

## Doç. Dr. YILMAZ AKSU

### Kişisel Bilgiler

İş Telefonu: [+90 242 310 6391](tel:+902423106391)

Fax Telefonu: [+90 242 310 6306](tel:+902423106306)

E-posta: [yilmazaksu@akdeniz.edu.tr](mailto:yilmazaksu@akdeniz.edu.tr)

Web: <https://avesis.akdeniz.edu.tr/yilmazaksu>

Posta Adresi: Akdeniz Üniversitesi, Mühendislik Fakültesi, Malzeme Bilimi ve Mühendisliği Bölümü, 07058 Antalya

### Uluslararası Araştırmacı ID'leri

ORCID: 0000-0003-3687-890X

Publons / Web Of Science ResearcherID: C-3604-2016

Yoksis Araştırmacı ID: 177910

### Eğitim Bilgileri

Post Doktora, Technische Universitaet Berlin, Matematik Ve Fen Fakültesi, Kimya-Fonksiyonel Malzeme Sentezi , Almanya 2005 - 2012

Doktora, Technische Universitaet Berlin, Matematik Ve Fen Fakültesi, Institut Für Chemie, Almanya 1998 - 2004

Yüksek Lisans, Akdeniz Üniversitesi, Fen Edebiyat Fakültesi, Kimya Bölümü, Türkiye 1994 - 1996

Lisans, Akdeniz Üniversitesi, Fen Edebiyat Fakültesi, Kimya Bölümü, Türkiye 1990 - 1994

### Yabancı Diller

Almanca, C1 İleri

Fransızca, C1 İleri

İngilizce, C1 İleri

### Yaptığı Tezler

Doktora, "Organokalay Dendrimerlerin Sentezlenmesi ve Yapılarının Aydınlatılması" , Technische Universitaet Berlin, Matematik Ve Fen Fakültesi, Kimya Enstitüsü, 2005

Yüksek Lisans, "Metal Alkolatların  $\beta$ -diketon ve  $\beta$ -ketoesterlerle Kompleksleşmeleri ve Komplekslerin Hidroliz Reaksiyonları" , Akdeniz Üniversitesi, Fen Fakültesi, Kimya, 1996

### Araştırma Alanları

Malzeme Bilimi ve Mühendisliği, Seramik Malzemeler, Yarıiletken ve Süperiletken Malzemeler, Optik Özellikler, Elektriksel ve Manyetik Özellikler, Kimyasal ve Elektrokimyasal Özellikler, Kompozitler, Polimerik Malzemeler, Kaplama Teknolojileri, Malzeme Karakterizasyonu, Nanomalzemeler, Yapı-Özellik İlişkisi , Kimya, Fizikokimya, Fonksiyonel Polimerler, Kompozitler, Nanokompozitler, Polimer Kimyada Yeni Teknolojiler, Polimerik Malzemeler, Spektroskopi, İnorganik Kimya, Geçiş Elementleri, İnorganik Polimerler, Kataliz, Nanokümler, Organometalik Kimya , Silikon Kimyası, Yeni Ligandlar, Yığınlar/Katılar ve Yüzeyler, Organik Kimya, Makromoleküller Kimyası, Organik Spektroskopi, Organometalik Bileşikler, Temel Bilimler

## Akademik Unvanlar / Görevler

Yrd. Doç. Dr., Akdeniz Üniversitesi, Mühendislik Fakültesi, Malzeme Bilimi Ve Mühendisliği, 2012 - Devam Ediyor

