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Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya (Dr), Turkey 1999 - 2004

Postgraduate, Mersin University, Institute Of Science, Kimya (YI) (Tezli), Turkey 1996 - 1998

Undergraduate, Gazi University, Gazi Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, Turkey 1990 - 1994

Dissertations

Doctorate, Electrochemical synthesis and characterization of sulfonated polythiophenes and aniline-thiophene copolymers, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya (Dr), 2004

Postgraduate, Polipirol, politiyofen, poliindol ve alaşımlarının elektrokimyasal sentezi ve karakterizasyonu, Mersin University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), 1998

Research Areas

Chemistry

Academic Titles / Tasks

Professor, Gazi University, Teknik Bilimler Meslek Yüksekokulu, Kimya ve Kimyasal İşleme Teknolojileri Bölümü, 2018 - Continues

Associate Professor, Gazi University, Fen Bilimleri Enstitüsü, -, 2010 - 2018

Assistant Professor, Gazi University, Fen Bilimleri Enstitüsü, -, 2008 - 2009

Assistant Professor, Mersin University, Faculty Of Arts And Sciences, Department Of Chemistry, 2004 - 2008

Research Assistant, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 1999 - 2004

Research Assistant, Mersin University, Faculty Of Arts And Sciences, Department Of Chemistry, 1995 - 1998

Academic and Administrative Experience

Deputy Head of Department, Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler Anabilim Dalı (Disiplinlerarası), 2015 - 2022

Advising Theses

UDUM Y., Electrochromic And Amperometric Biosensor Applications Of Multifunctional Conductive Polymer, Postgraduate, M.AKTAŞ(Student), 2019

UDUM Y., Syntheses of benzotriazole based conjugated polymers for organic light emitting diode and organic solar cell, Postgraduate, İ.ÖNK(Student), 2016

UDUM Y., Copolymers comprising benzodithiophene and benzotriazole derivatives for organic solar cells, Postgraduate, D.GÜLEŞ(Student), 2016

UDUM Y., Synthesis, electrochromic and optic properties of donor-acceptor type conductive polymers containing thiophene and thienothiophene, Postgraduate, E.RUSTAMLI(Student), 2014

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Determination of the relative sensitivity of polyaniline inks and films to deprotonation by ammonia using UV-Vis spectroscopy**
UDUM Y., Killard A. J., Wagner M.
European Polymer Journal, vol.205, 2024 (SCI-Expanded)
- II. **The effect of 10 weeks of karate training on the development of motor skills in children who are new to karate**
Udum Y., Yavaşoğlu B., Beykümü A., Pekel A. Ö., Suveren C., Karabulut E. O., Ayyıldız Durhan T., Çakır V. O., Sariakçalı N., Küçük H., et al.
Frontiers in Physiology, vol.15, 2024 (SCI-Expanded)
- III. **Building Block Engineering toward Realizing High-Performance Electrochromic Materials and Glucose Biosensing Platform**
Karabag A., Soyler D., UDUM Y., TOPPARE L. K., GÜNBAŞ E. G., Soylemez S.
Biosensors, vol.13, no.7, 2023 (SCI-Expanded)
- IV. **Electrochemical detection of Oxaliplatin induced DNA damage in G-quadruplex structures**
Osmanoğulları S. C., FOROUGH M., PERSİL ÇETİNKOL Ö., UDUM Y., Toppare L.
Analytical Biochemistry, vol.671, 2023 (SCI-Expanded)
- V. **D-A-D type functional conducting polymer: Development of its electrochromic properties and laccase biosensor**
UDUM Y., Aktas Gemci M., Cevher D., Soylemez S., ÇIRPAN A., Toppare L.
Journal of Applied Polymer Science, vol.140, no.11, 2023 (SCI-Expanded)
- VI. **Effect of 6-week karate (kihon) and basic movement exercise on balance performance in visually impaired individuals**
PEKEL A. Ö., Suveren C., UDUM Y., Yavasoglu B., Beykumul A., Durhan T. A., Ceylan L.
FRONTIERS IN PHYSIOLOGY, vol.14, 2023 (SCI-Expanded)
- VII. **Examination of basic motor skills in children and adolescents**
Karadeniz S., Suveren C., UDUM Y., AYYILDIZ DURHAN T., Ceylan T., Albay F., Küçük H., Ceylan L.
FRONTIERS IN PHYSIOLOGY, vol.14, 2023 (SCI-Expanded)
- VIII. **Effect of random copolymerization on the optical properties of selenophene and thieno[3,4-c]pyrrole-4,6-dione conjugated polymers**
Yasa M., UDUM Y., TOPPARE L. K.
MICROCHEMICAL JOURNAL, vol.178, 2022 (SCI-Expanded)
- IX. **Investigation the effect of π bridge and side chain on photovoltaic properties of benzodithiophene and quinoxaline based conjugated polymers**
Taskaya Aslan S., Alemdar Yılmaz E., Hacıfendioğlu T., UDUM Y., TOPPARE L. K., YILDIRIM E., ÇIRPAN A.
European Polymer Journal, vol.169, 2022 (SCI-Expanded)
- X. **Multipurpose acetic acid functionalized carbazole derivatives: Synthesis, electrochemical properties and electrochromic device applications**
Hacıoğlu S. O., YİĞİT D., Akbey T. E., UDUM Y., GÜLLÜ M., DEPCİ T., TOPPARE L. K.

JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.908, 2022 (SCI-Expanded)

- XI. **Light induced step-growth polymerization of Donor-Acceptor-Donor (DAD) type monomers based on thiophene - [1,2,5] Chalcogenazolo[3,4-f]-benzo [1,2,3] triazole - Thiophene**
Kaya K., Alkan E. A., Yasa M., Suerkan A., UDUM Y., TOPPARE L. K., Yağcı Y.
EUROPEAN POLYMER JOURNAL, vol.161, 2021 (SCI-Expanded)
- XII. **Synthesis of selenophene substituted benzodithiophene and fluorinated benzothiadiazole based conjugated polymers for organic solar cell applications**
Aslan S. T., Cevher D., Bolayir E., HIZALAN ÖZSOY G., UDUM Y., YILDIRIM E., TOPPARE L. K., ÇIRPAN A.
ELECTROCHIMICA ACTA, vol.398, 2021 (SCI-Expanded)
- XIII. **Multichromic Vanadium Pentoxide Thin Films Through Ultrasonic Spray Deposition**
TUTEL Y., DURUKAN M. B., Koc S., KOYLAN S., Cakmak H., Kocak Y., Hekmat F., ÖZENSOY E., ÖZBAY E., UDUM Y., et al.
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.168, no.10, 2021 (SCI-Expanded)
- XIV. **Highly conjugated visible and near-infrared light photoinitiating systems for radical and cationic polymerizations**
Suerkan A., Alkan E. A., Kaya K., UDUM Y., TOPPARE L. K., Yağcı Y.
PROGRESS IN ORGANIC COATINGS, vol.154, 2021 (SCI-Expanded)
- XV. **ProTOT: Synthesis of the missing member of the 3,4-chalcogen substituted bridged thiophenes and its utilization in donor-acceptor polymers**
Yaylali F. V., Ozel H., UDUM Y., TOPPARE L. K., SÖYLEMEZ S., GÜNBAŞ E. G.
POLYMER, vol.212, 2021 (SCI-Expanded)
- XVI. **Indenoquinoxalinone based conjugated polymer substrate for laccase biosensor**
Cevher S. C., Bekmezci S. A., SaniyeSoylemez S., UDUM Y., TOPPARE L. K., ÇIRPAN A.
MATERIALS CHEMISTRY AND PHYSICS, vol.257, 2021 (SCI-Expanded)
- XVII. **Construction of amperometric biosensor modified with conducting polymer/carbon dots for the analysis of catechol**
Yasa M., Deniz A., Forough M., YILDIRIM E., PERSİL ÇETİNKOL Ö., UDUM Y., TOPPARE L. K.
JOURNAL OF POLYMER SCIENCE, vol.58, no.23, pp.3336-3348, 2020 (SCI-Expanded)
- XVIII. **A comprehensive study: Theoretical and experimental investigation of heteroatom and substituent effects on frontier orbitals and polymer solar cell performances**
Cevher S. C., Hizalan G., ALEMDAR E., Cevher D., Udum Arslan Y., TOPPARE L. K., YILDIRIM E., ÇIRPAN A.
JOURNAL OF POLYMER SCIENCE, vol.58, no.19, pp.2792-2806, 2020 (SCI-Expanded)
- XIX. **Narrow band gap benzodithiophene and quinoxaline bearing conjugated polymers for organic photovoltaic applications**
Caliskan M., ERER M. C., Aslan S. T., UDUM Y., TOPPARE L. K., ÇIRPAN A.
DYES AND PIGMENTS, vol.180, 2020 (SCI-Expanded)
- XX. **Synthesis and characterization of optical, electrochemical and photovoltaic properties of selenophene bearing benzodithiophene based alternating polymers**
Ati G. O., ALEMDAR E., Aslan S. T., UDUM Y., TOPPARE L. K., ÇIRPAN A.
JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.862, 2020 (SCI-Expanded)
- XXI. **The impact of [1,2,5]chalcogenazolo[3,4-f]-benzo[1,2,3]triazole structure on the optoelectronic properties of conjugated polymers**
Alkan E. A., Goker S., Sarigul H., YILDIRIM E., UDUM Y., TOPPARE L. K.
JOURNAL OF POLYMER SCIENCE, vol.58, no.7, pp.956-968, 2020 (SCI-Expanded)
- XXII. **Electrosynthesis and characterizations of electrochromic and soluble polymer films based on N-substituted carbazole derivates**
Elkhidr H. E., ERTEKİN Z., UDUM Y., PEKMEZ K.
SYNTHETIC METALS, vol.260, 2020 (SCI-Expanded)
- XXIII. **A new ethanol biosensor based on polyfluorene-g-poly(ethylene glycol) and multiwalled carbon nanotubes**
Bekmezci S. A., SÖYLEMEZ S., Yilmaz G., UDUM Y., Yağcı Y., TOPPARE L. K.
EUROPEAN POLYMER JOURNAL, vol.122, 2020 (SCI-Expanded)

