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Education Information

Doctorate, Yıldız Technical University, Fen Edebiyat Fakültesi, Kimya/ Anorganik Kimya, Turkey 2004 - 2010

Postgraduate, Yıldız Technical University, Fen Edebiyat Fakültesi, Kimya/ Anorganik Kimya, Turkey 2001 - 2003

Undergraduate, Trakya University, Fen Edebiyat Fakültesi, Kimya Bölümü, Turkey 1994 - 1998

Dissertations

Doctorate, Yeni Mono ve Bis Ftalosiyanın Sentezi ve Özelliklerinin İncelenmesi, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Kimya/ Anorganik Kimya, 2010

Postgraduate, Kırmızı Soğan Kabuğundan Ekstrakte Edilen Antosiyanin ile Yünlü Kumaşların Boyanması, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Kimya Bölümü/ Anorganik Kimya, 2003

Research Areas

Chemistry, Inorganic Chemistry, Transition Metals, Inorganic Ring Compounds, Coordination Chemistry, Organometallic Chemistry, Novel Ligands, Natural Sciences

Academic Titles / Tasks

Associate Professor, Yıldız Technical University, Faculty Of Arts & Science, Department Of Chemistry, 2014 - Continues

Research Assistant PhD, Yıldız Technical University, Faculty Of Arts & Science, Department Of Chemistry, 2010 - 2011

Research Assistant, Yıldız Technical University, Faculty Of Arts & Science, Department Of Chemistry, 2002 - 2010

Courses

Genel Kimya, Undergraduate, 2020 - 2021, 2019 - 2020, 2014 - 2015

Deterjanlar, Undergraduate, 2019 - 2020, 2015 - 2016

Genel Kimya 2, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2014 - 2015

Kozmetik Kimyası ve Üretimi, Undergraduate, 2020 - 2021

Genel Kimya 1, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2014 - 2015

Kozmetik Kimyası ve Üretimi, Undergraduate, 2019 - 2020
İleri Anorganik Kimya, Postgraduate, 2019 - 2020
Anorganik Kimya 2, Undergraduate, 2018 - 2019
Anorganik Kimya 1, Undergraduate, 2018 - 2019
Ftalosiyanimler ve Uygulamaları, Postgraduate, 2018 - 2019, 2016 - 2017
Organometalik Bileşikler Kimyası, Postgraduate, 2016 - 2017
Anorganik Kimya 2, Undergraduate, 2016 - 2017, 2015 - 2016
Kozmetik Kimyası Ve Üretimi , Undergraduate, 2017 - 2018, 2016 - 2017
Anorganik Kimya 1 , Undergraduate, 2016 - 2017
Anorganik Kimya Laboratuvarı 1, Undergraduate, 2015 - 2016
Makrosiklik Bileşikler Kimyası, Postgraduate, 2014 - 2015

Advising Theses

Gümrükçü Köse G., Avciata O., FOTOKATALİZÖR ÖZELLİK GÖSTEREN YENİ FTALOSİYANİN- TİTANYUMDİOKSİT NANOKOMPOZİTLER, Doctorate, S.Neccaroğlu(Student), 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A novel diaxially silicon phthalocyanine sensitizer for the generation of high efficiency singlet oxygen in photochemical and sono-photochemical studies**
GÜMRÜKÇÜ KÖSE G.
Journal of Organometallic Chemistry, vol.998, 2023 (SCI-Expanded)
- II. **Influence of 2-naphthoic acid anchoring groups to the photovoltaic performance of zinc phthalocyanine-based photosensitizers in dye-sensitized solar cell**
Köse G. G., Karaoğlan G. K., Maden Y. E., KOCA A.
Journal of Electroanalytical Chemistry, vol.945, 2023 (SCI-Expanded)
- III. **Effects of anchoring and spacer groups of asymmetric zinc phthalocyanines on the photovoltaic performance of dye-sensitized solar cells**
Köse G. G., Karaoğlan G. K., Maden Y. E., KOCA A.
New Journal of Chemistry, vol.47, no.28, pp.13497-13507, 2023 (SCI-Expanded)
- IV. **DNA groove binder and significant cytotoxic activity on human colon cancer cells: Potential of a dimeric zinc (II) phthalocyanine derivative**
Batibay G. S., KESER KARAOĞLAN G., GÜMRÜKÇÜ KÖSE G., ÖZÇELİK KAZANCIOĞLU E., Metin E., DANIŞMAN KALINDEMİRTAŞ F., Erdem Kuruca S., ARSU N.
Biophysical Chemistry, vol.295, 2023 (SCI-Expanded)
- V. **New phthalocyanine-TiO₂ nanocomposites with photocatalyst properties**
Işık S. N., Köse G. G., AVCIATA O.
Research on Chemical Intermediates, vol.49, no.4, pp.1629-1648, 2023 (SCI-Expanded)
- VI. **Electrochemical and spectroelectrochemical characterizations of phthalocyanines bearing peripherally tetra-4-carboxyethylenephenoxy anchoring groups and usage as photosensitizers of dye-sensitized solar cell**
Maden Y. E., Köse G. G., Karaoğlan G. K., KOCA A.
Journal of Electroanalytical Chemistry, vol.929, 2023 (SCI-Expanded)
- VII. **Dual effect of light and ultrasound for efficient singlet oxygen generation with novel diaxial silicon phthalocyanine sensitizer**
Köse G. G., ERDOĞMUŞ A.
Photochemistry and Photobiology, 2023 (SCI-Expanded)
- VIII. **Synthesis of a novel axially substituted silicon phthalocyanine sensitizer for efficient singlet oxygen**

