Asst. Prof. Caner Ünlü

Personal Information

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Education Information

Doctorate, Wageningen Universiteit, Agrotechnology And Food Sciences, Laboratory Of Biophysics, Netherlands 2010 - 2015
Postgraduate, İzmir Yüksek Teknoloji Enstitüsü, Fen Fakültesi, Kimya, Turkey 2006 - 2009
Undergraduate, Bilkent Üniversitesi, Fen Fakültesi, Kimya, Turkey 2001 - 2006

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Probing functional (re)organization in photosynthesis by time-resolved fluorescence spectroscopy, Wageningen Universiteit, Agrotechnology And Food Sciences, Laboratory Of Biophysics, 2015
Postgraduate, Development of semiconductor nanocrystals for biotechnological applications / Yarı-iletken nanokristallerin biyoteknolojik uygulamalar için geliştirilmesi, İzmir Yüksek Teknoloji Enstitüsü, Mühendislik Ve Fen Bilimleri Enstitüsü, Kimya, 2009

Research Areas

Health Sciences, Medicine, Fundamental Medical Sciences, Biophysics, Basic Sciences, Chemistry, Physical Chemistry, nanocomposites, Spectroscopy

Academic Titles / Tasks

Assistant Professor, Istanbul Technical University, Fen-Edebiyat, Kimya, 2017 - Continues
Research Assistant PhD, Université Bordeaux I, Iecb, Dynamics Of Cell Growth And Cell Division, 2015 - 2017
Research Assistant, Wageningen Universiteit, Laboratory Of Biophysics, Biophysics, 2011 - 2015
Research Assistant, İzmir Yüksek Teknoloji Enstitüsü, Fen Fakültesi, Kimya, 2006 - 2011

Academic and Administrative Experience

Research Institute Director, Istanbul Technical University, Fen Bilimleri Enstitüsü, 2019 - Continues

Courses

Kimyasal Biyoloji, Doctorate, 2019 - 2020, 2020 - 2021
Polymeric Nanostructures, Doctorate, 2020 - 2021
Physics and Chemistry of Nano Structures, Postgraduate, 2018 - 2019, 2019 - 2020
General Chemistry I, Undergraduate, 2017 - 2018, 2018 - 2019, 2019 - 2020
Fiziksel Kimya I, Undergraduate, 2019 - 2020, 2020 - 2021
Physical Chemistry, Undergraduate, 2018 - 2019
Physical Chemistry I, Undergraduate, 2018 - 2019, 2019 - 2020
Genel Kimya I, Undergraduate, 2017 - 2018

Advising Theses

Ünlü C., SYNTHESIS OF BORON BASED QUANTUMD DOTS AND THEIR BIOMEDICAL APPLICATIONS, Postgraduate, E.BUDAK(Student), 2021

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

I. **A novel anthracene functionalized dibenzoxanthene fluorophore for copper (II) sensing**
Özükanar Ö., Gunduz H., Ünlü C., Kumbaracı İ. V.
Optical Materials, vol.119, 2021 (Journal Indexed in SCI)

II. **Enhanced fluorescence of photosynthetic pigments through conjugation with carbon quantum dots**
Budak E., Erdogan D., Ünlü C.
PHOTOSYNTHESIS RESEARCH, vol.147, pp.1-10, 2021 (Journal Indexed in SCI)

III. **Amphibious Transport of Fluids and Solids by Soft Magnetic Carpets**
Demirörs A. F. , Aykut S., Ganzeboom S., Meier Y. A. , Hardeman R., de Graaf J., Mathijssen A. J. T. M. , Poloni E., Carpenter J. A. , Ünlü C., et al.
Advanced Science, 2021 (Journal Indexed in SCI Expanded)

IV. **Boron regulated dual emission in B, N doped graphene quantum dots**
Budak E., Ünlü C.
Optical Materials, vol.111, 2021 (Journal Indexed in SCI)

V. **Spectroscopic investigation of defect-state emission in CdSe quantum dots**
Guleroglu G., Ünlü C.
TURKISH JOURNAL OF CHEMISTRY, vol.45, no.3, pp.520-527, 2021 (Journal Indexed in SCI)

VI. **Microwave assisted synthesis of boron and nitrogen rich graphitic quantum dots to enhance fluorescence of photosynthetic pigments**
Budak E., Aykut S., Paşaoğlu M. E. , Ünlü C.
MATERIALS TODAY COMMUNICATIONS, vol.24, 2020 (Journal Indexed in SCI)

VII. **Controlling defect state emission in ultra-small sized tellurium doped CdSe nanocrystals via two-phase synthesis method**
Ünlü C.
Optical Materials, vol.89, pp.361-367, 2019 (Journal Indexed in SCI)