- XXIV. **Syntheses and Characterization of Benzotriazole, Thienopyrroledione, and Benzodithiophene Containing Conjugated Random Terpolymers for Organic Solar Cells**
Goksu K., Hizalan G., UDUM Y., Hacıoğlu S. O., Cevher S. C., Akrema A., TOPPARE L. K., ÇIRPAN A.
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.166, no.15, 2019 (SCI-Expanded)
- XXV. **A thiazolothiazole containing multichromic polymer for glucose detection**
Soylemez S., Kaya H. Z., Udum Y., TOPPARE L. K.
EXPRESS POLYMER LETTERS, vol.13, no.10, pp.845-857, 2019 (SCI-Expanded)
- XXVI. **Tuning molecular energy levels and band gap of two-dimensional benzo[1,2-b:4,5-b'] dithiophene and quinoxaline bearing polymers**
Yasa M., Goker S., UDUM Y., TOPPARE L. K.
JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.847, 2019 (SCI-Expanded)
- XXVII. **A multipurpose conjugated polymer: Electrochromic device and biosensor construction for glucose detection**
Soylemez S., Kaya H. Z., UDUM Y., TOPPARE L. K.
ORGANIC ELECTRONICS, vol.65, pp.327-333, 2019 (SCI-Expanded)
- XXVIII. **Application of an Efficient Amperometric Glucose Sensing Electrode Based on a Bilayer Polymer Film Platform**
Kaya H. Z., SÖYLEMEZ S., UDUM Y., TOPPARE L. K.
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.165, no.16, 2018 (SCI-Expanded)
- XXIX. **Fabrication of a promising immobilization platform based on electrochemical synthesis of a conjugated polymer**
Buber E., SÖYLEMEZ S., UDUM Y., TOPPARE L. K.
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.167, pp.392-396, 2018 (SCI-Expanded)
- XXX. **Polymerization and biosensor application of water soluble peptide-SNS type monomer conjugates**
Soylemez S., Yilmaz T., Buber E., UDUM Y., ÖZÇUBUKÇU S., TOPPARE L. K.
JOURNAL OF MATERIALS CHEMISTRY B, vol.5, no.35, pp.7384-7392, 2017 (SCI-Expanded)
- XXXI. **Effect of substituent groups on quinoxaline-based random copolymers on the optoelectronic and photovoltaic properties**
Cevher S. C., Hizalan G., Temiz C., UDUM Y., TOPPARE L. K., ÇIRPAN A.
POLYMER, vol.101, pp.208-216, 2016 (SCI-Expanded)
- XXXII. **Incorporation of Different Conjugated Linkers into Low Band Gap Polymers Based on 5,6-Bis(octyloxy)-2,1,3 benzoxadiazole for Tuning Optoelectronic Properties**
Goker S., Hizalan G., Kutkan S., UDUM Y., ÇIRPAN A., TOPPARE L. K.
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.54, no.16, pp.2459-2467, 2016 (SCI-Expanded)
- XXXIII. **Incorporation of different conjugated linkers into low band gap polymers based on 5,6-bis(octyloxy)-2,1,3 benzoxadiazole for tuning efficiency of organic photovoltaics**
Goker S., Hizalan G., UDUM Y., TOPPARE L. K.
ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, vol.251, 2016 (SCI-Expanded)
- XXXIV. **Synthesis and characterization of conducting polymers containing polypeptide and ferrocene side chains as ethanol biosensors**
Kesik M., Akbulut H., Soylemez S., Cevher S. C., Hizalan G., UDUM Y., Endo T., Yamada S., ÇIRPAN A., Yağcı Y., et al.
ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, vol.251, 2016 (SCI-Expanded)
- XXXV. **Electrosynthesis and characterization of an electrochromic material containing biscarbazole-oxadiazole units and its application in an electrochromic device**
UDUM Y., HIZLIATEŞ C. G., Ergun Y., TOPPARE L. K.
THIN SOLID FILMS, vol.595, pp.61-67, 2015 (SCI-Expanded)
- XXXVI. **Electrochemical and optical properties of a conducting polymer and its use in a novel biosensor for the detection of cholesterol**
Soylemez S., UDUM Y., Kesik M., HIZLIATEŞ C. G., Ergun Y., TOPPARE L. K.
SENSORS AND ACTUATORS B-CHEMICAL, vol.212, pp.425-433, 2015 (SCI-Expanded)

- XXXVII. **Multichromic and soluble conjugated polymers containing thiazolothiazole unit for electrochromic applications**
Akpinar H. Z., UDUM Y., TOPPARE L. K.
EUROPEAN POLYMER JOURNAL, vol.63, pp.255-261, 2015 (SCI-Expanded)
- XXXVIII. **Synthesis of a benzotriazole bearing alternating copolymer for organic photovoltaic applications**
Istanbulluoglu C., Goker S., Hizalan G., Hacıoglu S. O., UDUM Y., Yildiz E. D., ÇIRPAN A., TOPPARE L. K.
NEW JOURNAL OF CHEMISTRY, vol.39, no.8, pp.6623-6630, 2015 (SCI-Expanded)
- XXXIX. **Electrochemical Properties of Perylene Diimide (PDI) and Benzotriazole (Btz) Bearing Conjugated Polymers to Investigate the Effect of pi-Bridge on Electrochemical Properties**
Baysec S., Unlu N. A., Hacıoglu S. O., UDUM Y., ÇIRPAN A., TOPPARE L. K.
JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY, vol.52, no.1, pp.1-9, 2015 (SCI-Expanded)
- XL. **Synthesis and Characterization of Thiophene and Thieno[3,2-b]thiophene Containing Conjugated Polymers**
Rustamh E., Goker S., Tarkuc S., UDUM Y., TOPPARE L. K.
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.162, no.9, 2015 (SCI-Expanded)
- XLII. **Electrochemical and spectroelectrochemical studies of poly(2,5-di-2,3-dihydrothieno[3,4-b][1,4]dioxin-5-ylthienyl) derivatives bearing azobenzene, coumarine and fluorescein dyes: Effect of chromophore groups on electrochromic properties**
Yigit D., UDUM Y., GÜLLÜ M., TOPPARE L. K.
ELECTROCHIMICA ACTA, vol.147, pp.669-677, 2014 (SCI-Expanded)
- XLIII. **Synthesis and Spectroelectrochemistry of Dithieno(3,2-b:2',3'-d)pyrrole Derivatives**
UDUM Y., Yildiz H. B., AZAK H., Sahin E., TALAZ O., ÇIRPAN A., TOPPARE L. K.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.131, no.17, 2014 (SCI-Expanded)
- XLIV. **Electrochromic properties of multicolored novel polymer synthesized via combination of benzotriazole and N-functionalized 2,5-di(2-thienyl)-1H-pyrrole units**
Rende E., Kilic C. E., UDUM Y., Toffoli D., TOPPARE L. K.
ELECTROCHIMICA ACTA, vol.138, pp.454-463, 2014 (SCI-Expanded)
- XLV. **Inverted bulk-heterojunction solar cell with cross-linked hole-blocking layer**
Udum Y., Denk P., Adam G., Apaydin D. H., Nevsad A., Teichert C., White M. S., Sariciftci N. S., Scharber M. C.
ORGANIC ELECTRONICS, vol.15, no.5, pp.997-1001, 2014 (SCI-Expanded)
- XLVI. **Electrochemical and optical properties of 5,6-bis(octyloxy)-2,1,3 benzoaxadiazole containing low band gap polymers**
Goker S., Hizalan G., UDUM Y., TOPPARE L. K.
SYNTHETIC METALS, vol.191, pp.19-27, 2014 (SCI-Expanded)
- XLVII. **A novel conducting polymer based platform for ethanol sensing**
Kekec N. C., Kanik F. E., UDUM Y., HIZLIATEŞ C. G., Ergun Y., TOPPARE L. K.
SENSORS AND ACTUATORS B-CHEMICAL, vol.193, pp.306-314, 2014 (SCI-Expanded)
- XLVIII. **Electrochemical and optical properties of novel terthienyl based azobenzene, coumarine and fluorescein containing polymers: Multicolored electrochromic polymers**
Yigit D., UDUM Y., GÜLLÜ M., TOPPARE L. K.
JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.712, pp.215-222, 2014 (SCI-Expanded)
- XLIX. **Synthesis and characterization of conducting polymers containing polypeptide and ferrocene side chains as ethanol biosensors**
Kesik M., Akbulut H., Soylemez S., Cevher S. C., Hizalan G., UDUM Y., Endo T., Yamada S., ÇIRPAN A., Yağcı Y., et al.
POLYMER CHEMISTRY, vol.5, no.21, pp.6295-6306, 2014 (SCI-Expanded)
- L. **A sepiolite modified conducting polymer based biosensor**
Soylemez S., Kanik F. E., Tarkuc S., UDUM Y., TOPPARE L. K.
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.111, pp.549-555, 2013 (SCI-Expanded)
- L. **Synthesis and electrochemical characterization of fluorene and benzimidazole containing novel conjugated polymers: Effect of alkyl chain length on electrochemical properties**

