

## Asst. Prof. BURAK AY

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: D-8031-2018

ScopusID: 54895785200

Yoksis Researcher ID: 115093

### Education Information

Doctorate, Cukurova University, Fen Edebiyat Fakültesi, Kimya Bölümü / Anorganik Kimya Anabilimdalı, Turkey 2011 - 2017

Postgraduate, Cukurova University, Fen Edebiyat Fakültesi, Kimya Bölümü / Anorganik Kimya Anabilimdalı, Turkey 2008 - 2011

Undergraduate, Pamukkale University, Fen Edebiyat Fakültesi, Kimya Bölümü, Turkey 2003 - 2007

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Occupational Health and Safety, İş Güvenliği Eğitim Semineri, Ç.Ü. Maden Mühendisliği Bölümü-İGUD, 2017

Occupational Health and Safety, Risk Değerlendirmesi Eğitimi, ÇiSAM, 2015

Occupational Health and Safety, B Sınıfı İş Güvenliği Uzmanlığı Belgesi, Çalışma ve Sosyal Güvenlik Bakanlığı, 2014

Occupational Health and Safety, C Sınıfı İş Güvenliği Uzmanlığı Belgesi, Çalışma ve Sosyal Güvenlik Bakanlığı, 2014

Occupational Health and Safety, Yüksekte Çalışma Güvenliği Kazi Güvenliği Eğitimi, SEGA SAFETY, 2011

Occupational Health and Safety, Genel İş Güvenliği Eğitimi, SEGA SAFETY, 2011

Occupational Health and Safety, Kişisel Koruyucular Eğitimi, SEGA SAFETY, 2011

Occupational Health and Safety, Kapalı Alanlarda İş Güvenliği Eğitimi, SEGA SAFETY, 2011

Quality Management, ISO 9001/2008 Kalite Yönetim Sistemi Temel Eğitimi, Adana ÜSAM, 2010

Occupational Health and Safety, OHSAS 18001 İş Sağlığı ve Güvenliği Temel Eğitimi, Adana ÜSAM, 2009

Foreign Language, Yabancı Dil Eğitimi, Çukurova Üniversitesi, YADİM, 2008

### Dissertations

Doctorate, Lantanit ve Geçiş Metali İçeren Homoleptik ve Heteroleptik Koordinasyon Polimerlerinin Hidrotermal Sentezi, Katalitik ve Lüminesans Özelliklerinin İncelenmesi, Cukurova University, Fen Bilimleri Enstitüsü, Kimya Bölümü / Anorganik Kimya Anabilimdalı, 2017

Postgraduate, Dikarboksilik Asit Grupları İçeren Geçiş Metal Komplekslerinin Hidrotermal Sentezi, UV Etkileşimlerinin ve Katalitik Aktivitelerinin İncelenmesi, Cukurova University, Fen Bilimleri Enstitüsü, Kimya Bölümü / Anorganik Kimya Anabilimdalı, 2011

## Research Areas

Chemistry, Inorganic Chemistry, Inorganic Polymers, Coordination Chemistry, Organometallic Chemistry, Natural Sciences

## Academic Titles / Tasks

Assistant Professor, Cukurova University, Fen Edebiyat Fakültesi, Kimya Bölümü, 2020 - Continues

Research Assistant PhD, Cukurova University, Fen Edebiyat Fakültesi, Kimya Bölümü, 2017 - 2020

Research Assistant, Cukurova University, Fen Bilimleri Enstitüsü, Kimya, 2008 - 2017

## Academic and Administrative Experience

Deputy Head of Department, Cukurova University, Fen-Edebiyat Fakültesi, Kimya, 2020 - 2022

## Courses

Genel Kimya, Undergraduate, 2018 - 2019

Anorganik Kimya Laboratuvarı II, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

İş Sağlığı ve Güvenliği, Undergraduate, 2018 - 2019

İş Sağlığı ve Güvenliği, Undergraduate, 2017 - 2018

İş Sağlığı ve Güvenliği, Undergraduate, 2018 - 2019

Enstrümental Analiz Laboratuvarı, Undergraduate, 2017 - 2018

Genel Kimya, Undergraduate, 2017 - 2018

Anorganik Kimya Laboratuvarı II, Undergraduate, 2017 - 2018, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009

Genel Kimya Laboratuvarı I, Undergraduate, 2016 - 2017

Anorganik Kimya Laboratuvarı I, Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2011 - 2012, 2010 - 2011, 2009 - 2010

Enstrümental Analiz Laboratuvarı, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010