## Verdiği Dersler

### Lisans

Malzeme Bilimi ve Mühendisliği, Lisans, 2014 - 2015

Organik Kimya, Lisans, 2013 - 2014

Malzeme Bilimi, Lisans, 2012 - 2013

Genel Kimya, Lisans, 2013 - 2014, 2012 - 2013

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **The crystal structure of the co-crystal tetrakis[2-(tris(4-methoxyphenyl)stannyl)ethyl]silane - tetrahydrofuran - toluene - tetrahydrofuran (1/1/1) C103H116O13SiSn4**  
Aksu Y., Irran E., Aksu S.  
ZEITSCHRIFT FÜR KRISTALLOGRAPHIE - NEW CRYSTAL STRUCTURES, cilt.237, sa.4, ss.759-763, 2022 (SCI-Expanded)
- II. **Silica material variation for the  $MnxOy-Na2WO4/SiO2$**   
Yildiz M., AKSU Y., Simon U., Otremba T., Kailasam K., Goebel C., Girgsdies F., Goerke O., Rosowski F., Thomas A., et al.  
APPLIED CATALYSIS A-GENERAL, cilt.525, ss.168-179, 2016 (SCI-Expanded)
- III. **Support material variation for the  $MnxOy-Na2WO4/SiO2$  catalyst.**  
Yildiz M., Simon U., Otremba T., AKSU Y., Kailasam K., Thomas A., Schomaecker R., Arndt S.  
CATALYSIS TODAY, cilt.228, ss.5-14, 2014 (SCI-Expanded)
- IV. **Enhanced catalytic performance of  $MnxOy-Na2WO4/SiO2$  for the oxidative coupling of methane using an ordered mesoporous silica support**  
Yildiz M., AKSU Y., Simon U., Kailasam K., Goerke O., Rosowski F., Schomaecker R., Thomas A., Arndt S.  
CHEMICAL COMMUNICATIONS, cilt.50, sa.92, ss.14440-14442, 2014 (SCI-Expanded)
- V. **A One-Pot Approach to Mesoporous Metal Oxide Ultrathin Film Electrodes Bearing One Metal Nanoparticle per Pore with Enhanced Electrocatalytic Properties**  
Guiet A., Reier T., Heidary N., Felkel D., Johnson B., Vainio U., Schlaad H., Aksu Y., Driess M., Strasser P., et al.  
CHEMISTRY OF MATERIALS, cilt.25, sa.23, ss.4645-4652, 2013 (SCI-Expanded)
- VI. **Chemoselective reduction of alpha,beta-unsaturated aldehydes and ketones over mesoporous B(O(i) Pr)(3)-MCM-41 catalyst via MPV reduction process: preparation, characterization and catalytic application**  
Uysal B., Aksu Y., Oksal B. Ş.  
JOURNAL OF POROUS MATERIALS, cilt.20, sa.1, ss.115-127, 2013 (SCI-Expanded)
- VII. **Facile Low-Temperature Approach to Tin-Containing ZnO Nanocrystals with Tunable Tin Concentrations Using Heterobimetallic Sn/Zn Single-Source Precursors**  
Tsaroucha M., AKSU Y., Epping J. D., Driess M.  
CHEMPLUSCHEM, cilt.78, sa.1, ss.62-69, 2013 (SCI-Expanded)
- VIII. **Supported ZnO catalysts for the conversion of alkanes: About the metamorphosis of a heterogeneous catalyst**  
Arndt S., Uysal B., Berthold A., Otrebma T., Aksu Y., Driess M., Schomaecker R.  
JOURNAL OF NATURAL GAS CHEMISTRY, cilt.21, sa.5, ss.581-594, 2012 (SCI-Expanded)
- IX. **From Molecular Gallium and Indium Siloxide Precursors to Amorphous Semiconducting Transparent Oxide Layers for Applications in Thin-Film Field-Effect Transistors**  
Samedov K., AKSU Y., Driess M.

CHEMPLUSCHEM, cilt.77, sa.8, ss.663-674, 2012 (SCI-Expanded)

