

## **Prof. YILMAZ YILDIRIR**

### **Personal Information**

**Email:** yildirir@gazi.edu.tr

**Web:** <https://avesis.gazi.edu.tr/yildirir>

### **International Researcher IDs**

ScholarID: smsWhq0AAAAJ

ORCID: 0000-0001-9091-5324

Publons / Web Of Science ResearcherID: AHE-1699-2022

ScopusID: 1749054479

Yoksis Researcher ID: 6135

### **Education Information**

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Kimya (Dr), Turkey 1986 - 1990

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), Turkey 1984 - 1986

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Kimya Bölümü, Turkey 1976 - 1983

### **Dissertations**

Doctorate, Sübstítüe benzo (b) tiyofenlerin dimetil asetilendikarboksilat ile reaksiyonları, Gazi University, Fen Bilimleri Enstitüsü, Kimya (Dr), 1990

### **Research Areas**

Natural Sciences

### **Academic Titles / Tasks**

Professor, Gazi University, Fen Fakültesi, Kimya, 2002 - Continues

Associate Professor, Gazi University, Fen Fakültesi, Kimya, 1996 - 2002

Assistant Professor, Gazi University, Fen Fakültesi, Kimya, 1990 - 1996

Research Assistant, Gazi University, Fen Fakültesi, Kimya, 1985 - 1990

### **Academic and Administrative Experience**

Gazi University, Fen Fakültesi, Kimya Bölümü, 2011 - Continues

Gazi University, Fen Fakültesi, Kimya Bölümü, 2005 - 2008

Gazi University, Fen Bilimleri Enstitüsü, 2002 - 2005

### **Advising Theses**

YILDIRIR Y., BAZI APİGENİN VE KUERSETİN BENZERİ BİLEŞİKLERİN SENTEZLENMESİ, YAPILARININ AYDINLATILMASI, Postgraduate, S.ÖZEL(Student), 2020  
Yıldırır Y., SYNTHESIS AND LIGHTING THEIR STRUCTURES OF SOME APIGENIN AND QUERSETIN-LIKE COMPOUNDS, Postgraduate, S.ÖZEL(Student), 2019  
YILDIRIR Y., Synthesis And Structure Elucidation Of Some Compounds Like Fingolimod, Postgraduate, D.Doyduk(Student), 2016  
YILDIRIR Y., Synthesis Of Some Novel 9-((5-(Butylthio)-1,3,4-Oxadiazol-2- Yl)Methyl)-9h-Purin-6-Amine Derivatives, Postgraduate, A.ÇETİN(Student), 2015  
YILDIRIR Y., AZOT ATOMUNDА TETRAZOL HALKASI İÇEREN BAZI TEBAİN TÜREVİ YARISENTETİK OPİOİTLERİN SENZEZİ VE YAPILARININ SPEKTROSKOPİK YÖNTEMLERLE AYDINLATILMASI, Postgraduate, Ö.PAMİR(Student), 2010  
YILDIRIR Y., Bazı yeni N-(aril)fenilselenoasetamitlerin sentezi, Postgraduate, Ö.GÜREL(Student), 2010  
YILDIRIR Y., TEBAİN TÜREVİ BAZI YARISENTETİK OPİOİTLERİN SENZEZİ VE YAPILARININ SPEKTROSKOPİK YÖNTEMLERLE AYDINLATILMASI, Doctorate, S.YAVUZ(Student), 2010  
YILDIRIR Y., Azot atomunda tetrazol halkası içeren bazı tebain türevi yarı sentetik opioitlerin sentezi ve yapılarının spektroskopik yöntemlerle aydınlatılması, Postgraduate, Ö.PAMİR(Student), 2010  
YILDIRIR Y., Tebain türevi bazı yarisentetik opioitlerin sentezi ve yapılarının spektroskopik yöntemlerle aydınlatılması, Doctorate, S.YAVUZ(Student), 2010  
YILDIRIR Y., OCTET STABILIZED 1,3-DIPOLAR CYCLOADDITION REACTIONS, Doctorate, H.ÖZKAN(Student), 2008  
YILDIRIR Y., Akridindion türü organik boyarmadde lazerlerinin sentezi ve bunların uygulanabilirliğinin araştırılması, Doctorate, M.KAYA(Student), 2007  
YILDIRIR Y., Bazı antrakinon boyar maddelerinin sentezlenmesi, Postgraduate, M.CANBULAT(Student), 2006  
YILDIRIR Y., Bazı 5-sübstitüe-1h tetrazol türevlerinin sentezi, Postgraduate, Ö.AYDIN(Student), 2006  
YILDIRIR Y., Tetrazol halkası içeren bazı sülfonamitlerin sentezi, Postgraduate, M.FARUK(Student), 2006  
YILDIRIR Y., 3-fenilazo-3-penten-4-ol-2-on ve türevlerinin PTAD ile reaksiyonlarının incelenmesi, Postgraduate, M.OĞUZ(Student), 2006  
YILDIRIR Y., Bazı naftiltiyoglikolik asit türevlerinin sentezi, Postgraduate, G.GÖNÜL(Student), 2005  
YILDIRIR Y., Metotreksat benzeri bileşiklerin sentezi, yapılarının aydınlatılması ve biyolojik aktivitelerinin incelenmesi, Doctorate, N.ÇOLAK(Student), 2005  
YILDIRIR Y., Bazı naftilselenoglikolik asit türevlerinin sentezi, Postgraduate, S.YAVUZ(Student), 2003  
YILDIRIR Y., Bazı fenilselenoglikolik asit türevlerinin sentezi, Postgraduate, H.ÖZKAN(Student), 2001  
YILDIRIR Y., Verbascum ancyritanum bornm bitkisinin kimyasal olarak incelenmesi, Postgraduate, N.ÇOLAK(Student), 1997  
YILDIRIR Y., Aromatik halkalardaki hidroksi (-OH) gruplarının kolay çıkışlı gruplar haline dönüştürülmesi için yöntem geliştirilmesi, Postgraduate, E.YANARATEŞ(Student), 1995