Anorganik Kimya Laboratuvarı I, Undergraduate, 2013 - 2014, 2012 - 2013

Analitik Kimya Laboratuvarı II, Undergraduate, 2013 - 2014, 2009 - 2010

Genel Kimya Laboratuvarı I, Undergraduate, 2011 - 2012

Genel Kimya Laboratuvarı, Undergraduate, 2011 - 2012

Genel Kimya Laboratuvarı, Undergraduate, 2009 - 2010

Kimya Laboratuvarına Giriş, Undergraduate, 2008 - 2009

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

- I. **Synthesis, spectroscopic, thermal analysis and in vitro cytotoxicity, anticholinesterase and antioxidant activities of new Co(II), Ni(II), Cu(II), Zn(II), and Ru(III) complexes of pyrazolone-based**

**Schiff base ligand**

Çakmak R., Ay B., Çınar E., Başaran E., Akkoç S., Boğa M., Taş E.

JOURNAL OF MOLECULAR STRUCTURE, vol.1292, no.15, pp.1-7, 2023 (SCI-Expanded)

- II. **Metal-Organodiphosphonate Chemistry: Hydrothermal Syntheses and Structures of Two Novel Copper(II) Coordination Polymers with o-Xylylenediphosphonic Acid and 4,4 $\alpha$ -Bipyridine Ligands**  
Ay B., Takano R., Ishida T.  
BULLETIN OF THE CHEMICAL SOCIETY OF JAPAN, vol.96, no.10, pp.1129-1138, 2023 (SCI-Expanded)
- III. **Preparation of TiO<sub>2</sub>/VO<sub>x</sub>, TiO<sub>2</sub>/SiO<sub>2</sub>, and VO<sub>x</sub>/SiO<sub>2</sub> nanostructures by hydrothermal methods and determination of their magnetic properties**  
Mohammad Hasham M. T., Ay B., Kaya D., Yıldız E., Ekicibil A.  
NEW JOURNAL OF CHEMISTRY, vol.47, no.7, pp.3312-3320, 2023 (SCI-Expanded)
- IV. **Synthesis, crystal structure, and luminescence properties of a three-dimensional coordination polymer from europium(iii) carbonate hemioxalate hydrate**  
Takano R., Ishida T., AY B.  
CRYSTENGCOMM, vol.24, no.44, pp.7786-7792, 2022 (SCI-Expanded)
- V. **Crystal structures, gas storage and magnetic properties of lanthanide-organic frameworks built up from dicarboxylates, [Ln<sub>2</sub>(2,5-pydc)<sub>2</sub>(2,5-pipdc)(H<sub>2</sub>O)<sub>2</sub>]<sub>n</sub> (Ln = Ce, Pr, Eu) and (H<sub>2</sub>pip)<sub>n</sub>[Ln<sub>2</sub>(2,6-pydc)<sub>4</sub>(H<sub>2</sub>O)<sub>2</sub>]<sub>n</sub> (Ln = Ce, Pr, Eu, Sm)**  
Ay B., Yıldız E., Enomoto M., Okazawa A., Kojima N.  
POLYHEDRON, no.226, pp.1-11, 2022 (SCI-Expanded)
- VI. **Tricopper(II)bis(2-((hydrogen phosphonato)methyl)benzylphosphonate) as a layered oxo-bridged copper(II) coordination polymer: Synthesis, structure, magnetic property, and catalytic activity**  
Ay B., Takano R., Ishida T., Yıldız E.  
POLYHEDRON, vol.225, pp.1-7, 2022 (SCI-Expanded)
- VII. **The effect of metalation processes on polymer morphology and conductivity properties**  
Sarıbiyik O. Y., Gonul I., AY B., KARACA S.  
POLYMERS & POLYMER COMPOSITES, vol.29, no.9\_SUPPL, 2021 (SCI-Expanded)
- VIII. **A novel paramagnetic coordination polymer, fabricated from Co(NCS)(2) and 2-pyridinecarbaldehyde isonicotinoylhydrazone**  
AY B., Mahmoudi G., Khandar A. A., Afkhami F. A., Toprak A., Zubkov F., White J., Klak J., Safin D. A.  
INORGANICA CHIMICA ACTA, vol.522, 2021 (SCI-Expanded)
- IX. **Novel lanthanide(III) complex [LaL<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub>(H<sub>2</sub>O)<sub>2</sub>]·5H<sub>2</sub>O with 2-pyridine carboxaldehyde isonicotinoyl hydrazine exhibiting a 3D supramolecular topology 3,6T49**  
AY B., YILDIZ E., Şahin O., Mahmoudi G., Kubicki M., Perumal V., Percino J., Miroslaw B., Safin D. A.  
Journal of Molecular Structure, vol.1212, 2020 (SCI-Expanded)
- X. **Antitumor effects of novel nickel-hydrazone complexes in lung cancer cells**  
AY B., Şahin O., Saygideğer Demir B., SAYGİDEĞER Y., López-De-Luzuriaga J. M., Mahmoudi G., Safin D. A.  
New Journal of Chemistry, vol.44, no.21, pp.9064-9072, 2020 (SCI-Expanded)
- XI. **Synthesis, structural characterization and in vitro anticancer activity of two new nickel complexes bearing imine bonds**  
AY B., Gonul I., Demir B. S., Saygideger Y., Kani I.  
INORGANIC CHEMISTRY COMMUNICATIONS, vol.114, 2020 (SCI-Expanded)
- XII. **One-Pot hydrothermal synthesis of 1D copper (II) coordination polymers involving in-situ decarboxylation**  
AY B., Sahin O., YILDIZ E.  
SOLID STATE SCIENCES, vol.96, 2019 (SCI-Expanded)
- XIII. **Synthesis, characterization, electrical conductivity and luminescence properties of two copper(II) complexes with tridentate N<sub>2</sub>O chelating ligands containing imine bond**  
Gonul I., AY B., KARACA S., ŞAHİN O., SERİN S.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1156, pp.465-472, 2018 (SCI-Expanded)
- XIV. **Semiconducting lanthanide polymers of pyridine-2,6-dicarboxylate: Hydrothermal synthesis,**

