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Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Kimya (Dr), Turkey 2013 - 2016
Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Kimya (Yl) (Tezli), Turkey 2010 - 2012
Undergraduate, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 2008 - 2011
Undergraduate, Ankara University, Fen Fakültesi, Kimya Bölümü, Turkey 2006 - 2010

Dissertations

Doctorate, Apta-sensör teknolojisinde kullanılmak üzere doğal kaynaklardan biyomalzemelerin izolasyonu, karakterizasyonu, elektrokimyasal özelliklerinin incelenmesi ve biyolojik uygulamaları, Ankara University, Fen Bilimleri Enstitüsü, Kimya (Dr), 2016
Postgraduate, Anti-miyelin temelli protein tayini için impedimetrik immünosensör geliştirilmesi, Ankara University, Fen Bilimleri Enstitüsü, Kimya (Yl) (Tezli), 2012

Research Areas

Tissue Engineering, Stem Cell Engineering, Biomaterial, Moleculer Biology of Cancer

Academic Titles / Tasks

Associate Professor, Ankara University, Fen Fakültesi, Kimya Bölümü, 2021 - Continues
Assistant Professor, Ankara University, Fen Fakültesi, Kimya Bölümü, 2020 - Continues
Assistant Professor, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, 2017 - 2020
Lecturer, Baskent University, Faculty Of Arts And Scıences, Department Of Molecular Bıology And Genetıcs, 2016 - 2017

Academic and Administrative Experience

Head of Department, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Biyomedikal Mühendisliği, 2019 - 2020

Courses

Biyomalzemelerin İleri Karakterizasyon Yöntemleri, Postgraduate, 2022 - 2023
GENERAL CHEMISTRY , Undergraduate, 2022 - 2023
BIOCHEMISTRY LABORATORY, Undergraduate, 2021 - 2022
Temel Kimya II, Undergraduate, 2021 - 2022
Genel Kimya II, Undergraduate, 2016 - 2017
Genel Kimya I YAZ DÖNEMİ, Undergraduate, 2016 - 2017
Genel Kimya I, Undergraduate, 2016 - 2017

Advising Theses

Derkuş B., Cerrahi ve kozmetik uygulamalara yönelik eksozom bileşenli deri doku mühendisliği ürünlerinin geliştirilmesi, Postgraduate, Ş.Yazıcıoğlu(Student), Continues
Derkuş B., Investigation of the effects of M1-M2 induced macrophages and macrophage-derived exosomes on pre/post-tumorigenic processes of breast cancer spheroids, Postgraduate, M.MUSTAFA(Student), 2023
Derkuş B., Makrofaj türevli eksozomların glioblastoma hücresel davranışları üzerine etkilerinin moleküler düzeyde incelenmesi, Postgraduate, D.KURT(Student), 2023
Derkuş B., MAKROFAJLARIN MEKANOİMMÜNİTESİ İLE MEME KANSERİ ARASINDAKİ KARŞILIKLI ETKİLERİN MULTİ-OMİK TEKNİKLER KULLANILARAK KARŞILAŞTIRMALI İNCELENMESİ, Postgraduate, B.SARI(Student), 2022
DERKUŞ B., Mikrobiyal Ekstrasellüler Veziküllerin İzolasyonu ve Karakterizasyonu, Postgraduate, D.BARUT(Student), 2020

Jury Memberships

Doctorate, Doctorate, Ankara Üniversitesi, September, 2023
Post Graduate, Post Graduate, Sabancı Üniversitesi, July, 2023
Post Graduate, Post Graduate, Çanakkale Onsekiz Mart Üniversitesi, June, 2023
Post Graduate, Post Graduate, Ankara Üniversitesi, June, 2023
Doctorate, Doctorate, Gazi Üniversitesi, May, 2023
Post Graduate, Post Graduate, Ankara Üniversitesi, January, 2023
Doctoral Examination, Doctoral Examination, Ankara Üniversitesi, July, 2022
Post Graduate, Post Graduate, Çanakkale Onsekiz Mart Üniversitesi, August, 2021
Doctoral Examination, Doctoral Examination, Çanakkale Onsekiz Mart Üniversitesi, July, 2021
Doctoral Examination, Doctoral Examination, Abdullah Gül Üniversitesi, July, 2021
Post Graduate, Post Graduate, Çanakkale Onsekiz Mart Üniversitesi, January, 2021
Post Graduate, Post Graduate, Çanakkale Onsekiz Mart Üniversitesi, August, 2019