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Molecular docking, synthesis, anticancer activity, and metabolomics study of boronic acid ester-containing fingolimod derivatives**  
Doyduk D., Derkuş B., Sarı B., Eylem C. C., Nemutlu E., Yıldırır Y.  
ARCHIV DER PHARMAZIE, vol.2300382, pp.1-17, 2023 (SCI-Expanded)
- II. **Synthesis and characterization of new chalcone compounds, and investigation of their DFT, optical and electrochemical properties**  
Abbas J. A., YILDIRIR Y.  
Journal of Molecular Structure, vol.1281, 2023 (SCI-Expanded)
- III. **Synthesis of Apigenin and Quercetin-Like Compounds, Molecular Docking Simulation, and Investigation of Their Bioactivity on A549 Cell Lines**  
YILDIRIR Y., Ozel S., DOYDUK D., Kartal Y., SABUNCUOĞLU S.  
CHEMISTRYSELECT, vol.7, no.43, 2022 (SCI-Expanded)
- IV. **Synthesis and DNA binding of new adenine derivatives incorporating 5-((Alkylthio)-1,3,4-oxadiazol-**

**2-yl)methyl moiety**

YILDIRIR Y., Cetin A., Ozkan H., YAVUZ S., AÇIK L., Celik S. P.

MEDICINAL CHEMISTRY RESEARCH, vol.27, no.8, pp.2027-2033, 2018 (SCI-Expanded)

**V. Synthesis and Functional Investigations of Computer Designed Novel Cladribine-Like Compounds for the Treatment of Multiple Sclerosis**

YAVUZ S., Cetin A., AKDEMİR A., DOYDUK D., DİŞLİ A., Celik Turgut G., ŞEN A., YILDIRIR Y.

ARCHIV DER PHARMAZIE, vol.350, no.11, 2017 (SCI-Expanded)

**VI. Computer design, synthesis, and bioactivity analyses of drugs like fingolimod used in the treatment of multiple sclerosis**

Turgut G. C., DOYDUK D., YILDIRIR Y., YAVUZ S., AKDEMİR A., DİŞLİ A., ŞEN A.

