., Kocabay O., DERKUŞ B., Yumak T., EMREGÜL K. C., SINAĞ A., POLAT K.
BIOELECTROCHEMISTRY, vol.90, pp.8-17, 2013 (SCI-Expanded)
- XXVII. **Carboxymethylcellulose-gelatin-superoxidase dismutase electrode for amperometric superoxide radical sensing**
Kocabay O., EMREGÜL E., Aras S., EMREGÜL K. C.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.35, no.6, pp.923-930, 2012 (SCI-Expanded)
- XXVIII. **Polyacrylamide-gelatine carrier system used for invertase immobilization**
EMREGÜL E., Sungur S., Akbulut U.
FOOD CHEMISTRY, vol.97, no.4, pp.591-597, 2006 (SCI-Expanded)
- XXIX. **Bioengineering functional copolymers. IX. Poly[(maleic anhydride-co-hexene-1)-g-poly(ethylene oxide)]**
Mazi H., Kibarar G., EMREGÜL E., Rzaev Z.
MACROMOLECULAR BIOSCIENCE, vol.6, no.4, pp.311-321, 2006 (SCI-Expanded)
- XXX. **Preparation and properties of invertase immobilized on a poly(maleic anhydride-hexen-1) membrane**
Mazi H., EMREGÜL E., Rzaev Z. M. O., Kibarar G.
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, vol.17, no.7, pp.821-835, 2006 (SCI-Expanded)
- XXXI. **Strategies for improving the functionality of an affinity bioreactor**
Wang T., Yang Z., EMREGÜL E., David A., Balthasar J., Liang J., Yang V.
INTERNATIONAL JOURNAL OF PHARMACEUTICS, vol.306, no.1-2, pp.132-141, 2005 (SCI-Expanded)
- XXXII. **A GPIIb/IIIa bioreactor for specific treatment of immune thrombocytopenic purpura, an autoimmune disease. Preparation, in vitro characterization, and preliminary proof-of-concept animal studies**
EMREGÜL E., David A., Balthasar J., Yang V.
JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A, vol.75A, no.3, pp.648-655, 2005 (SCI-Expanded)
- XXXIII. **Development of a new biosensor for superoxide radicals**
EMREGÜL E.
ANALYTICAL AND BIOANALYTICAL CHEMISTRY, vol.383, no.6, pp.947-954, 2005 (SCI-Expanded)
- XXXIV. **Immobilization of glucose oxidase onto gelatin for biosensor construction**
EMREGÜL E., Sungur S., Akbulut U.
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, vol.16, no.4, pp.505-519, 2005 (SCI-Expanded)
- XXXV. **New glucose biosensor based on glucose oxidase-immobilized gelatin film coated electrodes**
Sungur S., EMREGÜL E., Gunendi G., Numanoglu Y.
JOURNAL OF BIOMATERIALS APPLICATIONS, vol.18, no.4, pp.265-277, 2004 (SCI-Expanded)
- XXXVI. **Development of a protamine hollow-fiber device for extracorporeal heparin removal**
Liang J., EMREGÜL E., Yang V.
BLOOD PURIFICATION, vol.22, no.2, pp.198-202, 2004 (SCI-Expanded)
- XXXVII. **Effect of chromium salts on invertase immobilization onto carboxymethylcellulose-gelatine carrier system**
EMREGÜL E., Sungur S., Akbulut U.
BIOMATERIALS, vol.17, no.14, pp.1423-1427, 1996 (SCI-Expanded)
- XXXVIII. **Application of carboxymethylcellulose in controlled drug release**
Sungur S., EMREGÜL E.
JOURNAL OF MACROMOLECULAR SCIENCE-PURE AND APPLIED CHEMISTRY, vol.A33, pp.319-325, 1996 (SCI-Expanded)
- XXXIX. **INVESTIGATIONS ON CARRIER SYSTEMS FOR ALPHA-AMYLASE ENZYME IMMOBILIZATION**
EMREGÜL E., SUNGUR S., AKBULUT U.
JOURNAL OF MACROMOLECULAR SCIENCE-PURE AND APPLIED CHEMISTRY, vol.A32, pp.301-308, 1995 (SCI-Expanded)

21st International Biomedical Science and Technology Symposium BIOMED 2015, 21 - 24 October 2015

IX. Jellyfish Collagen Matrix for Thrombin Apta Sensing in Clinical Samples P42

BURAK D., EMREGÜL E., EMREGÜL K. C.

21st International Biomedical Science and Technology Symposium BIOMED 2015, Antalya, Turkey, 21 - 24 October 2015

X. Developemcnt of Polyethylene Glycol Functionalized Carbon Nanotube Bascd Anti Myclin Basic Protein Immunosensor P44

ÖZKAN M., EMREGÜL E., EMREGÜL K. C.