- X. **Heterotermetallic Indium Lithium Halostannates: Low-Temperature Single-Source Precursors for Tin-Rich Indium Tin Oxides and Their Application for Thin-Film Transistors**  
Samedov K., AKSU Y., Driess M.  
CHEMISTRY-A EUROPEAN JOURNAL, cilt.18, sa.25, ss.7766-7779, 2012 (SCI-Expanded)
- XI. **Facile Molecular Approach to Transparent Thin-Film Field-Effect Transistors with High-Performance Using New Homo- and Heteroleptic Indium(III)-Tin(II) Single-Source Precursors**  
Samedov K., AKSU Y., Driess M.  
CHEMISTRY OF MATERIALS, cilt.24, sa.11, ss.2078-2090, 2012 (SCI-Expanded)
- XII. **Li-doped MgO From Different Preparative Routes for the Oxidative Coupling of Methane**  
Arndt S., Simon U., Heitz S., Berthold A., Beck B., Goerke O., Epping J. -, Otremba T., AKSU Y., Irran E., et al.  
TOPICS IN CATALYSIS, cilt.54, sa.16-18, ss.1266-1285, 2011 (SCI-Expanded)
- XIII. **Synthesis of Stannyl-Substituted Zn<sub>4</sub>O<sub>4</sub> Cubanes as Single-Source Precursors for Amorphous Tin-Doped ZnO and Zn<sub>2</sub>SnO<sub>4</sub> Nanocrystals and Their Potential for Thin Film Field Effect Transistor Applications**  
Tsaroucha M., AKSU Y., Irran E., Driess M.  
CHEMISTRY OF MATERIALS, cilt.23, sa.9, ss.2428-2438, 2011 (SCI-Expanded)
- XIV. **Facile Access to Homo- and Heteroleptic, Triply Bonded Dimolybdenum Hexaalkoxides with Unsaturated Alkoxide Ligands**  
Krackl S., Ma J., AKSU Y., Driess M.  
EUROPEAN JOURNAL OF INORGANIC CHEMISTRY, sa.11, ss.1725-1732, 2011 (SCI-Expanded)
- XV. **Raman and Photoluminescence Spectroscopic Detection of Surface-Bound Li<sup>+</sup>O<sub>2</sub>- Defect Sites in Li-Doped ZnO Nanocrystals Derived from Molecular Precursors**  
Kirste R., AKSU Y., Wagner M. R., Khachadorian S., Jana S., Driess M., Thomsen C., Hoffmann A.  
CHEMPHYSICHEM, cilt.12, sa.6, ss.1189-1195, 2011 (SCI-Expanded)
- XVI. **A Molecular Precursor Approach to Tunable Porous Tin-Rich Indium Tin Oxide with Durable High Electrical Conductivity for Bioelectronic Devices**  
AKSU Y., Frasca S., Wollenberger U., Driess M., Thomas A.  
CHEMISTRY OF MATERIALS, cilt.23, sa.7, ss.1798-1804, 2011 (SCI-Expanded)
- XVII. **Unprecedented Alkylzinc-Magnesium Alkoxide Clusters as Suitable Organometallic Precursors for Magnesium-Containing ZnO Nanoparticles**  
Heitz S., AKSU Y., Merschjann C., Driess M.  
CHEMISTRY-A EUROPEAN JOURNAL, cilt.17, sa.14, ss.3904-3910, 2011 (SCI-Expanded)
- XVIII. **Entrapment of Heteropolyacids in Metallic Silver Matrices: Unique Heterogenized Acid Catalysts**  
Krackl S., Company A., AKSU Y., Avnir D., Driess M.  
CHEMCATCHEM, cilt.3, sa.1, ss.227-232, 2011 (SCI-Expanded)
- XIX. **Molecular Heterobimetallic Approach to Li-Containing MgO Nanoparticles with Variable Li-Concentrations Using Lithium-Methylmagnesium Alkoxide Clusters**  
Heitz S., Epping J., AKSU Y., Driess M.  
CHEMISTRY OF MATERIALS, cilt.22, sa.16, ss.4563-4571, 2010 (SCI-Expanded)
- XX. **Reply to Comment on "Methylmagnesium Alkoxide Clusters with Mg<sub>4</sub>O<sub>4</sub> Cubane- and Mg<sub>7</sub>O<sub>8</sub> Biscubane-Like Cores: Organometallic Precursors for Low-Temperature Formation of MgO Nanoparticles with Variable Surface Defects"**  
Heitz S., AKSU Y., Merschjann C., Driess M.  
CHEMISTRY OF MATERIALS, cilt.22, sa.15, ss.4513, 2010 (SCI-Expanded)
- XXI. **Hydrothermal Synthesis and Crystal Structures of Cd(II)-Based 1D Coordination Polymer and Mn(II) Coordination Complex with Mixed N- and O-donor Ligands: [Cd-2(4-4'-bpy)(2)(pa)(4)] (n) center dot 0.25(H<sub>2</sub>O) and [Mn(4-4'-bpy)(2)(pa)(H<sub>2</sub>O)(3)]ClO<sub>4</sub> center dot 2(H<sub>2</sub>O)**  
Kani I., AKSU Y.  
JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS, cilt.20, sa.1, ss.69-77, 2010 (SCI-Expanded)