BIOORGANIC & MEDICINAL CHEMISTRY, vol.25, no.2, pp.483-495, 2017 (SCI-Expanded)

**VII. SYNTHESIS, CHARACTERIZATION, AND IN VITRO ANTIMICROBIAL AND ANTIFUNGAL ACTIVITY OF NOVEL ACRIDINES**

KAYA M., YILDIRIR Y., Celik G. Y.

PHARMACEUTICAL CHEMISTRY JOURNAL, vol.48, no.11, pp.724-728, 2015 (SCI-Expanded)

**VIII. Synthesis and Pharmacological Evaluation of Some Novel Thebaine Derivatives: N-(Tetrazol-1H-5-yl)-6,14-endoethenotetrahydrothebaine Incorporating the 1,3,4-Oxadiazole or the 1,3,4-Thiadiazole Moiety**

YAVUZ S., ÜNAL Y., Pamir O., Yilmazer D., KURTİPEK Ö., KAVUTÇU M., ARSLAN M., ARK M., YILDIRIR Y.

ARCHIV DER PHARMAZIE, vol.346, no.6, pp.455-462, 2013 (SCI-Expanded)

**IX. Synthesis and Characterization of New Thebaine Derivatives as Potential Opioid Agonists and Antagonists: 2-[N-(1H-Tetrazol-5-yl)-6,14-endo-etheno-6,7,8,14-tetrahydrothebaine-7 alpha-yl]-5-phenyl-1,3,4-oxadiazoles**

YILDIRIR Y., Pamir O., YAVUZ S., DİŞLİ A.

JOURNAL OF HETEROCYCLIC CHEMISTRY, vol.50, 2013 (SCI-Expanded)

**X. SYNTHESIS AND CHARACTERIZATION OF NEW THEBAINE DERIVATIVES: 2-(6,14-ENDO-ETHENOTETRAHYDROTHEBAINE-7 alpha-YL)-5-(N-ARYLAMINO)-1,3,4-THIADIAZOLES**

YAVUZ S., YILDIRIR Y.

PHOSPHORUS SULFUR AND SILICON AND THE RELATED ELEMENTS, vol.187, no.11, pp.1303-1311, 2012 (SCI-Expanded)

**XI. Fast Method for Synthesis of Alkyl and Aryl-N-Methylnitrones**

YAVUZ S., ÖZKAN H., ÇOLAK N., YILDIRIR Y.

MOLECULES, vol.16, no.8, pp.6677-6683, 2011 (SCI-Expanded)

**XII. Synthesis and antimicrobial activities of novel bisacridine-1,8-dione derivatives**

KAYA M., YILDIRIR Y., Celik G. Y.

MEDICINAL CHEMISTRY RESEARCH, vol.20, no.3, pp.293-299, 2011 (SCI-Expanded)

**XIII. 4-[2-(2,2-Dimethyl-4,6-dioxo-1,3-dioxan-5-ylidene)hydrazin-1-yl]benzonitrile**

ÇOLAK N., YILDIRIR Y., Tercan B., Ermis E., HÖKELEK T.

ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.66, 2010 (SCI-Expanded)

**XIV. Synthesis of Isomeric 2,3,5-Trisubstituted Perhydropyrrolo[3,4-d]-isoxazole-4,6-diones via 1,3-Dipolar Cycloaddition Reactions**

Ozkan H., YILDIRIR Y.

JOURNAL OF HETEROCYCLIC CHEMISTRY, vol.47, no.4, pp.954-959, 2010 (SCI-Expanded)

**XV. Synthesis and antimicrobial activity studies of some novel substituted phenylhydrazone-1H-tetrazol-5-yl-acetonitriles**

YAVUZ S., Aydin O., ÇETE S., DİŞLİ A., YILDIRIR Y.

MEDICINAL CHEMISTRY RESEARCH, vol.19, no.2, pp.120-126, 2010 (SCI-Expanded)

**XVI. Synthesis and Characterization of New 7-Substituted 6,14-Ethenomorphinan Derivatives: N-{5-[(5 alpha,7 alpha)-4,5-Epoxy-3,6-dimethoxy-17-methyl-6,14-ethenomorphinan-7-yl]-1,3,4-oxadiazol-2-yl}arenamines**

YAVUZ S., YILDIRIR Y.