generation by comparing PDT and SPDT studies

GÜMRÜKÇÜ KÖSE G., KESER KARAOĞLAN G.

CHEMICAL PHYSICS, vol.565, 2023 (SCI-Expanded)

- IX. **Novel silicon phthalocyanine photosensitizers containing carboxylic acid based axial anchoring groups: Electrochemistry, spectroelectrochemistry, and dye sensitized solar cell performance**
GÜMRÜKÇÜ KÖSE G., KESER KARAOĞLAN G., ERDAĞ MADEN Y., KOCA A.
DYES AND PIGMENTS, vol.207, 2022 (SCI-Expanded)
- X. **Synthesis of new zinc phthalocyanines including schiff base and halogen; photophysical, photochemical, and fluorescence quenching studies**
Yuzeroglu M., Karaoglan G. K., Kose G. G., ERDOĞMUŞ A.
JOURNAL OF MOLECULAR STRUCTURE, vol.1238, 2021 (SCI-Expanded)
- XI. **The Synthesis, Characterization, Electrochemical and Spectroelectrochemical Properties of Novel Unsymmetrical Phthalocyanines Containing Naphthoic Acid and Di-tert-butylphenoxy Groups**
Gümrükçü Köse G., Keser Karaoğlan G., Isik S. N., Akyuz D., Koca A.
SYNTHETIC METALS, vol.264, 2020 (SCI-Expanded)
- XII. **Synthesis, characterization and ethanol sensing properties of carboxylic acid-terminated naphthoxy substituted phthalocyanines**
ISIK S. N., KARAOGLAN G., OMUR B., ALTINDAL A., KOSE G.
SYNTHETIC METALS, vol.246, pp.7-15, 2018 (SCI-Expanded)
- XIII. **Novel carboxylic acid terminated silicon(IV) and zinc(II) phthalocyanine photosensitizers: Synthesis, photophysical and photochemical studies**
Hısır A., Kose G., Atmaca G., Erdoğmuş A., Karaoglan G.
JOURNAL OF PORPHYRINS AND PHTHALOCYANINES, vol.22, pp.1010-1021, 2018 (SCI-Expanded)
- XIV. **Novel homoleptic, dimeric zinc(II) phthalocyanines as gate dielectric for OFET device**
Karaoglan G., Gümrükçü G., GÖRDÜK S., CAN N., Gül A.
Synthetic Metals, vol.230, pp.7-11, 2017 (SCI-Expanded)
- XV. **Synthesis, characterization, fluorescence spectra and energy transfer properties of a novel unsymmetrical zinc phthalocyanine with peripherally coordinated Ru(II) complex**
Ceylan N., Gumrukcu G., Karaoglan G., Gül A.
SYNTHETIC METALS, vol.206, pp.55-60, 2015 (SCI-Expanded)
- XVI. **Photophysical and photochemical properties of a zinc phthalocyanine with four diphenylborinic ester moieties**
Özçelik Ş., Karaoglan G., Gumrukcu G., Erdoğmuş A., Gül A.
JOURNAL OF ORGANOMETALLIC CHEMISTRY, vol.769, pp.17-23, 2014 (SCI-Expanded)
- XVII. **Photophysical, Photochemical, and BQ Quenching Properties of Zinc Phthalocyanines with Fused or Interrupted Extended Conjugation**
Gumrukcu G., Karaoglan G., ERDOĞMUŞ A., Gül A., Avciata U.
JOURNAL OF CHEMISTRY, 2014 (SCI-Expanded)
- XVIII. **Woolen Fabric Dyeing with Punica granatum L. Rind by Using Different Mordants**
Ozgur M., Acikgoz Z. O., Sahinbaskan B. Y., Gumrukcu G.
ASIAN JOURNAL OF CHEMISTRY, vol.25, no.4, pp.1956-1964, 2013 (SCI-Expanded)
- XIX. **Structural and Surface Characterization of Newly Synthesized D-pi-D Type Schiff Base Ligand: (1E,2E)-3-[4-(Dimethylamino)phenyl]prop-2-en-1-ylidene)phenylamine**
Gumrukcu G., Garikyan S., Karaoglan G., Sakar D.
JOURNAL OF CHEMISTRY, 2013 (SCI-Expanded)
- XX. **A novel phthalocyanine conjugated with four salicylideneimino complexes: Photophysics and fluorescence quenching studies**
Gumrukcu G., Karaoglan G., ERDOĞMUŞ A., Gül A., Avciata U.
DYES AND PIGMENTS, vol.95, no.2, pp.280-289, 2012 (SCI-Expanded)
- XXI. **A novel soluble phthalocyanine capable of binding four boronic esters**
Özçelik Ş., Karaoglan G., Gumrukcu G., Gül A.