- structural characterization, electrical conductivity and luminescence properties**  
AY B., YILDIZ E., KANI İ.  
POLYHEDRON, vol.142, pp.1-8, 2018 (SCI-Expanded)
- XV. **Cobalt(II), nickel(II) and copper(II) complexes of a Schiff base ligand: synthesis, structural characterization and luminescence properties**  
Gonul I., Faki E., AY B., KÖSE M., SERİN S.  
TRANSITION METAL CHEMISTRY, vol.43, no.1, pp.73-81, 2018 (SCI-Expanded)
- XVI. **Cobalt(II), nickel(II) and copper(II) complexes of a Schiff base ligand: synthesis, structural characterization and luminescence properties**  
Gönül İ., Faki E., AY B., Köse M., Serin S.  
TRANSITION METAL CHEMISTRY, pp.1-9, 2017 (SCI-Expanded)
- XVII. **Two novel isostructural and heteroleptic Nd(III) and Dy(III)-organic frameworks constructed by 2,5-pyridinedicarboxylic acid and in situ generated 2-pyridinecarboxylic acid: Hydrothermal synthesis, characterization, photoluminescence properties and heterogeneous catalytic activities**  
AY B., YILDIZ E., Kani I.  
POLYHEDRON, vol.130, pp.165-175, 2017 (SCI-Expanded)
- XVIII. **Synthesis of imine bond containing insoluble polymeric ligand and its transition metal complexes, structural characterization and catalytic activity on esterification reaction**  
Gonul I., AY B., KARACA S., Saribiyik O. Y., YILDIZ E., SERİN S.  
DESIGNED MONOMERS AND POLYMERS, vol.20, pp.441-448, 2017 (SCI-Expanded)
- XIX. **A novel catalyst system for the synthesis of N,N '-Methylenebisacrylamide from acrylamide**  
Avsar A., Gokbulut Y., AY B., SERİN S.  
DESIGNED MONOMERS AND POLYMERS, vol.20, pp.434-440, 2017 (SCI-Expanded)
- XX. **Hydrothermal synthesis, structure, heterogeneous catalytic activity and photoluminescent properties of a novel homoleptic Sm(III)-organic framework**  
AY B., YILDIZ E., Felts A. C., Abboud K. A.  
JOURNAL OF SOLID STATE CHEMISTRY, vol.244, pp.61-68, 2016 (SCI-Expanded)
- XXI. **In situ hydrothermal syntheses, structures and photoluminescent properties of four novel metal-organic frameworks constructed by lanthanide (Ln=Ce(III), Pr(III), Eu(III)) and Cu(I) metals with flexible dicarboxylate acids and piperazine-based ligands**  
AY B., KARACA S., YILDIZ E., Lopez V., Nanao M. H., Zubieta J.  
JOURNAL OF SOLID STATE CHEMISTRY, vol.233, pp.415-421, 2016 (SCI-Expanded)
- XXII. **Novel heteroleptic lanthanide organic frameworks containing pyridine-2,5-dicarboxylic acid and in situ generated piperazine-2,5-dicarboxylic acid from piperazine: Hydrothermal synthesis and luminescent properties**  
AY B., YILDIZ E., KANI İ.  
JOURNAL OF SOLID STATE CHEMISTRY, vol.233, pp.44-51, 2016 (SCI-Expanded)
- XXIII. **Hydrothermal synthesis and characterization of {[Ni-2(NA)(4)(mu-H<sub>2</sub>O)]center dot 2H<sub>2</sub>O}(n) (HNA = nicotinic acid) and its heterogeneous catalytic effect**  
AY B., YAG G., YILDIZ E., RHEINGOLD A. L.  
POLYHEDRON, vol.88, pp.164-169, 2015 (SCI-Expanded)
- XXIV. **A novel three dimensional samarium(III) coordination polymer with an unprecedented coordination mode of the 2,5-pyridinedicarboxylic acid ligand: Hydrothermal synthesis, crystal structure and luminescence property**  
AY B., DOGAN N., YILDIZ E., Kani I.  
POLYHEDRON, vol.88, pp.176-181, 2015 (SCI-Expanded)
- XXV. **Hydrothermal synthesis, crystal structure and heterogeneous catalytic activity of a novel inorganic-organic hybrid complex, possessing infinite La-O-La linkages**  
AY B., YILDIZ E., Protasiewicz J. D., Rheingold A. L.  
INORGANICA CHIMICA ACTA, vol.399, pp.208-213, 2013 (SCI-Expanded)
- XXVI. **Hydrothermal synthesis of a novel mu-dihydroxo-bis(2,6-pyridinedicarboxylatoaquachromium(III))**

