

ÖZGEÇMİŞ

1. **Adı Soyadı:** Fatma Gizem AVCI
2. **Doğum Tarihi:** 26 Nisan 1988
3. **Unvanı:** Dr.
4. **Öğrenim Durumu:**

Derece	Alan	Üniversite	Yıl
Lisans	Biyomühendislik	Ege Üniversitesi	2010
Y. Lisans	Biyomühendislik	Ege Üniversitesi	2013
Doktora	Biyomühendislik	Marmara Üniversitesi	2018

5. Yayınlar

5.1. Uluslararası hakemli dergilerde yayınlanan makaleler (SCI & SSCI & Arts and Humanities)

1. Altinisik Kaya FE, **Avci FG**, Sayar NA, Kazan D, Sayar A, Sariyar Akbulut B, 2018, What are the multi-omics mechanisms for adaptation by microorganisms to high alkalinity? A transcriptomic and proteomic study of a *Bacillus* strain with industrial potential. *OMICS: A Journal of Integrative Biology*, 22(11):717-732.
2. **Avci FG**, Sariyar Akbulut B, Ozkirimli E, 2018, Membrane active peptides and their biophysical characterization (Review). *Biomolecules*, 8(3):77.
3. **Avci FG**, Altinisik FE, Karacan I, Senturk Karagoz D, Ersahin S, Eren A, Sayar NA, Vardar Ulu D, Ozkirimli Olmez E, Sariyar Akbulut B, 2018, Targeting a hidden site on class A beta-lactamases. *Journal of Molecular Graphics and Modelling*, 84:125-133.
4. **Avci FG**, Sayar NA, Sariyar Akbulut B, 2018, An OMIC approach to elaborate the antibacterial mechanisms of different alkaloids. *Phytochemistry*, 149:123-131.
5. Ayyildiz D, Arga KY, **Avci FG**, Altinisik FE, Gurer C, Gulsoy G, Wozny K, Bruegger B, Mertoglu B, Kazan D, Sariyar-Akbulut B, 2016, Transcriptomic analysis displays the effect of (-)-roemerine on the motility and nutrient uptake in *Escherichia coli*. *Current Genetics*, 63(4):709-722.
6. Budeyri Gokgoz N*, **Avci FG***, Karaosmanoglu Yoneten K, Alaybeyoglu B, Ozkirimli Olmez E, Sayar NA, Kazan D, Sariyar Akbulut B, 2017, Response of *Escherichia coli* to prolonged berberine exposure. *Microbial Drug Resistance*, 23(5):531-544 (*Eşit katkılı yazar).
7. **Avci FG**, Altinisik FE, Vardar Ulu D, Ozkirimli Olmez E, Sariyar Akbulut B, 2016, An evolutionarily conserved allosteric site modulates beta-lactamase activity. *Journal of Enzyme Inhibition and Medicinal Chemistry*, 31(S3):33-40.
8. Maervoet VET, De Maeseneire SL, **Avci FG**, Beauprez J, Soetaert WK, De Mey M, 2016, High yield 1,3-propanediol production by rational engineering of the 3-hydroxypropionaldehyde bottleneck in *Citrobacter werkmanii*. *Microbial Cell Factories*, 15:23.
9. Maervoet VET, De Maeseneire SL, **Avci FG**, Beauprez J, Soetaert WK, De Mey M, 2014, 1,3-propanediol production with *Citrobacter werkmanii* DSM17579: effect of a dhaD knock-out. *Microbial Cell Factories*, 13:70.
10. **Avci FG**, Huccetogullari D, Azbar N, 2014, The effect of cell recycling on the production of 1,3-propanediol by *Klebsiella pneumoniae*. *Bioprocess and Biosystems Engineering*, 37:513-519.

5.2. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitabında (*Proceedings*) basılan bildiriler