Namal I., Ozeltaglayan A. C., UDUM Y., TOPPARE L. K.

EUROPEAN POLYMER JOURNAL, vol.49, no.10, pp.3181-3187, 2013 (SCI-Expanded)

- L.I. **Spray-processable thiazolothiazole-based copolymers with altered donor groups and their electrochromic properties**
Akpınar H. Z., UDUM Y., TOPPARE L. K.
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.51, no.18, pp.3901-3906, 2013 (SCI-Expanded)
- L.II. **Effective and Functional Surface Design for Biosensing Applications Based on a Novel Conducting Polymer and PMMA/Clay Nanocomposite**
Kesik M., Kocer O., Kanik F. E., Unlu N. A., Rende E., Aslan-Gurel E., Rossi R. M., UDUM Y., TOPPARE L. K.
ELECTROANALYSIS, vol.25, no.8, pp.1995-2006, 2013 (SCI-Expanded)
- L.III. **Fused structures in the polymer backbone to investigate the photovoltaic and electrochromic properties of donor-acceptor-type conjugated polymers**
Cevher S. C., Unlu N. A., Ozeltaglayan A. C., Apaydin D. H., UDUM Y., TOPPARE L. K., ÇIRPAN A.
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.51, no.9, pp.1933-1941, 2013 (SCI-Expanded)
- L.IV. **Synthesis of aromatic poly(pyridinium salt)s and their electrochromic properties**
Keshtov M. L., Udum Y., TOPPARE L. K., Kochurov V. S., Khokhlov A. R.
MATERIALS CHEMISTRY AND PHYSICS, vol.139, pp.936-943, 2013 (SCI-Expanded)
- L.V. **Quinoxaline derivatives as long wavelength photosensitizers in photoinitiated cationic polymerization of diaryliodonium salts**
Bulut U., Kolay M., Tarkuc S., UDUM Y., TOPPARE L. K.
PROGRESS IN ORGANIC COATINGS, vol.73, pp.215-218, 2012 (SCI-Expanded)
- L.VI. **Tailoring the optoelectronic properties of donor-acceptor-donor type pi-conjugated polymers via incorporating different electron-acceptor moieties**
Tarkuc S., UDUM Y., TOPPARE L. K.
THIN SOLID FILMS, vol.520, no.7, pp.2960-2965, 2012 (SCI-Expanded)
- L.VII. **Near infrared electrochromic polymers based on phenazine moieties**
Esmer E. N., Tarkuc S., UDUM Y., TOPPARE L. K.
MATERIALS CHEMISTRY AND PHYSICS, vol.131, pp.519-524, 2011 (SCI-Expanded)
- L.VIII. **The effect of the donor unit on the optical properties of polymers**
Unver E. K., Tarkuc S., UDUM Y., TANYELİ C., TOPPARE L. K.
ORGANIC ELECTRONICS, vol.12, no.10, pp.1625-1631, 2011 (SCI-Expanded)
- L.IX. **Synthesis and optical properties of fused aromatic thienopyrazine based pi-conjugated polymers**
Kolay M., Tarkuc S., UDUM Y., TOPPARE L. K.
SMART MATERIALS & STRUCTURES, vol.20, no.7, 2011 (SCI-Expanded)
- L.X. **Multi-colored electrochromic polymer with enhanced optical contrast**
Tarkuc S., Unver E. K., UDUM Y., TOPPARE L. K.
EUROPEAN POLYMER JOURNAL, vol.46, no.11, pp.2199-2205, 2010 (SCI-Expanded)
- L.XI. **The effect of changes in pi-conjugated terthienyl systems using thienyl and ethylenedioxybenzene functionalized thieno[3,4-b]pyrazine precursors: Multicolored low band gap polymers**
Tarkuc S., Unver E. K., UDUM Y., TANYELİ C., TOPPARE L. K.
ELECTROCHIMICA ACTA, vol.55, no.24, pp.7254-7258, 2010 (SCI-Expanded)
- L.XII. **Improving electrochromic properties via copolymerization**
Taskin A. T., Balan A., UDUM Y., TOPPARE L. K.
SMART MATERIALS AND STRUCTURES, vol.19, no.6, 2010 (SCI-Expanded)
- L.XIII. **Molecular architecture: Another plausible pathway toward a low band gap polymer**
Tarkuc S., UDUM Y., TOPPARE L. K.
JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.643, pp.89-93, 2010 (SCI-Expanded)
- L.XIV. **Effect of Conjugated Core Building Block Dibenzo[a,c]phenazine Unit on pi-Conjugated Electrochromic Polymers: Red-Shifted Absorption**
Unver E. K., Tarkuc S., UDUM Y., TANYELİ C., TOPPARE L. K.

- JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.48, no.8, pp.1714-1720, 2010 (SCI-Expanded)
- LXV. **A novel quinoxaline bearing electroactive monomer: Pyrrole as the donor moiety**
Taskin A. T., Balan A., Epik B., Yildiz E., UDUM Y., TOPPARE L. K.
ELECTROCHIMICA ACTA, vol.54, no.23, pp.5449-5453, 2009 (SCI-Expanded)
- LXVI. **Tuning of the neutral state color of the pi-conjugated donor-acceptor-donor type polymer from blue to green via changing the donor strength on the polymer**
Tarkuc S., UDUM Y., TOPPARE L. K.
POLYMER, vol.50, no.15, pp.3458-3464, 2009 (SCI-Expanded)
- LXVII. **Electrochemical synthesis and characterization of a new soluble conducting polymer**
UDUM Y., Ergun Y., ŞAHİN Y., PEKMEZ K., Yildiz A.
JOURNAL OF MATERIALS SCIENCE, vol.44, no.12, pp.3148-3155, 2009 (SCI-Expanded)
- LXVIII. **A bis-selenophene substituted alkoxy benzene derivative as a highly stable novel electrochromic polymer**
Udum Y., Tarkuc S., TOPPARE L. K.
SYNTHETIC METALS, vol.159, pp.361-365, 2009 (SCI-Expanded)
- LXIX. **Electrodeposition of Poly(4-methyl carbazole-3-carboxylic acid) on Steel Surfaces and Corrosion Protection of Steel**
Dueduekcue M., Udum Y., Erguen Y., Koeleli F.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.111, no.3, pp.1496-1500, 2009 (SCI-Expanded)
- LXX. **Both p- and n-type dopable polymer toward electrochromic applications**
Udum Y., Durmus A., GÜNBAŞ E. G., TOPPARE L. K.
ORGANIC ELECTRONICS, vol.9, no.4, pp.501-506, 2008 (SCI-Expanded)
- LXXI. **A new donor-acceptor type polymeric material from a thiophene derivative and its electrochromic properties**
Udum Y., Yildiz E., GÜNBAŞ E. G., TOPPARE L. K.
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.46, no.11, pp.3723-3731, 2008 (SCI-Expanded)
- LXXII. **Electrochemical polymerization and spectroscopic investigation of 2-methylindole**
Udum Y., Dudukcu M., Koleli F.
REACTIVE & FUNCTIONAL POLYMERS, vol.68, no.4, pp.861-867, 2008 (SCI-Expanded)
- LXXIII. **A new self-doped copolymer consisting of 3-methyl thiophene and aniline units**
Udum Y., Pekmez K., Yildiz A.
JOURNAL OF SOLID STATE ELECTROCHEMISTRY, vol.10, no.2, pp.110-116, 2005 (SCI-Expanded)
- LXXIV. **Electrochemically controlled solid-phase microextraction (EC-SPME) based on overoxidized sulfonated polypyrrole**
Tamer U., Ertas N., Udum Y., ŞAHİN Y., Pekmez K., Yildiz A.
TALANTA, vol.67, no.1, pp.245-251, 2005 (SCI-Expanded)
- LXXV. **Electrochemical preparation of a soluble conducting aniline-thiophene copolymer**
Udum Y., Pekmez K., Yildiz A.
EUROPEAN POLYMER JOURNAL, vol.41, no.5, pp.1136-1142, 2005 (SCI-Expanded)
- LXXVI. **Synthesis of aniline-thiophene copolymer on beta-PbO₂ electrode in acetonitrile**
Abaci S., Aslan Y., Yildiz A.
JOURNAL OF MATERIALS SCIENCE, vol.40, no.5, pp.1163-1168, 2005 (SCI-Expanded)
- LXXVII. **Preparation of sulfonated overoxidized polypyrrole film applicable as an SPME tool for cationic analytes**
Ugur T., Yucel S., Nusret E., Yasemin U., Kadir P., Attila Y.
JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.570, no.1, pp.6-12, 2004 (SCI-Expanded)
- LXXVIII. **Electrochemical synthesis of sulfonated polypyrrole in FSO₃H/acetonitrile solution**
ŞAHİN Y., Aydin A., Udum Y., Pekmez K., Yildiz A.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.93, no.2, pp.526-533, 2004 (SCI-Expanded)
- LXXIX. **Electrochemical synthesis of soluble sulfonated poly(3-methyl thiophene)**