**complex and investigation of its catalytic activity**

AY B., YILDIZ E., Jones S., Zubieta J.

INORGANICA CHIMICA ACTA, vol.387, pp.15-19, 2012 (SCI-Expanded)

**Articles Published in Other Journals**

- I. **Synthesis, Characterization, Investigation of Catalytic and Thermal Properties of Three-Dimensional and Layered Copper Organodiphosphonate Coordination Polymer**  
AY B.  
International journal of advances in engineering and pure sciences (Online), vol.35, no.4, pp.428-438, 2023 (Peer-Reviewed Journal)
- II. **Investigation of Usability of Imine Bonded Inorganic and Organic Compounds as Thermal Stabilizers for Unplasticized Poly(vinyl chloride)**  
Ay B., Gökbüllüt Y.  
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, no.22, pp.282-290, 2022 (Peer-Reviewed Journal)
- III. **pH Effect on Hydrothermal Synthesis of the Coordination Polymers Containing Pyrazine-2,3-dicarboxylate: Investigation of Thermal Stability, Luminescence, and Electrical Conductivity Properties**  
AY B., YILDIZ E., Zubieta J.  
Journal of the Turkish Chemical Society Section A: Turkish Journal of Chemistry, vol.7, no.1, pp.243-258, 2020 (Peer-Reviewed Journal)
- IV. **Conventional and Microwave-assisted Synthesis and Characterization of Ru(III)/Cu(II) Complexes Containing Dicarboxylic Acid Groups**  
AY B., YILDIZ E.  
JOURNAL OF THE TURKİSH CHEMİCAL SOCIETY, SECTION A: CHEMİSTRY, no.3, pp.103-116, 2016 (Peer-Reviewed Journal)

**Refereed Congress / Symposium Publications in Proceedings**

- I. **Fosfonik Asit Grubu İceren Çok Dişli Ligandların ve Lantanit Polimerlerinin Sentezi, Yapısal Karakterizasyonu**  
AY B., YILDIZ E.  
30. Ulusal Kimya Kongresi, Gazimagusa, Cyprus (Kktc), 5 - 08 November 2018, pp.84
- II. **Hydrothermal Synthesis of SiO<sub>2</sub>, TiO<sub>2</sub>, V<sub>2</sub>O<sub>5</sub> Nanostructured Produced from Waste Dental Prostheses**  
Yıldız C., AY B., YILDIZ E.  
5th International Conference on Materials Science and Nanotechnology For Next Generation (MSNG2018), Nevşehir, Turkey, 4 - 06 October 2018, pp.273
- III. **The Inhibition of 2,6-pyridinedicarboxylic Acid on Mild Steel: Experimental and Computational Investigations**  
AY B., Doğru Mert B., YILDIZ E., Yazıcı B.  
XVth International Corrosion Symposium, Hatay, Turkey, 26 - 28 September 2018, pp.102
- IV. **Synthesis and Structures of Inorganic-Organic Hybrid Systems: Investigations of Luminescence and Electrical Conductivity Properties**  
AY B., YILDIZ E., Kani İ.  
4th International Turkic World Conference on Chemical Sciences and Technologies (ITWCCST), Kiev, Ukraine, 7 - 10 September 2018, pp.57
- V. **Comparison of Synthesis of Lanthanide-Organic Frameworks by Using Hydro/Solvothermal and Conventional Methods**