1. Aksoy CS, Avci FG, Ugurel OM, Sayar NA, Sariyar-Akbulut B, 2018, Inhibition of berberine efflux by natural products to potentiate its activity in *Staphylococcus aureus* (Poster), EMBO Workshop: Bacterial Persistence and Antimicrobial Therapy, 10-14 Haziran 2018, Ascona/İsviçre.
2. Sariyar-Akbulut B, Atas B, Aksoy S, Avci FG, Sayar AA, 2017, Evaluation of active natural products as bacterial efflux pump inhibitors (Poster), EpiChemBio (CM1406) and MuTaLig COST (CA15135) actions joint annual meeting, 22-24 Eylül 2017, Porto/Portekiz.
3. Avci FG, Guillerminet M, Orelle C, Jault JM, Sariyar Akbulut B, 2017, Roemerine: A new multidrug resistance pump inhibitor? (Poster), 7th Congress of European Microbiologists (FEMS), 9-13 Temmuz 2017, Valencia/İspanya.
4. Avci FG, Velioglu C, Recber E, Unsal C, Gulsoy G, Sariyar-Akbulut B, 2016, Evaluation of Roemerine as a Multidrug Resistance Pump Inhibitor, 41st Federation of European Biochemical Societies (FEBS) Congress, 3-8 Eylül 2016, Kuşadası/Türkiye.
5. Altinisik FE, Avci FG, Sariyar-Akbulut, B, Denizci AA, Kazan D, 2016, Understanding alkaliphilic adaptation of *B. marmarensis* sp. nov. (Poster), 41st Federation of European Biochemical Societies (FEBS) Congress, 3-8 Eylül 2016, Kuşadası/Türkiye.
6. Ayyildiz, D, Avci FG, Arga KY, Sariyar-Akbulut B, 2016, (-)-Roemerine limits carbohydrate uptake which leads to alternative nutrients as acetyl-CoA sources (Sözlü), 41st Federation of European Biochemical Societies (FEBS) Congress, 3-8 Eylül 2016, Kuşadası/Türkiye.
7. Avci FG, Sariyar-Akbulut B, 2016, Evaluation the effect of plant-derived natural products on *Bacillus subtilis* 168 proteome (Poster), FEBS-IUBMB Workshop on Biointeractomics: from bimolecular interactions to networks, 17-20 Mayıs 2016, Seville/İspanya.
8. Altinisik FE, Avci FG, Sariyar-Akbulut B, Denizci AA, Kazan D, 2016, Investigation of proteome profile of alkaliphilic *Bacillus marmarensis* sp nov under different pH conditions (Poster), FEBS-IUBMB Workshop on Biointeractomics: from bimolecular interactions to networks, 17-20 Mayıs 2016, Seville/İspanya.
9. Ayyildiz D, Avci FG, Budeyri-Gokgoz N, Arga KY, Sayar NA, Kazan D, Wozny K, Bruegger B, Sariyar-Akbulut B, 2016, The plant derived alkaloid roemerine is involved in the modulation of motility in *Escherichia coli* (Poster), Biophysical Society 60th Annual Meeting, 27 Şubat-2 Mart 2016, Los Angeles/Amerika.
10. Avci FG, Sariyar Akbulut, B, 2015, Effect of three aporphine alkaloids on *Bacillus subtilis* 168 (Poster), The 29th Annual Symposium of the Protein Society, 22-25 Temmuz 2015, Barselona/İspanya.
11. Altinisik FE, Avci FG, Sariyar Akbulut B, Ozkirimli Olmez E, Vardar Ulu D, Karacan İ, Senturk D, 2015, Mutations of a conserved tryptophan residue of the TEM-1 β -lactamase (Poster), The 29th Annual Symposium of the Protein Society, 22-25 Temmuz 2015, Barselona/İspanya.
12. Avci FG, Ozkirimli Olmez E, Sariyar Akbulut B, 2014, The importance of a conserved residue of the H10 helix in beta-lactamase (Poster), 16th European Congress on Biotechnology, 13-16 Temmuz 2014, Edinburgh/İskoçya.
13. Avci FG, Ozkirimli Olmez E, Sariyar Akbulut B, 2013, Investigation of an Allosteric Site of R-TEM-1 beta-lactamase (Poster), 6th International Bioengineering Congress, 12-15 Kasım 2013, Kuşadası/Türkiye.
14. Gezgin Y, Sargın S, Eltem R, Vardar-Sukan F, Bakı B, Avci G, İltüzer H, Satılmış S, 2010, Determination of Optimum Conditions for *Trichoderma* Micropropagules Production in Shake Flasks

and Static Culture (Poster), 5th International Bioengineering Congress, 16-20 Haziran 2010, İzmir/Türkiye.

6. Projeler

1. Aporfine Sınıfına Ait Alkaloitlerin İn vitro ve İn siliko Yöntemlerle Farklı Sınıflara Ait İlaç Atım Pompalarına İnhibitör Olarak Değerlendirilmeleri (Araştırmacı). FEN-B-120917-0534 (M.Ü. BAPKO), 12/09/2017- Devam ediyor (24 ay).
2. Antimikrobiyal Özelliğe Sahip Farklı Alkaloitlerin Hücre İçi Hedeflerinin Gerçek Zamanlı Polimeraz Zincir Reaksiyonu ve Mikrodizi Teknolojileri İle Belirlenmesi (Araştırmacı). FEN-A-050614-0238 (M.Ü. BAPKO), 05/06/2014-15/11/2016.
3. Antimikrobiyel Ajanların Etkisini Anlamak İçin Sistem Biyolojisi Yaklaşımı ile Birleştirilmiş OMİK Verilerin Analizi (Bursiyer), TUBİTAK: MAG-113M052, 01/02/2014-25/10/2017.
4. Beta Laktamaz Alosterik Bölgesinin Ligand Tanıma ve Bağlanmaya Etkisinin İncelenmesi (Bursiyer), TUBİTAK: MAG-113M533, 15/07/2013-15/07/2014.

7. Bilimsel ve Mesleki Kuruluşlara Üyelikler

Türk Mikrobiyoloji Cemiyeti

8. Ödüller/Burslar

2018- FEMS Araştırma Bursu (3 ay)- Lyon Üniversitesi (CNRS), Fransa

2012- ERASMUS Öğrenci-Öğrenim Hareketliliği (3 ay)- Gent Üniversitesi, Belçika