- TURKISH JOURNAL OF CHEMISTRY, vol.36, no.6, pp.899-906, 2012 (SCI-Expanded)
- XXII. **Synthesis and characterization of novel soluble phthalocyanines with fused conjugated unsaturated groups**
Karaoglan G., Gumrukcu G., KOCA A., Gül A., Avciata U.
DYES AND PIGMENTS, vol.90, no.1, pp.11-20, 2011 (SCI-Expanded)
- XXIII. **Effect of Tannic Acid and Metal Salts on Dyeing of Woolen Fabrics with Red Onion (*Alliumcepa L.*)**
Gumrukcu G., Ozgur M.
ASIAN JOURNAL OF CHEMISTRY, vol.23, pp.1459-1466, 2011 (SCI-Expanded)
- XXIV. **The synthesis, characterization, electrochemical and spectroelectrochemical properties of a novel, cationic, water-soluble Zn phthalocyanine with extended conjugation**
Karaoglan G., Gumrukcu G., KOCA A., Gül A.
DYES AND PIGMENTS, vol.88, no.3, pp.247-256, 2011 (SCI-Expanded)
- XXV. **Synthesis and electrochemical, electrical and gas sensing properties of novel mononuclear metal-free, Zn(II), Ni(II), Co(II), Cu(II), Lu(III) and double-decker Lu(III) phthalocyanines substituted with 2-(2H-1,2,3-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl) phenoxy**
Gumrukcu G., Ozgur M., Altindal A., Özkaya A. R., Salih B., Bekaroglu O.
SYNTHETIC METALS, vol.161, pp.112-123, 2011 (SCI-Expanded)
- XXVI. **Extraction of anthocyanin pigments from red onion (*Alliumcepa L.*) and dyeing woolen fabrics**
Guemruekcue G., Oezguer M. U., Gueltekin C.
ASIAN JOURNAL OF CHEMISTRY, vol.20, no.4, pp.2891-2902, 2008 (SCI-Expanded)
- XXVII. **DETERMINATION OF ANTHOCYANINS IN SOME VEGETABLES AND FRUITS BY DERIVATIVE SPECTROPHOTOMETRIC METHOD**
Sakar D., Karaoglan G., Gumrukcu G., Ozgur M.
REVIEWS IN ANALYTICAL CHEMISTRY, vol.27, no.4, pp.235-249, 2008 (SCI-Expanded)
- XXVIII. **Abilities of partial least-squares (PLS-2) multivariate calibration in the analysis of quaternary mixture of food Colors (E-110, E-122, E-124, E-131)**
Keser Karaoglan G., Guemruekcue G., Oezguer M. U., Bozdogan A. E., Asci B.
ANALYTICAL LETTERS, vol.40, no.10, pp.1893-1903, 2007 (SCI-Expanded)

