

Prof. IŞIK PERÇİN DEMİRÇELİK

Personal Information

Office Phone: [+90 312 780 5066](tel:+903127805066)

Office Phone: [+90 312 297 8066](tel:+903122978066)

Fax Phone: [+90 312 299 2028](tel:+903122992028)

Email: ipercin@hacettepe.edu.tr

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

International Researcher IDs

ORCID: 0000-0002-9453-4462

Publons / Web Of Science ResearcherID: G-9159-2013

ScopusID: 25936731600

Yoksis Researcher ID: 109453

Education Information

Post Doctorate, Eidgenössische Technische Hochschule, ETHZ (The Federal Institute of Technology, Zürich), Department Of Chemistry And Applied Biosciences, Institute For Chemical And Bioengineering, Switzerland 2014 - 2014

Doctorate, Hacettepe University, Fen Fakültesi, Biyoloji/Moleküler Biyoloji, Turkey 2006 - 2012

Postgraduate, Hacettepe University, Fen Fakültesi, Biyoloji/Moleküler Biyoloji, Turkey 2003 - 2006

Undergraduate, Hacettepe University, Fen Fakültesi, Biyoloji, Turkey 1999 - 2003

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Fibronektin saflaştırılması için kriyojel monolitik kolonların hazırlanması, Hacettepe Üniversitesi, Fen Fakültesi, Biyoloji Bölümü, 2012

Postgraduate, Soya Fasulyesinden (Glycine max) Lektin İzolasyonu, Saflaştırılması ve Elektroforetik Karakterizasyonu, Hacettepe Üniversitesi, Fen Fakültesi, Biyoloji Bölümü, 2006

Research Areas

Life Sciences, Biochemistry, Biomolecules, Molecular Biochemistry, Proteomics, Natural Sciences

Academic Titles / Tasks

Research Assistant, Hacettepe University, Fen Fakültesi, Biyoloji Bölümü, 2005 - Continues

