

BURCU OKTAY

ASSOC. PROF.

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International Researcher IDs

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Publons / Web Of Science ResearcherID: N-9755-2018

ScopusID: 55469090200

Yoksis Researcher ID: 237249



Biography

Burcu Oktay 2009 yılında Kocaeli Üniversitesi Kimya bölümünden mezun oldu. Marmara Üniversitesinde yüksek lisans ve doktora öğrenimlerini tamamladı. 2015 yılında Marmara Üniversitesi Kimya Bölümünde göreve başladı. 2020 yılında doçent ünvanını aldı. Başlıca çalışma konuları arasında kontrollü polimerizasyon teknikleri, ışıkla sertleşen fonksiyonel kaplamalar, fonksiyonel enerji depolama malzemeleri, nanofiberler ve yüzey modifikasyonları yer almaktadır.

Learning Knowledge

Doctorate 2011 - 2015	Marmara University, Institute for Graduate Studies in Pure and Applied Sciences, Organik Kimya (Dr), Turkey
Postgraduate 2009 - 2011	Marmara University, Institute for Graduate Studies in Pure and Applied Sciences, Organik Kimya (YI) (Tezli), Turkey
Undergraduate 2005 - 2009	Kocaeli University, Fen-Edebiyat Fakültesi, Kimya Bölümü, Turkey

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Elektrospin tekniği ile hazırlanan biyopolimer nanoliflerin yüzey modifikasyonları ve uygulamaları, Marmara Üniversitesi, Institute for Graduate Studies in Pure and Applied Sciences, Organik Kimya (Dr), 2015

Postgraduate, Gümüş nanoparçacıkları içeren antimikroiyal organik-inorganik hibrit kaplamaların hazırlanması ve karakterizasyonu, Marmara Üniversitesi, Institute for Graduate Studies in Pure and Applied Sciences, Organik Kimya (YI) (Tezli), 2011

Academic Titles / Tasks

Associate Professor

2020 - Continues

Marmara University, Faculty of Arts and Sciences, Chemistry

Lecturer PhD

2015 - 2021

Marmara University, Faculty of Arts and Sciences, Chemistry

Supported Projects

1. Oktay B., Project Supported by Higher Education Institutions, Biyoesashı Vitrimerlerin Hazırlanması ve Karakterizasyonu, 2022 - 2024
2. Oktay B., Project Supported by Higher Education Institutions, Biyobazlı Kendiliğinden Çapraz Bağlanabilen Fonksiyonel Polimerik Malzemelerin Geliştirilmesi, 2022 - 2023
3. Oktay B., Project Supported by Higher Education Institutions, Polietilen glikol-Yağ Asidi İçerikli Faz Değişim Malzemelerinin Kontrollü Polimerizasyon Teknikleri ile Hazırlanması, 2019 - 2021
4. Oktay B., Kayaman Apohan N., Project Supported by Higher Education Institutions, İyonik Sıvı Destekli PVDF Polielektrolitlerin Kontrollü Polimerizasyon ile Hazırlanması ve Karakterizasyonu, 2019 - 2020
5. Oktay B., Kayaman Apohan N., Project Supported by Higher Education Institutions, Çekirdek Kabuk Tipi Poliakrilat Hidroksi Apatit İlaç Taşıyıcıların Kontrollü Polimerizasyon ile Sentezi ve Karakterizasyon Çalışmaları, 2017 - 2019
6. Oktay B., Kayaman Apohan N., Project Supported by Higher Education Institutions, Atom Transfer Radikal Polimerizasyonu ile Yüzey Modifiye Poliviniliden florid (PVDF) Esashı Nanoliflerin Lityum İyon Pillerde Elektrolit Olarak Kullanımı, 2017 - 2019

