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Education Information

Doctorate, Van Yüzüncü Yıl University, Fen Fakültesi, Kimya Bölümü, Turkey 2014 - 2020

Associate Degree, Anadolu University, Open Education Faculty, Department Of Theology, Turkey 2016 - 2018

Postgraduate, Van Yüzüncü Yıl University, Fen Fakültesi, Kimya Bölümü, Turkey 2009 - 2011

Undergraduate, Van Yüzüncü Yıl University, Fen Fakültesi, Kimya Bölümü, Turkey 2005 - 2009

Dissertations

Doctorate, YENİ FTALOSİYANİN KOMPLEKSLERİNİN SENTEZİ VE BOYAYA DUYARLI GÜNEŞ PİLLERİ İÇİN UYGUNLUĞUNUN İNCELENMESİ, Van Yüzüncü Yıl University, Fen Fakültesi, Kimya Bölümü, 2020

Postgraduate, BAZI FURANDİONLARIN İNDOL VE 2-METİL İNDOL NÜKLEOFİLLERİYLE REAKSİYONLARININ ARAŞTIRILMASI, Van Yüzüncü Yıl University, Fen Fakültesi, Kimya Bölümü, 2011

Research Areas

Chemistry, Inorganic Chemistry, Organic Chemistry, Natural Sciences

Academic Titles / Tasks

Assistant Professor, Van Yüzüncü Yıl University, Muradiye Meslek Yüksekokulu, Kimya ve Kimyasal İşletme Teknolojileri Bölümü, 2021 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Sensor properties for Fe³⁺ and synthesis of new a bis -(3-(benzhydryloxy) propanoate) phthalocyaninato silicon (IV)**
Solğun D., Ağırtaş M. S.
Synthetic Metals, vol.309, 2024 (SCI-Expanded)
- II. **Synthesis of zinc phthalocyanine containing 1,2-phenylene bis(3-chloropropanoate) substituted groups and investigation of their metabolic enzyme inhibitory effects**
Güngördü Solğun D., Sadeghian N., Taslimi P., Taskin-Tok T., Ağırtaş M. S.
Polyhedron, vol.264, 2024 (SCI-Expanded)
- III. **Synthesis and biological properties of axially bis – (3,4,5-trimethoxybenzyloxy) phthalocyaninato**

silicon (IV)

Güngördü Solğun D., Özdemir S., Dündar A., Ağırtaş M. S.

Journal of Photochemistry and Photobiology A: Chemistry, vol.456, 2024 (SCI-Expanded)

- IV. **Synthesis, fluorescence, enzymes effects, and evaluation of tetrahydroxy substituted zinc phthalocyanine as multitarget metabolic enzyme inhibitors with molecular docking: the biochemistry-oriented drug design**

Solğun D., Sadeghian N., Taskin-Tok T., Ağırtaş M. S., Taslimi P.

Journal of the Iranian Chemical Society, vol.21, no.9, pp.2413-2424, 2024 (SCI-Expanded)

- V. **Synthesis of zinc phthalocyanine complex containing tetra propanoic acid groups: Electronic properties and inhibitory effects on some metabolic enzymes**

Güngördü Solğun D., Sadeghian N., Taslimi P., Taskin-Tok T., Ağırtaş M. S.

Journal of Molecular Structure, vol.1306, 2024 (SCI-Expanded)

- VI. **Effect of silver nanoparticles prepared by green chemistry on the photovoltaic properties of zinc phthalocyanine**

Ödemiş Ö., Ağırtaş M. S., Güngördü Solğun D., Özkartal A.

Chemical Papers, vol.78, no.6, pp.3735-3746, 2024 (SCI-Expanded)

- VII. **Synthesis and biological properties of benzyl 2-(oxy)benzoate-substituted silicon phthalocyanine**

Solğun D., Özdemir S., Ağırtaş M. S., Tollu G.

Journal of Inclusion Phenomena and Macrocyclic Chemistry, vol.104, no.3-4, pp.137-148, 2024 (SCI-Expanded)

- VIII. **Synthesis of bis-(benzhydryloxy) substituted axially silicon(IV) phthalocyanine: investigation of photophysical, photochemical, and computational electronic properties**

Güngördü Solğun D., Yıldiko U., Ağırtaş M. S.

