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Education Information

Doctorate, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Kimya (Dr), Turkey 1992 - 1996

Post Graduate, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Kimya (YI), Turkey 1990 - 1992

Under Graduate, Karadeniz Teknik Üniversitesi, Fatih Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, Turkey 1985 - 1989

Foreign Languages

English

Research Areas

Basic Sciences, Chemistry, Analytical Chemistry, Electromagnetic Methods, Sensors, Physical Chemistry, Electrochemistry, Inorganic Chemistry, Coordination Chemistry, Organometallic Chemistry, Novel Ligands

Academic Titles / Tasks

Professor, İstanbul Teknik Üniversitesi, Fen-Edebiyat Fakültesi, Kimya Bölümü, 2009 - Continues

Associate Professor, İstanbul Teknik Üniversitesi, Fen-Edebiyat Fakültesi, Kimya Bölümü, 2003 - 2009

Assistant Professor, İstanbul Teknik Üniversitesi, Fen-Edebiyat Fakültesi, Kimya Bölümü, 1999 - 2003

Academic and Administrative Experience

İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, 2010 - 2012

İstanbul Teknik Üniversitesi, Fen-Edebiyat Fakültesi, Kimya Bölümü, 2004 - 2007

Jury Memberships

Associate Professor Exam, doçentlik sınavı, İTÜ, October, 2016

Associate Professor Exam, DOÇENTLİK SINAVI, İTÜ, October, 2015

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **New Chromenylum-cyanine based dual channel chemosensors for copper and hypochlorite sensing**
KARAOĞLU K., Kaya K., Yılmaz İ.
DYES AND PIGMENTS, vol.180, 2020 (Journal Indexed in SCI)
- II. **Visible Light Anthraquinone Functional Phthalocyanine Photoinitiator for Free-Radical and Cationic Polymerizations**
Breloy L., Brezova V., Blacha-Grzechnik A., Presset M., Yıldırım M. S., Yılmaz İ., Yağcı Y., Versace D.
MACROMOLECULES, vol.53, no.1, pp.112-124, 2020 (Journal Indexed in SCI)
- III. **Beryllium ion sensing through the ion pair formation between the electrochemically reduced ferrocenyl naphthoquinone radicals and Be²⁺ ions**
Atasen S. K., Alçay Y., Yavuz Ö., Yücel B., Yılmaz İ.
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- IV. **Superior Sensor for Be²⁺ Ion Recognition via the Unprecedented Octahedral Crystal Structure of a One-Dimensional Coordination Polymer of Crown Fused Zinc Phthalocyanine**
Yavuz O., Alçay Y., Kaya K., Sezen M., Atasen S. K., Yıldırım M. S., Özkılıç Y., Tüzün N., Yılmaz İ.
INORGANIC CHEMISTRY, vol.58, no.1, pp.909-923, 2019 (Journal Indexed in SCI)
- V. **New ferrocenyl naphthoquinone fused crown ether chemosensors: Highly selective, kinetically and regio controlled colorimetric, beryllium ion recognition**
