

Dr.Öğr.Üyesi YUSUF KELEŞTEMUR

Kişisel Bilgiler

İş Telefonu: [+90 312 210 5911](tel:+903122105911) Dahili: 5911
E-posta: yusufk@metu.edu.tr
Web: <https://avesis.metu.edu.tr/yusufk>
Posta Adresi: Metalurji ve Malzeme Mühendisliği Bölümü

Uluslararası Araştırmacı ID'leri

ScholarID: NxztSl4AAAAJ
ORCID: 0000-0003-1616-2728
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
Dr.Öğr.Üyesi, Atılım Üniversitesi, Mühendislik Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü, 2020 - 2021

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Tattoo-Like Multi-Color Physically Unclonable Functions**
KİREMİTLER N. B., Esidir A., Drake G. A., YAZICI A. F., Sahin F., TÖRÜN İ., Kalay M., KELEŞTEMUR Y., Demir H. V., Shim M., et al.
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- II. **Light-Induced Paramagnetism in Colloidal Ag+-Doped CdSe Nanoplatelets**
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- III. **Fast Neutron Imaging with Semiconductor Nanocrystal Scintillators**
McCall K. M., Sakhatskyi K., Lehmann E., Walfort B., Losko A. S., Montanarella F., Bodnarchuk M., Krieg F., Kelestemur Y., Mannes D., et al.
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- IV. **Plasmon-enhanced fluorescence in gold nanorod-quantum dot coupled systems**
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- V. **Colloidal CdSe Quantum Wells with Graded Shell Composition for Low-Threshold Amplified Spontaneous Emission and Highly Efficient Electroluminescence**
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- VI. **Orientation-Controlled Nonradiative Energy Transfer to Colloidal Nanoplatelets: Engineering Dipole Orientation Factor**
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- VII. **Highly Stable Multicrown Heterostructures of Type-II Nanoplatelets for Ultralow Threshold Optical Gain**
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- VIII. **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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- IX. **Understanding the Journey of Dopant Copper Ions in Atomically Flat Colloidal Nanocrystals of CdSe Nanoplatelets Using Partial Cation Exchange Reactions**
Sharma M., Olutas M., Yeltik A., Kelestemur Y., Sharma A., Delikanli S., Guzelturk B., Gungor K., McBride J. R., Demir H. V.
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- X. **High-Efficiency Optical Gain in Type-II Semiconductor Nanocrystals of Alloyed Colloidal Quantum Wells**
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- XI. **Near-Unity Emitting Copper-Doped Colloidal Semiconductor Quantum Wells for Luminescent Solar Concentrators**
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- XII. **Alloyed Heterostructures of CdSexS1-x Nanoplatelets with Highly Tunable Optical Gain Performance**
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- XIII. **CdSe/CdSe_{1-x}Tex Core/Crown Heteronanoplatelets: Tuning the Excitonic Properties without**

Changing the Thickness

- Kelestemur Y., Guzelturk B., Erdem O., Olutas M., Erdem T., Usanmaz C. F., Gungor K., Demir H. V.
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- XIV. **Quantum Dot/Light-Emitting Electrochemical Cell Hybrid Device and Mechanism of Its Operation**
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- XV. **Platelet-in-Box Colloidal Quantum Wells: CdSe/CdS@CdS Core/Crown@Shell Heteronanoplatelets**
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- XVI. **Highly Efficient Nonradiative Energy Transfer from Colloidal Semiconductor Quantum Dots to Wells for Sensitive Noncontact Temperature Probing**
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- XVII. **Colloidal Nanoplatelet/Conducting Polymer Hybrids: Excitonic and Material Properties**
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- XVIII. **Temperature-Dependent Emission Kinetics of Colloidal Semiconductor Nanoplatelets Strongly Modified by Stacking**
Erdem O., Olutas M., Guzelturk B., Kelestemur Y., Demir H. V.
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- XIX. **Excitonic improvement of colloidal nanocrystals in salt powder matrix for quality lighting and color enrichment**
Erdem T., SORAN ERDEM Z., Kelestemur Y., Gaponik N., Demir H. V.
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- XX. **Experimental Determination of the Absorption Cross-Section and Molar Extinction Coefficient of Colloidal CdSe Nanoplatelets**
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- XXI. **Implementation of graphene multilayer electrodes in quantum dot light-emitting devices**
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- XXII. **Continuously Tunable Emission in Inverted Type-I CdS/CdSe Core/Crown Semiconductor Nanoplatelets**
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- XXIII. **Stable and Low-Threshold Optical Gain in CdSe/CdS Quantum Dots: An All-Colloidal Frequency Up-Converted Laser**
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- XXIV. **Lateral Size-Dependent Spontaneous and Stimulated Emission Properties in Colloidal CdSe Nanoplatelets**
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- XXV. **Type-II Colloidal Quantum Wells: CdSe/CdTe Core/Crown Heteronanoplatelets**
Kelestemur Y., Olutas M., Delikanli S., Guzelturk B., Akgul M. Z., Demir H. V.
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- XXVI. **Nonradiative energy transfer in colloidal CdSe nanoplatelet films**
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- XXVII. **Stable and efficient colour enrichment powders of nonpolar nanocrystals in LiCl**
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- XXVIII. Stacking in Colloidal Nanoplatelets: Tuning Excitonic Properties**
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- XXIX. Manganese Doped Fluorescent Paramagnetic Nanocrystals for Dual-Modal Imaging**
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- XXX. Energy-saving quality road lighting with colloidal quantum dot nanophosphors**
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- XXXI. Type-tunable amplified spontaneous emission from core-seeded CdSe/CdS nanorods controlled by exciton-exciton interaction**
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- XXXIII. Amplified Spontaneous Emission and Lasing in Colloidal Nanoplatelets**
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- XXXIV. Tunable White-Light-Emitting Mn-Doped ZnSe Nanocrystals**
 Sharma V. K., Guzelturk B., Erdem T., Kelestemur Y., Demir H. V.
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- XXXV. Evidence for Nonradiative Energy Transfer in Graphene-Oxide-Based Hybrid Structures**
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- XXXVI. 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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- XXXVII. Observation of Biexcitons in Nanocrystal Solids in the Presence of Photocharging**
 Cihan A. F., Martinez P. L. H., Kelestemur Y., Mutlugu E., Demir H. V.
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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**
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- III. **SILICA NANOPARTICLE FORMATION BY USING DROPLET-BASED MICROMECHANICAL REACTOR**
 Nikdoost A., Ozkan A., Kelestemur Y., Demir H. V., Erdem E. Y.
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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**

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VI. **Low-threshold optical gain and lasing of colloidal nanoplatelets**

Kelestemur Y., Guzelturk B., Olutas M., Delikanli S., Demir H. V.

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VII. **Blue- and red-shifting amplified spontaneous emission of CdSe/CdS core/shell colloidal quantum dots**

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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 (Scopus): 1358

H-İndeks (WoS): 23

H-İndeks (Scopus): 22

Ödüller

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Kelestemur Y., 2211-E Doğrudan Yurt İçi Doktora Bursu, Tubitak, Ocak 2012

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