- Udum Y., Pekmez K., Yildiz A.
EUROPEAN POLYMER JOURNAL, vol.40, no.6, pp.1057-1062, 2004 (SCI-Expanded)
- LXXX. **Electropolymerization of self-doped polythiophene in acetonitrile containing FSO₃H**
Udum Y., Pekmez K., Yildiz A.
SYNTHETIC METALS, vol.142, pp.7-12, 2004 (SCI-Expanded)
- LXXXI. **Preparation and SEESR-spectroscopic investigations of indole/pyrrole copolymers in aprotic medium**
Koleli F., Arslan Y., Dudukcu M.
SYNTHETIC METALS, vol.129, no.1, pp.47-52, 2002 (SCI-Expanded)
- LXXXII. **Synthetic metal alloys: Preparation of polyaniline/polypyrrole alloys in protic medium**
Koleli F., Dudukcu M., Arslan Y.
TURKISH JOURNAL OF CHEMISTRY, vol.24, no.4, pp.333-341, 2000 (SCI-Expanded)

Articles Published in Other Journals

- I. **Position-Specific Movement Characteristics and Heart Rate Profile of Hearing-Impaired Futsal Players: A Simulated Game Analysis**
ALVURDU S., KESKİN K., UDUM Y.
International Journal of Disabilities Sports and Health Sciences, vol.7, no.3, pp.621-629, 2024 (Scopus)
- II. **Do Isokinetic Strength and Shoulder Mobility Influence Ball Velocity? A Study of Female Badminton Players**
Gümüş M., UDUM Y., SUVEREN ERDOĞAN C., ÇAKIR V. O.
International Journal of Religion, vol.5, no.5, pp.94-101, 2024 (Scopus)
- III. **Investigation of the Effect of Short-Term Karate Training on Walking Ability in Visually Impaired Children**
SUVEREN ERDOĞAN C., UDUM Y.
International Journal of Disabilities Sports and Health Sciences, vol.7, no.2, pp.445-451, 2024 (Scopus)
- IV. **The Effect of Core Strength Training on Free Throw and Vertical Jump Performance in Basketball**
Suveren C., UDUM Y., Ozan Çakir V.
International Journal of Religion, vol.5, no.4, pp.97-102, 2024 (Scopus)
- V. **Reflection of Leisure Literacy on Reading Habits**
KARAMAN M., AYYILDIZ DURHAN T., Suveren C., UDUM Y.
International Journal of Religion, vol.5, no.3, pp.214-220, 2024 (Scopus)
- VI. **Does Participation in Outdoor Sports Affect Environmental Attitudes? A Research on University Students**
UDUM Y., SUVEREN ERDOĞAN C., Unlu C., Ceviker A.
INTERNATIONAL JOURNAL OF EDUCATION IN MATHEMATICS SCIENCE AND TECHNOLOGY, no.3, 2024 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **A Novel 5,6-bis(octyloxy)-2,1,3 Benzooxadiazole Based Donor-Acceptor Random Copolymer for Efficient Organic Photovoltaic Devices**
GÖKER S., HIZALAN ÖZSOY G., UDUM Y., TOPPARE L. K.
Spring Meeting of the European Materials Research Society, 22 - 26 May 2017
- II. **Novel Bifunctional Polymer as High Performance Electrochromic Material**
ATAKAN G., UDUM Y., GÜNBAŞ E. G.
253rd American Chemical Society National Meeting Exposition, 2 - 06 April 2017
- III. **Synthesis, Electrochemical and Spectroelectrochemical Characterization of Quinoxaline-Based Conjugated Polymers for Organic Photovoltaics**

Yaşa M., GÖKER S., UDUM Y., GÜNBAŞ E. G., TOPPARE L. K.

253rd American Chemical Society National Meeting Exposition, 2 - 06 April 2017

- IV. **Syntheses, electrochemical and spectroelectrochemical characterizations of quinoxaline-based conjugated polymers for organic photovoltaics**
Yasa M., Goker S., UDUM Y., Gunbas G., TOPPARE L. K.
253rd National Meeting of the American-Chemical-Society (ACS) on Advanced Materials, Technologies, Systems, and Processes, San-Francisco, Costa Rica, 2 - 06 April 2017, vol.253
- V. **High performance electrochromic material shows voltage-dependent fluorescence change**
ATAKAN G., UDUM Y., Gunbas G.
253rd National Meeting of the American-Chemical-Society (ACS) on Advanced Materials, Technologies, Systems, and Processes, San-Francisco, Costa Rica, 2 - 06 April 2017, vol.253
- VI. **Modification of Quinoxaline on the Polymeric Materials for Optoelectronic Devices**
CEVHER Ş. C., Temiz C., HIZALAN ÖZSOY G., UDUM Y., TOPPARE L. K., ÇIRPAN A.
European Materials Research Society, 2 - 06 May 2016
- VII. **Incorporation of Different Conjugated Linkers into Low Band Gap Polymers Based on 5,6-bis(2,2,2-trifluoroethoxy)-1,3,4-benzoxadiazole for Tuning Efficiency of Organic Photovoltaics**
GÖKER S., HIZALAN ÖZSOY G., UDUM Y., TOPPARE L. K.
251st American Chemical Society National Meeting & Exposition, 13 - 17 March 2016
- VIII. **Synthesis and Characterization of Conducting Polymers Containing Polypeptide and Ferrocene Side Chains as Ethanol Biosensors**
Kesik M., Akbulut H., SÖYLEMEZ S., CEVHER Ş. C., HIZALAN ÖZSOY G., UDUM Y., Takeshi E., Shuhei Y., ÇIRPAN A., YAĞCI Y., et al.
251st American Chemical Society National Meeting, 13 - 17 March 2016
- IX. **BENZOTRIAZOLE BASED ALTERNATING COPOLYMER SYNTHESIS FOR ORGANIC PHOTOVOLTAIC APPLICATIONS**
İSTANBULLUOĞLU Ç., GÖKER S., HIZALAN ÖZSOY G., ÖZDEMİR HACIOĞLU Ş., UDUM Y., YILDIZ D. E., ÇIRPAN A., TOPPARE L. K.
3rd Turkish Solar Electricity and Exhibition, 27 - 29 April 2015
- X. **Conducting polymer based efficient surface design for the detection of cholesterol**
SÖYLEMEZ S., UDUM Y., KESİK M., ÇİĞDEMİR H., ERGÜN M. Y., TOPPARE L. K.
1th Conference of Medical and Biological Engineering, 13 - 15 March 2015
- XI. **Synthesis Electrochromic And Optical Properties Of Thiophene And Thienothiophene Containing Conductive Polymers**
elvin r., GÖKER S., UDUM Y., TOPPARE L. K.
1st International Scientific Conference of Young Scientists and Specialists, 15 - 16 October 2014
- XII. **Tiyofen ve Tiyeno 3,2-b tiyofen İçeren İletken Polimerlerin Sentezi Elektrokromik ve Optik Özelliklerinin incelenmesi**
elvin R., GÖKER S., UDUM Y., TOPPARE L. K.
IV. Fiziksel Kimya Kongresi, Turkey, 5 - 08 June 2014
- XIII. **Ferrosen İçeren Konjüge Polimerin Elektrokromik ve Optik Özellikleri**
CEVHER Ş. C., UDUM Y., TOPPARE L. K., ÇIRPAN A.
IV. Fiziksel Kimya Kongresi, Pamukkale, Turkey, 5 - 08 June 2014
- XIV. **Inverted bulk heterojunction solar cell with cross linked hole blocking layer**
UDUM Y., patric d., adam g., doğukan a., nevosad a., teichert c., white m., NS s., MC S.
Spring Conference of the European Materials Research Society (E-MRS), 26 - 30 May 2014
- XV. **Synthesis And Characterization Of Thiophene And Thienothiophene Containing Conjugated Polymers**
elvin r., GÖKER S., UDUM Y., TOPPARE L. K.
Baku World Forum Of Young Scientists, 26 - 31 May 2014
- XVI. **Synthesis and Electrochemical Characterization of Benzoxadiazole Derivative**
HIZALAN ÖZSOY G., GÖKER S., UDUM Y., TOPPARE L. K.
44th World Chemistry Congress (IUPAC 2013), 11 - 16 August 2013