Phosphorus, Sulfur and Silicon and the Related Elements, vol.199, no.4, pp.324-336, 2024 (SCI-Expanded)

- IX. **Synthesis, theoretical DFT analysis, photophysical and photochemical properties of a new zinc phthalocyanine compound**

Ağırtaş M. S., Güngördü Solğun D., YILDIKO Ü.

INORGANIC AND NANO-METAL CHEMISTRY, vol.54, no.4, pp.301-311, 2024 (SCI-Expanded)

- X. **Several biological properties and synthesis of 2-(4-methylthiazol-5-yl) ethoxy substitute zinc phthalocyanine**

Solğun D., Özdemir S., Dündar A., Ağırtaş M. S.

Applied Organometallic Chemistry, vol.38, no.1, 2024 (SCI-Expanded)

- XI. **Synthesis of novel an axially substituted silicon phthalocyanine and determination of its selectivity for Fe 3+**

Güngördü Solğun D., Ağırtaş M. S.

Journal of Molecular Structure, vol.1286, 2023 (SCI-Expanded)

- XII. **Synthesis and Sensor Properties of Silicon Phthalocyanine Axially Substituted with Bis-(Prop-2-Ynyloxy) Groups and Polymeric Phthalocyanines Bearing PEG Substituent by "Click" Chemistry**

Ağırtaş M. S., Güngördü Solğun D., Savas B., ÖZTÜRK T.

POLYCYCLIC AROMATIC COMPOUNDS, vol.43, no.4, pp.3278-3290, 2023 (SCI-Expanded)

- XIII. **Synthesis of phthalocyanine complexes carrying caffeic acid groups: increasing photovoltaic performance by doping silver nanoparticles**

Güngördü Solğun D., Özkartal A., Ağırtaş M. S.

Energy Sources, Part A: Recovery, Utilization and Environmental Effects, vol.45, no.1, pp.2240-2252, 2023 (SCI-Expanded)

- XIV. **Synthesis of silver nanoparticles formed by Chaerophyllum macrospermum and Eremurus spectabilis biomaterial and investigation of photovoltaic parameters by adding silicon phthalocyanine**

Ağırtaş M. S., Ödemiş Ö., Solğun D., Tanrıverdi A. A., Özkartal A.

Journal of Coordination Chemistry, vol.76, no.11-12, pp.1471-1484, 2023 (SCI-Expanded)

- XV. **Synthesis of axially silicon phthalocyanine substituted with bis- (3,4-dimethoxyphenethoxy) groups, DFT and molecular docking studies**

