

Assoc. Prof. EMRULLAH GÖRKEM GÜNBAŞ

Personal Information

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Education Information

Doctorate, University Of California, Davis, United States Of America 2008 - 2013

Postgraduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Chemistry, Turkey 2006 - 2007

Undergraduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Chemistry, Turkey 2003 - 2006

Dissertations

Doctorate, Using the Heterotriquinane Molecular Framework to Test the Limits of Bonding and Reactivity, University Of California, Davis, 2014

Postgraduate, Novel donor-acceptor type polymers towards excellent neutral state green polymeric materials for realization of RGB based electrochromic device applications, Middle East Technical University, Faculty of Arts and Sciences, Department of Chemistry, 2007

Research Areas

Chemistry, Physical Chemistry, Polymeric Materials, Organic Chemistry, Chemistry of Dyes and Pigments, Chemistry of Heterocyclic Compounds, Natural Sciences

Academic Titles / Tasks

Associate Professor, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Chemistry, 2018 - Continues

Assistant Professor, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Chemistry, 2015 - 2018

Lecturer, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Chemistry, 2014 - 2015

Research Assistant, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Chemistry, 2006 - 2014

Academic and Administrative Experience

BAP Scientific Commissioner, Middle East Technical University, Faculty of Arts and Sciences, Department of Chemistry, 2019 - Continues

Uygulama ve Araştırma Merkezi Yönetim Kurulu Üyesi, Middle East Technical University, Faculty of Arts and Sciences, Department of Chemistry, 2017 - Continues

Courses

Reaction Mechanisms in Organic Chemistry, Undergraduate, 2018 - 2019

Organic Chemistry Lab. II, Undergraduate, 2018 - 2019

Advising Theses

Günbaşı E. G. , Synthesis, structural characterization and chemistry of tribenzoheterotriquinane based molecular structures., Postgraduate, D.KEPİL(Student), 2020

Yerci S., Günbaşı E. G. , Manganese doped solution processed nickel oxide hole transport layer for perovskite solar cells, Postgraduate, M.DERYA(Student), 2019

GÜNBAŞ E. G. , ÖZÇUBUKÇU S., Synthesis of dioxin & tetra aryl pyrazine derivatives and their applications, Postgraduate, B.OKYAR(Student), 2019

Günbaşı E. G. , Turan R., Optimization of laser processing for PERC type c-Ci solar cells, Postgraduate, E.GENÇ(Student), 2019

GÜNBAŞ E. G. , Synthesis and in vitro studies of selenophene containingbodipy derivatives as mitochondria targetedphotodynamic therapy agents, Postgraduate, O.KARAMAN(Student), 2019

GÜNBAŞ E. G. , Advanced conjugated systems towards realization ofstable n-type materials and high-performanceelectrochromic polymers, Postgraduate, K.GHASEMIAHANGARANFARAHANI(Student), 2018

GÜNBAŞ E. G. , Syntheses of functional materials for organic photovoltaic and electrochromic device applications, Postgraduate, F.VARLIOĞLU(Student), 2017

GÜNBAŞ E. G. , Synthesis of novel diketopyrrole and selenophene containing nir absorbing polymers and their application in bulk-heterojunction solar cells, Postgraduate, G.ÖKLEM(Student), 2017

GÜNBAŞ E. G. , From supramolecular chemistry to fundamental organic chemistry: Bis-rosette nanotubes and novel molecular frameworks, Postgraduate, C.İĞCİ(Student), 2017

GÜNBAŞ E. G. , Synthesis and characterization of novel quinoxalinebased and thieno[3,4-c]pyrrole-4,6-dione-based conjugated polymers and their applications in organic electronics, Postgraduate, A.KARABAĞ(Student), 2017

GÜNBAŞ E. G. , Novel phenanthrocarbazole containing conjugated polymers as high performance electrochromic materials, Postgraduate, G.ATAKAN(Student), 2016