Courses

BİYOKİMYA I, Undergraduate, 2017 - 2018
DENEYSEL BİYOKİMYA I, Undergraduate, 2017 - 2018
ÖZEL ÇALIŞMA I, Undergraduate, 2017 - 2018
İŞ SAĞLIĞI VE GÜVENLİĞİ I, Undergraduate, 2017 - 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **PHEMA-based cryogels as 3D placental scaffolds**
Demir M., Öztürk S., Bayrak G., PERÇİN DEMİRÇELİK I., KILIÇ SÜLOĞLU A.
Process Biochemistry, vol.133, pp.85-98, 2023 (SCI-Expanded)
- II. **Recent Advances in Optical Sensing for the Detection of Microbial Contaminants**
İDİL N., Ashlyüce S., PERÇİN DEMİRÇELİK I., Mattiasson B.
Micromachines, vol.14, no.9, 2023 (SCI-Expanded)
- III. **Enhanced invertase binding from baker's yeast via cryogels included boronic acids**
Baydemir Peşint G., Eren Yüngeviş B., PERÇİN DEMİRÇELİK I.
World journal of microbiology & biotechnology, vol.39, no.10, pp.267, 2023 (SCI-Expanded)
- IV. **Characterization and antibacterial activity of gelatin-gellan gum bilayer wound dressing**
ÖZKAHRAMAN B., ÖZBAŞ Z., Bayrak G., Tamahkar E., PERÇİN DEMİRÇELİK I., KILIÇ SÜLOĞLU A., Bor F.
INTERNATIONAL JOURNAL OF POLYMERIC MATERIALS AND POLYMERIC BIOMATERIALS, vol.71, no.16, pp.1240-1251, 2022 (SCI-Expanded)
- V. **Evaluation of kappa carrageenan and gelatin based sponges for dental applications**
KILIÇ SÜLOĞLU A., ÖZKAHRAMAN B., ÖZBAŞ Z., Bayrak G., PERÇİN DEMİRÇELİK I., Kanca Y., BORAN F., Tamahkar E.
CHEMICAL PAPERS, vol.76, no.7, pp.4005-4015, 2022 (SCI-Expanded)
- VI. **Poly(vinyl alcohol)/(hyaluronic acid-g-kappa-carrageenan) hydrogel as antibiotic-releasing wound dressing**
ÖZBAŞ Z., ÖZKAHRAMAN B., Bayrak G., KILIÇ SÜLOĞLU A., PERÇİN DEMİRÇELİK I., BORAN F., Tamahkar E.
CHEMICAL PAPERS, vol.75, no.12, pp.6591-6600, 2021 (SCI-Expanded)
- VII. **Amino acid functionalized macroporous gelatin cryogels: Characterization and effects on cell proliferation**
Bayrak G., PERÇİN DEMİRÇELİK I., KILIÇ SÜLOĞLU A., DENİZLİ A.
PROCESS BIOCHEMISTRY, vol.110, pp.100-109, 2021 (SCI-Expanded)
- VIII. **Whole Cell Recognition of Staphylococcus aureus Using Biomimetic SPR Sensors**
İDİL N., Bakhshpour M., PERÇİN DEMİRÇELİK I., Mattiasson B.
BIOSENSORS-BASEL, vol.11, no.5, 2021 (SCI-Expanded)
- IX. **Evaluation of hyaluronic acid nanoparticle embedded chitosan-gelatin hydrogels for antibiotic release**
ÖZKAHRAMAN B., Tamahkar E., İDİL N., KILIÇ SÜLOĞLU A., PERÇİN DEMİRÇELİK I.
DRUG DEVELOPMENT RESEARCH, vol.82, no.2, pp.241-250, 2021 (SCI-Expanded)
- X. **Spongy membranes for peroxidase purification from Brassica oleracea roots**
Pesint G. B., Zenger O., PERÇİN DEMİRÇELİK I., DENİZLİ A.
PROCESS BIOCHEMISTRY, vol.103, pp.98-106, 2021 (SCI-Expanded)
- XI. **Laccase bound to cryogel functionalized with phenylalanine for the decolorization of textile dyes**
Percin I., ARACAGÖK Y. D., İDİL N., DENİZLİ A., Mattiasson B.
TURKISH JOURNAL OF CHEMISTRY, vol.45, no.5, pp.1353-1365, 2021 (SCI-Expanded)
- XII. **A novel multilayer hydrogel wound dressing for antibiotic release**
Tamahkar E., ÖZKAHRAMAN B., KILIÇ SÜLOĞLU A., İDİL N., PERÇİN DEMİRÇELİK I.
JOURNAL OF DRUG DELIVERY SCIENCE AND TECHNOLOGY, vol.58, 2020 (SCI-Expanded)
- XIII. **Molecularly imprinted poly(N-isopropylacrylamide) thermosensitive based cryogel for immunoglobulin G purification**
PERÇİN DEMİRÇELİK I., İDİL N., DENİZLİ A.