- Güngördü Solğun D., Tanrıverdi A. A., Yıldiko Ü., Ağırtaş M. S.
JOURNAL OF INCLUSION PHENOMENA AND MACROCYCLIC CHEMISTRY, vol.102, no.11-12, pp.851-860, 2022 (SCI-Expanded)
- XVI. **Synthesis of novel 2-(benzhydryloxy) phenoxy-substituted zinc phthalocyanine, third-order nonlinear optical and fluorescence properties**
Solğun D., Gundogdu Y., Kilic H. S., Agirtas M. S.
BULLETIN OF MATERIALS SCIENCE, vol.45, no.4, 2022 (SCI-Expanded)
- XVII. **Synthesis, DFT Calculations, Photophysical, Photochemical Properties of Peripherally Metallophthalocyanines Bearing (2-(Benzo[d] [1,3] Dioxol-5-Ylmethoxy) Phenoxy) Substituents**
Solğun D., Yıldiko Ü., Ağırtaş M. S.
Polycyclic Aromatic Compounds, vol.42, no.9, pp.6444-6462, 2022 (SCI-Expanded)
- XVIII. **Synthesis of Axial Bis(benzo[d][1,3]dioxol-5-ylmethoxy)phthalocyaninato Silicon (IV): Photophysical and Photochemical Properties and Docking Studies on DNA-SiPc Interactions**
Solğun D., Yıldiko U., Agirtas M. S.
CHEMISTRYSELECT, vol.7, no.33, 2022 (SCI-Expanded)
- XIX. **Metal contained Phthalocyanines with 3,4-Dimethoxyphenethoxy substituents: their anticancer, antibacterial activities and their inhibitory effects on some metabolic enzymes with molecular docking studies**
Taslimi P., TÜRKAN F., Gungordu Solğun D., Aras A., ERDEN Y., ÇELEBİOĞLU H. U., TÜZÜN B., Ağırtaş M. S., Gunay S., GÜLÇİN İ.
JOURNAL OF BIOMOLECULAR STRUCTURE & DYNAMICS, vol.40, no.7, pp.2991-3002, 2022 (SCI-Expanded)
- XX. **Synthesis, photophysical, photochemical, and DFT properties of a zinc phthalocyanine with 2-(2-isopropyl-5-methylphenoxy)phenoxy peripheral groups**
Güngördü Solğun D., YILDIKO Ü., Ağırtaş M. S.
JOURNAL OF COORDINATION CHEMISTRY, vol.75, no.7-8, pp.1082-1096, 2022 (SCI-Expanded)
- XXI. **Photovoltaic performance properties, DFT studies, and synthesis of (E)-3-(diphenxy) acrylic acid substituted phthalocyanine complexes**
Güngördü Solğun D., Yıldiko Ü., Özkartal A., Ağırtaş M. S.
Chemical Papers, vol.75, pp.6285-6295, 2021 (SCI-Expanded)
- XXII. **DFT analysis and electronic properties, and synthesis of tetra (9-phenyl-9H-xanthen-9-yl) oxy peripheral-substituted zinc phthalocyanine**
Solğun D., Keskin M. S., YILDIKO Ü., Ağırtaş M. S.
CHEMICAL PAPERS, vol.74, no.8, pp.2389-2401, 2020 (SCI-Expanded)
- XXIII. **Design of novel substituted phthalocyanines; synthesis and fluorescence, DFT, photovoltaic properties**
Ağırtaş M. S., Güngördü Solğun D., Yıldiko Ü., Özkartal A.
TURKISH JOURNAL OF CHEMISTRY, vol.44, no.6, pp.1574-1596, 2020 (SCI-Expanded)
- XXIV. **Synthesis of Tetra 3,4-dimethoxyphenethoxy Peripheral Substituted Metallophthalocyanines and Investigation of Some Properties**
Agirtas M. S., SOLGUN D., Ozdemir S., Izgi M. S.
CHEMISTRYSELECT, vol.3, no.12, pp.3523-3528, 2018 (SCI-Expanded)
- XXV. **Synthesis of novel tetra (4-tritylphenoxy) substituted metallophthalocyanines and investigation of their aggregation, photovoltaic, solar cell properties**
SOLGUN D., Horoz S., Ağırtaş M. S.
INORGANIC AND NANO-METAL CHEMISTRY, vol.48, no.10, pp.508-514, 2018 (SCI-Expanded)

Articles Published in Other Journals

- I. **Synthesis and characterisation of biodegradable copolymer containing phthalocyanine by ring-opening polymerization**