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

- I. **A Thienothiophene-Based Cation Treatment Allows Semitransparent Perovskite Solar Cells with Improved Efficiency and Stability**
Gunes U., Bag Celik E., Akgül Ç., Koc M., Ameri M., Uzuner B. E. , Ghasemi M., Şahiner M. C. , Yıldız İ., Kaya H. Z. , et al. *ADVANCED FUNCTIONAL MATERIALS*, 2021 (Journal Indexed in SCI)
- II. **Balanced Intersystem Crossing in Iodinated Silicon-Fluoresceins Allows New Class of Red Shifted Theranostic Agents.**
Cetin S., Elmazoglu Z., Karaman O., Gunduz H., Günbaşı E. G. , Kolemen S. *ACS medicinal chemistry letters*, vol.12, pp.752-757, 2021 (Journal Indexed in SCI)
- III. **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. , Soylemez S., GÜNBAŞ E. G. *Polymer*, vol.212, 2021 (Journal Indexed in SCI)
- IV. **A Nonionic Alcohol Soluble Polymer Cathode Interlayer Enables Efficient Organic and Perovskite Solar Cells**
Sharma A., Singh S., Song X., Rosas Villalva D., Troughton J., Corzo D., Toppare L., GÜNBAŞ E. G. , Schroeder B. C. , Baran D. *Chemistry of Materials*, 2021 (Journal Indexed in SCI Expanded)
- V. **Resorufin Enters the Photodynamic Therapy Arena: A Monoamine Oxidase Activatable Agent for Selective Cytotoxicity**

