

Prof. MEHMET YILMAZ

Personal Information

Email: mehmet.yilmaz@kocaeli.edu.tr

Other Email: mehmet.yilmaz972@gmail.com

Web: <https://avesis.kocaeli.edu.tr/mehmet.yilmaz>

International Researcher IDs

ORCID: 0000-0001-7179-4045

ScopusID: 57191783648

Yoksis Researcher ID: 10490

Education Information

Doctorate, Ankara University, Fen Fakültesi, Kimya Bölümü, Turkey 1999 - 2005

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), Turkey 1996 - 1999

Undergraduate, Ankara University, Fen Fakültesi, Kimya Bölümü, Turkey 1990 - 1994

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Trifluor β-dikarbonil bileşiklerinin mangan (III) asetat aracılığıyla alkenlere radikalik katılma reaksiyonları, Ankara Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2005

Postgraduate, Halkalı (Beta) B-dikarbonil bileşiklerinin mangan (III) asetat ortamında alkenlerle radikalik halkalaşma reaksiyonları, Ankara Üniversitesi, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), 1999

Research Areas

Chemistry, Organic Chemistry, Chemistry of Heterocyclic Compounds, Organic Reaction Mechanisms, Organic Spectroscopy, Free Radicals, Natural Sciences

Academic Titles / Tasks

Professor, Kocaeli University, Fen Edebiyat Fakültesi, Kimya, 2019 - Continues

Associate Professor, Kocaeli University, Kimya Bölümü, 2012 - 2019

Assistant Professor, Kocaeli University, Fen-Edebiyat Fakültesi, Kimya Bölümü, 2007 - 2012

Research Assistant, Ankara University, Fen Fakültesi, 1997 - 2005

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Recent Advances in Manganese(III)-Assisted Radical Cyclization for the Synthesis of Natural Products: A Comprehensive Review**
Bicer E., YILMAZ M.
MOLECULES, vol.29, no.10, 2024 (SCI-Expanded)
- II. **Microwave assisted synthesis, acetylcholinesterase inhibition and molecular docking studies of furo[2,3-d]pyrido[1,2-a]pyrimidin-4-one derivatives**
Yalduz S., SARI S., YILMAZ M.
Journal of Heterocyclic Chemistry, 2024 (SCI-Expanded)
- III. **Microwave assisted synthesis and AChE inhibition studies of novel thiazolo and thiadiazolo [3,2-a]pyrimidinone fused dihydrofuran compounds**
YILMAZ M., Inal A. U., SARI S.
Medicinal Chemistry Research, vol.32, no.5, pp.957-974, 2023 (SCI-Expanded)
- IV. **In vitro antioxidant activities and in silico molecular docking studies of N-substituted oxime derivatives**
