

## Doç. Dr. CEYDA KASAVI

### Kişisel Bilgiler

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### Uluslararası Araştırmacı ID'leri

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Publons / Web Of Science ResearcherID: GVS-6400-2022

ScopusID: 37050061300

Yoksis Araştırmacı ID: 309576

### Biyografi

Ceyda Kasavi received her Ph.D. degree in Chemical Engineering from Boğaziçi University in 2013 and she is currently working as an Assistant Professor at the Bioengineering Department of Marmara University (Istanbul, Turkey). Her research activities have been focused on systems biology. She has an experience on the development of biological production processes by yeast and extremophiles, the reconstruction and analysis of biological networks to understand the mechanisms behind the cellular processes, the integration and analysis of different omics data, and development of new diagnosis and treatment strategies for complex human diseases by employing systems biology approaches.

### Eğitim Bilgileri

Doktora, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Kimya Mühendisliği, Türkiye 2007 - 2013

Yüksek Lisans, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Kimya Mühendisliği, Türkiye 2003 - 2006

Lisans, İstanbul Teknik Üniversitesi, Kimya-Metalurji, Kimya Mühendisliği, Türkiye 1998 - 2003

### Yabancı Diller

İngilizce, C2 Ustalık

### Yaptığı Tezler

Doktora, A System Based Rational Approach to Improve First and Second Generation Bioethanol Production by *Saccharomyces cerevisiae*, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Kimya Mühendisliği, 2013

Yüksek Lisans, Kovalent Bağlanma ve Fiziksel Adsorpsiyon Metotları ile Proteaz Enziminin İmmobilizasyonu, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Kimya Mühendisliği, 2006

### Araştırma Alanları

Biyoteknoloji, Yaşam Bilimleri, Biyoinformatik, Mühendislik ve Teknoloji

## Akademik Unvanlar / Görevler

Dr. Öğr. Üyesi, Marmara Üniversitesi, Mühendislik Fakültesi, Biyomühendislik Bölümü, 2019 - Devam Ediyor

## Verdiği Dersler

Biostatistics, Lisans, 2020 - 2021, 2019 - 2020, 2018 - 2019  
System Biology, Yüksek Lisans, 2020 - 2021, 2019 - 2020  
Bioconversion of Lignocellulosics, Lisans, 2020 - 2021, 2017 - 2018, 2016 - 2017  
Bioengineering Project II, Lisans, 2020 - 2021  
Modern Techniques in Biochemical Engineering , Lisans, 2020 - 2021, 2018 - 2019, 2017 - 2018  
Bioengineering Principles, Lisans, 2020 - 2021, 2019 - 2020  
Bioengineering Project I, Lisans, 2020 - 2021  
Mathematical Applications in Bioengineering Systems, Lisans, 2019 - 2020  
Regulation of Gene Expression, Doktora, 2020 - 2021  
Biomass and Biorefineries, Lisans, 2017 - 2018

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Lung Adenocarcinoma Systems Biomarker and Drug Candidates Identified by Machine Learning, Gene Expression Data, and Integrative Bioinformatics Pipeline**  
Soyer S. M., ÖZBEK SARICA P., KASAVI C.  
OMICS A Journal of Integrative Biology, cilt.28, sa.8, ss.408-420, 2024 (SCI-Expanded)
- II. **Identifying new molecular signatures and potential therapeutics for idiopathic pulmonary fibrosis: a network medicine approach**  
Akca M. N., KASAVI C.  
Mammalian Genome, 2024 (SCI-Expanded)
- III. **Exploring COVID-19 Pandemic Disparities with Transcriptomic Meta-analysis from the Perspective of Personalized Medicine**  
Kori M., KASAVI C., ARGAN K. Y.  
Journal of Microbiology, 2024 (SCI-Expanded)
- IV. **Idiopathic Pulmonary Arterial Hypertension: Network-Based Integration of Multi-Omics Data Reveals New Molecular Signatures and Candidate Drugs**  
KASAVI C.  
OMICS A Journal of Integrative Biology, cilt.27, sa.7, ss.315-326, 2023 (SCI-Expanded)
- V. **Gene co-expression network analysis revealed novel biomarkers for ovarian cancer**  
KASAVI C.  
FRONTIERS IN GENETICS, cilt.13, 2022 (SCI-Expanded)
- VI. **Genomic Analysis Provides New Insights Into Biotechnological and Industrial Potential of Parageobacillus thermantarcticus M1**  
YILDIZ S. Y., Finore I., Leone L., Romano I., Lama L., KASAVI C., Nicolaus B., TOKSOY ÖNER E., Poli A.  
FRONTIERS IN MICROBIOLOGY, cilt.13, 2022 (SCI-Expanded)
- VII. **Multimomics Data Integration Identifies New Molecular Signatures for Abdominal Aortic Aneurysm and Aortic Occlusive Disease: Implications for Early Diagnosis, Prognosis, and Therapeutic Targets**  
Kori M., Cig D., Argan K. Y., Kasavi C.  
OMICS A JOURNAL OF INTEGRATIVE BIOLOGY, cilt.26, sa.5, ss.1-15, 2022 (SCI-Expanded)
- VIII. **Developments in effective use of volatile organic compound analysis to assess flavour formation during cheese ripening**  
Yavuz M., KASAVI C., Oner E. T.