- Almammadov T., ATAKAN G., Leylek O., Ozcan G., Gunbas G., Kolemen S.
ACS MEDICINAL CHEMISTRY LETTERS, vol.11, no.12, pp.2491-2496, 2020 (Journal Indexed in SCI)
- VI. **Hybrid Vapor-Solution Sequentially Deposited Mixed-Halide Perovskite Solar Cells**
Soltanpoor W., Dreessen C., ŞAHİNER M. C. , Susic I., Afshord A. Z. , Chirvony V. S. , Boix P. P. , Gunbas G., YERCI S., Bolink H. J.
ACS APPLIED ENERGY MATERIALS, vol.3, no.9, pp.8257-8265, 2020 (Journal Indexed in SCI)
- VII. **Mitochondria-Targeting Selenophene-Modified BODIPY-Based Photosensitizers for the Treatment of Hypoxic Cancer Cells**
Karaman O., Almammadov T., Gedik M. E. , GÜNAYDIN G., Kolemen S., Gunbas G.
CHEMMEDCHEM, vol.14, no.22, pp.1879-1886, 2019 (Journal Indexed in SCI)
- VIII. **Synthesis of N-Bridged Pyrido[4,3-d]pyrimidines and Self-Assembly into Twin Rosette Cages and Nanotubes in Organic Media**
Igci C., Karaman O., Fan Y., Gonzales A. A. , Fenniri H., GÜNBAŞ E. G.
SCIENTIFIC REPORTS, vol.8, 2018 (Journal Indexed in SCI)
- IX. **A new NIR absorbing DPP-based polymer for thick organic solar cells**
Oklem G., Song X., Toppare L., Baran D., GÜNBAŞ E. G.
JOURNAL OF MATERIALS CHEMISTRY C, vol.6, no.12, pp.2957-2961, 2018 (Journal Indexed in SCI)
- X. **A Novel Blue to Transparent Polymer for Electrochromic Supercapacitor Electrodes**
YUKSEL R., EKBER A., TURAN J., ALPUGAN E., HACIOGLU S. O. , TOPPARE L. K. , ÇIRPAN A., GUNBAS G., ÜNALAN H. E.
ELECTROANALYSIS, vol.30, no.2, pp.266-273, 2018 (Journal Indexed in SCI)
- XI. **A New High-Performance Blue to Transmissive Electrochromic Material and Use of Silver Nanowire Network Electrodes as Substrates**
YÜKSEL R., ATAOGU E., TURAN J., ALPUGAN E., HACIOGLU S. O. , TOPPARE L., ÇIRPAN A., ÜNALAN H. E. , GUNBAS G.
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.55, no.10, pp.1680-1686, 2017 (Journal Indexed in SCI)
- XII. **ABE Condensation over Monometallic Catalysts: Catalyst Characterization and Kinetics**
GOULAS K. A. , Gunbas G., DIETRICH P. J. , SREEKUMAR S., GRIPPO A., CHEN J. P. , GOKHALE A. A. , TOSTE F. D.
CHEMCATCHEM, vol.9, no.4, pp.677-684, 2017 (Journal Indexed in SCI)
- XIII. **Silver Nanowire/Conducting Polymer Nanocomposite Electrochromic Supercapacitor Electrodes**
YÜKSEL R., COŞKUN S., GUNBAS G., ÇIRPAN A., TOPPARE L., ÜNALAN H. E.
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.164, no.4, 2017 (Journal Indexed in SCI)
- XIV. **Synergistic Effects in Bimetallic Palladium-Copper Catalysts Improve Selectivity in Oxygenate Coupling Reactions**
Goulas K. A. , SREEKUMAR S., Song Y., Kharidehal P., Gunbas G., Dietrich P. J. , Johnson G. R. , Wang Y. C. , Grippo A. M. , Grabow L. C. , et al.
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol.138, no.21, pp.6805-6812, 2016 (Journal Indexed in SCI)
- XV. **A Novel Acetylcholinesterase Biosensor: Core-Shell Magnetic Nanoparticles Incorporating a Conjugated Polymer for the Detection of Organophosphorus Pesticides**
Cancar H. D. , SÖYLEMEZ S., AKPINAR Y., KEŞİK M., Goker S., Gunbas G., VOLKAN M., Toppare L.
ACS APPLIED MATERIALS & INTERFACES, vol.8, no.12, pp.8058-8067, 2016 (Journal Indexed in SCI)
- XVI. **A novel red to transmissive electrochromic polymer based on phenanthrocarbazole**
ATAKAN G., Gunbas G.
RSC ADVANCES, vol.6, no.30, pp.25620-25623, 2016 (Journal Indexed in SCI)
- XVII. **Novel pathways for fuels and lubricants from biomass optimized using life-cycle greenhouse gas assessment**
Balakrishnan M., Sacia E. R. , Sreekumar S., Gunbas G., Gokhale A. A. , Scown C. D. , Toste F. D. , Bell A. T.
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol.112, no.25, pp.7645-7649, 2015 (Journal Indexed in SCI)
- XVIII. **Production of an acetone-butanol-ethanol mixture from Clostridium acetobutylicum and its**

conversion to high-value biofuels

Sreekumar S, Baer Z. C. , Pazhamalai A., Gunbas G., Grippo A., Blanch H. W. , Clark D. S. , Toste F. D.
NATURE PROTOCOLS, vol.10, no.3, 2015 (Journal Indexed in SCI)

