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Publons / Web Of Science ResearcherID: AAJ-7958-2021

ScopusID: 55542524100

Yoksis Araştırmacı ID: 316663

### Eğitim Bilgileri

Doktora, İhsan Doğramacı Bilkent Üniversitesi, Mühendislik Ve Fen Bilimleri Enstitüsü, Malzeme Bilimi ve Nanoteknoloji, Türkiye 2012 - 2017

Yüksek Lisans, İhsan Doğramacı Bilkent Üniversitesi, Mühendislik Ve Fen Bilimleri Enstitüsü, Malzeme Bilimi ve Nanoteknoloji, Türkiye 2010 - 2012

Lisans, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği Bölümü, Türkiye 2005 - 2010

### Yabancı Diller

İngilizce, C1 İleri

### Yaptığı Tezler

Doktora, Colloidal heterostructures of semiconductor quantum wells: Synthesis, characterization and applications, İhsan Doğramacı Bilkent Üniversitesi, Mühendislik Ve Fen Bilimleri Enstitüsü, Malzeme Bilimi ve Nanoteknoloji, 2017

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### Araştırma Alanları

Yarıiletken ve Süperiletken Malzemeler, Optik Özellikler, Malzeme Karakterizasyonu, Nanomalzemeler, Yapı-Özellik İlişkisi

### Akademik Unvanlar / Görevler

Dr. Öğr. Üyesi, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği Bölümü, 2021 - Devam Ediyor

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

- I. **Direct Synthesis of Zinc-Blende ZnSe Nanoplatelets**  
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- II. **Tattoo-Like Multi-Color Physically Unclonable Functions**  
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- III. **Light-Induced Paramagnetism in Colloidal Ag<sup>+</sup>-Doped CdSe Nanoplatelets**  
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- IV. **Fast Neutron Imaging with Semiconductor Nanocrystal Scintillators**  
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- V. **Plasmon-enhanced fluorescence in gold nanorod-quantum dot coupled systems**  
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- VI. **Colloidal CdSe Quantum Wells with Graded Shell Composition for Low-Threshold Amplified Spontaneous Emission and Highly Efficient Electroluminescence**  
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- VII. **Orientation-Controlled Nonradiative Energy Transfer to Colloidal Nanoplatelets: Engineering Dipole Orientation Factor**  
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- VIII. **Highly Stable Multicrown Heterostructures of Type-II Nanoplatelets for Ultralow Threshold Optical Gain**  
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- IX. **Highly Stable, Near-Unity Efficiency Atomically Flat Semiconductor Nanocrystals of CdSe/ZnS Hetero-Nanoplatelets Enabled by ZnS-Shell Hot-Injection Growth**  
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- X. **Understanding the Journey of Dopant Copper Ions in Atomically Flat Colloidal Nanocrystals of CdSe Nanoplatelets Using Partial Cation Exchange Reactions**  
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- XI. **High-Efficiency Optical Gain in Type-II Semiconductor Nanocrystals of Alloyed Colloidal Quantum Wells**  
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- XIII. **Alloyed Heterostructures of CdSexS1-x Nanoplatelets with Highly Tunable Optical Gain Performance**