- AY B., YILDIZ E.  
4th International Turkic World Conference on Chemical Sciences and Technologies (ITWCCST), Kiev, Ukraine, 7 - 10 September 2018, pp.128
- VI. **Synthesis, Characterization, Crystal Structures, Electrical Conductivity and Luminescence Properties of Two Novel Copper(II) Complexes with ONN Type Ligands**  
gönül İ., AY B., KARACA S., SERİN S., ŞAHİN O.  
2nd International Mediterranean Science and Engineering Congress, Adana, Turkey, 25 - 27 October 2017, vol.973
- VII. **Hydrothermal Synthesis and Characterization of Novel Coordination Polymers and Investigation of the Their Catalytic Activities on the Oxidation of Thymol to Thymoquinone**  
AY B., YILDIZ E., Kani İ., Zubieta J.  
2nd International Mediterranean Science and Engineering Congress (IMSEC 2017), Adana, Turkey, 25 - 27 October 2017, pp.254
- VIII. **Insoluble metal-organic frameworks including lanthanide metals: Hydrothermal synthesis, characterization and investigation of their luminescence properties**  
AY B., YILDIZ E., Kani İ.  
International Congress on Chemistry and Materials Science, ANCON 2017, Ankara, Turkey, 5 - 07 October 2017, pp.324
- IX. **Hydrothermal synthesis of Cu(I) nanopolymer structure and investigation of its catalytic activity on the oxidation of thymol**  
AY B., YILDIZ E., Zubieta J.  
International Congress on Chemistry and Materials Science, ANCON 2017, Ankara, Turkey, 5 - 07 October 2017, pp.325
- X. **Şelat Özellikli Tridentat Schiff Bazı Ligantları ve Cu(II) Komplekslerinin Sentezi, Karakterizasyonu ve Lüminesans Özelliklerinin İncelenmesi**  
Gönül İ., AY B., KARACA S., ŞAHİN O., SERİN S.  
Uluslararası Katılımlı VI. Ulusal Anorganik Kimya Kongresi, Burdur, Turkey, 18 - 21 May 2017, vol.92
- XI. **Hydrothermal Syntheses and Characterization of the Metal-OrganicFrameworks Containing Lanthanides and Organophosphonate Ligands**  
AY B., YILDIZ E.  
European Workshop on Phosphorus Chemistry - EWPC 14/2017, Cluj, Romania, 20 - 22 March 2017, vol.62
- XII. **Synthesis and Characterization of Insoluble Coordination Polymers and Comparing of their Electrical Conductivity Properties**  
Gönül İ., AY B., Karaca S., Sarıbiyik O. Y., Serin S.  
VI. Ulusal Anorganik Kimya Kongresi, Burdur, Turkey, 18 - 21 May 2017, pp.91
- XIII. **Ordered Nanopolymer Structures Including Lanthanide-organic Frameworks: Hydrothermal Synthesis, Characterization and investigation of their Thermal and Luminescence Properties**  
AY B., YILDIZ E., Zubieta J.  
7th IEEE International Conference Nanomaterials - Application and Properties (NAP), Odesa, Ukraine, 10 - 15 September 2017
- XIV. **2,4-Diamino Toluen ile Glutaraldehit Kullanılarak Elde Edilen İmin Bağı İçeren Çözünmeyen Polimerik Ligandın Geçiş Metal Komplekslerinin Sentezi Yapısal Karakterizasyonu ve Esterleşme Reaksiyonu Üzerine Katalitik Aktivitesinin Belirlenmesi**  
gönül İ., AY B., KARACA S., SARIBIYIK O. Y., YILDIZ E., SERİN S.  
October 26 - 28 2016  
1st International Mediterranean Science and Engineering Congress (IMSEC 2016), 26 - 28 October 2016
- XV. **In situ Hydrothermal Synthesis of Two Novels 3D Lanthanide Organic Frameworks with pyrazine-2,3-dicarboxylic acid Ligand: Synthesis, Structure and Thermal Properties**  
AY B., YILDIZ E., Zubieta J.  
1st International Mediterranean Science and Engineering Congress (IMSEC 2016), Adana, Turkey, 26 - 28 October 2016, vol.-, no.269, pp.0-954
- XVI. **Çözünmeyen Polimer ve Bazı Geçiş Metali Komplekslerinin Üretimi ve Esterleşme Reaksiyonlarında Katalitik Etkinliklerinin Araştırılması**