Awards

1. Oktay B., Fen bilimleri 2018 yayın 1.lük ödülü, Marmara Üniversitesi, June 2019

Published journal articles indexed by SCI, SSCI, and AHCI

1. **Preparation of organic-inorganic bio-based epoxy coatings with high anti-corrosive performance**
Eral S., OKTAY B., Dizman C., KAYAMAN APOHAN N.
Polymer Bulletin, vol.81, no.8, pp.6873-6890, 2024 (SCI-Expanded)
2. **Self-healing and cell adhesion properties of dynamic and photo-crosslinking PEG-based dual networks soft hydrogels**
Yasar M., OKTAY B., Gurkan A. C., Apohan N. K.
Journal of Polymer Science, 2024 (SCI-Expanded)
3. **Vegetable oil-based epoxy coating materials for self-healing and anticorrosive applications**
Oktay B., Türkcan J. H., Özdemir O. K., Kayaman Apohan N.
Macromolecular Research, vol.31, no.11, pp.1077-1086, 2023 (SCI-Expanded)
4. **Fabrication of Eco-friendly Sustainable Superhydrophobic and Anticorrosive Coatings from Acrylated Soybean Oil and Biobased Amine by the Aza-Michael Reaction**
Güneş İ., Oktay B.
ACS SUSTAINABLE CHEMISTRY AND ENGINEERING, vol.11, no.42, pp.15253-15261, 2023 (SCI-Expanded)
5. **Development of self-healing vanillin/PEI hydrogels for tissue engineering**
Yasar M., Oktay B., Dal Yontem F., Haciosmanoglu Aldogan E., Kayaman Apohan N.
European Polymer Journal, vol.188, 2023 (SCI-Expanded)

6. **Poly(lactic acid) nanofibers containing phosphorylcholine grafts for transdermal drug delivery systems**
OKTAY B., Eroglu G. O., DEMİR S., KURUCA D. S., KAYAMAN APOHAN N.
MATERIALS TODAY SUSTAINABILITY, vol.18, 2022 (SCI-Expanded)
7. **Biodegradable Polyurethane Solid-Solid Phase Change Materials**
Oktay B., Kayaman Apohan N.
ChemistrySelect, vol.6, no.24, pp.6280-6285, 2021 (SCI-Expanded)
8. **Stimuli-responsive smart nanoparticles with well-defined random and triblock terpolymers for controlled release of an anticancer drug**
Koçal G., Oktay B., Eroğlu G. Ö., Kuruca S. E., Çubuk S., Kayaman Apohan N.
Materials Today Communications, vol.26, 2021 (SCI-Expanded)
9. **Polyurethane graphene nanocomposites with self-healing properties by azide-alkyne click reaction**
Akhan S., Oktay B., Özdemir O. K., Madakbaş S., Kayaman Apohan N.
Materials Chemistry and Physics, vol.254, 2020 (SCI-Expanded)
10. **Immobilization of pectinase on polyethyleneimine based support via spontaneous amino-yne click reaction**
OKTAY B., DEMİR S., Kayaman-Apohan N.
Food and Bioproducts Processing, vol.122, pp.159-168, 2020 (SCI-Expanded)
11. **Development of nanofiber based immunosorbent surface for the removal of fluoxetine from breast milk**
Tunali-Akbay T., Kahraman M. V., Oktay B., İpekçi H., Kayaman Apohan N.
International Journal of Polymeric Materials and Polymeric Biomaterials, vol.68, no.16, pp.947-955, 2019 (SCI-Expanded)
12. **Preparation of a Poly(ethylene glycol)-Based Cross-Linked Network from a Click Reaction for Enzyme Immobilization**
Oktay B., Demir S., Kayaman Apohan N.
CHEMISTRYSELECT, vol.4, no.20, pp.6055-6059, 2019 (SCI-Expanded)
13. **Designing Coconut Oil Encapsulated Poly(stearyl methacrylate-co-hydroxyethyl metacrylate) Based Microcapsule for Phase Change Materials**
OKTAY B., Basturk E., KAHRAMAN M. V., Apohan N.
CHEMISTRYSELECT, vol.4, no.17, pp.5110-5115, 2019 (SCI-Expanded)
14. **Poly(ethylene glycol)/Polyvinyl chloride Composite Form-Stable Phase-Change Materials by the Azide-Alkyne Click Reaction**
OKTAY B.
CHEMISTRYSELECT, vol.3, no.42, pp.11737-11743, 2018 (SCI-Expanded)
15. **Preparation of poly (bis[2-(methacryloyloxy)ethyl] phosphate) crosslinked polymer brushes on Poly(vinylidene fluoride) nanofibers**
Oktay B., Ugur M. H., Kayaman Apohan N.
MATERIALS CHEMISTRY AND PHYSICS, vol.217, pp.168-174, 2018 (SCI-Expanded)
16. **Preparation and thermal properties of Alkoxy Silane functionalized polyether sulfone/well-defined poly(trimethoxysilyl) propyl methacrylate-based hybrid materials**
OKTAY B., Basturk E., KAHRAMAN M. V., KAYAMAN APOHAN N.
POLYMER ENGINEERING AND SCIENCE, vol.58, no.8, pp.1346-1352, 2018 (SCI-Expanded)
17. **Thiol-yne photo-clickable electrospun phase change materials for thermal energy storage**
OKTAY B., Basturk E., KAHRAMAN M. V., Apohan N.
REACTIVE & FUNCTIONAL POLYMERS, vol.127, pp.10-19, 2018 (SCI-Expanded)
18. **Methacrylate Functionalized MWCNTs/PDMS-Polyurethane Methacrylate UV-Curable Nanocomposites**
İlgün K., Oktay B., Kayaman Apohan N.
JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS, vol.28, pp.1235-1245, 2018 (SCI-Expanded)