SARI S., Kilic N., YILMAZ M.
STRUCTURAL CHEMISTRY, vol.34, no.2, pp.605-616, 2023 (SCI-Expanded)
- V. **Microwave Assisted Synthesis of 2,3-Dihydro-4H- furo[2,3-d]pyrido[1,2-a]pyrimidin-4-ones and furo[2,3-d]pyrido[1,2-a]pyrimidin-4-one**
Yalduz S., YILMAZ M.
CHEMISTRYSELECT, vol.8, no.10, 2023 (SCI-Expanded)
- VI. **Manganese(III) Acetate-Based Radical Cyclization Reactions for Pyranocoumarin and Pyranoquinoline Compounds: Synthesis, DFT and Molecular Docking Studies**
YAKUT M., YILMAZ M., Pekel T., ERKAN S., Katirci R., Bicer E.
CHEMISTRYSELECT, vol.7, no.44, 2022 (SCI-Expanded)
- VII. **Microwave assisted synthesis of 2,3-dihydro-4H-benzo[4,5]thiazolo [3,2-a]furo[2,3-d] pyrimidin-4-ones by radical addition of 2-hydroxy-4H-benzo[4,5]thiazolo[3,2-a] pyrimidin-4-ones to various conjugated alkenes and dienes mediated Mn(OAc)(3)**
YILMAZ M., Inal A. i. U.
TETRAHEDRON, vol.116, 2022 (SCI-Expanded)
- VIII. **Acetylcholinesterase inhibition, molecular docking and ADME prediction studies of new dihydrofuran-piperazine hybrid compounds**
SARI S., YILMAZ M.
MEDICINAL CHEMISTRY RESEARCH, vol.30, no.11, pp.2114-2126, 2021 (SCI-Expanded)
- IX. **Formation of cyclopropa[c]indole system in the Mn-mediated radical addition of cyclohexane-1,3-diones to N-substituted acrylamides**
YILMAZ M., Birincioglu S., Inal A. U.
MENDELEEV COMMUNICATIONS, vol.30, no.6, pp.785-787, 2020 (SCI-Expanded)
- X. **Synthesis, characterization, acetylcholinesterase inhibition, and molecular docking studies of new piperazine substituted dihydrofuran compounds**
SARI S., YILMAZ M.
MEDICINAL CHEMISTRY RESEARCH, vol.29, no.10, pp.1804-1818, 2020 (SCI-Expanded)
- XI. **Synthesis and characterization of piperazine-substituted dihydrofuran derivatives via Mn(OAc)₃ mediated radical cyclizations**
SARI S., YILMAZ M.
TURKISH JOURNAL OF CHEMISTRY, vol.44, no.5, pp.1303-1332, 2020 (SCI-Expanded)
- XII. **Regioselective radical addition of 3-oxopropanenitriles with terminal dienes promoted by cerium(IV) ammonium nitrate and manganese(III) acetate**
Hocaoglu B., YILMAZ M.
SYNTHETIC COMMUNICATIONS, vol.49, no.15, pp.1938-1946, 2019 (SCI-Expanded)
- XIII. **Efficient syntheses and antimicrobial activities of new thiophene containing pyranone and quinolinone derivatives using manganese(iii) acetate: the effect of thiophene on ring closure-**