- XXII. **Methylmagesium Alkoxide Clusters with Mg<sub>4</sub>O<sub>4</sub> Cubane- and Mg<sub>7</sub>O<sub>8</sub> Biscubane-Like Cores: Organometallic Precursors for Low-Temperature Formation of MgO Nanoparticles with Variable Surface Defects**  
Heitz S., AKSU Y., Merschjann C., Driess M.  
CHEMISTRY OF MATERIALS, cilt.22, sa.4, ss.1376-1385, 2010 (SCI-Expanded)
- XXIII. **Activation of C-H bonds mediated by Mo Mo moieties in heterobimetallic Zn/O/Mo clusters**  
Ma J., AKSU Y., Gregoriades L. J., Sauer J., Driess M.  
DALTON TRANSACTIONS, cilt.39, sa.1, ss.103-106, 2010 (SCI-Expanded)
- XXIV. **Lithium related deep and shallow acceptors in Li-doped ZnO nanocrystals**  
Rauch C., Gehlhoff W., Wagner M. R., Malguth E., Callsen G., Kirste R., Salameh B., Hoffmann A., Polarz S., AKSU Y., et al.  
JOURNAL OF APPLIED PHYSICS, cilt.107, sa.2, 2010 (SCI-Expanded)
- XXV. **A Systematic Study on Zinc Oxide Materials Containing Group I Metals (Li, Na, K)-Synthesis from Organometallic Precursors, Characterization, and Properties**  
Polarz S., Orlov A., Hoffmann A., Wagner M. R., Rauch C., Kirste R., Gehlhoff W., AKSU Y., Driess M., van den Berg M. W. E., et al.  
CHEMISTRY OF MATERIALS, cilt.21, sa.16, ss.3889-3897, 2009 (SCI-Expanded)
- XXVI. **The Catalytic Activity of Zinc Oxides from Single Source Precursors with Additives for the C-H Activation of Lower Alkanes**  
Arndt S., AKSU Y., Driess M., Schomaecker R.  
CATALYSIS LETTERS, cilt.131, sa.1-2, ss.258-265, 2009 (SCI-Expanded)
- XXVII. **A Low-Temperature Molecular Approach to Highly Conductive Tin-Rich Indium Tin Oxide Thin Films with Durable Electro-Optical Performance**  
AKSU Y., Driess M.  
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION, cilt.48, sa.42, ss.7778-7782, 2009 (SCI-Expanded)
- XXVIII. **One-pot synthesis of lithium alkylzinc alkoxo heterocubanes with a LiZn<sub>3</sub>O<sub>4</sub> core as suitable organometallic precursors for Li-containing ZnO nanocrystals**  
Jana S., AKSU Y., Driess M.  
DALTON TRANSACTIONS, sa.9, ss.1516-1521, 2009 (SCI-Expanded)
- XXIX. **Synthesis and characterization of alpha,omega-bis[tri-(w-triphenylstannyl)butylstannyl]alkanes as starting materials for organotin dendrimers**  
Aksu Y., Aksu S., Schumann H.  
APPLIED ORGANOMETALLIC CHEMISTRY, cilt.21, sa.7, ss.521-530, 2007 (SCI-Expanded)
- XXX. **Synthesis and characterization of silicon-based group 14 dendrimers Si{(CH<sub>2</sub>)<sub>2</sub>Sn[(CH<sub>2</sub>)<sub>4</sub>MPh<sub>3</sub>](<sub>3</sub>)}<sub>4</sub> (M = Ge, Sn)**  
Schumann H., AKSU Y.  
ORGANOMETALLICS, cilt.26, sa.2, ss.397-402, 2007 (SCI-Expanded)
- XXXI. **Synthesis and characterization of new silicon-centred tin-dendrimers Si[CH<sub>2</sub>CH<sub>2</sub>SnR<sub>3</sub>](<sub>4</sub>). Single-crystal X-ray structure of the tetrahydrofuran adduct of tetrakis [2-(tribromostannyl)ethyl]silane**  
Schumann H., AKSU Y., Schutte S., Wassermann B. C., Muehle S. H.  
JOURNAL OF ORGANOMETALLIC CHEMISTRY, cilt.691, sa.22, ss.4717-4724, 2006 (SCI-Expanded)
- XXXII. **Convergent synthesis and characterization of organotin dendrimers Sn{(CH<sub>2</sub>)<sub>n</sub>Sn[(CH<sub>2</sub>)<sub>4</sub>SnPh<sub>3</sub>](<sub>3</sub>)}<sub>4</sub> (n=3, 4)**  
Schumann H., AKSU Y., Wassermann B. C.  
ORGANOMETALLICS, cilt.25, sa.14, ss.3428-3434, 2006 (SCI-Expanded)
- XXXIII. **Synthesis and characterization of some organo-all-tin dendrimers with different peripheral substituents**  
Schumann H., AKSU Y., Wassermann B. C.  
JOURNAL OF ORGANOMETALLIC CHEMISTRY, cilt.691, sa.8, ss.1703-1712, 2006 (SCI-Expanded)
- XXXIV. **Synthesis and characterization of water-soluble tin-based metallodendrimers**  
Schumann H., Wassermann B. C., Schutte S., Velder J., AKSU Y., Krause W., Raduchel B.