- HELVETICA CHIMICA ACTA, vol.93, no.12, pp.2406-2418, 2010 (SCI-Expanded)
- XVII. **Dimethyl trans-3-(4-bromophenyl)-2-methylisoxazolidine-4,5-dicarboxylate**  
BÜYÜKGÜNGÖR O., YAVUZ S., ODABAŞOĞLU M., Ozkan H., Pamir O., YILDIRIR Y.  
ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.65, 2009 (SCI-Expanded)
- XVIII. **N-Cyano-7 alpha-methoxycarbonyl-6,14-endo-ethenotetrahydronorthebaine**  
ODABAŞOĞLU M., YAVUZ S., Pamir O., BÜYÜKGÜNGÖR O., YILDIRIR Y.  
ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.65, 2009 (SCI-Expanded)
- XIX. **1-Methoxy-3-o-tolybicyclo[2.2.2]oct-5-ene-2,2-dicarbonitrile**  
BÜYÜKGÜNGÖR O., YAVUZ S., ODABAŞOĞLU M., Pamir O., YILDIRIR Y.  
ACTA CRYSTALLOGRAPHICA SECTION E-CRYSTALLOGRAPHIC COMMUNICATIONS, vol.65, 2009 (SCI-Expanded)
- XX. **7 alpha-Methoxycarbonyl-6,7,8,14-tetrahydro-6,14-endo-ethenothebaine**  
ODABAŞOĞLU M., YAVUZ S., Pamir O., YILDIRIR Y., BÜYÜKGÜNGÖR O.  
ACTA CRYSTALLOGRAPHICA SECTION E-CRYSTALLOGRAPHIC COMMUNICATIONS, vol.65, 2009 (SCI-Expanded)
- XXI. **2-Methyl-3-(5-methyl-2-thienyl)-5-phenylperhydropyrrolo[3,4-d]isoxazole-4,6-dione**  
ODABAŞOĞLU M., Oezkan H., YILDIRIR Y., BÜYÜKGÜNGÖR O.  
ACTA CRYSTALLOGRAPHICA SECTION E-CRYSTALLOGRAPHIC COMMUNICATIONS, vol.65, 2009 (SCI-Expanded)
- XXII. **Dimethyl cis-2-methyl-3-p-tolylisoxazolidine-4,5-dicarboxylate**  
ODABAŞOĞLU M., ÖZKAN H., YILDIRIR Y., BÜYÜKGÜNGÖR O.  
ACTA CRYSTALLOGRAPHICA SECTION E-CRYSTALLOGRAPHIC COMMUNICATIONS, vol.65, 2009 (SCI-Expanded)
- XXIII. **Synthesis and Laser Activity of Halo-Acridinedione Derivatives**  
Kaya M., YILDIRIR Y., Tuerker L.  
JOURNAL OF HETEROCYCLIC CHEMISTRY, vol.46, no.2, pp.294-297, 2009 (SCI-Expanded)
- XXIV. **The synthesis and investigation of the antimicrobial activity of some new phenylselanyl-1-(toluene-4-sulfonyl)-1H-tetrazole derivatives**  
YILDIRIR Y., Us M. F., Colak N., ÖZKAN H., YAVUZ S., DİŞLİ A., Ozturk S., Turker L.  
MEDICINAL CHEMISTRY RESEARCH, vol.18, no.2, pp.91-97, 2009 (SCI-Expanded)
- XXV. **Synthesis of some novel derivatives of 2,6-diaminoanthraquinone dyes**  
YILDIRIR Y., Canbolat M., DİŞLİ A., Colak N.  
ASIAN JOURNAL OF CHEMISTRY, vol.20, no.8, pp.6411-6416, 2008 (SCI-Expanded)
- XXVI. **(3R, 3aS, 6aR)-2,5-Dimethyl-3-(5-phenyl-2-thienyl)perhydropyrrolo[3,4-d][1,2]-oxazole-4,6-dione**  
Odabasoglu M., ÖZKAN H., YILDIRIR Y., BÜYÜKGÜNGÖR O.  
ACTA CRYSTALLOGRAPHICA SECTION E-CRYSTALLOGRAPHIC COMMUNICATIONS, vol.64, 2008 (SCI-Expanded)
- XXVII. **2,5-Dimethyl-3-(3-methylthiophen-2-yl)-perhydropyrrolo[3,4-d]isoxazole-4,6-dione**  
Odabasoglu M., ÖZKAN H., YILDIRIR Y., BÜYÜKGÜNGÖR O.  
ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.64, 2008 (SCI-Expanded)
- XXVIII. **9-(4-Methoxyphenyl)-3,3,6,6-tetramethyl-3,4,6,7-tetrahydro-2H-xanthene-1,8(5H, 9H)-dione**  
Odabasoglu M., KAYA M., YILDIRIR Y., BÜYÜKGÜNGÖR O.  
ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.64, 2008 (SCI-Expanded)
- XXIX. **A novel synthesis of bromobenzenes using molecular bromine**  
ÖZKAN H., DİŞLİ A., YILDIRIR Y., Tuerker L.  
MOLECULES, vol.12, no.11, pp.2478-2483, 2007 (SCI-Expanded)
- XXX. **Synthesis and antimicrobial effects of some phenylazopropanedinitriles and their derivatives**  
ÇETE S., DİŞLİ A., YILDIRIR Y., YAŞAR A.  
ASIAN JOURNAL OF CHEMISTRY, vol.18, no.3, pp.2061-2066, 2006 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Synthesis of some 2-alkyl-5-(4-vinylphenyl)-2H-tetrazole compounds via the Wittig reaction and investigation by X-ray crystallography**  
Doyduk D., Yıldırır Y.