Alçay Y., Yavuz Ö., Gelir A., ATASEN S. K., KARAOĞLU K., Yücel B., TUZUN N., Yılmaz İ.
Journal of Organometallic Chemistry, vol.868, pp.131-143, 2018 (Journal Indexed in SCI Expanded)
- VI. **Detection of Fe²⁺ in acetonitrile/water mixture by new 8-hydroxyquinolin based sensor through metal displacement mechanism**
karaoğlu k., Akcay H. T., Yılmaz İ.
JOURNAL OF MOLECULAR STRUCTURE, vol.1133, pp.492-498, 2017 (Journal Indexed in SCI)
- VII. **Ferrocenyl-substituted dinuclear Cu(II) complex: Synthesis, spectroscopy, electrochemistry, DFT calculations and catecholase activity**
EMİRİK M., KARAOĞLU K., SERBEST K., MENTEŞE E., Yılmaz İ.
JOURNAL OF MOLECULAR STRUCTURE, vol.1106, pp.331-342, 2016 (Journal Indexed in SCI)
- VIII. **A Novel Ferrocenyl Naphthoquinone Fused Crown Ether as a Multisensor for Water Determination in Acetonitrile and Selective Cation Binding**
Dagdevren M., Yılmaz İ., YUCEL B., EMIRIK M.
JOURNAL OF PHYSICAL CHEMISTRY B, vol.119, no.38, pp.12464-12479, 2015 (Journal Indexed in SCI)
- IX. **Ketone synthesized cobaloxime/organocobaloxime catalysts for cyclic carbonate synthesis from CO₂ and epoxides: Characterization and electrochemistry**
Kilic A., Kilic M. V., Ulusoy M., Durgun M., Aytar E., DAGDEVREN M., Yılmaz İ.
JOURNAL OF ORGANOMETALLIC CHEMISTRY, vol.767, pp.150-159, 2014 (Journal Indexed in SCI)
- X. **The synthesis, characterization, and electrochemistry of molecular cobaloxime/organocobaloxime: catalysts for cycloaddition of carbon dioxide and epoxides**
Kilic A., Ulusoy M., Durgun M., Aytar E., Keles A., DAGDEVREN M., Yılmaz İ.
JOURNAL OF COORDINATION CHEMISTRY, vol.67, no.16, pp.2661-2679, 2014 (Journal Indexed in SCI)
- XI. **Synthesis, characterization, electrochemical properties and conversions of carbon dioxide to cyclic carbonates mononuclear and multinuclear oxime complexes using as catalyst**
Kilic A., Palali A. A., Durgun M., Tasci Z., Ulusoy M., DAGDEVREN M., Yılmaz İ.
INORGANICA CHIMICA ACTA, vol.394, pp.635-644, 2013 (Journal Indexed in SCI)
- XII. **Synthesis, characterization, electrochemical behaviors and applications in the Suzuki-Miyaura cross-coupling reactions of N₂S₂O₂ thio Schiff base ligand and its Cu(II), Co(III), Ni(II), Pd(II) complexes and their usage in the fabrication of organic-inorganic hybrid devices**
Temel H., Pasa S., Ocak Y. S., Yılmaz İ., Demir S., ÖZDEMİR İ.
SYNTHETIC METALS, vol.161, pp.2765-2775, 2012 (Journal Indexed in SCI)
- XIII. **Synthesis and characterization of pyrrole and thiophene functional polystyrenes via "click chemistry"**
Kışkan B., GACAL B., ASAN M., GUNAYDIN E. C., Yılmaz İ., YAGCI Y.

POLYMER BULLETIN, vol.67, no.4, pp.609-621, 2011 (Journal Indexed in SCI)