- XIX. **Upgrading Lignocellulosic Products to Drop-In Biofuels via Dehydrogenative Cross-Coupling and Hydrodeoxygenation Sequence**
SREEKUMAR S., BALAKRISHNAN M., GOULAS K., GÜNBAŞ E. G. , GOKHALE A., LOUÏE L., GRÍPPO A., SCOWN C., BELL A., TOSTE D.
CHEMSUSCHEM, vol.8, no.16, pp.2609-2614, 2015 (Journal Indexed in SCI)
- XX. **Chemocatalytic Upgrading of Tailored Fermentation Products Toward Biodiesel**
SREEKUMAR S., Baer Z. C. , GROSS E., Padmanaban S., GOULAS K., Gunbas G., ALAYOGLU S., Blanch H. W. , Clark D. S. , Toste F. D.
CHEMSUSCHEM, vol.7, no.9, pp.2445-2448, 2014 (Journal Indexed in SCI)
- XXI. **Synthesis of N-substituted Pyrido[4,3-d]pyrimidines for the Large-Scale Production of Self-Assembled Rosettes and Nanotubes**
DURMUS A., Gunbas G., Farmer S. C. , Ohnstead M. M. , MASCAL M., Legese B., Cho J., Beingessner R. L. , Yamazaki T., Fenniri H.
JOURNAL OF ORGANIC CHEMISTRY, vol.78, no.22, pp.11421-11426, 2013 (Journal Indexed in SCI)
- XXII. **Extraordinary Modes of Bonding Enabled by the Triquinane Framework**
Gunbas G., MASCAL M.
JOURNAL OF ORGANIC CHEMISTRY, vol.78, no.19, pp.9579-9583, 2013 (Journal Indexed in SCI)
- XXIII. **Extreme Oxatriquinanes: Structural Characterization of alpha-Oxyoxonium Species with Extraordinarily Long Carbon-Oxygen Bonds**
Gunbas G., Sheppard W. L. , Fettinger J. C. , Olmstead M. M. , MASCAL M.
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol.135, no.22, pp.8173-8176, 2013 (Journal Indexed in SCI)
- XXIV. **Extreme oxatriquinanes and a record C-O bond length**
Gunbas G., HAFEZÍ N., Sheppard W. L. , Olmstead M. M. , Stoyanova I. V. , Tham F. S. , Meyer M. P. , MASCAL M.
NATURE CHEMISTRY, vol.4, no.12, pp.1018-1023, 2012 (Journal Indexed in SCI)
- XXV. **The R3O+center dot center dot center dot H+ Hydrogen Bond: Toward a Tetracoordinate Oxadionium(2+) Ion**
Stoyanov E. S. , Gunbas G., HAFEZÍ N., MASCAL M., Stoyanova I. V. , Tham F. S. , Reed C. A.
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol.134, no.1, pp.707-714, 2012 (Journal Indexed in SCI)
- XXVI. **Electrochromic conjugated polyheterocycles and derivatives-highlights from the last decade towards realization of long lived aspirations**
Gunbas G., Toppare L.
CHEMICAL COMMUNICATIONS, vol.48, no.8, pp.1083-1101, 2012 (Journal Indexed in SCI)
- XXVII. **A green neutral state donor-acceptor copolymer for organic solar cells**
GÜNEŞ S., Baran D., Gunbas G., Durmus A., Fuchsbauer A., Sariciftci N. S. , Toppare L.
POLYMER CHEMISTRY, vol.1, no.8, pp.1245-1251, 2010 (Journal Indexed in SCI)
- XXVIII. **A low-band gap conductive copolymer of bis-3-hexylthiophene substituted 4-tert-butylphenyl quinoxaline and 3,4-ethylenedioxythiophene**
Ozyurt F., Durmus A., GÜNBAŞ E. G. , TOPPARE L. K.
JOURNAL OF SOLID STATE ELECTROCHEMISTRY, vol.14, no.2, pp.279-283, 2010 (Journal Indexed in SCI)
- XXIX. **Highly Conjugated Thiophene Derivatives as New Visible Light Sensitive Photoinitiators for Cationic Polymerization**
Aydoğan B., Gunbas G. E. , Durmus A., Toppare L., Yağcı Y.
MACROMOLECULES, vol.43, no.1, pp.101-106, 2010 (Journal Indexed in SCI)
- XXX. **A Quinoxaline Derivative as a Long Wavelength Photosensitizer for Diaryliodonium Salts**
Bulut U., Gunbas G. E. , Toppare L.
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.48, no.1, pp.209-213, 2010 (Journal Indexed in SCI)
- XXXI. **Electrochromic Properties of a Copolymer of 1-4-Di[2,5-di(2-thienyl)-1H-1-pyrrolyl]benzene with**