opening reactions

Ozgun M., YILMAZ M., Nishino H., Avar E. C., Dal H., Pekel A. T., HÖKELEK T.

NEW JOURNAL OF CHEMISTRY, vol.43, no.15, pp.5737-5751, 2019 (SCI-Expanded)

- XIV. **Synthesis and characterization of unsaturated diacyl and alkyl-acyl piperazine derivatives**
SARI S., Unalan S., YILMAZ M.
TURKISH JOURNAL OF CHEMISTRY, vol.43, no.6, pp.1656-1710, 2019 (SCI-Expanded)
- XV. **Synthesis, Characterization, and Fluorescence Studies of Novel Heterocyclic Azo Dyes Derived from Benzothiazole**
Sener N., Eriskin S., Sahin C., YILMAZ M., Sener I.
JOURNAL OF HETEROCYCLIC CHEMISTRY, vol.54, no.6, pp.3510-3518, 2017 (SCI-Expanded)
- XVI. **Microwave assisted synthesis of 2,3-dihydro-4H-benzo[4,5]thiazolo[3,2-a]furo[2,3-d]pyrimidin-4-ones and 6,7-dihydro-5H-furo[2,3-d]thiazolo [3,2-a]pyrimidin-5-ones using Mn(OAc)(3)**
Ustalar A., YILMAZ M.
TETRAHEDRON LETTERS, vol.58, no.6, pp.516-519, 2017 (SCI-Expanded)
- XVII. **Synthesis and antifungal activity of new dihydrofurocoumarins and dihydrofuroquinolines**
USTALAR A., YILMAZ M., OSMANİ A., KEÇELİ S. A.
TURKISH JOURNAL OF CHEMISTRY, vol.41, no.1, pp.80-88, 2017 (SCI-Expanded)
- XVIII. **Regio- and diastereoselective synthesis of trans-dihydrofuran-3-carboxamides by radical addition of 1,3-dicarbonyl compounds to acrylamides using manganese(III) acetate and determination of exact configuration by X-ray crystallography**
YILMAZ M., Ustalar A., Uçan B., Pekel A. T.
Arkivoc, vol.2016, no.6, pp.79-91, 2016 (SCI-Expanded)
- XIX. **Synthesis of 2-(2-phenylethenyl) substituted 4,5-dihydrofurans by regioselective addition of 1,3-dicarbonyl compounds to dienes promoted by cerium(IV) ammonium nitrate**
YILMAZ M., USTALAR A.
ARKIVOC, pp.202-213, 2016 (SCI-Expanded)
- XX. **Synthesis of new 2,5-di(thiophen-2-yl)furan-3-carbonitrile derivatives and investigation of the electrochromic properties of homopolymers and co-polymers with EDOT**
Abaci U., Ustalar A., Yılmaz M., Güney H. Y.
RSC ADVANCES, vol.6, no.33, pp.27836-27845, 2016 (SCI-Expanded)
- XXI. **Synthesis of 4,5-Dihydrofuran-3-carbonitrile Derivatives with Electron-Rich Alkenes in the Presence of Manganese(III) Acetate**
Yılmaz M., Burgaz E. V., Yakut M., BİÇER E.
JOURNAL OF THE CHINESE CHEMICAL SOCIETY, vol.61, no.10, pp.1101-1107, 2014 (SCI-Expanded)
- XXII. **Synthesis of furan-substituted dihydrofuran compounds by radical-cyclization reactions mediated by manganese(III) acetate**
YILMAZ M., Biçer E., USTALAR A., Pekel A. T.
Arkivoc, vol.2014, no.5, pp.225-236, 2014 (SCI-Expanded)
- XXIII. **Synthesis of dihydrofuro- and C-alkenylated naphthoquinones catalyzed by manganese(III) acetate**
Alagoz O., YILMAZ M., Pekel A. T., GRAIFF C., MAGGİ R.
RSC ADVANCES, vol.4, no.28, pp.14644-14654, 2014 (SCI-Expanded)
- XXIV. **Synthesis of trifluoromethylated dihydrofurans by addition of 1,3-dicarbonyl compounds to alkenes promoted by manganese(III) acetate**
BİÇER E., YILMAZ M.
Arkivoc, vol.2013, no.3, pp.304-316, 2013 (SCI-Expanded)
- XXV. **Synthesis of Thienyl-Substituted Dihydrofuran Compounds Promoted by Manganese(III) Acetate**
BİÇER E., YILMAZ M., Burgaz E. V., Pekel A. T.
HELVETICA CHIMICA ACTA, vol.96, no.1, pp.135-141, 2013 (SCI-Expanded)
- XXVI. **Radical Cyclization Reactions via Manganese(III) Acetate Leading to 2-Thienyl-Substituted Dihydrofuran Compounds**
Bicer E., YILMAZ M., Karatas M., Pekel A. T.

