

ÖZGEÇMİŞ

T.C. 26489004216

Telefon: +90 544 731 20 45

E-mail: bestenuryalcin@gmail.com

Adı Soyadı: Bestenur YALÇIN

Doğum Tarihi: 1984

Unvanı: Dr. Öğretim Üyesi (2019-Devam)

Bahçeşehir Üniversitesi – SHMYO

Öğrenim Durumu:

Derece	Bölüm/Program	Üniversite	Yıl
Lisans	Kimya Mühendisliği	İstanbul Üniversitesi	2006
Yüksek Lisans	Kimya Mühendisliği (Kimyasal Teknolojiler ABD)	İstanbul Üniversitesi	2009
Doktora	Kimya	İstanbul Teknik Üniversitesi	2018

Akademik Unvanlar

Bahçeşehir Üniversitesi

Mühendislik ve Doğa Bilimleri Fakültesi – Araştırma Görevlisi 2009 – 2019

Bahçeşehir Üniversitesi

Sağlık Hizmetleri Meslek Yüksek Okulu – Dr. Öğretim Üyesi 2019 – devam

Üniversiteler Arası Kurul – Doçent (Kimya Mühendisliği Temel Bilim Alanı) – 2023

Yayınlar

A-ULUSLARARASI YAYIN VE ETKİNLİKLER

3. SCI/SCIE/ SSCI/AHCI kapsamındaki dergilerde yayınlanmış

a) Özgün araştırma, makale, derleme

A3_a14: Yalcin, B., Arda, L., Yalcin, I. E., Senturk, K., Alphan, M. C., Akcan, D., & Ozyigit, I. I. (2023). Exploration of the improving effect of Cd-doping on structural, photocatalytic, and biological properties of ZnO nanoparticles. *Journal of Nanoparticle Research*, 25(7), 146.

A3_a13: Senturk, K., Yalcin, B., Yalcin, I. E., Alphan, M. C., Sengul, M. S., Tav, C, ... & Arda, L. (2023). The role of defects in the structural and photocatalytic properties of Mg/B co-doped ZnO nanoparticles. *Journal of Materials Science: Materials in Electronics*, 34(9), 847.

A3_a12: I., Dogan, I., Hocaoglu-Ozyigit, A., Yalcin, B., Erdogan, A., Yalcin, I. E., ... & Kaya, Y. (2023). Production of secondary metabolites using tissue culture-based biotechnological applications. *Frontiers in Plant Science*, 14.

A3_a11: Yalcin, B. (2022). Exploration of the potential of Co/Cu co-doped Fe₂O₄ for medical applications: nanostructure, catalytic properties, and blood compatibility. *Journal of Nanoparticle Research*, 24(12), 271.

A3_a10: Endeşav, C., **Yalçın, B.**, Şimşek, C., & Erbil, C. (2022). Tuning Compressive Young's Moduli and Antibacterial Activities of Alginate/Poly (N-isopropylacrylamide) Hydrogels with Laponite Layers and Cerium Ions. *ACS omega*, 7(40), 35792-35804.

A3_a9: Sabah C.K., **Yalçın B.**, Şimşek C., Gürsel Y.H., Erbil C. (2022) Improved mechanical properties of antimicrobial poly (N-[3-(dimethylaminopropyl)] methacrylamide) hydrogels prepared by free radical polymerization in the presence of cetyltrimethylammonium bromide as a lyotropic liquid crystal template. *Soft Matter*, 18(21), 4156-4166.

A3_a8: **Yalçın B.**, Ozcelik S., Icin K., Senturk K., Ozcelik B., Arda L. (2021) Structural, optical, magnetic, photocatalytic activity and related biological effects of CoFe₂O₄ ferrite nanoparticles. Structural, optical, magnetic, photocatalytic activity and related biological effects of CoFe₂O₄ ferrite nanoparticles. *Journal of Materials Science: Materials in Electronics*, 32(10), 13068-13080. <https://doi.org/10.1007/s10854-021-05752-6>

A3_a7: Ozyigit I.I., Arda L., **Yalçın B.**, Yalçın I.E., Ucar B., Hocaoglu-Ozyigit A. (2021) Lemna minor, a hyperaccumulator shows elevated levels of Cd accumulation and genomic template stability in binary application of Cd and Ni: a physiological and genetic approach. *International Journal of Phytoremediation*, 23(12), 1255-1269. <https://doi.org/10.1080/15226514.2021.1892586>.