JOURNAL OF DAIRY RESEARCH, cilt.88, ss.461-467, 2021 (SCI-Expanded)

- IX. **Process development for the continuous production of heterologous proteins by the industrial yeast, *Komagataella phaffii***  
Cankorur-Cetinkaya A., Narraidoo N., Kasavi C., Slater N. K. H., Archer D. B., Oliver S. G.  
BIOTECHNOLOGY AND BIOENGINEERING, cilt.115, sa.12, ss.2962-2973, 2018 (SCI-Expanded)
- X. ***Halomonas smyrnensis* as a cell factory for co-production of PHB and levan**  
Tohme S., Haciosmanoğlu G. G., Eroğlu M. S., Kasavi C., Genç S., Can Z. S., Oner E. T.  
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, cilt.118, ss.1238-1246, 2018 (SCI-Expanded)
- XI. **The global transcriptional response of a raw starch-degrading amyolytic *Saccharomyces cerevisiae* strain to oxygen limitation and genetic modification**  
Kasavi C., Eraslan S., TOKSOY ÖNER E., KIRDAR B.  
TURKISH JOURNAL OF BIOLOGY, cilt.40, sa.3, ss.684-723, 2016 (SCI-Expanded)
- XII. **An integrative analysis of transcriptomic response of ethanol tolerant strains to ethanol in *Saccharomyces cerevisiae***  
Kasavi C., Eraslan S., Oner E., Kirdar B.  
MOLECULAR BIOSYSTEMS, cilt.12, sa.2, ss.464-476, 2016 (SCI-Expanded)
- XIII. **A system based network approach to ethanol tolerance in *Saccharomyces cerevisiae***  
Kasavi C., Eraslan S., ARĞA K. Y., Oner E. T., KIRDAR B.  
BMC SYSTEMS BIOLOGY, cilt.8, 2014 (SCI-Expanded)
- XIV. **Evaluation of industrial *Saccharomyces cerevisiae* strains for ethanol production from biomass**  
Kasavi C., Finore I., Lama L., Nicolaus B., Oliver S. G., Oner E. T., KIRDAR B.  
BIOMASS & BIOENERGY, cilt.45, ss.230-238, 2012 (SCI-Expanded)
- XV. **Identification of candidate genes related to ethanol tolerance in *Saccharomyces cerevisiae* via a systems based modular approach**  
Kasavi C., ARĞA K. Y., Oner E. T., KIRDAR B.  
NEW BIOTECHNOLOGY, cilt.29, 2012 (SCI-Expanded)
- XVI. **Investigating the transcriptional differences of amyolytic *Saccharomyces cerevisiae* strains developed for bioethanol production via a systems based approach**  
Kasavi C., Oner E. T., Oliver S. G., KIRDAR B.  
NEW BIOTECHNOLOGY, cilt.29, 2012 (SCI-Expanded)
- XVII. **Purification, biochemical characterization and gene sequencing of a thermostable raw starch digesting alpha-amylase from *Geobacillus thermoleovorans* subsp *stromboliensis* subsp nov.**  
Finore I., Kasavi C., Poli A., Romano I., Oner E. T., KIRDAR B., Dipasquale L., Nicolaus B., Lama L.  
WORLD JOURNAL OF MICROBIOLOGY & BIOTECHNOLOGY, cilt.27, sa.10, ss.2425-2433, 2011 (SCI-Expanded)
- XVIII. **Comparison of industrial *Saccharomyces cerevisiae* strains for second generation bioethanol production**  
Kasavi C., Finore I., Nicolaus B., Oner E. T., Kirdar B., Oliver S. G.  
NEW BIOTECHNOLOGY, cilt.25, 2009 (SCI-Expanded)

## **Diğer Dergilerde Yayınlanan Makaleler**

- I. **Potential biomarkers for lung adenocarcinoma identified by integrative transcriptomics analysis**  
KASAVI C.  
Biotech Studies, cilt.30, sa.1, ss.33-42, 2021 (Hakemli Dergi)
- II. **Use of Agro Waste Biomass for  $\alpha$ -Amylase Production by *Anoxybacillus amyolyticus*: Purification and Properties**  
Finore I., Di Donato P., Poli A., KIRDAR B., KASAVI C., TOKSOY ÖNER E., Nicolaus B., Lama L.  
JOURNAL OF MICROBIAL & BIOCHEMICAL TECHNOLOGY, cilt.6, sa.6, ss.320-326, 2014 (Hakemli Dergi)

## Kitap & Kitap Bölümleri

### I. Research and Production of Microbial Polymers for Food Industry

Selvi S. S., Eminagic E., Kandur M. Y., Ozcan E., Kasavi C., Toksoy Öner E.