- HELVETICA CHIMICA ACTA, vol.95, no.5, pp.795-804, 2012 (SCI-Expanded)
- XXVII. **Radical Cyclization of Fluorinated 1,3-Dicarbonyl Compounds with Dienes Using Manganese(III) Acetate and Synthesis of Fluoroacylated 4,5-Dihydrofurans**
YILMAZ M., Yilmaz E. V. B., Pekel A. T.
HELVETICA CHIMICA ACTA, vol.94, no.11, pp.2027-2038, 2011 (SCI-Expanded)
- XXVIII. **Synthesis of dihydrofurans containing trifluoromethyl ketone and heterocycles by radical cyclization of fluorinated 1,3-dicarbonyl compounds with 2-thienyl and 2-furyl substituted alkenes**
Yilmaz M.
TETRAHEDRON, vol.67, no.43, pp.8255-8263, 2011 (SCI-Expanded)
- XXIX. **Synthesis of fluoroacylated 4,5-dihydrofurans and fluoroalkylated tetrahydrofurans by the radical cyclization using manganese(III) acetate. Part II**
YILMAZ M., Pekel A. T.
JOURNAL OF FLUORINE CHEMISTRY, vol.132, no.9, pp.628-635, 2011 (SCI-Expanded)
- XXX. **Studies on the radical cyclization of 3-oxopropanenitriles and alkenes with cerium(IV) ammonium nitrate in ether solvents**
YILMAZ M.
Helvetica Chimica Acta, vol.94, no.7, pp.1335-1342, 2011 (SCI-Expanded)
- XXXI. **Radical cyclizations of conjugated esters and amides with 3-oxopropanenitriles mediated by manganese(III) acetate**
Yilmaz E. V. B., YILMAZ M., Öktemer A.
Arkivoc, vol.2011, no.2, pp.363-376, 2011 (SCI-Expanded)
- XXXII. **Synthesis and biological activity studies of furan derivatives**
Logoglu E., YILMAZ M., Katircioglu H., Yakut M., Mercan S.
MEDICINAL CHEMISTRY RESEARCH, vol.19, no.5, pp.490-497, 2010 (SCI-Expanded)
- XXXIII. **Synthesis, Characterization and Theoretical Calculations of 5-Methoxyisatin-3-thiosemicarbazone Derivatives**
Kandemirli F., ARSLAN T., Koksoy B., YILMAZ M.
JOURNAL OF THE CHEMICAL SOCIETY OF PAKISTAN, vol.31, no.3, pp.498-504, 2009 (SCI-Expanded)
- XXXIV. **Oxidative cyclisation of 3-oxopropanenitriles mediated manganese(III) acetate with 2-thienyl substituted Alkenes**
YILMAZ M., UZUNALIOGLU N., YAKUT M., PEKEL A. T.
TURKISH JOURNAL OF CHEMISTRY, vol.32, no.4, pp.411-422, 2008 (SCI-Expanded)
- XXXV. **Synthesis of 2,3-Dihydro-4H-furo[3,2-c] chromen-4-ones and 2,3-dihydronaphtho[2,3-b]furan-4,9-diones by the radical cyclizations of hydroxyenones with electron-rich alkenes using manganese(III) acetate**
YILMAZ M., Yakut M., Pekel A. T.
SYNTHETIC COMMUNICATIONS, vol.38, no.6, pp.914-927, 2008 (SCI-Expanded)
- XXXVI. **Oxidative cyclization of 3-oxopropanenitriles with alpha,beta-unsaturated amides by manganese(III) acetate. Regio- and stereoselective synthesis of 4-cyano-2,3-dihydrofuran-3-carboxamides**
Burgaz E. V., YILMAZ M., Pekel A. T., Oektemer A.
TETRAHEDRON, vol.63, no.30, pp.7229-7239, 2007 (SCI-Expanded)
- XXXVII. **Free radical cyclization of 1,3-dicarbonyl compounds mediated by manganese(III) acetate with alkynes and synthesis of tetrahydrobenzofurans, naphthalene, and trifluoroacetyl substituted aromatic compounds**
ALAGÖZ O., Yilmaz M., PEKEL A. T.
SYNTHETIC COMMUNICATIONS, vol.36, no.8, pp.1005-1013, 2006 (SCI-Expanded)
- XXXVIII. **Manganese(III) acetate based oxidative cyclizations of 3-oxopropanenitriles with conjugated alkenes and synthesis of 4,5-dihydrofuran-3-carbonitriles containing heterocycles**
Yilmaz M., UZUNALIOGLU N., PEKEL A. T.
TETRAHEDRON, vol.61, no.37, pp.8860-8867, 2005 (SCI-Expanded)
- XXXIX. **Manganese(III) acetate mediated synthesis of 3-trifluoroacetyl-4,5-dihydrofurans and 3-**

(dihydrofuran-2(3H)-ylidene)-1,1,1-trifluoroacetones by free radical cyclization. Part 1

Yilmaz M., PEKEL A. T.

JOURNAL OF FLUORINE CHEMISTRY, vol.126, no.3, pp.401-406, 2005 (SCI-Expanded)

XL. Manganese(III) acetate mediated free radical cyclization of 1,3-dicarbonyl compounds with sterically hindered olefins

YILMAZ M., BİÇER E., PEKEL A. T.

TURKISH JOURNAL OF CHEMISTRY, vol.29, no.6, pp.579-587, 2005 (SCI-Expanded)

XLI. Regioselective synthesis of 5-carbamoyl-dihydrofurans mediated manganese (III) acetate in acetic acid

Yilmaz M., PEKEL A. T.