- Kelestemur Y., Dede D., Gungor K., Usanmaz C. F., Erdem O., Demir H. V.  
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- XIV. **CdSe/CdSe<sub>1-x</sub>Te<sub>x</sub> Core/Crown Heteronanoplatelets: Tuning the Excitonic Properties without Changing the Thickness**  
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- XV. **Quantum Dot/Light-Emitting Electrochemical Cell Hybrid Device and Mechanism of Its Operation**  
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- XVI. **Platelet-in-Box Colloidal Quantum Wells: CdSe/CdS@CdS Core/Crown@Shell Heteronanoplatelets**  
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- XVII. **Highly Efficient Nonradiative Energy Transfer from Colloidal Semiconductor Quantum Dots to Wells for Sensitive Noncontact Temperature Probing**  
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- XVIII. **Colloidal Nanoplatelet/Conducting Polymer Hybrids: Excitonic and Material Properties**  
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- XIX. **Temperature-Dependent Emission Kinetics of Colloidal Semiconductor Nanoplatelets Strongly Modified by Stacking**  
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- XX. **Excitonic improvement of colloidal nanocrystals in salt powder matrix for quality lighting and color enrichment**  
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- XXIII. **Continuously Tunable Emission in Inverted Type-I CdS/CdSe Core/Crown Semiconductor Nanoplatelets**  
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- XXIV. **Stable and Low-Threshold Optical Gain in CdSe/CdS Quantum Dots: An All-Colloidal Frequency Up-Converted Laser**  
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- XXV. **Lateral Size-Dependent Spontaneous and Stimulated Emission Properties in Colloidal CdSe Nanoplatelets**  
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- XXVIII. **Stable and efficient colour enrichment powders of nonpolar nanocrystals in LiCl**  
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- XXX. **Manganese Doped Fluorescent Paramagnetic Nanocrystals for Dual-Modal Imaging**  
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- XXXI. **Energy-saving quality road lighting with colloidal quantum dot nanophosphors**  
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- XXXII. **Type-tunable amplified spontaneous emission from core-seeded CdSe/CdS nanorods controlled by exciton-exciton interaction**  
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- XXXV. **Tunable White-Light-Emitting Mn-Doped ZnSe Nanocrystals**  
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- XXXVII. **Attractive versus Repulsive Excitonic Interactions of Colloidal Quantum Dots Control Blue- to Red-Shifting (and Non-shifting) Amplified Spontaneous Emission**  
Cihan A. F., Kelestemur Y., Guzelturk B., Yerli O., Kurum U., YAĞLIOĞLU H. G., ELMALI A., Demir H. V.  
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- XXXVIII. **Observation of Biexcitons in Nanocrystal Solids in the Presence of Photocharging**  
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## Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **Exciton Dynamics of Colloidal Semiconductor Quantum Well Stacks**  
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- II. **Heterodoped Nanoparticles as Dual-Mode Contrast Agent for MRI**  
Alipour A., Sharma V. K., Soran-Erdem Z., Kelestemur Y., Aykut Z. G., Demir H. V.  
21st National Biomedical Engineering Meeting (BIYOMUT), İstanbul, Türkiye, 24 Kasım - 26 Aralık 2017
- III. **SILICA NANOPARTICLE FORMATION BY USING DROPLET-BASED MICROREACTOR**  
Nikdoost A., Ozkan A., Kelestemur Y., Demir H. V., Erdem E. Y.  
ASME International Technical Conference and Exhibition on Packaging and Integration of Electronic and Photonic

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- IV. **High-efficiency high-quality street lighting with colloidal quantum dot nanophosphors**  
ERDEM T., Kelestemur Y., Soran-Erdem Z., Ji Y., Demir H. V.  
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- V. **SILICA SYNTHESIS & COATING OF QUANTUM DOTS IN DROPLET BASED MICROREACTORS**  
Ozkan A., Kelestemur Y., Demir H. V., Erdem E. Y.  
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- VII. **Blue- and red-shifting amplified spontaneous emission of CdSe/CdS core/shell colloidal quantum dots**  
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Conference on Lasers and Electro-Optics (CLEO), San-Jose, Kostarika, 9 - 14 Haziran 2013
- VIII. **Type-tuning of quasi-type-II CdSe/CdS seeded core/shell nanorods: type-I vs. type-II**  
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- IX. **Observation of Biexcitons in the presence of Trions generated via Sequential Absorption of Multiple Photons in Colloidal Quantum Dot Solids**  
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## Metrikler

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Atıf (WoS): 1530

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H-İndeks (WoS): 23

H-İndeks (Scopus): 22

## Ödüller

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Keleştemur Y., 2210-A Genel Yurt İçi Yüksek Lisans Bursu, Tubitak, Ocak 2010