19. **Magnetic nanoparticle containing thiol-ene crosslinked hydrogels for controlled and targeted release of hydrophobic drugs**
Oktay B., Demir S., Kayaman Apohan N.
POLYMER COMPOSITES, vol.39, 2018 (SCI-Expanded)
20. **Highly thermally resistant, hydrophobic poly(vinyl alcohol)-silica hybrid nanofibers**
Ugur M. H., OKTAY B., Gungor A., KAYAMAN APOHAN N.
JOURNAL OF THE SERBIAN CHEMICAL SOCIETY, vol.83, pp.885-897, 2018 (SCI-Expanded)
21. **Preparation and modification of polyethersulfone-based hybrid materials**
OKTAY B., Baştürk E., KAHRAMAN M. V., KAYAMAN APOHAN N.
Spe Journal, 2018 (SCI-Expanded)
22. **DOPO tethered Diels Alder clickable reactive silica nanoparticles for bismaleimide containing flame retardant thiol-ene nanocomposite coatings**
OKTAY B., ÇAKMAKÇI E.
POLYMER, vol.131, pp.132-142, 2017 (SCI-Expanded)
23. **Chitosan-co-Hyaluronic acid porous cryogels and their application in tissue engineering**
Kutlusoy T., OKTAY B., KAYAMAN APOHAN N., Silleymanoglu M., Kuruca S. E.
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol.103, pp.366-378, 2017 (SCI-Expanded)
24. **Zwitterionic phosphorylcholine grafted chitosan nanofiber: Preparation, characterization and in-vitro cell adhesion behavior**
Oktay B., Kayaman Apohan N., Suleymanoglu M., Erdem-Kuruca S.
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.73, pp.569-578, 2017 (SCI-Expanded)
25. **Superhydrophobic behavior of polyimide-siloxane mats produced by electrospinning**
OKTAY B., Toker R. D., KAYAMAN APOHAN N.
POLYMER BULLETIN, vol.72, no.11, pp.2831-2842, 2015 (SCI-Expanded)
26. **Fabrication of collagen immobilized electrospun poly (vinyl alcohol) scaffolds**
Oktay B., Kayaman Apohan N., Erdem-Kuruca S., Suleymanoglu M.
POLYMERS FOR ADVANCED TECHNOLOGIES, vol.26, pp.978-987, 2015 (SCI-Expanded)
27. **Dual-crosslinked thiol-ene/sol gel hybrid electrospun nanowires: preparation and characterization**
Basturk E., OKTAY B., KAHRAMAN M. V.
JOURNAL OF POLYMER RESEARCH, vol.22, no.7, 2015 (SCI-Expanded)
28. **Immobilization of alpha-amylase onto poly(glycidyl methacrylate) grafted electrospun fibers by ATRP**
Oktay B., Demir S., Kayaman Apohan N.
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.50, pp.386-393, 2015 (SCI-Expanded)
29. **Preparation and evaluation of linseed oil based alkyd paints**
Iseri-Caglar D., Basturk E., OKTAY B., KAHRAMAN M. V.
PROGRESS IN ORGANIC COATINGS, vol.77, no.1, pp.81-86, 2014 (SCI-Expanded)
30. **Polydimethylsiloxane (PDMS)-based antibacterial organic-inorganic hybrid coatings**
OKTAY B., KAYAMAN APOHAN N.
JOURNAL OF COATINGS TECHNOLOGY AND RESEARCH, vol.10, no.6, pp.785-798, 2013 (SCI-Expanded)
31. **Highly porous starch/poly(ethylene-alt-maleic anhydride) composite nanofiber mesh**
OKTAY B., Basturk E., KAYAMAN APOHAN N., KAHRAMAN M. V.
POLYMER COMPOSITES, vol.34, no.8, pp.1321-1324, 2013 (SCI-Expanded)
32. **UV cured thiol-ene flame retardant hybrid coatings**
Basturk E., OKTAY B., KAHRAMAN M. V., KAYAMAN APOHAN N.
PROGRESS IN ORGANIC COATINGS, vol.76, no.6, pp.936-943, 2013 (SCI-Expanded)
33. **Maleimide Containing UV-Cured Hybrid Coatings**
OKTAY B., KAYAMAN APOHAN N.
ADVANCES IN POLYMER TECHNOLOGY, vol.32, no.2, 2013 (SCI-Expanded)