- XIV. **Synthesis and electro-spectroelectrochemistry of ferrocenyl naphthaquinones**
Yucel B., SANLI B., SOYLEMEZ H., Yılmaz İ.
TETRAHEDRON, vol.67, no.7, pp.1406-1421, 2011 (Journal Indexed in SCI)
- XV. **Hetero- and homo-leptic Ru(II) catalyzed synthesis of cyclic carbonates from CO₂; Synthesis, spectroscopic characterization and electrochemical properties**
Kilic A., Ulusoy M., DURGUN M., Tasci Z., Yılmaz İ., Cetinkaya B.
APPLIED ORGANOMETALLIC CHEMISTRY, vol.24, no.6, pp.446-453, 2010 (Journal Indexed in SCI)
- XVI. **Synthesis, structural characterization, electrochemistry and spectroelectrochemistry of dinuclear copper(II) metal complexes stabilized by a tetradentate N₄O salicylaldimine ligands**
Tas E., Onal I. H., Yılmaz İ., Kilic A., Durgun M.
JOURNAL OF MOLECULAR STRUCTURE, vol.927, pp.69-77, 2009 (Journal Indexed in SCI)
- XVII. **Mono- and dinuclear Pd(II) complexes of different salicylaldimine ligands as catalysts of transfer hydrogenation of nitrobenzene with cyclohexene and Suzuki-Miyaura coupling reactions**
Tas E., Kilic A., Durgun M., Yılmaz İ., ÖZDEMİR İ., GÜRBÜZ N.
JOURNAL OF ORGANOMETALLIC CHEMISTRY, vol.694, no.3, pp.446-454, 2009 (Journal Indexed in SCI)
- XVIII. **Synthesis, characterization and electro-spectroelectrochemical studies of four macrocyclic Schiff-base Co(II) complexes having N₂O₂ set of donor atoms**
Yılmaz İ., İlhan S., Temel H., Kilic A.
JOURNAL OF INCLUSION PHENOMENA AND MACROCYCLIC CHEMISTRY, vol.63, pp.163-169, 2009 (Journal Indexed in SCI)
- XIX. **Synthesis Spectral Characterization and Electrochemical Investigations of Mononuclear Cu II Ni II and Co II Metal Complexes Containing Different New vic dioxime Groups**
TAS E., KARA H., DURGUN M., KILIÇ A., Yılmaz İ.
SYNTHESIS AND REACTIVITY IN INORGANIC METAL-ORGANIC AND NANO-METAL CHEMISTRY, vol.39, no.7, pp.379-387, 2009 (Journal Indexed in SSCI)
- XX. **Synthesis spectroscopic and redox properties of the mononuclear Ni II Ni II BPh₂ 2 containing B C bond and trinuclear Cu II Ni II Cu II type metal complexes of N N 4 amino 1 benzyl piperidine glyoxime**
Yılmaz İ., KILIÇ A., TAS E.
JOURNAL OF CHEMICAL SCIENCES, vol.121, no.1, pp.43-56, 2009 (Journal Indexed in SCI)
- XXI. **Synthesis, spectral characterization, electrochemical studies and catalytic properties in Suzuki-Miyaura coupling reactions of the mononuclear Pd(II), trinuclear Pd(II)(BPh₂)(2) and Ru(II)-Pd(II)-Ru(II) type complexes containing 4-amino-1-benzyl piperidine and phenyl groups**
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- XXII. **Synthesis, characterization, fluorescence and redox features of new vic-dioxime ligand bearing pyrene and its metal complexes**
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- XXIII. **Synthesis, electrochemistry, thin-layer UV-vis and fluorescence spectroelectrochemistry of a new salicylaldimine ligand and its copper complex**
Yılmaz İ.
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- XXIV. **The sterically hindered salicylaldimine ligands with their copper(II) metal complexes: Synthesis, spectroscopy, electrochemical and thin-layer spectroelectrochemical features**
Tas E., Kilic A., Konak N., Yılmaz İ.
POLYHEDRON, vol.27, no.3, pp.1024-1032, 2008 (Journal Indexed in SCI)
- XXV. **Novel vic-dioxime ligands and their poly-metal complexes bearing 1,8-diamino-3,6-dioxaoctane: synthesis, characterization, spectroscopy and electrochemistry**
Kilic A., Durgun M., Tas E., Yılmaz İ.

