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Eğitim Bilgileri

Doktora, Gebze Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Türkiye 2005 - 2010

Yüksek Lisans, Gebze Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Türkiye 2002 - 2005

Lisans, Kocaeli Üniversitesi, Türkiye 1997 - 2002

Yaptığı Tezler

Doktora, Novel n-bridged diiron phthalocyanine complexes: Synthesis, characterization and application in oxidation, Gebze Teknik Üniversitesi, Fen Bilimleri Enstitüsü, 2010

Araştırma Alanları

Malzeme Bilimi ve Mühendisliği, Kimya, Koordinasyon Kimyası, Organometalik Bileşikler, Kataliz, Mühendislik ve Teknoloji

Akademik Unvanlar / Görevler

Prof. Dr., Marmara Üniversitesi, Teknoloji Fakültesi, Metalurji ve Malzeme Mühendisliği Bölümü, 2023 - Devam Ediyor

Yönetilen Tezler

İşçi Ü., FONKSİYONEL GRUP İÇEREN Mü- NİTRİDO PORFİRİNLER, Doktora, O.EREN(Öğrenci), 2023

İşçi Ü., Monomerik ve dimerik suda çözünen demir ftalosiyanınler, Yüksek Lisans, D.AYDIN(Öğrenci), 2022

İşçi Ü., Mü- nitrido porfirinoidler: Sentezi, karakterizasyonu ve uygulamaları, Doktora, Ç.YÜCEEL(Öğrenci), 2022

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- Nanoencapsulation of a Far-Red Absorbing Phthalocyanine into Poly(benzylmalate) Biopolymers and Modulation of Their Photodynamic Efficiency**

ŞAHİN Z., Önal E., Ali L. M. A., Durand D., EMAMI A., Touré M., İŞÇİ Ü., Gary-Bobo M., Cammas-Marion S., DUMOULIN