Bioprocessing for Biomolecules Production, Gustavo Molina, Vijai Gupta, Brahma Singh, Nicholas Gathergood, Editör, John Wiley & Sons, West Sussex, UK , New-Jersey, ss.211-238, 2019

## Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

### I. Implications of Machine Learning Approaches in Cancer for Biomarker Discovery: Oversampling and Feature Selection

Soyer S. M., Özbek Sarica P., Kasavi C.

5th International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2024), Ankara, Türkiye, 26 - 28 Haziran 2024

### II. Identification of Molecular Signatures and Therapeutic Targets for COVID-19 and PAH through Multiomics Data Integration

Çığ D., Kasavi C.

9th International BAU Drug Design Congress, İstanbul, Türkiye, 29 Kasım - 02 Aralık 2023, ss.165

### III. MicroRNA-Based Drug Repositioning Revealed Candidate Drugs for Abdominal Aortic Aneurysm

Çığ D., Tutar E., Peker Eyüboğlu I., Kori M., Çelik F. B., Çalışkan M., Erzik C., Yılmaz B., Arga K. Y., Kasavi C.

5th Eurasia Biochemical Approaches & Technologies Congress (EBAT), Antalya, Türkiye, 2 - 05 Kasım 2023, ss.68

### IV. Molecular Substrates of COVID-19 and Pulmonary Arterial Hypertension Identified Through Signalling Network Construction

Cig D., KASAVI C.

6th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2023), Ankara, Türkiye, 11 - 13 Ekim 2023, ss.429

### V. Analysis of multi-omics data revealed candidate drugs for COVID-19

Cig D., KASAVI C.

16th International Symposium on Health Informatics and Bioinformatics (HIBIT), Ankara, Türkiye, 4 - 06 Ekim 2023

### VI. İdiyopatik pulmoner fibrozise yönelik moleküler belirteçlerin sistem biyolojisi yaklaşımları ile belirlenmesi

AKÇA M. N., KASAVI C.

25. Ulusal Biyoloji Kongresi, İzmir, Türkiye, 13 - 15 Temmuz 2023, ss.199

### VII. Identification of common signatures in pulmonary diseases by bioinformatic analysis

KASAVI C.

International Congress of Multidisciplinary Medical and Health Sciences Studies, Ankara, Türkiye, 27 Mayıs 2023

### VIII. Microbial and Enzymatic Production of Halomonas Levan

KIRTEL O., KASAVI C., TOKSOY ÖNER E.

IX. International Fructan Symposium, İstanbul, Türkiye, 10 Ekim 2022

### IX. Biyoinformatik analizlerle COVID-19 ve pulmoner arteriyel hipertansiyon ile ilişkili aktif modüllerin belirlenmesi

Cig D., KASAVI C.

11. Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Online, Türkiye, 08 Ekim 2022

### X. Differential co-expression network analysis revealed a novel prognostic module in thyroid cancer

KASAVI C.

2nd International Symposium of Scientific Research and Innovative Studies (ISSRIS'22), Online, Türkiye, 02 Mart 2022

### XI. A System-based network approach to identify prognostic biomarker candidates for lung adenocarcinoma

KASAVI C.

4. Uluslararası Erciyes Bilimsel Araştırmalar Kongresi, Kayseri, Türkiye, 16 Ekim 2020

**XII. Investigation of Transcriptional Response to Ethanol Stress in *Saccharomyces cerevisiae***

KASAVI C., ERASLAN S., TOKSOY ÖNER E., KIRDAR B.

2nd Applied Synthetic Biology in Europe, Malaga, İspanya, 25 - 27 Kasım 2013

**XIII. A systems based approach to understand transcriptional differences of amyolytic *saccharomyces cerevisiae* strains developed for bioethanol production**

Kasavi C., Oner E. T., Kirdar B.

22nd IUBMB Congress/37th FEBS Congress, Sevilla, İspanya, 4 - 09 Eylül 2012, cilt.279, ss.521-522

**XIV. Investigation of the Response to Ethanol Stress in *Saccharomyces cerevisiae***

KASAVI C., TOKSOY ÖNER E., KIRDAR B.