## Hakemli Bilimsel Toplantılarda Yayımlanmış Bildiriler

- I. **a,w-bis [tri-(w-triphenylstannyl)butylstannyl]alkanes as starting materials for organotin dendrimers for use in biomedical applications**  
AKSU Y., AKSU S., Schumann H.  
5th EuCheMS Chemistry Congress, İstanbul, Türkiye, 31 Ağustos - 04 Eylül 2014, ss.60
- II. **?, ?-bis [tri-(w-triphenylstannyl)butylstannyl]alkanes as starting materials for organotin dendrimers for use in biomedical applications**  
AKSU Y., Aksu S., Schumann H.  
5th EuCheMS (European Association for Chemical and Molecular Sciences)-Chemistry Congress, İstanbul, Türkiye, 31 Ağustos - 04 Eylül 2014, ss.60
- III. **Transparent Thin-Film Field-Effect Transistors with High-Performance Using Novel Homo- and Heteroleptic Indium(III)-Tin(II) Single-Source Precursors**  
AKSU Y., Samedov K., Driess M.  
5th EuCheMS (European Association for Chemical and Molecular Sciences)-Chemistry Congress, İstanbul, Türkiye, 31 Ağustos - 04 Eylül 2014, ss.65
- IV. **Biosensors comprising enzymes coupled to mesoporous tin-rich indium tin oxide based transparent and conductive thin films prepared by employing a single source precursor approach**  
AKSU Y., Frasca S., Aksu S., Thomas A., Wollenberger U., Driess M.  
IUPAC 44th World Chemistry Congress, İstanbul, Türkiye, 11 - 16 Ağustos 2013, ss.109
- V. **Biosensors comprising enzymes coupled to mesoporous tin-rich indium tin oxide based transparent and conductive thin films prepared by employing a single source precursor approach**  
AKSU Y., Frasca S., AKSU S., Thomas A., Wollenberger U., Driess M.  
44th World Chemistry Congress, IUPAC 2013, İstanbul, Türkiye, 11 - 16 Ağustos 2013, ss.109
- VI. **Predesigning heterogeneous catalysts on the molecular scale: a unique way to high quality Lidoped MgO and related materials**  
AKSU Y., Heitz S., Driess M.  
IUPAC 44th World Chemistry Congress, İstanbul, Türkiye, 11 - 16 Ağustos 2013, ss.108
- VII. **Mn-Na<sub>2</sub>WO<sub>4</sub>/SiO<sub>2</sub> – An Industrial Catalyst for Methane Coupling?**  
Yıldız M., Arndt S., Simon U., AKSU Y., Otremba T., Berthold A., Gorke O., Thomas A., Schubert H., Schomaecker R.  
Proceedings of the DGMK-Conference “Reducing the Carbon Footprint of Fuels and Petrochemicals, Berlin, Almanya, 8 - 10 Ekim 2012, ss.125-132
- VIII. **The Support Effect of the Mn/Na<sub>2</sub>WO<sub>4</sub> Catalyst in the Oxidative Coupling of Methane**  
Yıldız M., Arndt S., Simon U., AKSU Y., Schubert H., Schomaecker R.  
DGMK (German Society for Petroleum and Coal Science and Technology) International Conference, “Catalysis-Innovative Applications in Petrochemistry and Refining”, Dresden, Almanya, 4 - 06 Ekim 2011, ss.173-180
- IX. **The Support Effect of the Mn/Na<sub>2</sub>WO<sub>4</sub> Catalyst in the Oxidative Coupling of Methane**  
Schomaecker R., Yıldız M., Simon U., AKSU Y., Schubert H., Arndt S.  
DGMK (German Society for Petroleum and Coal Science and Technology) International Conference, Catalysis-Innovative Applications in Petrochemistry and Refining”, Dresden, Almanya, 4 - 06 Ekim 2011, ss.173-180
- X. **Mesoporous Transparent Conductive Bio-interfaces**  
Güet A., Perez F., Frasca S., Thomas A., AKSU Y., Driess M., Wollenberger U., Fischer A.  
XV. International Symposium on Relations Between Homogeneous and Heterogeneous Catalysis, Berlin, Almanya, 11 - 16 Eylül 2011, ss.13
- XI. **Towards OER-Catalyst Materials from Heterobimetallic Single Source Precursors**  
Pfrommer J., AKSU Y., Driess M.  
XV. International Symposium on Relations Between Homogeneous and Heterogeneous Catalysis, Berlin, Almanya, 11 - 16 Eylül 2011, ss.37