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Development and characterization of skin substitutes from electrospun polycaprolactone/silk fibroin**
Yildiz G., ARSLAN Y. E., DERKUŞ B., Sezgin B., Menceloglu Y. Z., Bayar G. R.
Journal of Bioactive and Compatible Polymers, vol.39, no.1, pp.46-62, 2024 (SCI-Expanded)

II. **Manipulating macrophage polarization with nanoparticles to control metastatic behavior in heterotypic breast cancer micro-tissues via exosome signaling**
Sungu M., Isik M., GÜLER Ü., EYLEM C. C., ESKİZENGİN H., NEMUTLU E., SALİH B., DERKUŞ B.
Nanoscale, vol.16, no.1, pp.394-410, 2023 (SCI-Expanded)

III. **Molecular docking, synthesis, anticancer activity, and metabolomics study of boronic acid ester-containing fingolimod derivatives**
DOYDUK D., DERKUŞ B., Sari B., EYLEM C. C., NEMUTLU E., YILDIRIR Y.
Archiv der Pharmazie, vol.356, no.12, 2023 (SCI-Expanded)

IV. **Bioactive and chemically defined hydrogels with tunable stiffness guide cerebral organoid formation and modulate multi-omics plasticity in cerebral organoids**
Isik M., Okesola B. O., EYLEM C. C., Kocak E., NEMUTLU E., D'Este M., Mata A., DERKUŞ B.
Acta Biomaterialia, vol.171, pp.223-238, 2023 (SCI-Expanded)

V. **3D Printing of Extracellular Matrix-Based Multicomponent, All-Natural, Highly Elastic, and Functional Materials toward Vascular Tissue Engineering**
Isik M., Karakaya E., Arslan T. S., Atila D., ERDOĞAN Y. K., ARSLAN Y. E., ESKİZENGİN H., Eylem C. C., NEMUTLU E., ERCAN B., et al.
ADVANCED HEALTHCARE MATERIALS, vol.12, no.20, 2023 (SCI-Expanded)

VI. **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)

VII. **Development of plant-based biopolymer coatings for 3D cell culture: boron-silica-enriched quince seed mucilage nanocomposites**
YILMAZ H. D., CENGİZ U., DERKUŞ B., ARSLAN Y. E.
BIOMATERIALS SCIENCE, vol.11, no.15, pp.5320-5336, 2023 (SCI-Expanded)

VIII. **Bacterial Membrane Vesicles as Smart Drug Delivery and Carrier Systems: A New Nanosystems Tool for Current Anticancer and Antimicrobial Therapy**
Aytar Çelik P., Erdogan-Gover K., Barut D., Enuh B. M., Amasya G., Sengel-Türk C. T., Derkus B., Çabuk A.
PHARMACEUTICS, vol.15, no.4, 2023 (SCI-Expanded)

IX. **The relationship between bacterial outer membrane vesicles and halophilic adaptation**
Barut D., Enuh B. M., DERKUŞ B., GÜLER Ü., SALİH B., AYTAR ÇELİK P.
MOLECULAR OMICS, vol.19, no.2, pp.174-181, 2023 (SCI-Expanded)

X. **Capecitabine-loaded bacterial membrane vesicles derived from Enterococcus faecalis promotes apoptosis in HT-29 colon cancer cells**
Erdogan Gover K., Isik M., Barut D., ŞENGEL TÜRK C. T., AMASYA G., DERKUŞ B., ÇABUK A., AYTAR ÇELİK P.
Biochemical Engineering Journal, vol.189, 2022 (SCI-Expanded)