- Sarıbüyük O. Y., Gönül İ., AY B., Karaca S., Serin S.  
1st International Mediterranean Science and Engineering Congress (IMSEC 2016), Adana, Turkey, 26 - 28 October 2016, pp.1603
- XVII. **2,4-Diamino Toluen ile Glutaraldehit Kullanılarak Elde Edilen İmin Bağı İçeren Çözünmeyen Polimerik Ligandın Geçiş Metal Komplekslerinin Sentezi, Yapısal Karakterizasyonu ve Esterleşme Reaksiyonu Üzerine Katalitik Aktivitesinin Belirlenmesi**  
Gönül İ., AY B., Karaca S., Sarıbüyük O. Y., YILDIZ E., Serin S.  
1st International Mediterranean Science and Engineering Congress (IMSEC 2016), Adana, Turkey, 26 October 2016 - 28 October 2018, pp.1454
- XVIII. **Hydrothermal Synthesis and Characterization of Heterogeneous Catalysts for the Oxidation of the Thymol to Thymoquinone?,**  
AY B., YILDIZ E.  
NCC6-6th Catalysis Conference, Bursa, Turkey, 27 - 30 April 2016, pp.1
- XIX. **Hydrothermal Synthesis and Structural Characterization of Two Novel Nd III and Dy III Coordination Polymers and Investigation of Their Thermal Properties 4 6 April 2016 Dubai UAE**  
AY B., YILDIZ E., KANI İ.  
2nd World Congress and Expo on Nanotechnoogy and Material Science, 4 - 06 April 2016
- XX. **Hydrothermal Synthesis and Structural Characterization of Two Novel Nd(III) and Dy(III) Coordination Polymers and Investigation of Their Thermal Properties**  
AY B., YILDIZ E., KANI İ.  
2nd World Congress and Expo on Nanotechnoogy and Material Science, Dubai, United Arab Emirates, 4 - 06 April 2016, pp.84
- XXI. **Hydrothermal synthesis and photoluminescent properties of two novel metal-organic frameworks constructed by lanthanide (Ln = Ce(III), Eu(III))**  
AY B., YILDIZ E., LOPEZ V., KARACA S., Zubieto J., Nanao M.  
Green and Sustainable Chemistry Conference, Berlin, Germany, 3 April - 06 August 2016, pp.1
- XXII. **Hydrothermal Synthesis and Structural Characterization of two Lanthanide III Coordination Polymers I 22 91st Florida Annual Meeting and Exposition FAME 2015 May 7th 9th 2015 Palm Harbor Tampa FL**  
YILDIZ E., AY B., KANI İ.  
Florida Annual Meeting and Exposition, FAME 2015, 7 - 09 May 2015
- XXIII. **Hydrothermal Synthesis and Structural Characterization of two Lanthanide(III) Coordination Polymers**  
AY B., YILDIZ E., KANI İ.  
91st Florida Annual Meeting and Exposition, FAME 2015, Florida, United States Of America, 7 - 09 May 2015, no.2, pp.22
- XXIV. **Lantan(III) Koordinasyon Polimerlerinin Hidrotermal Koşullardaki Sentezinde pH?nın Etkisi ve Lüminesans Özelliklerinin İncelenmesi**  
AY B., YILDIZ E., LOPEZ V., Zubieto J.  
V. ULUSAL ANORGANİK KİMYA KONGRESİ, Mersin, Turkey, 22 - 25 April 2015, pp.358
- XXV. **Klor Köprülü Cu I Koordinasyon Polimerinin Hidrotermal Sentezi Termal ve Lüminesans Özelliklerinin İncelenmesi 22 25 Nisan Mersin 2015**  
YILDIZ E., AY B.  
V. Ulusal Anorganik Kimya Kongresi, Mersin Üniversitesi, Turkey, 22 - 25 April 2015
- XXVI. **Klor Köprülü Cu(I) Koordinasyon Polimerinin Hidrotermal Sentezi, Termal ve Lüminesans Özelliklerinin İncelenmesi**  
AY B., YILDIZ E., Lopez V., Zubieto J.  
V. Ulusal Anorganik Kimya Kongresi, Mersin, Turkey, 22 - 25 April 2015, pp.441
- XXVII. **Lantan III Koordinasyon Polimerlerinin Hidrotermal Koşullardaki Sentezinde pH in Etkisi ve Lüminesans Özelliklerinin İncelenmesi 22 25 Nisan Mersin 2015**  
YILDIZ E., AY B.