- XII. **Single Source Precursor Approach as a Unique Way to Design Li-doped MgO on the Molecular Scale**  
AKSU Y., Heitz S., Arndt S., Schomaecker R., Driess M.  
XV. International Symposium on Relations Between Homogeneous and Heterogeneous Catalysis, Berlin, Almanya, 11 - 16 Eylül 2011, ss.5
- XIII. **The Role of the Support of Mn-Na-W/Silica and Na-W/Silica**  
Yıldız M., Arndt S., Simon U., AKSU Y., Thomas A., Schubert H., Schomaecker R.  
EuropaCat X 2011, Glasgow, Birleşik Krallık, 28 Ağustos - 02 Eylül 2011, ss.61
- XIV. **Are Li/MgO and Gd-Li/MgO Suitable Catalysts for Methane Coupling?**  
Arndt S., Simon U., Heitz S., Otremba T., Berthold A., AKSU Y., Dinse K. P., Driess M., Schubert H., Schomaecker R.  
EuropaCat X 2011, Glasgow, Birleşik Krallık, 28 Ağustos 2011 - 02 Eylül 2010, ss.97
- XV. **A Heterobimetallic Single Source Precursor Approach for OER Catalyst Materials**  
Pfrommer J., AKSU Y., Driess M.  
ISACS4 Challenges in Renewable Energy, Boston, Amerika Birleşik Devletleri, 5 - 08 Temmuz 2011, ss.73
- XVI. **Mesoporous transparent conducting oxides as a platform for bioelectronics**  
Frasca S., Richter C., von Graberg T., AKSU Y., Fischer A., Smarsky B. M., Hildebrandt P., Driess M., Wollenberger U.  
7. German Bio-Sensor Symposium, Heilbad-Heiligenstadt, Almanya, 3 - 06 Nisan 2011, ss.31
- XVII. **A single source molecular precursor approach to tunable porous tin-rich ITO film electrode for bioelectronic devices**  
AKSU Y., Driess M., Thomas A., Fischer A., Frasca S., Wollenberger U.  
23. German Zeolith-Congress, Erlangen, Almanya, 2 - 11 Mart 2011, ss.172
- XVIII. **Low Temperature Preparation of Zinc Oxide and Indium Tin Oxide Thin Films with Durable Electro-Optical Performance Using Molecular Precursors**  
AKSU Y., Driess M.  
GDCh (German Chemical Society) 15th Meeting of the Wöhler-Association, Freiburg, Almanya, 29 Eylül - 01 Ekim 2010, ss.32
- XIX. **Mesoporous ITO and Tin-Rich ITO as a Novel Platform for Bioelectronics**  
Frasca S., von Graberg T., AKSU Y., Feng J., Thomas A., Smarsky B. M., Hildebrandt P., Driess M., Wollenberger U.  
61st Annual Meeting of the International Society of Electrochemistry, Nice, Fransa, 26 Eylül - 01 Ekim 2010, ss.111
- XX. **A Single-Source Precursor Approach for the Preparation of Stable Tin-Rich Indium Tin Oxide Thin Films with High Conductivity**  
AKSU Y., Driess M.  
GDCh (German Chemical Society)-Science Forum Chemistry, Frankfurt Am Main, Almanya, 30 Ağustos - 02 Eylül 2010, ss.341
- XXI. **A New Organometallic Route for the Synthesis of Sn-Doped ZnO nanocrystals and their Optoelectronic Properties**  
AKSU Y., Tsaroucha M., Driess M.  
GDCh (German Chemical Society)-Science Forum Chemistry, Frankfurt Am Main, Almanya, 30 Ağustos - 02 Eylül 2010, ss.340
- XXII. **Preparation and Characterization of Li-doped ZnO Nanocrystals Synthesized via a Single Source Molecular Precursor Approach**  
AKSU Y., Jana S., Driess M.  
GDCh (German Chemical Society)-Science Forum Chemistry, Frankfurt Am Main, Almanya, 30 Ağustos - 02 Eylül 2010, ss.344
- XXIII. **Nanocrystalline Molybdenum-Doped Zinc Oxide from a Unique Molybdenum-Zinc Oxo Clusters and its Potential Application as a New TCO**  
AKSU Y., Ma J. G., Driess M.  
GDCh (German Chemical Society)-Science Forum Chemistry, Frankfurt Am Main, Almanya, 30 Ağustos - 02 Eylül 2010, ss.342
- XXIV. **Nanosized-ZnO-Based flexible FETs with High Mobility Prepared from Organometallic Single Source Precursors**  
AKSU Y., Driess M.

GDCh (German Chemical Society)-Science Forum Chemistry, Frankfurt Am Main, Almanya, 30 Ağustos - 02 Eylül 2010, ss.343

- XXV. **ZnO supported on Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, TiO<sub>2</sub> and ZrO<sub>2</sub> for the Activation of Methane, Ethane and Propane**  
Arndt S., Uysal B., Otremba T., AKSU Y., Schomaecker R.  
14th Nordic Symposium on Catalysis, Marienlyst, Danimarka, 29 - 31 Ağustos 2010, ss.73
- XXVI. **Coupling of Methane with Li/MgO-Catalysts**  
Arndt S., Laugel G., Simon U., Heitz S., Otremba T., AKSU Y., Berthold A., Driess M., Schubert H., Schomaecker R.  
14th Nordic Symposium on Catalysis, Marienlyst, Danimarka, 29 - 31 Ağustos 2010, ss.70
- XXVII. **Encoding tin-rich indium tin oxide-based nanoscaled materials with excellent optoelectronic properties via single source precursors**  
AKSU Y., Driess M.  
3rd EuCheMS (European Association for Chemical and Molecular Sciences)-Chemistry Congress, Nürnberg, Almanya, 20 Ağustos - 02 Eylül 2010, ss.34
- XXVIII. **Synthesis of heterobimetallic Sn/Zn-alkoxides and their controlled transformation to Amorphous Sn-doped ZnO or Zn<sub>2</sub>SnO<sub>4</sub> nanocrystals**  
Tsaroucha M., AKSU Y., Driess M.  
3rd EuCheMS (European Association for Chemical and Molecular Sciences)-Chemistry Congress, Nürnberg, Almanya, 20 Ağustos - 02 Eylül 2010, ss.34
- XXIX. **New Directions in Materials Synthesis for Energy-saving**  
Driess M., AKSU Y., Samedov K., Yıldız M., Heitz S., Jana S.  
3rd EuCheMS (European Association for Chemical and Molecular Sciences)-Chemistry Congress, Nürnberg, Almanya, 20 Ağustos - 02 Eylül 2010, ss.90
- XXX. **High quality MgO-based catalysts design by single source precursor approach**  
Heitz S., AKSU Y., Driess M.  
3rd EuCheMS (European Association for Chemical and Molecular Sciences)-Chemistry Congress, Nürnberg, Almanya, 20 Ağustos - 02 Eylül 2010, ss.68
- XXXI. **Nanoporous tin-rich indium tin oxide with improved electrical properties by templating a molecular single-source precursor for bioelectronic applications**  
AKSU Y., Thomas A., Driess M.  
3rd EuCheMS (European Association for Chemical and Molecular Sciences)-Chemistry Congress, Nürnberg, Almanya, 20 Ağustos - 02 Eylül 2010, ss.34
- XXXII. **Molybdenum in catalysis: From molecular model systems to bio-inspired and heterogeneous catalysts**  
Krackl S., AKSU Y., Driess M.  
3rd EuCheMS (European Association for Chemical and Molecular Sciences)-Chemistry Congress, Nürnberg, Almanya, 20 Ağustos - 02 Eylül 2010, ss.62
- XXXIII. **Doped-metal matrices: a new approach for the design of versatile catalytic materials**  
Krackl S., AKSU Y., Driess M.  
3rd EuCheMS (European Association for Chemical and Molecular Sciences)-Chemistry Congress, Nürnberg, Almanya, 20 Ağustos - 02 Eylül 2010, ss.68
- XXXIV. **Cubane-like Alkyl Zinc Alkoxides as excellent precursors for the preparation of nanosized ZnO-based Field-effect transistors (FETs) with high mobility at low temperature**  
AKSU Y., Driess M.  
3rd EuCheMS (European Association for Chemical and Molecular Sciences)-Chemistry Congress, Nürnberg, Almanya, 20 Ağustos - 02 Eylül 2010, ss.34
- XXXV. **Doped-metal matrices: a new approach for the design of versatile catalytic materials**  
AKSU Y.  
3rd EuCheMS (European Association for Chemical and Molecular Sciences)-Chemistry Congress, Nürnberg, Almanya, 20 Ağustos - 02 Eylül 2010, ss.68
- XXXVI. **From heterobimetallic alkyl-Mg-Zn-alkoxides to Mg@ZnO nanoparticles – A unique bottom-up approach to large band gap zinc oxide**