21st International Biomedical Science and Technology Symposium BIOMED 2015, Antalya, Turkey, 21 - 24 October 2015

XI. Biosorption of copper II from aqueous solutions by Lobaria pulmonaria

KILIÇ Z., ATAKOL O., EMREGÜL E., ÇELİKKOL P., ARAS E. S., CANSARAN DUMAN D.

6th International Conference of Chemical Societies of South Eastern European Countries., Bulgaria, 10 - 14 September 2008

XII. DNA changes in lichen species Lobaria pulmonaria induced by copper pollution

KILIÇ Z., ATAKOL O., EMREGÜL E., CANSARAN DUMAN D., ARAS E. S.

6th International Conference of Chemical Societies of South Eastern European Countries., Bulgaria, 10 - 14 September 2008

Supported Projects

EMREGÜL E., Project Supported by Higher Education Institutions, Kolon Kanserinde Erken Tanı Amacıyla Belirteç Potansiyeli Taşıyacak Eksozom ve miRNA İçeriklerinin İncelenmesi, 2017 - Continues

EMREGÜL E., Project Supported by Higher Education Institutions, Eksozomların Kanser Hücre Kültürü'nden Etkin İzolasyonu İçin Farklı Tekniklerin Karşılaştırmalı Olarak İncelenmesi, 2017 - Continues

Derkuş B., Emregül E., Nemutlu E., TÜBİTAK Project, Doğal Hibrit Hidrojellerin Kullanılmasıyla Gerçekçi Kanser Metastaz Modellerinin Oluşturulması ve Metastaz Sürecinin Çoklu-Omiks Tekniklerle İncelenmesi, 2022 - 2025

Emregül E., Nemutlu E., Özçınar E., Dağ O., Durmaz O., TÜBİTAK Project, 2023 - 2024

Derkuş B., Nemutlu E., Emregül E., Project Supported by Higher Education Institutions, Dinamik metabolomiks tekniği ile hücrenel süreçlerin moleküler düzeyde incelenmesi: Kanser modeli, 2021 - 2023

Derkuş B., Emregül E., Odabaş S., TÜBİTAK Project, İnsan Periodontal Ligament Fibroblast (hPDLF) ve insan damar endotel hücresi (HUVEC) türevli eksozomlarla katkılanmış enjekte edilebilir hidrojellerin geliştirilmesi, in vivo uygulamaları, 2020 - 2023

Derkuş B., Nemutlu E., Emregül E., Aytar Çelik P., Çabuk A., TÜBİTAK Project, GBAINVITRO: Bağırsak-Beyin Eksenini (GBA)'nin 3-Boyutlu (3B) Hücre Kültürü Teknolojisi ile Modellenmesi ve Sofistike Omiks Platformlar ile Moleküler Mekanizmaların İncelenmesi, 2020 - 2023

Emregül E., Arslan Y. E., Derkuş B., Emregül K. C., ERGİN İ., KIRAN F., TÜBİTAK Project, Subventriküler Bölge (Svb) Kaynaklı Eksozomların İzolasyonu Ve Mezenkimal Kök Hücreleri Çip-Üstü Nöron-Benzeri Hücrelere Farklılaştırma Potansiyelinin İncelenmesi, 2017 - 2020

EMREGÜL E., DERKUŞ B., Project Supported by Higher Education Institutions, Denizanasından İzole Edilen Tip-I Kollajenin Aptasensör Matriksi Olarak Kullanılabilirliğinin İncelenmesi, 2016 - 2017

EMREGÜL E., EMREGÜL K. C., TÜBİTAK Project, Multipl Skleroz'xxlu Hastalardan Alınan Beyin-Omurilik Sıvısı ve Serumda Miyelin Bazık Protein ve Tau Proteinlerinin Eş Zamanlı Tayinine Yönelik Nanoimmünosensör Geliştirilmesi, 2013 - 2017

EMREGÜL E., Project Supported by Higher Education Institutions, Yumurta Kabuğu, Deniz Anası, Hidroksiapatit, Kollajen, Apta-Sensör, 2015 - 2016

Emregül E., Project Supported by Higher Education Institutions, Antikorların tayini için impedimetrik protein A immünosensörlerinin geliştirilmesi, 2012 - 2014

EMREGÜL E., EMREGÜL K. C., ARAS E. S., TÜBİTAK Project, Süperoksit Radikallerinin Tayini İçin Jelatin-karboksümetilselluloz-süperoksit Dismutaz Biyosensörünün Geliştirilmesi, 2008 - 2010

Metrics

Publication: 56

Citation (WoS): 768

Citation (Scopus): 823

H-Index (WoS): 18

H-Index (Scopus): 17