EDOT

- KIRALP S., ÇAMURLU P., GUNBAS G., TANYELİ C., AKHMEDOV I., Toppare L.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.112, no.2, pp.1082-1087, 2009 (Journal Indexed in SCI)
- XXXII. **A new p- and n-dopable selenophene derivative and its electrochromic properties**
Cetin G. A. , Balan A., Durmus A., Gunbas G., TOPPARE L. K.
ORGANIC ELECTRONICS, vol.10, no.1, pp.34-41, 2009 (Journal Indexed in SCI)
- XXXIII. **One polymer for all: benzotriazole containing donor-acceptor type polymer as a multi-purpose material**
Balan A., Baran D., Gunbas G., Durmus A., Ozyurt F., TOPPARE L. K.
CHEMICAL COMMUNICATIONS, no.44, pp.6768-6770, 2009 (Journal Indexed in SCI)
- XXXIV. **Donor-Acceptor Polymer with Benzotriazole Moiety: Enhancing the Electrochromic Properties of the "Donor Unit"**
Balan A., Gunbas G., Durmus A., Toppare L.
CHEMISTRY OF MATERIALS, vol.20, no.24, pp.7510-7513, 2008 (Journal Indexed in SCI)
- XXXV. **Photovoltaic and photophysical properties of a novel bis-3-hexylthiophene substituted quinoxaline derivative**
GÜNEŞ S., Baran D., Gunbas G., Ozyurt F., Fuchsbaue A., Sariciftci N. S. , Toppare L.
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.92, no.9, pp.1162-1169, 2008 (Journal Indexed in SCI)
- XXXVI. **Both p- and n-type dopable polymer toward electrochromic applications**
Udum Y. A. , Durmus A., Gunbas G. E. , Toppare L.
ORGANIC ELECTRONICS, vol.9, no.4, pp.501-506, 2008 (Journal Indexed in SCI)
- XXXVII. **A unique processable green polymer with a transmissive oxidized state for realization of potential RGB-based electrochromic device applications**
Gunbas G. E. , Durmus A., Toppare L.
ADVANCED FUNCTIONAL MATERIALS, vol.18, no.14, pp.2026-2030, 2008 (Journal Indexed in SCI)
- XXXVIII. **Processable and multichromic polymer of bis-3-hexylthiophene substituted 4-tert-butylphenyl quinoxaline**
Ozyurt F., GÜNBAŞ E. G. , Durmus A., Toppare L.
ORGANIC ELECTRONICS, vol.9, no.3, pp.296-302, 2008 (Journal Indexed in SCI)
- XXXIX. **A new donor-acceptor type polymeric material from a thiophene derivative and its electrochromic properties**
Udum Y. A. , Yildiz E., Gunbas G., Toppare L.
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.46, no.11, pp.3723-3731, 2008 (Journal Indexed in SCI)
- XL. **Synthesis, characterization and electrochromic properties of a near infrared active conducting polymer of 1,4-di(selenophen-2-yl)-benzene**
Aydemir K., Tarkuc S., Durmus A., Gunbas G. E. , Toppare L.
POLYMER, vol.49, no.8, pp.2029-2032, 2008 (Journal Indexed in SCI)
- XLI. **A fast switching, low band gap, p- and n-dopable, donor-acceptor type polymer**
Gunbas G. E. , ÇAMURLU P., Akhmedov I. M. , TANYELİ C., ÖNAL A. M. , Toppare L.
JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.615, no.1, pp.75-83, 2008 (Journal Indexed in SCI)
- XLII. **Could green be greener? Novel donor-acceptor-type electrochromic polymers: Towards excellent neutral green materials with exceptional transmissive oxidized states for completion of RGB color space**
Gunbas G. E. , Durmus A., Toppare L.
ADVANCED MATERIALS, vol.20, no.4, pp.691-696, 2008 (Journal Indexed in SCI)
- XLIII. **New, highly stable electrochromic polymers from 3,4-ethylenedioxythiophene-bis-substituted quinoxalines toward green polymeric materials**
Durmus A., Gunbas G. E. , Toppare L.
CHEMISTRY OF MATERIALS, vol.19, no.25, pp.6247-6251, 2007 (Journal Indexed in SCI)
- XLIV. **A neutral state green polymer with a superior transmissive light blue oxidized state**

Durmus A., Gunbas G. E. , Camurlu P., Toppare L.