- V. Ulusal Anorganik Kimya Kongresi, Mersin Üniversitesi, Turkey, 22 - 25 April 2015
- XXVIII. **Klor Köprülü Cu(I) Koordinasyon Polimerinin Hidrotermal Sentezi, Termal ve Lüminesans Özelliklerinin İncelenmesi**  
AY B., YILDIZ E., LOPEZ V., Zubieta J.  
V. ULUSAL ANORGANİK KİMYA KONGRESİ, Mersin, Turkey, 22 - 25 April 2015, pp.360
- XXIX. **Effect of pH on Hydrothermal Synthesis of Samarium (III) Coordination Polymers**  
AY B., Doğan N., YILDIZ E., Kani İ.  
Florida Inorganic Materials Symposium (FIMS), Florida, United States Of America, 3 - 04 October 2014, pp.1
- XXX. **Taguchi Method To Be Applied To The Hydrothermal Synthesis**  
Doğan N., AY B., Karataylı Y., YILDIZ E.  
5th National Catalysis Congress, Adana, Turkey, 23 - 26 April 2014, pp.159
- XXXI. **Hydrothermal Synthesis, Characterization of Heterogeneous Polymeric Nickel (II) Complex and Investigation of Its Catalytic Activity**  
AY B., Gümüşgöz G., YILDIZ E., Serin S.  
5th National Catalysis Congress, Adana, Turkey, 23 - 26 April 2014, pp.162
- XXXII. **Hydrothermal Synthesis and Characterization of Dinuclear Co(II) and La(III) Complexes and Comparison of Their Catalytic Activities**  
AY B., YILDIZ E.  
5. National Catalysis Conference, Adana, Turkey, 23 - 26 April 2014, vol.-, pp.161
- XXXIII. **Investigation of Catalytic Activity on the Epoxidation of Styrene of Dimeric [Cr(H<sub>2</sub>O)(OH)(C<sub>7</sub>H<sub>3</sub>N<sub>0</sub>4)]<sub>2</sub> Complex**  
Kozay S., AY B., YILDIZ E., Serin S.  
5th National Catalysis Congress, Adana, Turkey, 23 - 26 April 2014, pp.163
- XXXIV. **Catalytic Activity on the Epoxidation Reaction of Asymmetric [Cu(C<sub>7</sub>H<sub>3</sub>N<sub>0</sub>4)<sub>2</sub>][Cu(H<sub>2</sub>O)<sub>5</sub>].2H<sub>2</sub>O Complex**  
Karataylı Y., AY B., YILDIZ E.  
5th National Catalysis Congress, Adana, Turkey, 23 - 26 April 2014, pp.32
- XXXV. **İnorganik-Organik Hibrit Bileşiklerinin Hidrotermal Sentezi, Karakterizasyonu ve Timol Oksidasyonu Üzerindeki Katalitik Aktivitelerinin İncelenmesi**  
AY B., YILDIZ E.  
IV. Ulusal Anorganik Kimya Kongresi, Tokat, Turkey, 30 May - 02 June 2013
- XXXVI. **1. Hidrotermal Şartlarda Sentezlenen Ay-Yıldız Katalizörünün Kristal Yapısı, Karakterizasyonu ve Timokinon Eldesinde Katalitik Performans Optimizasyonu**  
AY B., YILDIZ E.  
IV. Ulusal Anorganik Kimya Kongresi, Tokat, Turkey, 30 May - 02 June 2013, pp.33
- XXXVII. **Hidrotermal Şartlarda Sentezlenen Ay-Yıldız Katalizörünün Kristal Yapısı, Karakterizasyonu ve Timokinon Eldesinde Katalitik Performans Optimizasyonu**  
AY B., Karaca S., Karataylı Y., YILDIZ E.  
IV. ULUSAL ANORGANİK KİMYA KONGRESİ, Tokat, Turkey, 30 May - 02 June 2013, pp.158
- XXXVIII. **İmidazol Halkası İçeren Beş Koordinasyonlu Yeni Cu (II) Kompleksinin Kristal Yapısı ve Antioksidan Aktivitesinin İncelenmesi**  
Gönül İ., Köse M., AY B., Türk M., McKee V.  
IV. Ulusal Anorganik Kimya Kongresi, Tokat, Turkey, 30 May - 02 June 2013, pp.90
- XXXIX. **Homoleptik Cr (III) Koordinasyon Bileşığının Hidrotermal Sentezi ve Katalitik Etkinliğinin İncelenmesi**  
AY B., Doğan N., YILDIZ E.  
IV. Ulusal Anorganik Kimya Kongresi, Tokat, Turkey, 30 May - 02 June 2013, pp.173
- XL. **İnorganik-Organik Hibrit Bileşiklerin Hidrotermal Sentezi, Karakterizasyonu ve Timol Oksidasyonu Üzerindeki Katalitik Aktivitelerinin İncelenmesi**  
AY B., YILDIZ E.  
IV. ULUSAL ANORGANİK KİMYA KONGRESİ, Tokat, Turkey, 30 May - 02 June 2013, pp.33

