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### Uluslararası Araştırmacı ID'leri

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Publons / Web Of Science ResearcherID: A-3227-2016

ScopusID: 57191349789

Yoksis Araştırmacı ID: 224806

### Eğitim Bilgileri

Post Doktora, Universiteit Gent, Fen, Kimya, Belçika 2021 - 2022

Doktora, Abdullah Gül Üniversitesi, Fen Bilimleri Enstitüsü, -, Türkiye 2017 - 2021

Yüksek Lisans, Abdullah Gül Üniversitesi, Fen Bilimleri Enstitüsü, -, Türkiye 2014 - 2016

Lisans, Ankara Üniversitesi, Fen Fakültesi, Kimya Bölümü, Türkiye 2004 - 2008

### Yabancı Diller

İngilizce, C1 İleri

### Yaptığı Tezler

Doktora, YENİ [1]BENZOTHIENO[3,2-B][1]BENZOTHIOPHENE (BTBT)-TEMELLİ MOLEKÜLER YARIİLETKENLER VE ORGANİK ALAN ETKİLİ TRANSİSTÖR UYGULAMALARI, Abdullah Gül Üniversitesi, Fen Bilimleri Enstitüsü, -, 2022

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### Araştırma Alanları

Yarıiletken ve Süperiletken Malzemeler, Polimerik Malzemeler, Nanomalzemeler, Aromatik Bileşikler Kimyası

### Akademik Unvanlar / Görevler

Dr. Öğr. Üyesi, Eskişehir Osmangazi Üniversitesi, ESKİŞEHİR MESLEK YÜKSEKOKULU, ELEKTRONİK VE OTOMASYON BÖLÜMÜ, 2022 - Devam Ediyor

Araştırma Görevlisi, Abdullah Gül Üniversitesi, Fen Bilimleri Enstitüsü, -, 2015 - 2021

### Akademik İdari Deneyim

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

- I. **Organic and inorganic semiconducting materials-based SERS: recent developments and future prospects**  
ÖZDEMİR R., ÖZKAN HÜKÜM K., USTA H., DEMİREL G.  
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- II. **Multifunctional Anionic Zn(II)-MOF for Selective CO<sub>2</sub> Adsorption, Cationic Dye Removal, and Luminescence-Based pH Sensing**  
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- III. **Quantum Dot Patterning and Encapsulation by Maskless Lithography for Display Technologies**  
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- IV. **A dopant-free 2,7-dioctyl[1]benzothieno[3,2-b][1]benzothiophene (C8-BTBT)-based hole transporting layer for highly stable perovskite solar cells with efficiency over 22%**  
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- V. **Organic Light-Emitting Physically Unclonable Functions**  
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- VI. **Meso- $\pi$ -Extended/Deficient BODIPYs and Low-Band-Gap Donor-Acceptor Copolymers for Organic Optoelectronics**  
Can A., Choi G., ÖZDEMİR R., Park S., Park J. S., Lee Y., DENEME İ., MUTLUGÜN E., Kim C., Kim B. J., et al.  
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- VII. **Interplay between Charge Injection, Electron Transport, and Quantum Efficiency in Ambipolar Trilayer Organic Light-Emitting Transistors**  
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- VIII. **Engineering functionalized low LUMO [1]benzothieno[3,2-b][1]benzothiophenes (BTBTs): unusual molecular and charge transport properties**  
ÖZDEMİR R., Ahn K., DENEME İ., Zorlu Y., Kim D., Kim M., USTA H.  
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- IX. **A hybridized local and charge transfer excited state for solution-processed non-doped green electroluminescence based on oligo(p-phenyleneethynylene)**  
USTA H., Alimli D., ÖZDEMİR R., Tekin E., ALKAN F., Kacar R., Altas A. G., Dabak S., Gurek A. G., MUTLUGÜN E., et al.  
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- X. **Molecular engineering of organic semiconductors enables noble metal-comparable SERS enhancement and sensitivity**  
DEMİREL G., Gieseking R. L. M., ÖZDEMİR R., Kahmann S., Loi M. A., Schatz G. C., Facchetti A., USTA H.  
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- XI. **Highly Efficient Deep-Blue Electroluminescence Based on a Solution-Processable A- $\pi$ -D- $\pi$ -A Oligo(p-phenyleneethynylene) Small Molecule**  
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- XII. **A Solution-Processable meso-Phenyl-BODIPY-Based n-Channel Semiconductor with Enhanced Fluorescence Emission**  
Ozcan E., Ozdemir M., Ho D., Zorlu Y., ÖZDEMİR R., Kim C., USTA H., Cosut B.

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- XIII. **High Electron Mobility in [1]Benzothieno[3,2-b][1]benzothiophene-Based Field-Effect Transistors: Toward n-Type BTBTs**  
USTA H., Kim D., ÖZDEMİR R., Zorlu Y., Kim S., Ruiz Delgado M. C., Harbuzaru A., Kim S., DEMİREL G., Hong J., et al.  
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- XIV. **BODIPY-Based Semiconducting Materials for Organic Bulk Heterojunction Photovoltaics and Thin-Film Transistors**  
Ho D., ÖZDEMİR R., Kim H., Earmme T., USTA H., Kim C.  
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- XV. **Triisopropylsilylethynyl-substituted indenofluorenes: carbonyl versus dicyanovinylene functionalization in one-dimensional molecular crystals and solution-processed n-channel OFETs**  
ÖZDEMİR R., Park S., DENEME İ., Park Y., Zorlu Y., Alidagi H. A., Harmandar K., Kim C., USTA H.  
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- XVI. **Frequency and electric field controllable photodevice: FYTRONIX device**  
TATAROĞLU A., Al-Sehemi A. G., Ozdemir M., ÖZDEMİR R., USTA H., Al-Ghamdi A. A., Farooq W. A., Yakuphanoglu F.  
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- XVII. **A Solution-Processable Liquid-Crystalline Semiconductor for Low-Temperature-Annealed Air-Stable N-Channel Field-Effect Transistors**  
ÖZDEMİR R., Choi D., Ozdemir M., Kim H., Kostakoglu S. T., ERKARTAL M., Kim H., Kim C., USTA H.  
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- XVIII. **Ultralow bandgap molecular semiconductors for ambient-stable and solution-processable ambipolar organic field-effect transistors and inverters**  
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- XIX. **Ambipolar small molecular semiconductor-based heterojunction diode**  
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- XX. **Trans-cis isomerization assisted synthesis of solution-processable yellow fluorescent maleic anhydrides for white-light generation**  
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- XXI. **Synthesis, Characterization, and Antimicrobial Activities of New N-(2-hydroxy-1-naphthalidene)-amino Acid (L-Tyrosine, L-Arginine, and L-Lysine) Schiff Bases and Their Manganese(III) Complexes**  
Sakiyan I., ÖZDEMİR R., Ogutcu H.  
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## Kongre ve Sempozyum Katılımı Faaliyetleri

15th International Conference for Organic Electronics in Hasselt, Katılımcı, Hasselt, Belçika, 2019