Heitz S., AKSU Y., Driess M.

3rd EuCheMS (European Association for Chemical and Molecular Sciences)-Chemistry Congress, Nürnberg, Almanya, 20 Ağustos - 02 Eylül 2010, ss.34

**XXXVII. A Molecular Single-Source Precursor Approach to Synthesize Mesoporous Tin-rich Indium Tin Oxide for Photovoltaic Applications**

AKSU Y., Thomas A., Driess M.

GDCh (German Chemical Society) Catalysis and Photochemistry for Energy Technologies, Rostock, Almanya, 29 Haziran - 01 Temmuz 2010, ss.15

**XXXVIII. Li/MgO as catalyst for coupling of methane, single source precursor route for well defined Li/MgO**

Arndt S., Heitz S., Otremba T., Laugel G., AKSU Y., Driess M., Schomaecker R.

43th Annual Meeting of the German Catalysis Scientists, Weimar, Almanya, 10 - 12 Mart 2010, ss.151

**XXXIX. Single Source Precursor Approach to Nanocrystalline Magnesium Oxide with Tunable Surface Defects**

Heitz S., AKSU Y., Driess M.

EUROMAT 2009 European Congress and Exhibition on Advanced Materials and Processes, Glasgow, Birleşik Krallık, 7 Ekim - 10 Eylül 2009, ss.19

**XL. The Catalytic Activity of Zinc Oxide Supported on Aerosil for C-H Activation of Light Alkanes**

Arndt S., Uysal B., AKSU Y., Otremba T., Schomaecker R.

Proceedings of the DGMK-Conference "Production and Use of light Olefins, Dresden, Almanya, 28 - 30 Eylül 2009, ss.39-46

**XLl. Preparation of Highly Conductive, Transparent and Stable Indium-Tin-Oxide Thin Films Using an Organometallic Single-Source Precursor**

AKSU Y., Driess M.

EUROMAT 2009 European Congress and Exhibition on Advanced Materials and Processes, Glasgow, Birleşik Krallık, 7 - 10 Eylül 2009, ss.22

**XLII. Design of Heterogeneous Catalysts on the Molecular Scale: A Unique Way to High Quality Li-doped MgO**

Heitz S., AKSU Y., Driess M.

EUROMAT 2009 European Congress and Exhibition on Advanced Materials and Processes, Glasgow, Birleşik Krallık, 7 - 10 Eylül 2009, ss.20

**XLIII. From Organometallic Single Source Precursors to High Mobility Flexible Thin-Film Field-Effect Transistors with nanosized-ZnO as Active Channel**

AKSU Y., Driess M.

EUROMAT 2009 European Congress and Exhibition on Advanced Materials and Processes, Glasgow, Birleşik Krallık, 7 - 10 Eylül 2009, ss.21

**XLIV. The Organometallic Precursor Clue to Zn<sub>2</sub>SnO<sub>4</sub> and Sn@ZnO Based Nanomaterials for Optoelectronics**

Driess M., AKSU Y., Tsaroucha M.