- ORGANIC COMMUNICATIONS, vol.15, no.4, pp.333-345, 2022 (ESCI)
- II. **Synthesis of some new derivatives of tick pheromones and investigation of pheromone properties**  
YANARATEŞ E., YILDIRIR Y., DİŞLİ A.  
Biological Diversity and Conservation, vol.12, no.3, pp.132-143, 2019 (Peer-Reviewed Journal)
- III. **Synthesis of N-Aryl-2-Phenylselanyl Acetamides and Their Antimicrobial Activities**  
YAVUZ S., ÖZKAN H., GÜREL Ö., YILDIRIR Y.  
Gazi University Journal of Science, vol.29, no.2, pp.309-315, 2016 (ESCI)
- IV. **Synthesis of N-(Aryl)-2-(phenylselanyl) acetamides and Their Antimicrobial Activities**  
YAVUZ S., ÖZKAN H., Gurel O., YILDIRIR Y.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.29, no.2, pp.309-315, 2016 (ESCI)
- V. **Structural Elucidation of Jojoba Plant (*Simmondsia Chinensis*) Oil From Saudi Arabia**  
Dawoud U. M., DİŞLİ A., YILDIRIR Y., UYSAL B. Z.  
J. Fac.Pharm. Ankara, vol.31, no.4, pp.223-229, 2002 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Organik Kimyaya Giriş: Temel Kavramlar**  
YILDIRIR Y.  
in: ORGANİK KİMYA "YAŞAMIN KALBİ", Yılmaz YILDIRIR, Editor, Palme Yayınevi, Ankara, pp.1-55, 2023
- II. **Organik Kimyada Spektroskopik Yöntemler**  
YILDIRIR Y.  
in: ORGANİK KİMYA "YAŞAMIN KALBİ", Yılmaz YILDIRIR, Editor, Palme Yayınevi, Ankara, pp.196-267, 2023