XI. **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)

XII. **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)

XIII. **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)

XIV. **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)

XV. **Bacterial membrane vesicle functions, laboratory methods, and applications**
AYTAR ÇELİK P., DERKUŞ B., Erdogan K., Barut D., Manga E. B., Yildirim Y., Pecha S., ÇABUK A.
BIOTECHNOLOGY ADVANCES, vol.54, 2022 (SCI-Expanded)

XVI. **Mechanically robust hybrid hydrogels of photo-crosslinkable gelatin and laminin-mimetic peptide**

amphiphiles for neural induction
Isik M., Eylem C. C., Haciefendioglu 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)

XVII. **Decellularized spinal cord meninges extracellular matrix hydrogel that supports neurogenic differentiation and vascular structure formation**
ÖZÜDOĞRU E., Isik M., Eylem C. C., NEMUTLU E., ARSLAN Y. E., DERKUŞ B.
JOURNAL OF TISSUE ENGINEERING AND REGENERATIVE MEDICINE, vol.15, no.11, pp.948-963, 2021 (SCI-Expanded)

XVIII. **De Novo Design of Functional Coassembling Organic-Inorganic Hydrogels for Hierarchical Mineralization and Neovascularization**
Okesola B. O., Mendoza-Martinez A. K., Cidonio G., DERKUŞ B., Boccorh D. K., de la Pena D. O., Elsharkawy S., Wu Y., Dawson J., Wark A. W., et al.
ACS NANO, vol.15, no.7, pp.11202-11217, 2021 (SCI-Expanded)

XIX. **Human cardiomyocyte-derived exosomes induce cardiac gene expressions in mesenchymal stromal cells within 3D hyaluronic acid hydrogels and in dose-dependent manner**
DERKUŞ B.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN MEDICINE, vol.32, no.1, 2021 (SCI-Expanded)

XX. **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)

XXI. **Multicomponent hydrogels for the formation of vascularized bone-like constructs in vitro**
DERKUŞ B., Okesola B. O., Barrett D. W., D'Este M., Chowdhury T. T., Eglin D., Mata A.
ACTA BIOMATERIALIA, vol.109, pp.82-94, 2020 (SCI-Expanded)

XXII. **Growth-Factor Free Multicomponent Nanocomposite Hydrogels That Stimulate Bone Formation**
Okesola B. O., Ni S., DERKUŞ B., Galeano C. C., Hasan A., Wu Y., Ramis J., Buttery L., Dawson J. I., D'Este M., et al.
ADVANCED FUNCTIONAL MATERIALS, vol.30, no.14, 2020 (SCI-Expanded)

XXIII. **Triazine-based 2D covalent organic frameworks improve the electrochemical performance of enzymatic biosensors**
Yildirim O., DERKUŞ B.
JOURNAL OF MATERIALS SCIENCE, vol.55, no.7, pp.3034-3044, 2020 (SCI-Expanded)

XXIV. **Covalent co-assembly between resilin-like polypeptide and peptide amphiphile into hydrogels with controlled nanostructure and improved mechanical properties**
Okesola B. O., Lau H. K., DERKUŞ B., Boccorh D. K., Wu Y., Wark A. W., Kiick K. L., Mata A.
BIOMATERIALS SCIENCE, vol.8, no.3, pp.846-857, 2020 (SCI-Expanded)

XXV. **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)

XXVI. **Supramolecular Self-Assembly To Control Structural and Biological Properties of Multicomponent Hydrogels**
Okesola B. O., Wu Y., DERKUŞ B., Gani S., Wu D., Knani D., Smith D. K., Adams D. J., Mata A.
CHEMISTRY OF MATERIALS, vol.31, no.19, pp.7883-7897, 2019 (SCI-Expanded)

XXVII. **Trans-differentiation of human adipose-derived mesenchymal stem cells into cardiomyocyte-like cells on decellularized bovine myocardial extracellular matrix-based films**
ARSLAN Y. E., Galata Y. F., Arslan T. S., DERKUŞ B.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN MEDICINE, vol.29, no.8, 2018 (SCI-Expanded)