- XL.I. **Ligand Karakterli Polimerler ve Bu Polimerlerin Co(II), Ni(II), Cu(II) Komplekslerinin Sentezi, Karakterizasyonu ve Katalitik Etkinliklerinin İncelenmesi**  
 Gönül İ., AY B., Karaca S., Sarıbiyik O. Y., Serin S.  
 IV. Ulusal Anorganik Kimya Kongresi, Tokat, Turkey, 30 May - 02 June 2013, pp.117
- XL.II. **Yeni İnorganik-Organik Hibrit Bileşiği {[La<sub>2</sub>(H<sub>2</sub>pdc)<sub>2</sub>(Hpdc)(H<sub>2</sub>O)<sub>3</sub>].OH.H<sub>2</sub>O}n Hidrotermal Sentezi ve Katalitik Aktivitesinin İncelenmesi**  
 AY B., YILDIZ E.  
 XXVI. Ulusal Kimya Kongresi, Muğla, Turkey, 1 - 06 October 2012, pp.80-81
- XL.III. **Hydrothermal Synthesis of Novel μ-Dihydroxo-Bis(2,6-pyridinedicarboxylatoaquachromium(III)) Complex and Investigation of its Catalytic Activity**  
 AY B., YILDIZ E.  
 III.Uluslararası İnorganik Kimya Kongresi, Çanakkale, Turkey, 19 - 22 May 2011, pp.46
- XL.IV. **Dikarboksilik Asit Grupları İçeren Geçiş Metal Komplekslerinin Hidrotermal Sentezi ve Katalitik Aktivitelerinin İncelenmesi**  
 AY B., YILDIZ E.  
 III.Uluslararası İnorganik Kimya Kongresi, Çanakkale, Turkey, 19 - 22 May 2011, pp.82
- XL.V. **Dikarboksilik Asit Grupları İçeren Cu(II) Komplekslerinin Sentezi ve Karakterizasyonu**  
 AY B., YILDIZ E.  
 II.Uluslararası İnorganik Kimya Kongresi, Elazığ, Turkey, 16 - 19 May 2009, pp.40
- XL.VI. **Mikrodalga ve Konvansiyonel Yöntemlerin Ru(II) Kompleks Sentezlerine Uygulanması**  
 AY B., YILDIZ E.  
 II.Uluslararası İnorganik Kimya Kongresi, Elazığ, Turkey, 16 - 19 May 2009, pp.39

## Supported Projects

- AY B., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Kimyasal Madde Üretim Teknolojileri Merkezi Kimya Vadisi Projesi, 2017 - Continues
- AY B., Project Supported by Higher Education Institutions, Metal Organik Kafes Yapılarının (MOFs) Farklı Yöntemlerle Sentezlenebilirliğinin Araştırılması, 2018 - 2019
- SERİN S., GÖNÜL İ., AY B., Project Supported by Higher Education Institutions, Şelat Özellikli Tridentat Schiff Bazı Ligantları ve Cu(II) Komplekslerinin Sentezi Karakterizasyonu ve Lüminesans Özelliklerinin İncelenmesi, 2017 - 2018
- YILDIZ E., AY B., Project Supported by Higher Education Institutions, Yayın Teşvik, 2016 - 2017
- YILDIZ E., AY B., Project Supported by Higher Education Institutions, Heterojen Katalizörler Kullanılarak Timolden Timokinon Eldesi ve Timokinonun Saflaştırılması, 2016 - 2017
- YILDIZ E., AY B., Project Supported by Higher Education Institutions, Lantanit ve Geçiş Metali İçeren Homoleptik ve Heteroleptik Koordinasyon Polimerlerinin Hidrotermal Sentezi, Katalitik ve Lüminesans Özelliklerinin İncelenmesi, 2013 - 2017
- AY B., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Kimyasal Madde Üretim Teknolojileri Merkezi Kimya Vadisinin Kurulmasına Yönelik Fizibilite Raporunun Hazırlanması, 2016 - 2016
- YILDIZ E., AY B., Project Supported by Higher Education Institutions, Heteronükleik Koordinasyon Bileşiklerinin Hidrotermal Sentezi, Karakterizasyonu ve Katalitik Etkinliğinin İncelenmesi, 2013 - 2015

## Scientific Research / Working Group Memberships

İş Sağlığı ve Güvenliği Kurulu, ÇUKUROVA ÜNİVERSİTESİ, Türkiye, <http://cisam.cu.edu.tr/tr/>, 2014 - Continues

## Metrics

Publication: 76  
Citation (WoS): 213  
Citation (Scopus): 244  
H-Index (WoS): 10  
H-Index (Scopus): 10

## Scholarships

2219 - Yurt Dışı Doktora Sonrası Araştırma Burs Programı, The University of Electro-Communications, Tokyo, JAPAN,  
TUBITAK, 2022 - 2023

2214 Yurt Dışı Doktora Sırası Araştırma Burs Programı, Syracuse University, New York, USA, TUBITAK, 2014 - 2015

## Awards

AY B., Bölüm İkinciliği Ödülü, Pamukkale Üniversitesi, June 2007