- TRANSITION METAL CHEMISTRY, vol.33, no.1, pp.29-37, 2008 (Journal Indexed in SCI)
- XXVI. **Synthesis, electrochemistry and in situ spectroelectrochemistry of a new Co(III) thio Schiff-base complex with N,N'-bis(2-aminothiophenol)-1,4-bis(carboxylidene phenoxy)butane**
Yilmaz I., Temel H., Alp H.
POLYHEDRON, vol.27, no.1, pp.125-132, 2008 (Journal Indexed in SCI)
- XXVII. **In situ monitoring of metallation of metal-free phthalocyanine via UV-Vis and steady-state fluorescence techniques. Thin-layer UV-Vis and fluorescence spectroelectrochemistry of a new non-aggregating and electrochromic manganese(3+) phthalocyanine**
Yilmaz I.
NEW JOURNAL OF CHEMISTRY, vol.32, no.1, pp.37-46, 2008 (Journal Indexed in SCI)
- XXVIII. **Spectroscopic and electrochemical studies of transition metal complexes with N,N'-bis(2-aminothiophenol)-1,7-bis(2-formylphenyl)-1,4,7-trioxaheptane and structure effects on extractability of ligand towards some divalent cations**
Temel H., Alp H., İlhan S., Ziyadanogullari B., Yilmaz I.
MONATSHFÜR CHEMIE, vol.138, no.12, pp.1199-1209, 2007 (Journal Indexed in SCI)
- XXIX. **Synthesis, electrochemical and in situ spectroelectrochemical studies of new transition metal complexes with two new Schiff-bases containing N₂O₂/N(2)O(4) donor groups**
Kilic A., Tas E., Deveci B., Yilmaz I.
POLYHEDRON, vol.26, no.14, pp.4009-4018, 2007 (Journal Indexed in SCI)
- XXX. **Synthesis, structural characterization and electrochemical studies of new macrocyclic Schiff base containing pyridine head and its metal complexes**
İlhan S., Temel H., Yilmaz I., Sekerci M.
JOURNAL OF ORGANOMETALLIC CHEMISTRY, vol.692, no.18, pp.3855-3865, 2007 (Journal Indexed in SCI)
- XXXI. **Synthesis, electro-spectroelectrochemical characterization and electrocatalytic behavior towards dioxygen reduction of a new water-soluble cobalt phthalocyanine containing naphthoxy-4-sulfonic acid sodium salt**
Yilmaz I., Arslan S., Güney S., Becerik I.
ELECTROCHIMICA ACTA, vol.52, no.24, pp.6611-6621, 2007 (Journal Indexed in SCI)
- XXXII. **A new water-soluble metal-free phthalocyanine substituted with naphthoxy-4-sulfonic acid sodium salt. Synthesis, aggregation, electrochemistry and in situ spectroelectrochemistry**
Arslan S., Yilmaz I.
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- XXXIII. **Synthesis and characterization of new macrocyclic Schiff base derived from 2,6-diaminopyridine and 1,7-bis(2-formylphenyl)-1,4,7-trioxaheptane and its Cu(II), Ni(II), Pb(II), Co(III) and La(III) complexes**
İlhan S., Temel H., Yilmaz I., Sekerci M.
POLYHEDRON, vol.26, no.12, pp.2795-2802, 2007 (Journal Indexed in SCI)
- XXXIV. **Synthesis, electrochemistry, and in situ spectroelectrochemistry of a new water-soluble zinc phthalocyanine substituted with naphthoxy-4-sulfonic acid sodium salt**
Arslan S., Yilmaz I.
TRANSITION METAL CHEMISTRY, vol.32, no.3, pp.292-298, 2007 (Journal Indexed in SCI)
- XXXV. **Synthesis, characterization and redox properties of macrocyclic Schiff base by reaction of 2,6-diaminopyridine and 1,3-bis(2-carboxyaldehyde phenoxy) propane and its Cu-II, Ni-II, Pb-II, Co-III and La-III complexes**
İlhan S., Temel H., Yilmaz I., Kilic A.
TRANSITION METAL CHEMISTRY, vol.32, no.3, pp.344-349, 2007 (Journal Indexed in SCI)
- XXXVI. **In situ monitoring of the synthesis of a pyranine-substituted phthalonitrile derivative via the steady-state fluorescence technique**
Gelir A., Yilmaz I., Yılmaz Y.
JOURNAL OF PHYSICAL CHEMISTRY B, vol.111, no.2, pp.478-484, 2007 (Journal Indexed in SCI)
- XXXVII. **The synthesis, spectroscopic and voltametric studies of new metal complexes containing three**

different vic-dioximes

Kilic A., TAS E., GUMGUM B., Yilmaz I.