XXVIII. **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)

XXIX. **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)

XXX. **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)

XXXI. **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)

XXXII. **Synthesis and characterization of CdS nanorods by combined sonochemical-solvothermal method**
Bozkurt P., DERKUŞ B.
Materials Science- Poland, vol.34, no.3, pp.684-690, 2016 (SCI-Expanded)

XXXIII. **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., Kantarcioglu I., Emregül K. C., Emregül E.
SENSORS AND ACTUATORS B-CHEMICAL, vol.228, pp.725-736, 2016 (SCI-Expanded)

XXXIV. **Applying the miniaturization technologies for biosensor design**
Derkuş B.
BIOSENSORS & BIOELECTRONICS, vol.79, pp.901-913, 2016 (SCI-Expanded)

XXXV. **Detergent-free decellularization of bovine costal cartilage for chondrogenic differentiation of human adipose mesenchymal stem cells in vitro**
Erten E., Arslan T. S., Derkuş B., Arslan Y. E.
RSC ADVANCES, vol.6, no.96, pp.94236-94246, 2016 (SCI-Expanded)

XXXVI. **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)

XXXVII. **Sonochemical synthesis and characterisation of lead sulfide nanoparticles using different capping agents**
Bozkurt P., DERKUŞ B., EMREGÜL K. C., Canel M.
Journal of Chemical Research, vol.39, no.11, pp.649-653, 2015 (SCI-Expanded)

XXXVIII. **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)

XXXIX. **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)

XL. **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)

XLI. **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)

XLII. **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)

XLIII. **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)

Articles Published in Other Journals

I. **Surgical method for critical sized cranial defects in rat cranium**
ODABAŞ S., DERKUŞ B., VARGEL İ., Vural A. C.
MethodsX, vol.10, 2023 (ESCI)

II. **Synthesis of Silica-Based Boron-Incorporated Collagen/Human Hair Keratin Hybrid Cryogels with the Potential Bone Formation Capability**
Cal F., Arslan T. S., DERKUŞ B., KIRAN F., CENGİZ U., ARSLAN Y. E.
ACS APPLIED BIO MATERIALS, vol.4, no.9, pp.7266-7279, 2021 (ESCI)

III. **Development of gelatin-alginate-tio2-sod biosensor for the detection of superoxide radicals**
Karakaya U., DERKUŞ B., EMREGÜL E.
Journal of the Turkish Chemical Society, Section A: Chemistry, vol.7, no.2, pp.571-580, 2020 (Scopus)

IV. **Multilayer Graphene Oxide-Silver Nanoparticle Nanostructure as Efficient Peroxidase Mimic.**
DERKUŞ B., ACAR BOZKURT P.
Hacettepe Journal of Biology Chemistry, vol.46, no.2, pp.159-167, 2018 (Peer-Reviewed Journal)

Books & Book Chapters

I. **Targeting Mechanobiology of Stem Cells Via Biomaterials for Regenerative Medicine Approaches**
Sari B., Derkuş B.
in: Handbook of Stem Cell Applications, K. H. Haider, Editor, Springer Nature, Singapore, pp.1-24, 2023

II. **Polypeptide-Based Multicomponent Materials: From Design to Applications**
Derkuş B., Okesola B.
in: Peptide Bionanomaterials, Mohamed Elsawy, Editor, Springer Nature, Edinburgh, pp.195-227, 2023

III. **Mitokondride Fonksiyonel Analizler**
Eylem C. C., Derkuş B., Nemutlu E.
in: Çocukluk Çağında Mitokondriyal Hastalıklar, Ünal Uzun Ö, Editor, Türkiye Klinikleri Yayınevi, Ankara, pp.93-100, 2022

IV. **Ultrasonics-Assisted Effective Isolation and Characterization of Exosomes from Whole Organs**
DERKUŞ B., EMREGÜL E.
in: Supramolecules in Drug Discovery and Drug Delivery. Methods in Molecular Biology., Thomas Mavromoustakos, Andreas G. Tzakos, Serdar Durdagi, Editor, Humana, New York, pp.25-34, 2020

V. **Sophisticated Biocomposite Scaffolds from Renewable Biomaterials for Bone Tissue Engineering**
ARSLAN Y. E., Ozudogru E., Sezgin Arslan T., DERKUŞ B., EMREGÜL E., EMREGÜL K. C.
in: Regenerative Medicine and Plastic Surgery, Dominik Duscher, Melvin Shiffman, Editor, Springer Nature, pp.17-31, 2019

Refereed Congress / Symposium Publications in Proceedings

I. **Impact of Distinct Bacterial Populations on Brain Organoid Phenotype**
Derkuş B., Emregül E., Nemutlu E., Eylem C. C.