SYNTHETIC COMMUNICATIONS, vol.31, no.14, pp.2189-2194, 2001 (SCI-Expanded)

XLII. Synthesis of benzofuran derivatives using manganese (III) acetate mediated addition of beta-dicarbonyl compounds to alkyne and alkenes - A comparative study

Yilmaz M., PEKEL A. T.

SYNTHETIC COMMUNICATIONS, vol.31, no.24, pp.3871-3876, 2001 (SCI-Expanded)

Articles Published in Other Journals

I. MANGANESE(III) ACETATE MEDIATED SYNTHESIS OF NEW ANGULAR AND LINEAR DIHYDROFUROQUINOLINONES

Özgür M., Yilmaz M., Pekel A. T.

Communications, Series B: Chemistry and Chemical Engineering, vol.59, pp.1-11, 2017 (Peer-Reviewed Journal)

II. Synthesis characterization and theoretical calculations of 5 methoxyisatin 3 thiosemicarbazone derivatives Fatma Kandemirli

KANDEMİRLİ F., ARSLAN T., KOKSOY B., YILMAZ M.

Journal Of The Chemical Society Of Pakistan, vol.31, pp.498-504, 2009 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. N-sübstitüe Oksimlerin Sentezi ve Antioksidan Aktivitelerinin İncelenmesi

KILIÇ N., SARI S., YILMAZ M.

32. ULUSAL KİMYA KONGRESİ, Turkey, 17 - 19 September 2020

II. AChE inhibition and molecular docking studies of new piperazine-dihydrofuran compounds

SARI S., YILMAZ M.

3RD INTERNATIONAL EURASIAN CONFERENCE ON BIOLOGICAL AND CHEMICAL SCIENCES, 19 - 20 March 2020

III. 1. Mn(OAc)₃ mediated synthesis of novel piperazine bearing dihydrofurans and investigation of their enzyme inhibiton capabilities.Part 2.

Sarı S., Yilmaz M.

2nd International Conference on Applied Chemistry, Al-Ghardaqah, Egypt, 25 - 28 November 2017, pp.118-119

IV. Synthesis of New Furyl-substituted Dihydrofuran Compounds

Özgür M., Alagöz O., Yilmaz M.

ANCON 2017, Ankara, Turkey, 5 - 07 October 2017, pp.175

V. Mn(OAc)₃ mediated synthesis of novel piperazine bearing dihydrofurans and investigation of their enzyme inhibiton capabilities.Part 1.

SARI S., YILMAZ M.

ANCON 2017, 5 - 07 October 2017

VI. Microwave Assisted Synthesis and Acetylcholine Esterase Inhibition of 6,7-Dihydro-5H-furo[2,3-d]thiazolo[3,2-a]pyrimidin-5-ones

Ustalar A., YILMAZ M.

ANCON 2017, 5 - 07 October 2017

VII. Photopolymerization of a novel piperazine derivative

Yeldir E. K., ORAL A., YILMAZ M.

The international Joint Science congress of materials and polymers, 25 - 28 August 2017

VIII. Synthesis of pyrimido[2,1-b]benzotiazole compounds

Ustalar A., YILMAZ M.

248th National Meeting of the American-Chemical-Society (ACS), San-Francisco, Costa Rica, 10 - 14 August 2014, vol.248

IX. Microwave assisted radical addition of 2-hydroxy-4H-pyrimido[2,1-b][1,3]benzothiazole-4-ones to conjugated alkenes by manganese(III) acetate

Ustalar A., YILMAZ M.

248th National Meeting of the American-Chemical-Society (ACS), San-Francisco, Costa Rica, 10 - 14 August 2014, vol.248

X. Synthesis of 4 Phenyl 2 5 Di Thiophene 2 Yı 4 5 Dihydrifuran 3 Carbonitrile and Investigation of Its Electrochromic Properties

ABACI U., YILMAZ M., GÜNEY H. Y.