Books & Book Chapters

- I. **DYEING PROPERTIES OF WOOLLEN FABRIC WITH QUERCETIN EXTRACTED FROM PUNICA GRANATUM L. RIND USING DIFFERENT DYEING METHOD AND MORDANT MIXTURES**
Yılmaz Şahinbaşkan B., Ögütgen Açıkgöz Z., Gümrükçü Köse G., Özgür M.
in: ITC&DC: 5TH INTERNATIONAL TEXTILE, CLOTHING & DESIGN CONFERENCE 2010, BOOK OF PROCEEDINGS: MAGIC WORLD OF TEXTILES, Sajatovic A.H., Vujasinovic E., Editor, UNIV ZAGREB, FAC TEXTILE TECH, PO BOX 818, PRILAZ BARUNA FILIPOVICA 28A, ZAGREB, HR-10 000, CROATIA, Zagreb, pp.433-438, 2010
- II. **Adsorption of Cu (II) from Aqueous Solutions by Sumac (*Rhus coriaria L.*) Tannins**
Uğur A. L., Gümrükçü Köse G., Özgür M.
in: INNOVATIONS IN CHEMICAL BIOLOGY, Sener B, Editor, SPRINGER DORDRECHT, NETHERLANDS, Dordrecht, pp.269-276, 2009

Refereed Congress / Symposium Publications in Proceedings

- I. **The Synthesis and Characterization of Novel Carboxylic Group Substituted Metallophthalocyanines**
GÜMRÜKÇÜ KÖSE G., Neccaroğlu Işık S., KESER KARAOĞLAN G.
20th JCF-Frühjahrssymposium Congress, Konstanz, Germany, 21 March 2018, pp.158
- II. **Synthesis and Characterization of Metallophthalocyanines Containing Carboxylic Group**
KESER KARAOĞLAN G., Hışır A., GÜMRÜKÇÜ KÖSE G.

20. Fröhjahrssymposium JungChemikerForum, Konstanz, Germany, 21 March 2018, pp.181

III. Synthesis and characterization of a new dimeric zinc phthalocyanine

GÜMRÜKÇÜ KÖSE G., KESER KARAOĞLAN G., GÖRDÜK S., GÜL A.

19. JCF-Fröhjahrssymposium, Mainz, Germany, 29 March - 01 April 2017, pp.110

IV. Synthesis of A Novel Phthalocyanine With Peripherally Coordinated Ru(II) Complex

Gümrükçü Köse G., Keser Karaođlan G., Kemikli N., Gül A.

All in One Conferences, Dubai, United Arab Emirates, 24 - 28 March 2015, pp.78

V. Simultaneous Determination of Food Dyes Using Derivative Spectrophotometry

GÜMRÜKÇÜ KÖSE G., EKEN KORKUT S., ÖZGÜR M.

3rd Black Sea basin Conference on Analytical Chemistry, Constanta, Romania, 12 September 2005, pp.143

Supported Projects

GÜMRÜKÇÜ KÖSE G., Neccarođlu Işık S., Project Supported by Higher Education Institutions, FOTOKATALİZÖR ÖZELLİK GÖSTEREN YENİ FTALOSİYANİN TİTANYUM DİOKSİT NANOKOMPOZİTLER, 2017 - 2019

Gümrükçü Köse G., Keser Karaođlan G., Erdođmuş A., Avciata U., Project Supported by Higher Education Institutions, PERİFERAL BİSBİPİRİDİL RUTENYUM KOMPLEKSİ İÇEREN FTALOSİYANİNLER, 2015 - 2017

GÜMRÜKÇÜ KÖSE G., ERDOĐMUŞ A., AVCIATA U., KESER KARAOĐLAN G., Project Supported by Higher Education Institutions, Dimerik Ftalosiyanın Sentez ve Karakterizasyonu, 2015 - 2017

Gümrükçü Köse G., Bekarođlu Ö., Özgür M., Project Supported by Higher Education Institutions, Yeni Bis Ftalosiyanın ve Lutesyum Komplekslerinin Sentezi ve Özelliklerinin İncelenmesi, 2007 - 2011

Metrics

Publication: 51

Citation (WoS): 320

Citation (Scopus): 342

H-Index (WoS): 9

H-Index (Scopus): 10