- PROCESS BIOCHEMISTRY, vol.80, pp.181-189, 2019 (SCI-Expanded)
- XIV. **Biomedical Applications of Polymeric Cryogels**
Bakhshpour M., İDİL N., PERÇİN DEMİRÇELİK I., DENİZLİ A.
APPLIED SCIENCES-BASEL, vol.9, no.3, 2019 (SCI-Expanded)
- XV. **RNA purification from Escherichia coli cells using boronated nanoparticles**
PERÇİN DEMİRÇELİK I., İDİL N., DENİZLİ A.
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.162, pp.146-153, 2018 (SCI-Expanded)
- XVI. **Microcontact Imprinted Plasmonic Nanosensors: Powerful Tools in the Detection of Salmonella paratyphi**
PERÇİN DEMİRÇELİK I., İDİL N., Bakhshpour M., YILMAZ E., Mattiasson B., DENİZLİ A.
SENSORS, vol.17, no.6, 2017 (SCI-Expanded)
- XVII. **Tentacle-type immobilized metal affinity cryogel for invertase purification from Saccharomyces cerevisiae**
ÇETİN K., PERÇİN DEMİRÇELİK I., Denizli F., DENİZLİ A.
ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY, vol.45, no.7, pp.1431-1439, 2017 (SCI-Expanded)
- XVIII. **Supermacroporous hydrophobic affinity sorbents for penicillin acylase purification**
Demircelik A. H., PERÇİN DEMİRÇELİK I., DENİZLİ A.
JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY, vol.54, no.2, pp.71-79, 2017 (SCI-Expanded)
- XIX. **Gelatin-loaded p(HEMA-GMA) cryogel for high-capacity immobilization of horseradish peroxidase**
SOOMRO R., Percin I., MEMON N., BHANGER M. I., DENİZLİ A.
ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY, vol.44, no.7, pp.1708-1713, 2016 (SCI-Expanded)
- XX. **Metal-immobilized magnetic nanoparticles for cytochrome C purification from rat liver**
Percin I., karakoç V., ergün B., DENİZLİ A.
BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY, vol.63, no.1, pp.31-40, 2016 (SCI-Expanded)
- XXI. **Catalase purification from rat liver with iron-chelated poly(hydroxyethyl methacrylate-N-methacryloyl-(L)-glutamic acid) cryogel discs**
Gokturk I., Percin I., DENİZLİ A.
PREPARATIVE BIOCHEMISTRY & BIOTECHNOLOGY, vol.46, no.6, pp.602-609, 2016 (SCI-Expanded)
- XXII. **Concanavalin A immobilized magnetic poly(glycidyl methacrylate) beads for prostate specific antigen binding**
İDİL N., Percin I., KARAKOC V., Yavuz H., AKSÖZ N., DENİZLİ A.
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.134, pp.461-468, 2015 (SCI-Expanded)
- XXIII. **Dye affinity cryogels for plasmid DNA purification**
ÇİMEN D., YILMAZ F., Perçin I., TÜRKMEN D., DENİZLİ A.
Materials Science and Engineering C, vol.56, pp.318-324, 2015 (SCI-Expanded)
- XXIV. **Megaporous poly(hydroxy ethylmethacrylate) based poly(glycidylmethacrylate-N-methacryloyl-(L)-tryptophan) embedded composite cryogel**
TÜRKMEN D., BERELİ N., Derazshamshir A., Percin I., SHAIKH H., Yilmaz F.
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.130, pp.61-68, 2015 (SCI-Expanded)
- XXV. **Strong cation-exchange chromatography of proteins on a sulfoalkylated monolithic cryogel**
Percin I., KHALAF R., BRAND B., MORBIDELLI M., GEZICI O.
JOURNAL OF CHROMATOGRAPHY A, vol.1386, pp.13-21, 2015 (SCI-Expanded)
- XXVI. **Composite cryogels for lysozyme purification**
BAYDEMİR G., TURKOGLU E. A., Andac M., Percin I., DENİZLİ A.
BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY, vol.62, no.2, pp.200-207, 2015 (SCI-Expanded)
- XXVII. **Comparison of Two Different Reactive Dye Immobilized Poly(Hydroxyethyl Methacrylate) Cryogel Discs for Purification of Lysozyme**
PERÇİN DEMİRÇELİK I., ŞENER G., Dmirçelik A. H., BERELİ N., DENİZLİ A.
APPLIED BIOCHEMISTRY AND BIOTECHNOLOGY, vol.175, no.6, pp.2795-2805, 2015 (SCI-Expanded)
- XXVIII. **Molecularly imprinted composite cryogels for hemoglobin depletion from human blood**