44th World Chemistry Congress, İstanbul, Turkey, 11 - 16 August 2013

Supported Projects

YILMAZ M., ÜNALAN S., Project Supported by Higher Education Institutions, DOYMAMIŞ C=C BAĞI İÇEREN DİAÇİL PİPERAZİN TÜREVLERİNİN SENTEZİ, KARAKTERİZASYONU VE ANTİOKSİDAN ÖZELLİKLERİNİN İNCELENMESİ, 2018 - 2019

YILMAZ M., Project Supported by Higher Education Institutions, ETİL 2, 4-DİOKSO-4-FENİL BÜTONOAT BİLEŞİKLERİNİN SENTEZİ VE YAPILARININ AYDINLATILMASI, 2018 - 2019

Dündar D., Yılmaz M., TUBITAK Project, TÜBİTAK-116Z455 Doymamış Grup İçeren Yeni Piperazin Türevlerinin Sentezi, Mn(Oac)₃ Aracılığıyla 1,3-Dikarbonil Bileşikleriyle Halkalaşma Tepkimeleri Ve Elde Edilen Bileşiklerin Antibakteriyal Aktivitelerinin Araştırılması, 2017 - 2019

YILMAZ M., Project Supported by Higher Education Institutions, BAZI 1,3 -DİKARBONİL BİLEŞİKLERİNİN MANGAN (III) ASETAT ARACILIĞIYLA 1,1-DİFENİL ETİLEN VE TÜREVLERİYLE RADİKAL HALKALAŞMA REAKSİYONLARININ İNCELENMESİ, 2017 - 2018

YILMAZ M., USTALAR A., ÜNALAN S., SERENLİ S., Project Supported by Higher Education Institutions, 4-HİDROKSİ-PİRAN-2-ON BİLEŞİKLERİNİN MANGAN(III) ASETAT ARACILIĞIYLA -DOYMAMIŞ AMİT VE ESTERLERLE OKSİDATİF HALKALAŞMA REAKSİYONLARI, VE DİHİDROFURANLARIN ENZİM İNHİBİSYONLARININ İNCELENMESİ, 2016 - 2018

YILMAZ M., Project Supported by Higher Education Institutions, DİHİDROFURO-PİRİMİDO-BENZOTİYAZOL VE DİHİDROFURO-TİYAZOLO-PİRİMİDİN BİLEŞİKLERİNİN SENTEZİ VE ENZİM İNHİBİSYONLARININ İNCELENMESİ, 2016 - 2017

YILMAZ M., Project Supported by Higher Education Institutions, DİHİDROFURO-KARBPKSİAMİTLERİN SENTEZİ VE KARAKTERİZASYONLARININ YAPILMASI, 2015 - 2016

YILMAZ M., Project Supported by Higher Education Institutions, 1,3-Dikarbonil Bileşiklerinin Seryum(IV)amonyum Nitrat Aracılığıyla Konjuge Doymamış Sistemlere Radikalik Katılma Tepkimelerinin İncelenmesi, 2014 - 2016

YILMAZ M., Project Supported by Higher Education Institutions, ETİL TRİFLUORASETATIN MANGAN (III) ASETAT ARACILIĞIYLA 1,1-DİFENİL ETİLEN VE TÜREVLERİYLE RADİKAL HALKALAŞMA REAKSİYONLARININ İNCELENMESİ, 2014 - 2015

YILMAZ M., TUBITAK Project, Dihidrofuro pirimido benzotiyazol ve Dihidrofuro tiyazolo pirimidin Bileşiklerinin Sentezi ve Antibakteriyal Aktivitelerinin İncelenmesi, 2013 - 2015

YILMAZ M., Project Supported by Higher Education Institutions, ?-Konjuge 3-Siyano-furan Bileşiklerinin Sentezi ve Elektrokromik Özelliklerinin İncelenmesi, 2012 - 2014

YILMAZ M., Project Supported by Higher Education Institutions, Oksopropannitrillerin Seryum (IV) Amonyum Nitrat Aracılığıyla Konjuge Dienlerle Radikalik Halkalaşma Tepkimeleri, 2010 - 2012

Metrics

Publication: 54

Citation (WoS): 671

Citation (Scopus): 665

H-Index (WoS): 17

H-Index (Scopus): 16

Non Academic Experience

Bitli Group-Polisan Kimya San. A.Ş.