Articles Published in Other Journals

1. **Bioactivated poly (vinyl alcohol) /poly(acrylic acid) based nanofiber for high-performance membrane techniques**
Akbay T., Kahraman M. V., Oktay B., Kayaman Apohan N.
Letters in Applied NanoBioScience, vol.9, no.1, pp.819-823, 2020 (Peer-Reviewed Journal)
2. **Preparation of Stearic Acid/Graphene oxide Based Form-Stable Composite Phase Change Materials**
Oktay B.
International journal of advances in engineering and pure sciences (Online), vol.30, no.2, pp.119-125, 2018 (Peer-Reviewed Journal)
3. **Multi-Walled Carbon Nanotube Reinforced Polyimide Composites**
OKTAY B., Türker S., KARATAŞ S., KAYAMAN APOHAN N.
Journal of the Turkish Chemical Society, Section A: Chemistry, pp.283-294, 2018 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

1. **İYONİK SIVI DESTEKLİ PVDF POLİELEKTROLİTLERİN KONTROLLÜ POLİMERİZASYON İLE HAZIRLANMASI VE KARAKTERİZASYONU**
Bekdaş B., Oktay B., Kayaman Apohan N.
International Marmara Sciences Congress, Kocaeli, Turkey, 19 - 20 June 2021, pp.56
2. **Diels-Alder Kliklenebilen Fosfor Modifie Silika Nanopartiülleri İçeren Alev Geciktici Tiyol-En Fotokürlenmiş Kaplamalar**
ÇAKMAKÇI E., OKTAY B.
31 Ulusal Kimya Kongresi, Turkey, 10 - 13 September 2019
3. **Uv İle Kürlenebilen Fosfor İçerikli Alev Geciktirici Malzemeler**
OKTAY B.
31. Ulusal Kimya Kongresi, Turkey, 10 September 2019
4. **Preparation and characterization of polyethylenimine cryogels**
OKTAY B.
2ND INTERNATIONAL EURASIAN CONFERENCE ON BIOLOGICAL AND CHEMICAL SCIENCES, 28 - 29 June 2019
5. **DESIGNING OF OFF-STOICHIOMETRY THIOL-ENE POLYMERS**
OKTAY B.
ULUSLARARASI MARMARA FEN VE SOSYAL BİLİMLER KONGRESİ, 26 - 28 April 2019
6. **Starch-Based Biocomposite Nanofibers**
OKTAY B., Baştürk E., KAHRAMAN M. V., KAYAMAN APOHAN N.
1st International Symposium on Light Alloys and Composite Materials, 22 - 24 March 2018
7. **The Preparation of Fluorine and Graphene Oxide Containing Hydrophobic Nanocomposite Coatings**
KAYAMAN APOHAN N., Akhan S., OKTAY B., MADAKBAŞ S.
4th International Conference on New Trends in Chemistry, 11 - 13 May 2018
8. **POLY(METHACRYLOYLOXY ETHYL PHOSPHATE) GRAFTEDPVDF POLYMER ELECTROLYTE MEMBRANES VIA SURFACEINITIATED ATRP**
KAYAMAN APOHAN N., OKTAY B., Uğur M. H.
4th International Conference on New Trends in Chemistry, 11 - 13 May 2018
9. **The Preparation of Fluorine and Graphane Oxide Containing Hydrophobic Nanocomposite Coatings**
KAYAMAN APOHAN N., AKHAN S., OKTAY B., MADAKBAŞ S.
4th International Conference on New Trends in Chemistry, St.Petersburg, Russia, 11 - 13 May 2018
10. **The Preparation of Fluorine and Graphane Oxide Containing Hydrophobic Nanocomposite Coating**
APOHAN N. K., AKHAN S., OKTAY B., MADAKBAŞ S.
icntc CONFERENCE 2018, St.Petersburg, Russia, 11 - 13 May 2018
11. **BİYOPOLİMER ESASLI KRİYOJEL DOKU İSKELELERİ**