- Güngördü Solğun D., Savaş B., Salih Ağırtaş M., Öztürk T.
Materials Research Innovations, vol.29, no.1, pp.51-56, 2025 (Scopus)
- II. Preparation of Metal Complexes of 4,5-Dichlorphthalic Acid as Nanoscale and Electronic Properties
Keskin M. S., Yıldiko Ü., Güngördü Solğun D., Ağırtaş M. S.
İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.10, no.3, pp.1865-1875, 2020 (Peer-Reviewed Journal)
- III. DNA binding studies of the 2,10,16,24-tetrakis (phenoxy-3-methoxybenzoic acid)phthalocyaninato)
Co(II) and Cu(II) compounds
Ballı Z., Arslantas A., Solğun D., Ağırtaş M. S.
SN APPLIED SCIENCES, vol.2, no.5, 2020 (ESCI)
- IV. Photovoltaic, thermal, fluorescence and aggregation properties of non-peripherally
metallophthalocyanines bearing four 3,4-dimethoxyphenethoxy substituents
Güngördü Solğun D., Ağırtaş M. S., Horoz S.
International Journal of Chemistry and Technology, vol.4, no.1, pp.8-15, 2020 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. KOBALT FTALOSİYANİN BİLEŞİĞİNİN 2-NİTROFENOL İÇİN KATALİTİK ÖZELLİĞİNİN İNCELENMESİ
Güngördü Solğun D., Ağırtaş M. S.
ICHEAS 7TH INTERNATIONAL CONFERENCE ON HEALTH, ENGINEERING AND APPLIED SCIENCES, Sarajevo,
Bosnia And Herzegovina, 28 - 30 June 2024, pp.198
- II. SYNTHESIS OF (2-(BENZO[D]THIAZOL-2-YLTHIO)PHENOXY) SUBSTITUTED ZINC PHTHALOCYANINE
AND PROPERTIES
Güngördü Solğun D.
EGE 8th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, İzmir, Turkey, 2 - 04 June 2023, pp.193-194
- III. 2-(2-İzopropil-5-metilfenoksi)fenoksi Sübstütue Kobalt, Bakır Ftalosiyayanın Bileşiklerinin Sentezi ve
Karakterizasyonu
Güngördü Solğun D., Ağırtaş M. S.
4th International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 24 - 26 November
2021, pp.1142
- IV. Tetra (benzil 2-fenoksi benzoat) Sübstütue Çinko Ftalosiyayanın Sentezi ve Elektronik Özellikleri
Güngördü Solğun D., Ağırtaş M. S.
4th International Eurasian Conference on Biological and Chemical Sciences , Ankara, Turkey, 24 - 26 November
2021, pp.330
- V. Antioxidant properties of 3,4-dimethoxyphenethoxy peripheral substituted metallophthalocyanines
compounds
Güngördü Solğun D., Ağırtaş M. S., Özdemir S.
2nd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2019), Ankara,
Turkey, 28 - 29 June 2019, pp.765
- VI. Synthesis of (4-hydroxy-3-methoxybenzoyl) oxy-silver Compound; A comparative MP2 and DFT
study
Güngördü Solğun D., Yıldiko Ü., Ağırtaş M. S.
2nd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2019), Ankara,
Turkey, 28 - 29 June 2019, pp.246
- VII. 9-fenil-9h-ksantan-9-il oksi substituentli ftalosiyayanın sentezi ve DFT analizi
İşcan Ö., Güngördü Solğun D., Yıldiko Ü., Ağırtaş M. S.
Uluslararası Katılımlı VII.Uluslararası Anorganik Kimya Kongresi, Çorum, Turkey, 19 - 22 June 2019
- VIII. Tritilfenoksi substituentli ftalosiyayanınların karakterizasyonu ve bazı özelliklerinin araştırılması
Güngördü Solğun D., Ağırtaş M. S., Horoz S.
Uluslararası Katılımlı VII.Uluslararası Anorganik Kimya Kongresi, Çorum, Turkey, 19 - 22 June 2019

Supported Projects

Ağırlaş M. S., Güngördu Solğun D., Project Supported by Higher Education Institutions, Fotovoltaik Amaçlar İçin Yeni Fталосиyanin Komplekslerinin Sentezi, 2024 - Continues

Metrics

Publication: 37

Citation (WoS): 42

Citation (Scopus): 85

H-Index (WoS): 4

H-Index (Scopus): 6

Congress and Symposium Activities

4th International Eurasian Conference on Biological and Chemical Sciences, Attendee, Ankara, Turkey, 2021

4th International Eurasian Conference on Biological and Chemical Sciences, Attendee, Ankara, Turkey, 2021

2.nd International Eurasian Conference on Biological and Chemical Sciences. ANKARA, TÜRKİYE, Attendee, Ankara, Turkey, 2018

2.nd International Eurasian Conference on Biological and Chemical Sciences. ANKARA, TÜRKİYE, Attendee, Ankara, Turkey, 2018

Uluslararası Katılımlı VII.Uluslararası Anorganik Kimya Kongresi, Attendee, Çorum, Turkey, 2018

VII.Uluslararası Anorganik Kimya Kongresi, Attendee, Çorum, Turkey, 2018