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- II. **Phthalocyanine vs porphyrin: Experimental and theoretical comparison of the catalytic activity of N-bridged diiron tetrapyrrolic complexes for alcohols oxidation**
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- III. **Near infrared-absorbing self-encapsulated phthalocyanine-cored polycaprolactone star polymeric nanoparticles**
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- IV. **Amphiphilic Single-Chain Polymer Nanoparticles as Imaging and Far-Red Photokilling Agents for Photodynamic Therapy in Zebrafish Embryo Xenografts**
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- V. **Multifunctional Photovoltaic Window Layers for Solar-Driven Catalytic Conversion of CO₂: The Case of CIGS Solar Cells**
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- VI. **Comparing PVP and Polymeric Micellar Formulations of a PEGylated Photosensitizing Phthalocyanine by NMR and Optical Techniques**
Gergely L. P., Yüceel Ç., İŞCİ Ü., Spadin F. S., Schneider L., Spingler B., Frenz M., DUMOULIN F., Vermathen M.
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- VII. **Transparent Porous ZnO|Metal Complex Nanostructured Materials: Application to Electrocatalytic CO₂Reduction**
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- VIII. **Phthalocyanines prepared from 4,5-dihexylthiophthalonitrile, a popular building block**
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- IX. **Tetra vs. octa-How it affects the photophysical, photochemical, physicochemical and biological properties of mercaptophenol-substituted Zn phthalocyanines**
TOPKAYA TAŞKIRAN D., Aydin D., Ben Aziza H., ŞAHİN Z., İŞCİ Ü., Durand D., TAZEBAY U. H., Gary-Bobo M., DUMOULIN F.
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- X. **Far-red triplet sensitized Z-to-E photoswitching of azobenzene in bioplastics**
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- XI. **Nanoscaled PAMAM Dendrimer Spacer Improved the Photothermal-Photodynamic Treatment Efficiency of Photosensitizer-Decorated Confeito-Like Gold Nanoparticles for Cancer Therapy**
Saw W. S., Anasamy T., Thu Thi Anh Do T. T. A. D., Lee H. B., Chee C. F., İsci Ü., Misran M., DUMOULIN F., Chong W. Y., Kiew L. V., et al.
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- XII. **Substituent effect on iron phthalocyanines as cyclohexene oxidation catalysts**
Yüceel Ç., Şahin Z., İŞCİ Ü.
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- XIII. **Tuning of organic heterojunction conductivity by the substituents' electronic effects in phthalocyanines for ambipolar gas sensors**
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- XIV. **Alkylthio-tetrasubstituted mu-Nitrido Diiron Phthalocyanines: Spectroelectrochemistry, Electrical Properties, and Heterojunctions for Ammonia Sensing**
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- XV. **Phthalocyanine-based mesoporous organosilica nanoparticles: NIR photodynamic efficiency and siRNA photochemical internalization**
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- XVI. **CO₂ electrochemical catalytic reduction with a highly active cobalt phthalocyanine**
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- XVIII. **A Noble-Metal-Free Heterogeneous Photosensitizer-Relay Catalyst Triad That Catalyzes Water Oxidation under Visible Light**
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- XIX. **Triphenylphosphonium-substituted phthalocyanine: Design, synthetic strategy, photoproperties and photodynamic activity**
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- XX. **Photophysical properties of palladium/platinum tetrasulfonyl phthalocyanines and their application in triplet-triplet annihilation upconversion**
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- XXI. **Sulfanyl vs sulfonyl, 4,5-vs 3,6-position. How structural variations in phthalonitrile substitution affect their infra-red, crystallographic and Hirshfeld surface analyses**
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- XXII. **Cyclotriphosphazene, a scaffold for F-19 MRI contrast agents**
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- XXIII. **Synthesis and characterization of a new meso-tetra-dihydro benzocyclobutenaphthylene free-base porphyrin**
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- XXIV. **Subtle variations of the behavior of a silylated tetraethylene glycol-substituted Zn phthalocyanine towards acids**
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- XXV. **Covalent or supramolecular combinations of resorcinarenes and porphyrinoids**
DUMOULIN F., TOPKAYA TAŞKIRAN D., Yasar S., Ahsen V., Isci Ü.
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- XXVI. **Methylsulfonyl Zn phthalocyanine: A polyvalent and powerful hydrophobic photosensitizer with a wide spectrum of photodynamic applications**
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- PHOTODIAGNOSIS AND PHOTODYNAMIC THERAPY, *cilt.13, ss.40-47, 2016 (SCI-Expanded)*
- XXVII. **A library of dimeric and trimeric phthalonitriles linked by a single aromatic ring: comparative structural and DFT investigations**
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- XXVIII. **Synthesis, characterization, and Pb²⁺ ion sensing application of hexa-armed dansyl end-capped poly(epsilon-caprolactone) star polymer with phosphazene core**
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- XXIX. **Fluorescent mono- and tetra-dansylated cavitands: synthesis and acid sensitivity**
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- XXX. **Site-selective formation of an iron(IV)-oxo species at the more electron-rich iron atom of heteroleptic mu-nitrido diiron phthalocyanines**
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- XXXIV. **Axial binding and host-guest interactions of a phthalocyanine resorcinarene cavitand hybrid**
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- XXXV. **Expeditious selective access to functionalized platforms of A(7)B-type heteroleptic lanthanide double-decker complexes of phthalocyanine**
Alpugan S., Isci Ü., Albrieux F., Hirel C., Gurek A. G., Bretonniere Y., Ahsen V., DUMOULIN F.
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- XXXVI. **Modulation of the electronic and spectroscopic properties of Zn(II) phthalocyanines by their substitution pattern**
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- XXXVII. **Sulfonamide-substituted iron phthalocyanine: design, solubility range, stability and oxidation of olefins**
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- XXXVIII. **N-bridged dimers of tetrapyrroles complexed by transition metals: syntheses, characterization methods, and uses as oxidation catalysts**
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- XXXIX. **Comparative structural analysis of 4,5- and 3,6-dialkylsulfanylphthalonitriles of different bulkiness**
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STRUCTURAL CHEMISTRY, *cilt.24, sa.4, ss.1027-1038, 2013 (SCI-Expanded)*
- XL. **Preparation of N-bridged diiron phthalocyanines bearing bulky or small electron-withdrawing substituents**

- Isci Ü., DUMOULIN F., Ahsen V., Sorokin A. B.
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- XLIII. **Preparation and characterization of mu-nitrido diiron phthalocyanines with electron-withdrawing substituents: application for catalytic aromatic oxidation**
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- XLIII. **A first ABAC phthalocyanine**
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Kitap & Kitap Bölümleri

I. Phthalocyanines and Porphyrines

İŞÇİ Ü., DUMOULIN İSÇİ F. A. C.

Fundamentals of Porphyrin Chemistry: A 21st Century Approach, Penelope J. Brothers (Editor), Mathias O. Senge (Editor), Editör, WILEY, ss.241-302, 2022

Desteklenen Projeler

İşçi Ü., Gürek A. G., Dumoulin İsci F. A. C., TÜBİTAK Uluslararası İkili İşbirliği Projesi, PDT, PTT ya da Işıklı Tetiklenen İlaç Salınımı İçin Tasarlanmış ve Kendiliğinden Düzenlenerek Ortogonal Fonksiyonlanabilen Karışık ya da Saf Ftalozenleri Oluşturabilen Amfifilik Ftalozenler, 2020 - 2023

İşçi Ü., TÜBİTAK Projesi, CO₂'nin İndirgenmesi İçin Pacman Ftalozenin Dimerler, 2021 - 2022

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