- OKTAY B., Kutlusoy T., KAYAMAN APOHAN N., SÜLEYMANOĞLU M., KURUCA D. S.
Ist International Symposium on Innovative Approaches in Scientific Studies, 11 April - 13 August 2018
12. **Preparation Of Polyethersulfone/ Poly(Trimethoxysilyl)Propyl Methacrylate) Composites**
OKTAY B., BAŞTÜRK E., KAHRAMAN M. V., KAYAMAN APOHAN N.
East West chemistry Conference, 12 - 14 October 2017
13. **Tissue Engineering Studies of Chitosan-co-hyaluronic Acid Porous Cryogels**
OKTAY B., Kutlusoy T., KAYAMAN APOHAN N., Süleymanoğlu M., KURUCA D. S.
IVEK 3rd International Convention of Pharmaceuticals and Pharmacies, 26 - 29 April 2017
14. **MAGNETIC FIELD SENSITIVE BIOPOLYMER HYDROGELS IN CONTROLLED DRUG DELIVERY SYSTEMS**
OKTAY B., DEMİR S., KAYAMAN APOHAN N.
IVEK 3rd International Convention of Pharmaceuticals and Pharmacies, 26 - 29 April 2017
15. **Poli glisidil metakrilat Aşılanmış Nanolif Esaslı Malzemelerin Hazırlanması ve Karakterizasyonu**
OKTAY B., KAYAMAN APOHAN N.
3.Uluslararası Organik kimya kongresi, Turkey, 5 - 08 September 2016
16. **Preparation of Well Defined Chitosan Nanofibers by Atom Transfer Radical**
KAYAMAN APOHAN N., OKTAY B., Erdem Kuruca S.
International Conference on Chemical and Polymer Engineering, 21 July 2015
17. **Preparation of Well Defined Chitosan Nanofibers by Atom Transfer Radical Polymerization**
KAYAMAN APOHAN N., OKTAY B., KURUCA D. S.
Proceedings of the World Congress on Mechanical, Chemical, and Material Engineering (MCM 2015), Barselona, 20 - 21 July 2015
18. **Removal of fluoxetine from milk by using immunosorbent featured surface**
TUNALI AKBAY T., KAHRAMAN M. V., KAYAMAN APOHAN N., OKTAY B., İPEKÇİ H.
4th International Meeting on Pharmacy & Pharmaceutical Sciences (IMPPS-4). 18-21 September 2014 Istanbul, Turkey., 18 - 21 September 2014
19. **Immunosorbent surface removes cotinine from milk**
TUNALI AKBAY T., KAHRAMAN M. V., KAYAMAN APOHAN N., İPEKÇİ H., OKTAY B.
4th International Meeting on Pharmacy & Pharmaceutical Sciences (IMPPS-4). 18-21 September 2014 Istanbul, Turkey, 18 - 21 September 2014
20. **Preparation and evaluation of linseed oil based alkyd paints**
İŞERİ D., BAŞTÜRK E., OKTAY B., KAHRAMAN M. V.
