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Kişisel Bilgiler

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Biyografi

Dr. Talha Erdem received his BS, MS, and PhD degrees all in Electrical and Electronics Engineering from Bilkent University in 2009, 2011, and 2016, respectively. During his MS and PhD he worked on the design and optimization of high-quality light-emitting diodes. After his PhD he was awarded the Newton International Fellowship by the Royal Society and moved to the University of Cambridge as a Newton International Fellow. At Cambridge, he worked on the smart self-assembly of nanomaterials for photonic applications. In April 2019 he moved to Abdullah Gül University as an Assistant Professor and established the Smart Nanophotonics Research Group, His current research interests are the design of stable nano-emitters, DNA-driven self-assembly of colloidal nanoparticles, and their photonic applications.

Araştırma Alanları

Dielektrik Malzeme ve Aygıtlar , Optik Malzeme ve Aygıtlar , Optoelektronik Malzeme ve Aygıtlar , Yarı İletken Malzeme ve Aygıtlar , Mühendislik ve Teknoloji

Akademik Unvanlar / Görevler

Dr.Öğr.Üyesi, Abdullah Gül Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2019 - Devam Ediyor

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Tuning optical properties of self-assembled nanoparticle network with external optical excitation**
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- II. **Optical detection of microplastics in water**
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- III. **Osmotic-Pressure-Induced Nematic Ordering in Suspensions of Laponite and Carboxy Methyl Cellulose**
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- V. **Transparent Films Made of Highly Scattering Particles**
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- VIII. **Color-Enrichment Semiconductor Nanocrystals for Biorhythm-Friendly Backlighting**
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- IX. **Near-Unity Emitting Copper-Doped Colloidal Semiconductor Quantum Wells for Luminescent Solar Concentrators**
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- X. **CdSe/CdSe_{1-x}Tex Core/Crown Heteronanoplatelets: Tuning the Excitonic Properties without Changing the Thickness**
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- XII. **High-Stability, High-Efficiency Organic Monoliths Made of Oligomer Nanoparticles Wrapped in Organic Matrix**
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- XIII. **Excitonic improvement of colloidal nanocrystals in salt powder matrix for quality lighting and color enrichment**
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- XIV. **Colloidal nanocrystals for quality lighting and displays: milestones and recent developments**
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- XV. **Implementation of High-Quality Warm-White Light-Emitting Diodes by a Model-Experimental Feedback Approach Using Quantum Dot-Salt Mixed Crystals**
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- XVIII. **Sweet plasmonics: Sucrose macrocrystals of metal nanoparticles**
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- XIX. **Construction of multi-layered white emitting organic nanoparticles by clicking polymers**
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- XXIII. **Highly polarized light emission by isotropic quantum dots integrated with magnetically aligned segmented nanowires**
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- XXIV. **Comparative study of field-dependent carrier dynamics and emission kinetics of InGaN/GaN light-emitting diodes grown on (11 $\bar{2}$)over-bar2 semipolar versus (0001) polar planes**
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- XXVI. **Morphology-Dependent Energy Transfer of Polyfluorene Nanoparticles Decorating InGaN/GaN Quantum-Well Nanopillars**
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- XXVII. **Color science of nanocrystal quantum dots for lighting and displays**
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- XXIX. **Computational study of power conversion and luminous efficiency performance for semiconductor quantum dot nanophosphors on light-emitting diodes**
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- XXXIII. **White-Emitting Conjugated Polymer Nanoparticles with Cross-Linked Shell for Mechanical Stability and Controllable Photometric Properties in Color-Conversion LED Applications**
Park E., ERDEM T., Ibrahimova V., Nizamoglu S., Demir H. V. , Tuncel D.
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Kitap & Kitap Bölümleri

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Atıflar

Toplam Atıf Sayısı (WOS):1151

h-indeksi (WOS):18