A3_a6: Ozcelik S., **Yalçın B.**, Arda L., Santos H., Sáez-Puche R., Angurel L., de la Fuente G., Özçelik B. (2020) Structure, Magnetic, Photocatalytic and Blood Compatibility Studies of Nickel Nanoferrites Prepared by Laser Ablation Technique in Distilled Water. *Alloys and Compounds* 854, 157279. <https://doi.org/10.1016/j.jallcom.2020.157279>

A3_a5: Sanal I., **Yalçın B.**, Yalçın I.E., Arda L. (2021) Application of Poly(Vinyl Acetate) and Poly(1,4-Butylene Adipate) Hydrophobic Surface Coatings on Cementitious Mortar Specimens, *Techno-Press Journals, Advances in Concrete Construction, An International Journal*, 11(4), 323-333, <https://doi.org/10.12989/acc.2021.11.4.323>.

A3_a4: Senol S.D., **Yalçın B.**, Ozugurlu E., Arda L. (2020) Structure, microstructure, optical and photocatalytic properties of Mn-doped ZnO nanoparticles. *Materials Research Express*, 7(1), 015079. <https://doi.org/10.1088/2053-1591/ab5eea>

A3_a3: **Yalçın B.**, Akcan D., Yalçın I.E., Alphan M.C., Senturk K., Ozyigit I.I, Arda L. (2020) Effect of Mg doping on morphology, photocatalytic activity and related biological properties of Zn_{1-x}Mg_xO nanoparticles. *Turkish Journal of Chemistry*, 44, 1177-1199. doi:10.3906/kim-2004-9

A3_a2: **Yalçın B.**, Erbil C. (2018) Effect of sodium hydroxide solution as polymerization solvent and activator on structural, mechanical and antibacterial properties of PNIPAAm and P (NIPAAm-clay) hydrogels. *Polymer Composites*, 39, E386-E406. <https://doi.org/10.1002/pc.24490>

A3_a1: Gürdağ, G., **Kurtulus, B.** (2010) Synthesis and Characterization of Novel Poly (N-isopropylacrylamide-co-N, N'-dimethylaminoethyl methacrylate sulfate) Hydrogels. *Industrial & Engineering Chemistry Research*, 49(24), 12675-12684. <https://doi.org/10.1021/ie101577r>

B- ULUSAL YAYIN ve ETKİNLİKLER

3.TÜBİTAK-ULAKBİM Ulusal veri tabanlarında taranan yurt içi hakemli dergilerde yayınlanmış a) Özgün, araştırma, makale

B3_a1: **Yalçın B.** (2022) ZnMnCuO Nanoparçacıkların Karakterizasyonu: Fotokatalitik ve Hemolitik Özellikler. *Journal of Advanced Research in Natural and Applied Sciences*, 8(3), 429-442. <https://doi.org/10.28979/jarnas.1064592>

4. TÜBİTAK-ULAKBİM Ulusal veri tabanlarında dergiler haricinde yer alan yurt içi hakemli dergilerde yayınlanmış

c) Özgün, araştırma, makale

B4_c1: Ozyigit, I, Abakirova, A., Hocaoglu-Ozyigit, A., Kurmanbekova, G., Chekirov, K., Yalcin, B., Yalcin, I.E. (2021) Cadmium stress in barley seedlings: Accumulation, growth, anatomy and physiology. International Journal of Life Sciences and Biotechnology, 4(2), 204-223. <https://doi.org/10.38001/ijlsb.833611>

6. Ulusal ve uluslararası katılımlı bilimsel toplantılarda

a) Sözlü sunulan ve tam metni ya da özeti yayınlanan bildiri

B6_a10: Yalçın B., “Synthesis And Investigation of Chitosan Loaded Zinc-Alginate Beads”, International Congress on Engineering And Sciences, 18-19 March 2023.

B6_a9: Yalçın B., “Synthesis and Investigation of PEG incorporated Cu²⁺- Alginate Gels for Medical Uses: Hemolytic Potential and Antibacterial Properties”, 2nd International Congress on Multidisciplinary Natural Sciences and Engineering, 1-2 December, 2022.

B6_a8: Yalçın B., “Material Properties, Photocatalytic and Hemolytic Study of CoCuFe₂O₄ Synthesized by Co-Precipitation” II International Biology Congress, Bishkek, Kyrgyzstan, 18-20 May 2022.