## Refereed Congress / Symposium Publications in Proceedings

- I. **Synthesis of 2-(1-alkyl-1H-tetrazol-5-yl)ethan-1-ol Group Containing Aldophosphamide as can used Potential Anticancer Prodrug and Study**  
YILDIRIR Y., DOYDUK D.  
7th Drug Chemistry Conference - Short oral presentation-acceptance, 14 - 17 March 2019
- II. **Synthesis of Aldophosphamides Containing 2-(1-alkyl-1H-tetrazol-5-yl)ethan-1-ol Groups as can used Potential Anticancer Prodrug**  
DOYDUK D., YILDIRIR Y.  
Uluslararası 7. İlaç Kimyası: İlaç Etken Maddesi Tasarımı, Sentezi, Üretilimi ve Standardizasyonu Kongresi, 14 - 17 March 2019
- III. **Evaluation of Anti-inflammatory Effect of Novel Fingolimod Based Compound F1-12h in SH-SY5Y, SK-N-SH and U-118MG Cells for the Efficacy in Multiple Sclerosis**  
ÇELİK TURGUT G., DOYDUK D., YILDIRIR Y., YAVUZ S., AKDEMİR A., DİŞLİ A., ŞEN A.  
5th International Congress of the Molecular Biology Association of Turkey, 8 - 10 September 2018
- IV. **Evaluation of Anti-inflammatory Effect of Novel Fingolimod Based Compound F1-12h in SH-SY5Y, SK-N-SH and U-118 MG Cells for the Efficacy in Multiple Sclerosis**  
ÇELİK TURGUT G., DOYDUK D., YILDIRIR Y., YAVUZ S., AKDEMİR A., DİŞLİ A., ŞEN A.  
5th International Congress of the Molecular Biology Association of Turkey, 8 September - 10 December 2017,  
pp.31

## Supported Projects

YILDIRIR Y., DOYDUK D., DERKUŞ B., Project Supported by Higher Education Institutions, Bor Çekirdekli Fingolimod Benzeri Yeni Bileşiklerin Sentezleri, Yapılarının Spektroskopik Yöntemlerle Doğrulanması ve Biyoetkinliklerinin

## İncelenmesi, 2020 - 2023

YILDIRIR Y., Project Supported by Higher Education Institutions, Bazı Apigenin ve Kuersetin Benzeri Bileşiklerin Sentezlenmesi, Yapılarının Aydınlatılması, 2019 - 2021

DİŞLİ A., YILDIRIR Y., YAVUZ S., TUBITAK Project, Multipl Skleroz Ms Hastalığının Tedavisinde Kullanılan Fingolimod ve Kladrabin Benzeri İlaçların Bilgisayarlı Tasarımı Sentezi ve Biyoetkinliklerinin İncelenmesi KBAG 113Z141, 2014 - 2016

YILDIRIR Y., Project Supported by Higher Education Institutions, MORFİNYAN TÜRÜ TEBAİN BİLEŞİKLERİNİN

AROMATİK HALKASI (A HALKASI) ÜZERİNDEN YENİ TÜREVLERİNİN SENTEZİ, 2010 - 2013

YILDIRIR Y., Project Supported by Higher Education Institutions, Okted Stabilize 1,3-Dipolar Siklo Katılma Tepkimeleri, 2006 - 2008

YILDIRIR Y., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Akredindion Türü yeni org.boyar mad.lazerl.sent. ve bunların uyg.araşt., 2005 - 2007

YILDIRIR Y., Project Supported by Higher Education Institutions, Naftiltiyoglikolik Asit ve Türevlerinin Sentezi ve Halkalaştırma Reaksiyonlarının İncelenmesi, 2003 - 2005

YILDIRIR Y., Project Supported by Higher Education Institutions, Kanser tedavisinde kullanılan metotreksatin bazı türevlerinin hazırlanması ve etkilerinin inc., 2001 - 2004

YILDIRIR Y., Project Supported by Higher Education Institutions, Feniselenglikolik asitler ve türevlerinin sentezi, 1998 - 1998

YILDIRIR Y., Project Supported by Higher Education Institutions, Türkiye'de yetişen bazı zehirli mantarlar için indikör geliştirilmesi, 1996 - 1996

YILDIRIR Y., Project Supported by Higher Education Institutions, Verbascum Ancyritanum Bornm (sığır kuyruğu) bitkisinin kimyasal incelenmesi, 1995 - 1995

YILDIRIR Y., Project Supported by Higher Education Institutions, Aromatik halkalardaki-OH gruplarının kolay çıkışıcı gruplar haline dönüştürülmesi için yöntem geliştirilmesi, 1993 - 1993

## Metrics

Publication: 46

Citation (WoS): 215

Citation (Scopus): 242

H-Index (WoS): 9

H-Index (Scopus): 9