JOURNAL OF COORDINATION CHEMISTRY, vol.60, no.11, pp.1233-1246, 2007 (Journal Indexed in SCI)

XXXVIII. **Three new vic-dioxime ligands: Synthesis, characterization, spectroscopy, and redox properties of their mononuclear nickel(II) complexes**

Kilic A., TAS E., GUMGUM B., Yilmaz I.

HETEROATOM CHEMISTRY, vol.18, no.6, pp.657-663, 2007 (Journal Indexed in SCI)

XXXIX. **Synthesis, spectroscopic and electrochemical investigations of two vic-dioximes and their mononuclear Ni(II), Cu(II) and Co(II) metal complexes containing morpholine group**

Kilic A., TAS E., GUMGUM B., Yilmaz I.

CHINESE JOURNAL OF CHEMISTRY, vol.24, no.11, pp.1599-1604, 2006 (Journal Indexed in SCI)

XL. **Synthesis, spectral characterization and electrochemical properties of new vic-dioxime complexes bearing carboxylate**

Kilic A., Tas E., Gungum B., Yilmaz I.

TRANSITION METAL CHEMISTRY, vol.31, no.5, pp.645-652, 2006 (Journal Indexed in SCI)

XLII. **Synthesis of poly(methyl methacrylate)-b-polystyrene containing a crown ether unit at the junction point via combination of atom transfer radical polymerization and nitroxide mediated radical polymerization routes**

Altintas O., Yilmaz I., HIZAL G., TUNCA U.

JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.44, no.10, pp.3242-3249, 2006 (Journal Indexed in SCI)

XLIII. **Coordination chemistry of nickel II copper II and cobalt II with MN4 core containing two novel vic dioximes ligands Synthesis spectroscopy and redox properties**

KILIÇ A., TAŞ E., GÜMGÜM B., Yılmaz İ.

POLISH JOURNAL OF CHEMISTRY, vol.80, no.12, pp.1967-1981, 2006 (Journal Indexed in SCI Expanded)

XLIV. **Synthesis, electrochemical, and spectroelectrochemical properties of tetrakis(13,17-dioxanonacosane-15-sulphonyl) phthalocyaninato zinc(II)**

Yılmaz İ., Gurek A., Ahsen V.

POLYHEDRON, vol.24, no.7, pp.791-798, 2005 (Journal Indexed in SCI)

XLV. **Electrochemical, spectroelectrochemical, and pyridine binding properties of tetrathia macrocycle-bridged dimeric cobalt phthalocyanine**

Yilmaz I., KOCAK M.

POLYHEDRON, vol.23, no.7, pp.1279-1285, 2004 (Journal Indexed in SCI)

XLVI. **Synthesis, characterization and redox properties of a new vic-dioxime and its transition metal complexes**

Tas E. F., ULUSOY M., GULER M., Yilmaz I.

TRANSITION METAL CHEMISTRY, vol.29, no.2, pp.180-184, 2004 (Journal Indexed in SCI)

XLVII. **4,5-Dicyano-1,2-bis(2-dimethylaminoethylsulfanyl)benzene**

Coruh U., USTABAŞ R., Yilmaz I., YAVUZ M.

ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.59, 2003 (Journal Indexed in SCI)

XLVIII. **Thermodynamic study of ion-pairing effects between reduced double-decker lutetium(III) phthalocyanines and a cationic matrix**

Nakanishi T., Yilmaz I., NAKASHIMA N., KADISH K.

JOURNAL OF PHYSICAL CHEMISTRY B, vol.107, no.46, pp.12789-12796, 2003 (Journal Indexed in SCI)

XLIX. **Electrochemical and spectroscopic investigation of neutral oxidized and reduced double decker lutetium III phthalocyanines**

Yılmaz İ., NAKANISHI T., GÜREK A. G., KADISH K.