5th Biochemical Approaches and Technologies, Antalya, Turkey, 2 - 05 November 2023, pp.10

II. **IN VITRO VIABILITY OF HUMAN UMBILICAL CORD MESENCHYMAL STEM CELLS CULTURED ON 3D PRINTED POLYCAPROLACTONE/GELATINE METHACRYLATE HYBRID SCAFFOLDS AND THE IN VIVO TISSUE RESPONSE IN RATS; A PILOT STUDY**
Derkuş B., Islamova G., Çetinkaya Ş. E., Topal Çelikkan F., Serdaroglu B., Seval M. M., Dökmeci F.
16th EUGA Annual Congress, Rome, Italy, 19 - 22 October 2023, pp.105

III. **Integrative Omics Approaches to Explore Extracellular Vesicles-Mediated Cell-Cell Communications**
Derkuş B.
International Proteomics Congress, Ankara, Turkey, 13 - 14 October 2023, pp.5

IV. **EVALUATION OF THE CYTOTOXIC AND ANTI-INFLAMMATORY EFFECTS OF MELANOMA-TARGETED NANOSTRUCTURED LIPID CARRIERS ON MELANOCYTES, MACROPHAGES, AND 3D-CANCER CELL SPHEROIDS**
Derkuş B., Ak Demiroz G., Balyapan H., Tutar G., Arslan Y. E.
8th INTERNATIONAL CONFERENCE ON ENGINEERING AND NATURAL SCIENCES , İstanbul, Turkey, 18 - 22 May 2023, pp.18

V. **Biomolecular Differences in Normal and Pathological Cerebral Organoids**
DERKUŞ B., Eylem C. C., EMREGÜL E., NEMUTLU E.
4th Euroasian Biochemical Approaches and Technologies, Turkey, 03 November 2022

VI. **Polikaprolakton (PCL) ve Jelatin Metakrilat (GelMA) Doku Mühendisliği İskelesi Üzerinde Mezenkimal Kök Hücrelerinin Tutunması ve Canlılık Testi**
İslamova G., ÇETİNKAYA Ş. E., DERKUŞ B., SEVAL M. M., DÖKMECİ F.
10. Ulusal Ürojinekoloji Kongresi, İstanbul, Turkey, 30 September - 02 October 2022

VII. **Hybrid hydrogels combining photo-crosslinkable polymer and self-assembling laminin-mimetic peptide amphiphiles promote neurogenic differentiation**
DERKUŞ B., Okesola B. O.
RSC Biomaterials Chemistry Special Interest Group Annual Conference, Nottingham, England, 11 - 12 January 2021, pp.21

VIII. **Extracellular-Matrix Like Multicomponent Hydrogels For Complex Bone Tissue Engineering**
DERKUŞ B., Mata A.
2nd EURASIA BIOCHEMICAL APPROACHES TECHNOLOGIES CONGRESS, Antalya, Turkey, 27 - 29 October 2019, pp.79

IX. **Multi-omics study of colorectal cancer exosomes: Comparison of clinical samples and cell Culture**
DERKUŞ B.
2nd International Eurasian Conference Biological and Chemical Sciences, Ankara, Turkey, 28 - 29 June 2019, pp.378

X. **Triazine-based 2D-covalent organic frameworks enhances electrochemical performance of enzymaticbiosensors**
Yıldırım O., DERKUŞ B.
Merck Young Chemists Symposium, 13 - 15 November 2017

XI. **Fabrication of human hair keratin/jellyfish collagen/eggshellderivedhydroxyapatite osteoinductive biocompositescaffolds for bone tissue engineering: From waste toregenerative medicine products**
ARSLAN Y. E., Arslan T., DERKUŞ B., EMREGÜL E., EMREGÜL K. C.
Joint Science Congress of Materials and Polymers, Ohrid, Macedonia, 25 - 28 August 2017