CHEMICAL COMMUNICATIONS, no.31, pp.3246-3248, 2007 (Journal Indexed in SCI)

XLV. New conjugated materials containing cyano substituents for light-emitting diodes

Cirpan A., RATHNAYAKE H. P. , GUNBAS G., LAHTI P. M. , KARASZ F. E.

Synthetic Metals, vol.156, pp.282-286, 2006 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **Flexible Organic Light Emitting Diodes (OLEDs) with multi-layer Graphene Anode**
Sharif P., ALEMDAR E., GÜNBAŞ E. G. , ÇIRPAN A., ORAL A.
Graphene2020 Virtual International Conference Expo, 19 - 23 October 2020
- II. **Flexible Organic Light Emitting Diodes (OLEDs) with multi-layer Graphene Anode**
Sharif P., ALEMDAR E., GÜNBAŞ E. G. , ÇIRPAN A., ORAL A.
Graphene2020 Virtual International Conference Expo, 19 - 23 October 2020
- III. **New class of red absorbing activatable PDT drugs**
Almammadov T., ATAKAN G., GÜNAYDIN G., Gunbas G., Kolemen S.
257th National Meeting of the American-Chemical-Society (ACS), Florida, United States Of America, 31 March - 04 April 2019, vol.257
- IV. **Synthesis and Characterization of Novel TPD-Based Random Copolymer and Its Application in Organic Solar Cells**
Günbaş E. G. , Udum Y., Karabağ A., Bağ E.
PVCON 2018 - International Conference on Photovoltaic Science and Technologies, Ankara, Turkey, 4 - 06 July 2018, pp.144
- V. **New DPP and Selenophene based NIR Absorbing Polymers for Organic Solar Cell Applications**
Günbaş E. G. , Toppare L. K. , Baran D., Song, Song X., Oklem G.
PVCON 2018 - International Conference on Photovoltaic Science and Technologies, Ankara, Turkey, 4 - 06 July 2018, pp.31
- VI. **BENZODITHIOPHENE AND SELENOPHENE BEARING POLYMER FOR INVERTED ORGANIC SOLAR CELL APPLICATIONS**
Toppare L. K. , Hizalan G., Yaşa M., Göker S., Udum Y., Günbaş E. G. , Çirpan A.
International Conference on Photovoltaic Science and Technologies, Ankara, Turkey, 4 - 06 July 2018, pp.1-2
- VII. **Silver Nanowire Networks as Transparent Electrodes for Organic Photovoltaics and Light Emitting Diodes**
alpugan e., hizalan g., GÜNBAŞ E. G. , ÇIRPAN A., TOPPARE L. K. , ÜNALAN H. E.
MRS Fall Meeting 2017, 26 November 2017
- VIII. **silver nanowire networks as transparent electrodes for organic photovoltaics and light emitting diodes**
Alpugan E., HIZALAN ÖZSOY G., GÜNBAŞ E. G. , ÇIRPAN A., TOPPARE L. K. , ÜNALAN H. E.
MRS 2017, 26 November - 01 December 2017
- IX. **Supramoleküler Kimya ile Homojen ve Heterojen Kataliz Arasında Köprü Kurmak**
karaman o., içci C., GÜNBAŞ E. G.
29. Ulusal Kimya Kongresi, Turkey, 10 - 14 September 2017
- X. **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
- XI. **Synthesis of self-assembled bisrosette supramolecules**
Iğci C., Fan Y., Gonzales A., Temburnikar K., Fenniri H., 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