JOURNAL OF PORPHYRINS AND PHTHALOCYANINES, vol.7, pp.227-238, 2003 (Journal Indexed in SCI)

L. **A novel (E,E)-dioxime and its mono-, di- and trinuclear complexes bearing tetradentate octyl sulfanyl phenylamino substituents. Synthesis, characterization and electrochemical properties of its transition metal complexes**

Kandaz M., CORUHLU S., Yilmaz I., OZKAYA A.

TRANSITION METAL CHEMISTRY, vol.27, no.8, pp.877-883, 2002 (Journal Indexed in SCI)

- L. **Synthesis, characterization, and electrochemical properties of a novel macrocyclic ligand and its transition metal complexes**
Yilmaz I., KANDAZ M., OZKAYA A., KOCA A.
MONATSHEFTE FÜR CHEMIE, vol.133, no.5, pp.609-622, 2002 (Journal Indexed in SCI)
- LI. **Synthesis, spectroscopy and redox properties of a novel (E-E) vic-dioxime and its mono-, di- and trinuclear complexes bearing an 18-membered N₂O₂S₂ macrocycle**
Kandaz M., Yilmaz I., KESKIN S., KOCA A.
POLYHEDRON, vol.21, no.8, pp.825-834, 2002 (Journal Indexed in SCI)
- LII. **Electrochemistry of a double-decker lutetium(III) phthalocyanine in aqueous media. The first evidence for five reductions**
Kadish K., NAKANISHI T., GUREK A., Ahsen V., Yilmaz I.
JOURNAL OF PHYSICAL CHEMISTRY B, vol.105, no.40, pp.9817-9821, 2001 (Journal Indexed in SCI)
- LIII. **Synthesis and characterization of novel symmetrical phthalocyanines substituted with mono- or bi-macrocycles**
Kandaz M., Yilmaz I., BEKAROĞLU O.
POLYHEDRON, vol.19, no.1, pp.115-121, 2000 (Journal Indexed in SCI)
- LIV. **Supramolecular assemblies of pyridyl porphyrin and diazadithia phthalocyanine**
ION R., Yilmaz İ., BEKAROĞLU Ö.
JOURNAL OF THE SERBIAN CHEMICAL SOCIETY, vol.64, pp.453-462, 1999 (Journal Indexed in SCI Expanded)
- LV. **Electrochemical and adsorption properties of novel phthalocyanines with four 16 membered diazadithia macrocycles**
ÖZKAYA A. R. , Yilmaz İ., BEKAROĞLU Ö.
JOURNAL OF PORPHYRINS AND PHTHALOCYANINES, vol.2, no.6, pp.483-492, 1998 (Journal Indexed in SCI)
- LVI. **Synthesis and characterization of 2,2'-azoquinoxalines substituted with long alkoxy chains and halogeno groups and a binuclear cyclopalladated symmetrical azoquinoxaline complex**
Yilmaz I., BEKAROĞLU O.
JOURNAL OF CHEMICAL RESEARCH-S, no.7, pp.374-375, 1998 (Journal Indexed in SCI)

Supported Projects

Yilmaz İ., Project Supported by Higher Education Institutions, Benzo-9-c-9 grubunu içeren yeni ferrosenil naftakinon bileşiğinin sentezi ve katyon bağlama özelliklerinin incelenmesi, 2015 - 2017

Yilmaz İ., Project Supported by Higher Education Institutions, Ticari kinonlara dayalı eser miktarda su tayini, 2015 - 2017

Yilmaz İ., Project Supported by Higher Education Institutions, Taç Eter Grupları İçeren çeşitli Kinon Türevlerinin Sentezi, Elektrokimyasal ve Spektroelektrokimyasal Davranışlarının İncelenmesi, 2011 - 2017

Yilmaz İ., TUBITAK Project, Poli 3 Metil Tiyofen İletken Polimer Matriksi İçerisine Yerleştirilmiş Ftalosiyanın ve Türevi Bileşikler Varlığında Metanolün Elektrokimyasal Davranışlarının İncelenmesi, 2006 - 2007

Citations

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