XII. **NANO-SİZED SPHERİCAL HYDROXYAPATİTE ENHANCEDAPTAMER IMMOBİLİZATİON**
DERKUŞ B., EMREGÜL E., EMREGÜL K. C.
1th INTERNATIONAL CONFERENCE ON ADVANCES INENGINEERING SCIENCES: THAILAND 2017, Phuket, Thailand, 3 - 05 July 2017

XIII. **MATERIALS DESIGN TOWARDS USE IN CLINICAL BIOSENSORS FOR MS DIAGNOSIS**
DERKUŞ B., EMREGÜL K. C., EMREGÜL E.
1th INTERNATIONAL CONFERENCE ON ADVANCES INENGINEERING SCIENCES: THAILAND 2017, Phuket, Thailand, 3 - 05 July 2017

XIV. **Detergent-Free Decellularization of Bovine Costal Cartilage for Condrogenic Differentiation of Human Adipose Mesenchymal Stem Cells In Vitro**
evren e., Tuğba S., DERKUŞ B., ARSLAN Y. E., EMREGÜL E.
6. Kök Hücre Sempozyumu, Turkey, 5 - 06 May 2017, pp.43

Supported Projects

Derkuş B., Altuntaş S., Büyükserin F., TUBITAK Project, Sağlıklı Yaşam İçin Yeni Nesil Biyomalzeme Teknolojileri Araştırma Ağı , 2023 - 2028
Odabaş S., Derkuş B., Oto Ç., Yılgör Huri P., TUBITAK Project, 22AG055 - Sağlıklı Yaşam İçinYeni Nesil Biyomalzeme Teknolojileri Araştırma Ağı, 2023 - 2027
Derkuş B., Acar A., Akkulak M., Yılmaz E., TÜBİTAK - AB COST Project, Tümör-İlişkili Makrofajların Eksozom Aracılı Post-Tümörijenik Etki Mekanizmalarının Kolorektal Kanser Modelinde In Vitro Ve In Vivo Düzeyde Detaylı Olarak İncelenmesi, 2023 - 2026
Derkuş B., Emregül E., Nemutlu E., TUBITAK Project, Doğal Hibrit Hidrojellerin Kullanılmasıyla Gerçekçi Kanser Metastaz Modellerinin Oluşturulması ve Metastaz Sürecinin Çoklu-Omiks Tekniklerle İncelenmesi, 2022 - 2025
Derkuş B., TUBITAK Project, Rejeneratif ve Restoratif Tıp Araştırmaları ve Uygulamaları , 2021 - 2025
Şenel O. O., Ergin İ., Derkuş B., Bayraktaroğlu A. G., TUBITAK Project, Allogenik Mezenkimal Kök Hücre Türevli Eksozomların Limbal Yetmezliğe Bağlı Konjunktivalizasyon Üzerine Kullanılma Potansiyelinin Değerlendirilmesi, 2023 - 2024
Derkuş B., Arslan Y. E., Nemutlu E., Research Project of the Presidency of Turkey Health Institutes (TÜSEB), Dinamik Biyomalzemelerin ve Mikro-Doku Teknolojilerinin Kullanımıyla Realistik Kanser Modellerinin Geliştirilmesi ve İlaç Test Platformu Olarak Kullanılması, 2022 - 2024
Şengel Türk C. T., Aytar Çelik P., DERKUŞ B., TUBITAK Project, Enfekte Akut Yaraların Iyileştirilmesinde Antimikrobiyal Venom Peptid Içeren Levan Taşıyıcı Sistemlerinin Geliştirilmesi, 2021 - 2024
Derkuş B., Nemutlu E., Emregül E., Project Supported by Higher Education Institutions, Dinamik metabolomiks tekniği ile hücresel süreçlerin moleküler düzeyde incelenmesi: Kanser modeli, 2021 - 2023
Derkuş B., Emregül E., Odabaş S., TUBITAK 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., TUBITAK Project, GBAInVitro: Bağırsak-Beyin Ekseni (GBA)'nin 3-Boyutlu (3B) Hücre Kültürü Teknolojisi ile Modellenmesi ve Sofistike Omiks Platformlar ile Moleküler Mekanizmaların İncelenmesi, 2020 - 2023
Derkuş B., Odabaş S., TUBITAK Project, Hücresizleştirilmiş Bitki İçeren 3 Boyutlu Baskılanmış Doku İskelelerinin Geliştirilmesi Ve Kıkırdak Doku Farklılaşması Üzerine Etkisinin İncelenmesi, 2021 - 2022
Derkuş B., TUBITAK Project, Mikro-Anatomik Beyin Organoid Modellerinin Biyoaktif 3D Hiyaluronik Asit Hidrojel Ortamında Geliştirilmesi, Karakterizasyonu ve Moleküler Farklılıkların İncelenmesi, 2019 - 2022
Derkuş B., TUBITAK Project, Nöroindüktif Epitop İçeren 3-Boyutlu (3B) Hidrojellerin Geliştirilmesi ve in vitro Hücre Kültürü Çalışmalarının Gerçekleştirilmesi, 2020 - 2021
Emregül E., Arslan Y. E., Derkuş B., Emregül K. C., ERGİN İ., KIRAN F., TUBITAK 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
DERKUŞ B., Project Supported by Higher Education Institutions, Yumurta Kabuğundan Hidroksiapatit Izolasyonu Ve Apta-sensör Matriksi Olarak Kullanılabilirliğinin Incelenmesi, 2015 - 2016
EMREGÜL K. C., DERKUŞ B., TUBITAK Project, Antikorların Tayinine Yönelik İmpedimetrik Protein A İmmünosensörlerinin Geliştirilmesi, 2012 - 2014