- Baydemir G., Andac M., Percin I., Derazshamshir A., DENİZLİ A.
JOURNAL OF MOLECULAR RECOGNITION, vol.27, no.9, pp.528-536, 2014 (SCI-Expanded)
- XXIX. **Gelatin-Immobilised Poly(hydroxyethyl methacrylate) Cryogel for Affinity Purification of Fibronectin**
Percin I., Aksoz E., DENİZLİ A.
APPLIED BIOCHEMISTRY AND BIOTECHNOLOGY, vol.171, no.2, pp.352-365, 2013 (SCI-Expanded)
- XXX. **Macroporous PHEMA-based cryogel discs for bilirubin removal**
PERÇİN DEMİRÇELİK I., Baydemir G., Ergun B., DENİZLİ A.
ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY, vol.41, no.3, pp.172-177, 2013 (SCI-Expanded)
- XXXI. **Purification of urease from jack bean (Canavalia ensiformis) with copper (II) chelated poly(hydroxyethyl methacrylate-N-methacryloyl-(L)-histidine methyl ester) cryogels**
Tekiner P., Percin I., Ergun B., Yavuz H., Aksoz E.
JOURNAL OF MOLECULAR RECOGNITION, vol.25, no.11, pp.549-554, 2012 (SCI-Expanded)
- XXXII. **Poly(hydroxyethyl methacrylate) based magnetic nanoparticles for plasmid DNA purification from Escherichia coli lysate**
Percin I., Karakoc V., AKGÖL S., Aksoz E., DENİZLİ A.
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.32, no.5, pp.1133-1140, 2012 (SCI-Expanded)
- XXXIII. **Mannose-specific lectin isolation from Canavalia ensiformis seeds by PHEMA-based cryogel**
Percin I., Yavuz H., Aksoz E., DENİZLİ A.
BIOTECHNOLOGY PROGRESS, vol.28, no.3, pp.756-761, 2012 (SCI-Expanded)
- XXXIV. **Poly(hydroxyethyl methacrylate) based affinity cryogel for plasmid DNA purification**
Percin I., Saglar E., Yavuz H., Aksoz E., DENİZLİ A.
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol.48, no.4, pp.577-582, 2011 (SCI-Expanded)
- XXXV. **N-Acetyl-D-galactosamine-Specific Lectin Isolation from Soyflour with Poly(HPMA-GMA) Beads**
Percin I., Yavuz H., Aksoz E., DENİZLİ A.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.111, no.1, pp.148-154, 2009 (SCI-Expanded)

Articles Published in Other Journals

- I. **Headspace Gas Chromatography-Mass Spectroscopy Analysis and Antibacterial Tests of Commercial Hand Sanitizers**
VARLIK S., BAYRAK G., PERÇİN DEMİRÇELİK I., İşbir Turan A.
Hitit University, vol.9, 2022 (Peer-Reviewed Journal)
- II. **Comparison of PSA Binding for Prostate Cancer and BPH Using Lectin Glycoprotein Interactions**
İDİL N., PERÇİN DEMİRÇELİK I., KARA Ö., Özdemir B., AKSÖZ N.
Hacettepe Journal of Biology and Chemistry, vol.43, no.3, pp.205-211, 2015 (Peer-Reviewed Journal)
- III. **Comparison of Six Commercial DNA Extraction Kits for DNA Extraction from Wheat**
KARAASLAN İ. Ç., AKEL H., PERÇİN DEMİRÇELİK I., ÜNLÜ S.
Hacettepe Journal of Biology and Chemistry, vol.42, pp.395-400, 2014 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Ion imprinted polymers**
TAMAHKAR IRMAK E., PERÇİN DEMİRÇELİK I., ANDAÇ ÖZDİL A. M., DENİZLİ A.
in: Molecular Imprinting, Adil Denizli, Editor, Hacettepe Üniversitesi, Ankara, pp.143-167, 2018