Microbial Stress: from Molecules to Systems (second meeting organized by European Federation of Biotechnology Section on Microbial Physiology), Belgirate, İtalya, 10 - 13 Mayıs 2012

**XV. Genomic Comparison of Ethanol Tolerance Genes of Industrial *Saccharomyces cerevisiae* Strains**

KASAVI C., TOKSOY ÖNER E., KIRDAR B.

EMBO (European Molecular Biology Organization) Conference on Comparative Genomics of Eukaryotic Microorganisms: Understanding the Complexity of Diversity, San Feliu de Guixols, İspanya, 15 - 20 Ekim 2011

**XVI. Systems Based Modular Approach to Analyze Ethanol Tolerance in *Saccharomyces cerevisiae***

KASAVI C., TOKSOY ÖNER E., KIRDAR B.

12th International Conference on Systems Biology, Mannheim, Almanya, 28 Ağustos - 01 Eylül 2011

**XVII. Genomic Comparison of Ethanol Tolerances of Industrial *Saccharomyces cerevisiae* Strains**

KIRDAR B., KASAVI C., TOKSOY ÖNER E.

11th International Conference on Systems Biology, Edinburgh, Saint Helena, 10 - 15 Ekim 2010

**XVIII. Fermentation Performances of Industrial Yeast Strains in Second Generation Bioethanol Production**

KASAVI C., Finore I., Nicolaus B., TOKSOY ÖNER E., KIRDAR B., Oliver S. G.

International Symposium on Biotechnology: Developments and Trends, Ankara, Türkiye, 27 - 30 Eylül 2009

**XIX. Analysis of Dynamic Expression Profiles Using Pre-processed Quantitative PCR Data**

CANKORUR ÇETİNKAYA A., KASAVI C., KIRDAR B.

International Symposium on Biotechnology: Developments and Trends, Ankara, Türkiye, 27 - 30 Eylül 2009

## Desteklenen Projeler

Kasavi C., Soyer S. M., Yükseköğretim Kurumları Destekli Proje, Glioma Alt Türlerine Özgü Aday Biyobelirteç ve Terapötiklerin Belirlenmesi için Makine Öğrenmesi Yöntemleri, 2024 - 2025

Toksoy Öner E., Kasavi C., Yıldız S. Y., TÜBİTAK Uluslararası İkili İşbirliği Projesi, Biyorafineri Yaklaşımları ve Termozimlerle Ksilan İçerikli Biyokütlenin Değerlendirilmesi, 2023 - 2025

Kasavi C., Arğa K. Y., Erzik C., Çalışkan M., Yılmaz B., TÜBİTAK Projesi, Abdominal aort anevrizmasının erken teşhis ve tedavisine yönelik biyobelirteç ve ilaç adayların belirlenmesi, 2021 - 2023

Orešič M., Gonzalez E., Eerola T., Rousu J., Aldana J., Greiner-Stöfle T., Oliver S., Kasavi C., 7. Çerçeve Programı Projesi, BIOLEDGE (BIO knowLEDGe Extractor and Modeller for Protein Production), 2011 - 2015

Kirdar B., TÜBİTAK Projesi, Kafein Ve Rapamisinin Yaşam Kalitesi Ve Süresi Üzerine Etkilerinin Sistem Bazlı Bir Yaklaşım ile İncelenmesi, 2011 - 2014

Toksoy Öner E., Kirdar B., TÜBİTAK Projesi, Yüksek Verimli Biyo-Yakıt Üretimi İçin Sistem Bazlı in-silico Model Geliştirilmesi ve Fabrika Hücrelerin Akılcı Tasarımı, 2007 - 2010

## Öğrenci Projeleri

Ar-Ge Projesi, Polikistik Over Sendromu için Sistem Biyolojisi Yaklaşımı ile Farklı Seviyelerde Biyolojik Moleküller Üzerinden İlaç Repozisyonu , Marmara Üniversitesi, Mühendislik Fakültesi, Biyomühendislik Bölümü, Türkiye, 2023 -

Devam Ediyor

Ar-Ge Projesi, Transkriptomik Verilerin Genom-Seviyeli Biyolojik Modeller ile Bütünleşik İncelenmesi Sonucunda Pulmoner Arteriyel Hipertansiyon Hastalığına Yönelik Biyobelirteç Adaylarının Belirlenmesi, Marmara Üniversitesi, Mühendislik Fakültesi, Biyomühendislik Bölümü, Türkiye, 2021 - 2022

## **Metrikler**

Yayın: 41

Atf (WoS): 132

Atf (Scopus): 205

H-İndeks (WoS): 6

H-İndeks (Scopus): 7

## **Akademi Dışı Deneyim**

Cambridge University