B6_a7: Yalçın B., “Characterization of Copper-Manganese Co-Doped ZnO Nanoparticles: Photocatalytic And Hemolytic Properties” International Marmara Sciences Congress (IMASCON-Autumn 2021) Kocaeli/Turkiye, 10-11 December 2021

B6_a6: Alphan, M., Yalçın, B., Senturk, K., Yalcin, I.E., Akcan, D., Arda, L., “Structure, Optical and Biological Properties of Mn-Doped ZnO Nanoparticles” International Conference on Condensed Matter and Materials Science (ICCMMS-2019), Adana/Turkiye, 14-19 October 2019

B6_a5: Akcan, D., Yalçın, B., Senturk, K., Yalcin, I.E., Alphan, M., Guler, A., Boyraz, C., Arda, L., “Preparation, Growth, And Optical Properties Of (Cu/Co) Co-Doped ZnO Thin Films” International Conference on Condensed Matter and Materials Science (ICCMMS-2019), Adana/Turkiye, 14-19 October 2019

B6_a4: Gungor, A., Akcan, D., Yalçın, B., Senturk, K., Yalcin, I.E., Alphan, M., Arda, L., “Structural, optical and magnetic properties of Cu/Ni co-doped ZnO Films” International Conference on Condensed Matter and Materials Science (ICCMMS-2019), Adana/Turkiye, 14-19 October 2019.

B6_a3: Yalçın, B., Arda, L., “ZnO Nanoparticles: Effect of Cd Doping on Structural and Biological Properties” International Conference on Condensed Matter and Materials Science (ICCMMS-2019), Adana/Turkiye, 14-19 October 2019

B6_a2: Yalçın, B., Erbil, C., "Effect of Cationic and Zwitterionic Comonomers on Mechanical Properties and Swelling Behaviours of Traditional and Composite PNIPAAm Hydrogels" 4th. International Polymeric Composites Symposium, Exhibition & Brokerage Event, İzmir/ Turkiye 7-9 May 2015.

B6_a1: Kurtulus B., Akcan D., Arda L., Okten H. E., Kurt Karakus P., Demir G., Coban A., Yalcin I. E., Uyanik O. L., Proposal for Color and Heavy Metal Removal from Textile Wastewater by Crosslinked Polyelectrolyte Composite Membranes, Istanbul International Solid Waste, Water and Wastewater Congress 2013.

b) Tam metni ya da özeti yayınlanan poster

B6_b1: Kurtulus, B., Erbil, C., "Synthesis of PNIPAAm-based composite hydrogels in NaOH solution" International Porous and Powder Materials Symposium and Exhibition Cesme-Izmir/ Turkiye, 3-6 September 2013

B6_b2: Kozbekçi, C., Yalçın, B., Gürsel, Y., Erbil, C., "Influence of Polymerization Conditions on Nanostructure, Mechanical Strength and Antibacterial Activity of Poly(N-[3-(dimethylamino)propyl] methacrylamide) Hydrogels Templated From CTAB and TMSA-MMT" 2nd International Advanced and Functional Materials Technologies (AFMAT), Antalya/Turkiye, 20-22 October 2016

B6_b3: Kozbekçi, C., Yalçın, B., Gürsel, Y., Erbil, C., "Antibacterial properties of cethyltrimethylammonium bromide loaded and mechanically improved poly(N-[3- (dimethyl amino)propyl] methacrylamide) (PDMAAPMAAm) hydrogels" IUPAC-sponsored 16th International Conference Polymers and Organic Chemistry (POC' 16) Greece, 13-16 June 2016

B6_b4: Endeşav, Ç., Yalçın, B., Erbil, C., "Poly (N-isopropylacrylamide) Interpenetrating Networks Reinforced with Laponite RD" 4th. International Polymeric Composites Symposium, Exhibition & Brokerage Event, İzmir/ Turkiye, 7-9 May 2015

Hirsch-Index (HI): 5

Projeler

BAHÇEŞEHİR ÜNİVERSİTESİ BİLİMSEL ARAŞTIRMA PROJELERİ BİRİMİ Çeşitli Polimerle Modifiye Edilmiş Betonların ve Beton Yüzey Kaplamalarının Su Geçirmezlik Performanslarının İncelenmesi. Proje No: BAP.2019.01.02, **Araştırmacı**, 2019

TÜBİTAK 1002 – HIZLI DESTEK PROGRAMI Poli (N-[3-(dimetilamino)propil]metakrilamid) Hidrojellerinin Mekanik ve Antimikrobiyal Özelliklerinin İyileştirilmesi Üzerindeki Bileşimsel Etkiler. Proje No: 115Z876, **Araştırmacı**, 2015

İTÜ BİLİMSEL ARAŞTIRMA PROJELERİ BİRİMİ Temel Bileşeni N-izopropilakrilamid Olan Özellikleri Değiştirilmiş Kompozit Hidrojellerin Şişme, İlaç Salım ve Mekanik Davranışlarının İncelenmesi. Proje No: 37746, **Araştırmacı**, 2014

Bilimsel Kuruluşlara Üyelikler-Görevler

Frontiers in Life Sciences and Related Technologies Dergisi - Yazım ve Dil Editörü

Patentler

“ZnO KATKILI KİL İÇERİKLİ PNIPAAm NANOKOMPOZİT HİDROJEL İÇEREN BİTKİ DOKU KÜLTÜR ORTAMI”

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