Refereed Congress / Symposium Publications in Proceedings

- I. **Investigation of Enhanced Uptake of Hypericin with Chitosan Nanoparticles in Lung Cancer**
TAŞKONAK B., AYLAZ G., ANDAÇ A. M., GÜVEN E., ÖZKAHRAMAN B., PERÇİN DEMİRÇELİK I., SANİN S., KILIÇ SÜLOĞLU A.
SECOND INTERNATIONAL MULTIDISCIPLINARY CANCER RESEARCH CONGRESS, 21 July 2022
- II. **Preparation and Characterization of Hypericin-Loaded Chitosan Nanoparticles**
TAŞKONAK B., AYLAZ G., ANDAÇ A. M., GÜVEN E., ÖZKAHRAMAN B., PERÇİN DEMİRÇELİK I., KILIÇ SÜLOĞLU A.
9 th International Conference on Materials Science and Nanotechnology for Next Generation, 22 September 2022
- III. **Microcontact imprinted based SPR biosensors for the detection of Salmonella paratyphi**
PERÇİN DEMİRÇELİK I., İDİL N., Bakhshpour M., Yılmaz E., DENİZLİ A.
European Biotechnology Congress, Dubrovnik, Croatia, 25 - 27 May 2017, vol.256
- IV. **BOYA LİGAND AFİNİTE KRİYOJELLER İLE SACCHAROMYCES CEREVISIAE DEN MALAT DEHİDROGENAZ ENZİMİNİN SAFLAŞTIRILMASI**
PERÇİN DEMİRÇELİK I., GÖKTÜRK BAŞAL I., DENİZLİ A.
10. Ulusal afinite teknikleri kongresi, Turkey, 26 May 2016
- V. **Poly vinyl alcohol polyethyleneimine PVA PEI blended monolithic cryogel columns for the depletion of haemoglobin from human blood**
PERÇİN DEMİRÇELİK I., GÖKTÜRK BAŞAL I., DENİZLİ A.
10. Ulusal Afinite Teknikleri Kongresi, Turkey, 26 May 2016
- VI. **Investigation of difference in genotype frequencies of APOE polymorphism between BPH patients and prostat cancer patients**
SAĞLAR E., KAMIŞLI G., PERÇİN DEMİRÇELİK I., KARADUMAN T., ERDEM B., KÜÇÜKYILDIRIM S., MERGEN H.
III. International Congress of the Molecular Biology Association, 10 - 12 September 2014
- VII. **Investigation of lectin and serum-PSA interaction using magnetic poly(glycidyl methacrylate) microspheres**
İDİL N., PERÇİN DEMİRÇELİK I., YAVUZ H., AKSÖZ N., DENİZLİ A.
European Biotechnology Congress, Lecce, Italy, 15 - 18 May 2014, vol.185

Supported Projects

PERÇİN DEMİRÇELİK I., Project Supported by Higher Education Institutions, Enzim immobilizasyonu için kriyojel disklerin hazırlanması, 2017 - 2018

İDİL N., PERÇİN DEMİRÇELİK I., Project Supported by Higher Education Institutions, Staphylococcus aureus'un tanımlanması için nanobiyosensör hazırlanması, 2017 - 2018

PERÇİN DEMİRÇELİK I., Project Supported by Higher Education Institutions, 11. Ulusal Afinite Teknikleri Kongresi'ne katılım, 2017 - 2017

PERÇİN DEMİRÇELİK I., DENİZLİ A., ANDAÇ ÖZDİL A. M., KILIÇ SÜLOĞLU A., Project Supported by Higher Education Institutions, Yeni Nesil Biyobozunur Makrogözenekli Kriyojellerin İnsan Dermal Fibroblast Hücre Hattında Sitotoksitesisi, 2017 - 2017

PERÇİN DEMİRÇELİK I., Project Supported by Higher Education Institutions, Katyon değiştirici özellik gösteren kriyojel monolitik kolonun protein saflaştırma çalışmaları için etkinliğinin araştırılması, 2016 - 2017

PERÇİN DEMİRÇELİK I., Project Supported by Higher Education Institutions, 10. Ulusal Afinite Teknikleri Kongresine katılım, 2016 - 2016

PERÇİN DEMİRÇELİK I., Project Supported by Higher Education Institutions, RNA Saflaştırılması İçin Boronik Asit Taşıyan Nanopartiküllerin Hazırlanması, 2015 - 2016

PERÇİN DEMİRÇELİK I., Project Supported by Higher Education Institutions, Hücre ayırma ve afinite temelli yöntemler, 2015 - 2015

PERÇİN DEMİRÇELİK I., Project Supported by Higher Education Institutions, Hidrofobik kriyojele penisilin açılaz adsorpsiyonu için uygun koşulların belirlenmesi, 2015 - 2015

PERÇİN DEMİRÇELİK I., BAYDEMİR PEŞİNT G., GÖKTÜRK BAŞAL I., Project Supported by Higher Education Institutions, Katalaz Enzimine Afinite Gösteren Kriyojel Disklerin Hazırlanması, 2015 - 2015

Metrics

Publication: 47

Citation (WoS): 414

Citation (Scopus): 542

H-Index (WoS): 12

H-Index (Scopus): 14

Non Academic Experience

Eidgenössische Technische Hochschule Zürich (ETH Zurich)