Paint İstanbul 2012, 13 - 15 September 2012
21. **Modified nano silica containing thiol ene systems**
OKTAY B., KAYAMAN APOHAN N., KAHRAMAN M. V.
Paint İstanbul 2012., 13 - 15 September 2012
22. **UV cured thiol ene flame retardant hybrid coatings**
BAŞTÜRK E., OKTAY B., KAYAMAN APOHAN N., KAHRAMAN M. V.
Paint İstanbul 2012, 13 - 15 September 2012
23. **Nano silver containing antibacterial hybrid coatings**
OKTAY B., KAYAMAN APOHAN N.
7th Nanoscience and Naontechnology Conference, 1 - 04 June 2012
24. **Effects of nano sized titanium dioxide and silica particles on tensile properties of polymethyl methacrylate PMMA denture base materials**
Kurt A., OKTAY B., KAYAMAN APOHAN N., Işık G.
8th Nanoscience and Naontechnology Conference., 4 - 05 May 2012

Academic and Administrative Experience

2021 - Continues

Deputy Head of
Department

Marmara University, Faculty of Arts and Sciences, Chemistry

Courses

Genel Kimya Laboratuvarı, Undergraduate, 2021 - 2022

Polimer Kimyası, Undergraduate, 2019 - 2020

Organik Kimya, Undergraduate, 2019 - 2020, 2018 - 2019

Polimerlerde Yapı Özellik İlişkileri , Postgraduate, 2018 - 2019

Advising Theses

Oktay B., Biyo-bazlı Kendiliğinden Çapraz Bağlanabilen Süper-Hidrofobik Kaplamaların Sentezi Ve Karakterizasyonu, Postgraduate, İ.Güneş(Student), Continues

Oktay B., Biyo-esaslı Vitrimerlerin Hazırlanması ve Karakterizasyonu , Doctorate, F.Betül(Student), Continues

Oktay B., Kayaman Apohan N., Enerji Depolama Sistemleri için Fonksiyonel Nano-yapıların Tasarımı, Postgraduate, İ.Cenik(Student), Continues

Oktay B., Kayaman Apohan N., İyonik Sıvı Destekli PVDF Polielektrolitlerin Kontrollü Polimerizasyon ile Hazırlanması ve Karakterizasyonu, Postgraduate, B.Bektaş(Student), 2021

Oktay B., Kayaman Apohan N., Çekirdek Kabuk Tipi Poliakrilat Hidroksi Apatit İlaç Taşıyıcılarının Kontrollü Polimerizasyon ile Sentezi ve Karakterizasyon Çalışmaları, Postgraduate, G.Koçal(Student), 2020

Metrics

Publication: 62

Citation (WoS): 382

Citation (Scopus): 362

H-Index (WoS): 11

H-Index (Scopus): 11

Research Areas

Chemistry, Organic Chemistry, Natural Sciences, Engineering and Technology