- XVII. Benzooxadiazole containing polymers Comparison of donor units**
GÖKER S., HIZALAN ÖZSOY G., UDUM Y., TOPPARE L. K.
44th World Chemistry Congress (IUPAC 2013), 11 - 16 August 2013
- XVIII. A Sepiolite Modified Conducting Polymer Based Biosensor**
SÖYLEMEZ S., fulya k., TARKUÇ S., UDUM Y., TOPPARE L. K.
Bioelectrochemistry 2013, 17 - 21 March 2013
- XIX. Carbazole Unit and TiO₂ Nanoparticles Containing Biosensor and Its Applications**
EMRE F. B., fa s., UDUM Y., TOPPARE L. K.
Bioelectrochemistry 2013, 17 - 21 March 2013
- XX. Synthesis and Application of a Novel Conducting Polymer Containing Both Benzotriazole and SNS Units for Electrochromic Applications**
eda r., UDUM Y., TOPPARE L. K.
XXVI. National Chem. Symp, Turkey, 1 - 06 October 2012
- XXI. Synthesis And Characterization of a Novel Fused Dithiophene Substitued Benzotriazole Derivative For Photovoltaic Applications**
eda r., UDUM Y., ÇIRPAN A., TOPPARE L. K.
International Conference on Superconductivity and Magnetism-ICSM 2012, 29 April - 04 May 2012
- XXII. Synthesis of Conjugated Heterocyclic Fused Polymer via Donor Acceptor Approach and its Electrochromic Application**
UDUM Y., TARKUÇ S., TOPPARE L. K.
8th International Conference on Advanced Polymers via Macro-molecular Engineering, 4 - 07 October 2009
- XXIII. Tuning of the Neutral State Color of the Conjugated Donor Acceptor Donor Type Polymer from Blue to Green via Changing the Donor Strength on the Polymer**
TARKUÇ S., UDUM Y., TOPPARE L. K.
8th International Conference on Advanced Polymers via Macro-molecular Engineering, 4 - 07 October 2009
- XXIV. Synthesis and Electrochromic Applications of Thiophene and Furan Containing Polymers**
akpınar h., UDUM Y., TOPPARE L. K.
XXVI. National Chem. Symp, Turkey, 1 - 06 October 2012
- XXV. Synthesis Of New Donor Acceptor Polymers Based On Phenazine Moities**
Nazlı E., TARKUÇ S., UDUM Y., TOPPARE L. K.
9th International Electrochemistry Meeting, 25 September 2011 - 29 October 2009
- XXVI. Electrochemical Polymerization and Spectroscopic Investigation of 2 Methylindole**
UDUM Y., DÜDÜKCÜ M., KÖLELİ F.
XXI. National Chem. Symp, 23 - 27 August 2007
- XXVII. Electrochemical Oxidation of 4 methyl carbazol 3 carboxylic acid**
UDUM Y., ERGÜN M. Y., PEKMEZ K., okay g., attila y.
VI. Electrochemistry Days, Turkey, 29 June - 01 July 2005
- XXVIII. Electrochemistry of Conducting Aniline Thiophene Copolymers**
attila y., nuran p., PEKMEZ K., UDUM Y., CAN M., ABACI S., şahin y.
2nd International Aegean Physical Chemistry Days, 7 - 10 October 2004
- XXIX. Sülfolanmış ve aşırı yükseltgenmiş polipirol film elektrotları ile yüksek tuz içerikli sularda katyon analizi**
TAMER U., ERTAŞ N., ŞAHİN Y., UDUM Y., PEKMEZ K., attila y.
XVIII. Ulusal Kimya Kongresi, Turkey, 5 - 09 July 2004
- XXX. Electrochemical control of solid phase microextraction using conducting polymer for the analysis of ionic species**
TAMER U., ERTAŞ N., UDUM Y., şahin y., PEKMEZ K., attila y.
XVIII. National Chem. Symp, 5 - 09 July 2004
- XXXI. Sülfolanmış ve aşırı yükseltgenmiş polipirol film elektrotlarının elektrokimyasal kontrollü katı faz mikro ekstraksiyon ortamı olarak kullanılması**
TAMER U., ŞAHİN Y., ERTAŞ N., UDUM Y., PEKMEZ K., attila y.