VIII. **A possible molecular basis for photoprotection in the minor antenna proteins of plants**
FOX K. F. , Ünlü C., BALEVICIUS V., RAMDOUR B. N. , KERN C., PAN X., LI M., van Amerongen H., DUFFY C. D.
Biochimica et Biophysica Acta - Bioenergetics, vol.1859, no.7, pp.471-481, 2018 (Journal Indexed in SCI Expanded)

IX. **Phosphatidylserine and GTPase activation control Cdc42 nanoclustering to counter dissipative diffusion**
SARTOREL E., Unlu C., Jose M., Aurélie M., MECA J., Sibarita J., MCCUSKER D.
Molecular Biology of the Cell, vol.29, no.11, pp.1299-1310, 2018 (Journal Indexed in SCI Expanded)

X. **Scaffold-mediated gating of Cdc42 signalling flux**
Rapali P., Mitteau R., Braun C., Massoni-Laporte A., Ünlü C., Bataille L., Saint Arramon F., Gyg S. P. , McCusker D.
ELIFE, vol.6, 2017 (Journal Indexed in SCI)

XI. **Origin of pronounced differences in 77 K fluorescence of the green alga Chlamydomonas reinhardtii in state 1 and 2**
Ünlü C., Polukhina I., van Amerongen H.
EUROPEAN BIOPHYSICS JOURNAL WITH BIOPHYSICS LETTERS, vol.45, no.3, pp.209-217, 2016 (Journal Indexed in SCI)

XII. **Disturbed excitation energy transfer in Arabidopsis thaliana mutants lacking minor antenna complexes of photosystem II**
Osto L., Ünlü C., Cazzaniga S., van Amerongen H.
BIOCHIMICA ET BIOPHYSICA ACTA-BIOENERGETICS, vol.1837, no.12, pp.1981-1988, 2014 (Journal Indexed in SCI)

XIII. **State transitions in Chlamydomonas reinhardtii strongly modulate the functional size of photosystem II but not of photosystem I**
Ünlü C., Drop B., Croce R., van Amerongen H.
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol.111, no.9, pp.3460-3465, 2014 (Journal Indexed in SCI)

XIV. **Developing a facile method for highly luminescent colloidal CdSxSe1-x ternary nanoalloys**
Ünlü C., Tosun G. U. , Sevim S., Ozcelik S.
JOURNAL OF MATERIALS CHEMISTRY C, vol.1, no.17, pp.3026-3034, 2013 (Journal Indexed in SCI)

XV. **Controlling Spontaneous Emission of CdSe Nanoparticles Dispersed in Electrospun Fibers of Polycarbonate Urethane**
Demir M. M. , Soyal D., Ünlü C., Kus M., Ozcelik S.
JOURNAL OF PHYSICAL CHEMISTRY C, vol.113, no.26, pp.11273-11278, 2009 (Journal Indexed in SCI)

Articles Published in Other Journals

I. **Affinity biosensors developed with quantum dots in microfluidic systems**
Şahin S., Ünlü C., Trabzon L.
EMERGENT MATERIALS, 2021 (Journal Indexed in ESCI)

II. **Effect of nitrogen precursor on optical properties of hexagonal boron nitride quantum dots**
Budak E., Ünlü C.
Journal of the Turkish Chemical Society, Section A: Chemistry, vol.8, no.3, pp.969-976, 2021 (Refereed Journals of Other Institutions)

Supported Projects

Ünlü C., Ramazanoğlu M. K. , ÖZÖNDER Ş., Karalar T. C. , Trabzon L., Project Supported by Higher Education Institutions, NanoGeliştirilmiş Ölçeklenebilir Kuantum Güneş Pili Tasarımı Üretimi ve Karakterizasyonu, 2019 - Continues
Ünlü C., Özdemir M., Project Supported by Higher Education Institutions, Heteroatom katkılanmış suda çözünebilen karbon kuantum noktaların sentezi ve karakterizasyonu, 2019 - 2021
Ünlü C., TUBITAK Project, Suda Çözünen Bor Nitrür Kuantum Nokta Sistemlerinin Geliştirilmesi ve Hücre Içi Etkileşimlerinin Incelenmesi, 2019 - 2021
Ünlü C., Project Supported by Higher Education Institutions, İki faz sentez yöntemi ile 3 ve / veya 4 merkez atomlu alaşım kolloidal kuantum nokta sentezi, 2017 - 2019

Edit Congress and Symposium Activities

İstanbul International Organic Electronic Symposium, Invited Speaker, İstanbul, Turkey, 2019

Citations

Total Citations (WOS):199
h-index (WOS):8

Scholarships

ÖSS Başarı Bursu (%100), University, 2001 - 2006