- XII. **New design principles for realization of high performance electrochromic materials**
GÜNBAŞ E. 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
- XIII. **Syntheses, electrochemical and spectroelectrochemical characterizations of quinoxaline-based conjugated polymers for organic photovoltaics**
Yasa M., Goker S., Udum Y. A. , Gunbas G., Toppare L.
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
- XIV. **High performance electrochromic material shows voltage-dependent fluorescence change**
ATAKAN G., Udum Y. A. , 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
- XV. **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
- XVI. **Development of Novel Catalysts for Upgrading Biomass to Renewable Diesel Range Fuels and Lubricants**
GÜNBAŞ E. G.
12th Nanoscience and Nanotechnology Conference, 3 - 05 June 2016
- XVII. **Using the Heterotriquinane and Benzoheterotriquinane Molecular Framework to Test the Limits of Bonding and Reactivity**
GÜNBAŞ E. G.
Anatolian Conference on Synthetic Organic Chemistry, 21 - 24 March 2016
- XVIII. **Acetone-butanol-ethanol condensation catalysis: Evolution and kinetics**
Goulas K., Sreekumar S., Gunbas G., Toste D.
247th National Spring Meeting of the American-Chemical-Society (ACS), Texas, United States Of America, 16 - 20 March 2014, vol.247
- XIX. **Homogeneous and heterogeneous kinetics for the coupling of furfural with aliphatic alcohols**
Goulas K., GÜNBAŞ E. G. , Sreekumar S., Tosté D.
International Congress on Energy 2014, ICE 2014 - Topical Conference at the 2014 AIChE Annual Meeting, Georgia, United States Of America, 16 - 21 November 2014, vol.3, pp.1508-1510
- XX. **Homogeneous and heterogeneous kinetics for the coupling of furfural with aliphatic alcohols**
Goulas K., GÜNBAŞ E. G. , Sreekumar S., Tosté D.
Catalysis and Reaction Engineering Division 2014 - Core Programming Area at the 2014 AIChE Annual Meeting, Georgia, United States Of America, 16 - 21 November 2014, vol.2, pp.1022-1024
- XXI. **Effects of aluminum content and aging on the selectivity and reactivity of metal-oxide-supported Pd and Cu catalysts**
Goulas K., Dietrich P., Grippo A., GÜNBAŞ E. G. , Kulzick M., Tosté D.
Catalysis and Reaction Engineering Division 2014 - Core Programming Area at the 2014 AIChE Annual Meeting, Georgia, United States Of America, 16 - 21 November 2014, vol.2, pp.821-823
- XXII. **Homogeneous and heterogeneous kinetics for the coupling of furfural with aliphatic alcohols**
Goulas K., GÜNBAŞ E. G. , Sreekumar S., Tosté D.
Fuels and Petrochemicals Division 2014 - Core Programming Area at the 2014 AIChE Annual Meeting, Georgia, United States Of America, 16 - 21 November 2014, pp.252-254
- XXIII. **Extreme oxatriquinanes: From protonating oxonium cations to record long C-O bonds**
Gunbas G., Stoyanov E., Hafezi N., Mascal M., Stoyanova I., Tham F., Shepperd W., Reed C.
243rd National Spring Meeting of the American-Chemical-Society, California, United States Of America, 25 - 29 March 2012, vol.243
- XXIV. **Green as it Gets; Donor-Acceptor type Polymers as the Key to Realization of RGB Based Polymer Display Devices**

Gunbas G., Toppare L.

13th International Symposium on Polymers and Organic Chemistry, Montreal, Canada, 5 - 08 July 2009, vol.297, pp.79-86

Supported Projects

Günbaşı E. G. , H2020 Project, Overcoming the Barriers of Brain Cancer Treatment: Targeted and Fully NIR Absorbing Photodynamic Therapy Agents with Extremely Low Molecular Weights and Controlled Lipophilicity, 2019 - 2024

Günbaşı E. G. , TUBITAK Project, Tribenzoheterotrikuinan Tabanlı Moleküler Yapıların Sentezi ve Kimyalarının İncelenmesi, 2017 - 2020

Günbaşı E. G. , Yerci S., Turan R., FP7 Project, CHEETAH - Cost-reduction through material optimisation and Higher Energy output of solar photovoltaic modules - joining Europe's Research and Development efforts in support of its PV industry, 2013 - 2018

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