- V. Ulusal Kromatografi Kongresi, Turkey, 30 June - 02 July 2004
- XXXII. **Preparation of sulfonated overoxidized polypyrrole film applicable as an SPME tool for cationic analytes**
TAMER U., ŞAHİN Y., ERTAŞ N., UDUM Y., PEKMEZ K., ATILA Y.
V. Ulusal Kromatografi Kongresi, Turkey, 30 June - 02 July 2004
- XXXIII. **A New Self Doped Copolymer Consisting of 3 Methyl Thiophene and Aniline Units**
UDUM Y., PEKMEZ K., ATILA Y.
V. Electrochemistry Days, Turkey, 9 - 11 June 2004
- XXXIV. **Electrochemical preparation of sulfonated polypyrrole**
ŞAHİN Y., AYDIN A., UDUM Y., PEKMEZ K., ATILA Y.
V. Electrochemistry Days, Turkey, 9 - 11 June 2004
- XXXV. **Controlled Electropolymerization of Self Doped Poly 3 methyl thiophene**
UDUM Y., PEKMEZ K., ATILA Y.
2nd Black Sea Basin Conference on Analytical Chemistry, 14 - 17 September 2003
- XXXVI. **Electrochemically controlled solid phase microextraction SPME for the analysis of cation**
TAMER U., ŞAHİN Y., ERTAŞ N., UDUM Y., PEKMEZ K., ATILA Y.
IV. Electrochemistry Days, Turkey, 11 - 13 June 2003
- XXXVII. **Controlled electrochemical polymerization of self doped polythiophene IV Electrochemistry Days**
UDUM Y., PEKMEZ K., ATILA Y.
IV. Electrochemistry Days, Turkey, 11 - 13 June 2003
- XXXVIII. **Electrochemically controlled solid phase microextraction for the analysis of cations**
TAMER U., ERTAŞ N., ŞAHİN Y., UDUM Y., PEKMEZ K., ATILA Y.
Electrochemistry Days, Turkey, 11 - 13 June 2001
- XXXIX. **Electrochemical Copolymerization of Sulfonated Thiophene with Aniline**
UDUM Y., PEKMEZ K., ATILA Y.
3rd National Electrochemistry Days, Turkey, 18 - 20 April 2001
- XL. **Electrochemical Synthesis and Characterization of Polypyrrole Polyaniline Copolymers In Protic and Aprotic Medium**
DÜDÜKCÜ M., UDUM Y., KÖLELİ F.
14th National Chem. Symp, Turkey, 15 September - 16 November 2000
- XLI. **Electrochemical Synthesis and Characterization of Polypyrrole Polyaniline Copolymers in Aprotic Medium**
DÜDÜKCÜ M., UDUM Y., KÖLELİ F.
12th National Chem. Symp., Turkey, 7 - 11 November 1998
- XLII. **Electrochemical Synthesis and Characterization of Polypyrrole Polyaniline Copolymers in Protic Medium**
DÜDÜKCÜ M., UDUM Y., KÖLELİ F.
12th National Chem. Symp, Turkey, 7 - 09 November 1998
- XLIII. **Electrochemical Synthesis and Characterization of Polypyrrole Polythiophene Copolymers**
UDUM Y., DÜDÜKCÜ M., KÖLELİ F.
12th National Chem. Symp, Turkey, 7 - 11 November 1998
- XLIV. **Electrochemical Synthesis and Characterization of Polypyrrole Polyindole Copolymers**
UDUM Y., DÜDÜKCÜ M., KÖLELİ F.
12th National Chem. Symp, Turkey, 7 - 11 November 1998

Supported Projects

UDUM Y., Project Supported by Higher Education Institutions, DONÖR-AKSEPTÖR TİPİ TİYOFEN VE TİYENOTİYOFEN İÇEREN İLETKEN POLİMERLERİN SENTEZİ, ELEKTROKROMİK VE OPTİK ÖZELLİKLERİNİN İNCELENMESİ, 2014 - 2016

UDUM Y., Project Supported by Higher Education Institutions, Donör-Akseptör-Donör Tipi İletken Polimerlerin

Elektronik ve Optik Özelliklerine Donör Grupların Etkisi, 2011 - 2012

UDUM Y., Project Supported by Higher Education Institutions, YENİ BİR İLETKEN POLİMERİN SENTEZİ,

KARAKTERİZASYONU VE ELEKTROKROMİK ÖZELLİKLERİ, 2010 - 2012

Metrics

Publication: 132

Citation (WoS): 1436

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H-Index (Scopus): 23

Scholarships

Optimization of Manufacturing Process of Polyaniline-Dodecyl Benzenesulfonic Acid Films for Organic Electronic Applications, TUBITAK, 2021 - 2023

Inverted Bulk-Heterojunction Solar Cells, YOK, 2014 - 2014

Binalarda ve Taşıtlarda Renk Değişimi ile Isı ve Işık Kontrolü Sağlayan Akıllı Camların Üretimi, TUBITAK, 2007 - 2008

Non Academic Experience

University, University of the West of England, Applied Sciences, England

University, Johannes Kepler Üniversitesi, Institute of Physical Chemistry and Linz Institute for Organic Solar Cells, Austria

University, Orta Dogu teknik Üniversitesi, Kimya Bölümü