Scientific Refereeing

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, November 2023
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ADVANCED HEALTHCARE MATERIALS, SCI Journal, August 2023
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TUBITAK Project, 1005 - National New Ideas and Products Research Support Program, Ankara University, Turkey, June 2023
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TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, May 2023
CANCER LETTERS, SCI Journal, April 2023
Frontiers in Materials, SCI Journal, April 2023
MATERIALS TODAY BIO, SCI Journal, February 2023
TUBITAK Project, 1007 - Public Institutions Research and Development Projects DP, Ankara University, Turkey, December 2022
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, January 2022
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, October 2021
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, October 2021
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TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, October 2021
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, October 2021
TUBITAK Project, 1005 - National New Ideas and Products Research Support Program, Ankara University, Turkey, May 2021
TUBITAK Project, 3501 - National Young Researcher Career Development Program, Ankara University, Turkey, May 2021
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, April 2021
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, April 2021
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TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, April 2021
JOURNAL OF CELLULAR BIOCHEMISTRY, SCI Journal, February 2021
TUBITAK Project, 3501 - National Young Researcher Career Development Program, Ankara University, Turkey, January 2021
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, August 2020
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, August 2020
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, August 2020
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TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, August 2020
MATERIALS ADVANCES, SCI Journal, July 2020
IEEE SENSORS JOURNAL, SCI Journal, February 2020
BIOSENSORS AND BIOELECTRONICS, SCI Journal, February 2020
JOURNAL OF BIOACTIVE AND COMPATIBLE POLYMERS, SCI Journal, February 2020
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, January 2020
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Ankara University, Turkey, January 2020
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Metrics

Publication: 67
Citation (WoS): 908
Citation (Scopus): 964
H-Index (WoS): 19
H-Index (Scopus): 20

Congress and Symposium Activities

5. Uluslararası Proteomik Kongresi, Invited Speaker, Ankara, Turkey, 2023
8. Biyomalzeme Günleri, Invited Speaker, Ankara, Turkey, 2021

Awards

Derkuş B., BAGEP, Bilim Akademisi, April 2023

Derkuş B., ÜSTÜN BAŞARILI GENÇ BİLİM İNSANI ÖDÜLÜ, Türkiye Bilimler Akademisi, December 2022