EUROMAT 2009 European Congress and Exhibition on Advanced Materials and Processes, Glasgow, Birleşik Krallık, 7 - 10 Eylül 2009, ss.22

**XLV. Unique Molybdenum-Zinc Oxo Clusters in Concert: Potential Precursors for a New Class of TCOs**

AKSU Y., Ma J. G., Driess M.

EUROMAT 2009 European Congress and Exhibition on Advanced Materials and Processes, Glasgow, Birleşik Krallık, 7 - 10 Eylül 2009, ss.23

**XLVI. The catalytic activity of pure and doped zinc oxides from single source precursors for CH activation of light alkanes**

Arndt S., AKSU Y., Driess M., Schomaecker R.

EuropaCat IV, Catalysis for a Sustainable World, Salamanca, İspanya, 30 Ağustos - 04 Eylül 2009, ss.74

**XLVII. Aksu N ve O donör atomlu karışık ligantlarla tek boyutlu polimerik yapıda iki çekirdekli Cd(II) ve tek çekirdekli makroyapılı Mn(II) komplekslerinin hidrotermal olarak sentezi: [Cd<sub>2</sub>(4-4'-bpy)<sub>4</sub>(pa)<sub>4</sub>]n(O) and [Mn(4-4'-bpy)<sub>2</sub>(pa)(H<sub>2</sub>O)<sub>3</sub>]. (CO).(H<sub>2</sub>O).ClO<sub>4</sub>**



AKSU Y., Kani i.

II. Ulusal Anorganik Kimya Kongresi, Elazığ, Türkiye, 16 - 19 Mayıs 2009, ss.160

**XLVIII. Electronic and Optical Properties of Lithium doped ZnO Nanocrystals**

Wagner M. R., Kirste R., Rauch C., Callsen G., Gehlhoff W., Malguth E., Cobet M., Lehmann M., Polarz S., AKSU Y., et al.  
Proceedings of the German Physical Society, Dresden, Almanya, 22 - 27 Mart 2009, ss.3

**XLIX. Raman Spectroscopy on Lithium Doped ZnO Nanocrystals**

Kirste R., AKSU Y., Wagner M. R., Jana S., Callsen G., Driess M., Hoffmann A.

Proceedings of the German Physical Society, Dresden, Almanya, 22 - 27 Mart 2009, ss.2

## Desteklenen Projeler

AKSU Y., TÜBİTAK Projesi, Elektrostatik toz boya kaplama malzemesi atıklarının yapısının değiştirilerek termoplastiklerde dolgu malzemesi olarak kullanılması, 2014 - Devam Ediyor

BAŞARAN S. C., ALBAYRAK Y., AKSU Y., AKSU S., Yükseköğretim Kurumları Destekli Proje, Biyotelemetri Uygulamaları için Biyosensör Entegre Modülü Tasarımı, 2016 - 2020

AKSU Y., Diğer Resmi Kurumlarca Desteklenen Proje, Light to Hydrogen „Energy for the future – Photocatalytic Splitting of Water to Hydrogen, 2009 - 2014

AKSU Y., Diğer Resmi Kurumlarca Desteklenen Proje, Excellence Cluster-EXC 341/1 “Unifying Concepts in Catalysis (Unicat)”- Project A3: Hierarchically Organized Solid Catalysts, 2008 - 2010

AKSU Y., Diğer Uluslararası Fon Programları, Excellence Cluster-EXC 341/1 “Unifying Concepts in Catalysis (Unicat)”- Project A1: Bridging Model Systems to Real catalysis: Oxidative Methane Coupling (OCM), 2008 - 2010

AKSU Y., Diğer Resmi Kurumlarca Desteklenen Proje, MadRiX- Alliance Project for Printable Polymer Electronics: Synthesis of Inorganic Semiconductor Materials from Organometallic Precursors, 2007 - 2010

AKSU Y., Diğer Resmi Kurumlarca Desteklenen Proje, Synthesis of Indium Tin Oxide (ITO) Nanoparticles from Organometallic Precursors, 2006 - 2007

AKSU Y., AB Destekli Diğer Projeler, Chemical Modification of Nanoparticles for Applications in the Optoelectronic Industry, 2005 - 2006

AKSU Y., Diğer Resmi Kurumlarca Desteklenen Proje, Development of a procedure for the differential multidimensional chromatography (DMDLC) for proteomic analysis of models of neural apoptosis, 2002 - 2004

AKSU Y., Diğer Resmi Kurumlarca Desteklenen Proje, Synthesis, structure elucidation and use of alkaline earth metal complexes in the catalysis of carbonyl functionalized substrates, 2001 - 2003

AKSU Y., Diğer Uluslararası Fon Programları, Use of supramolecular systems in the X-ray diagnostics:“development of new iodine-free X-ray contrast medium based on tin, 1998 - 2001

## Bilimsel Kuruluşlardaki Üyelikler / Görevler

AKİŞMER, Yönetim Kurulu Üyesi, 2013 - Devam Ediyor

Mühendislik Fakültesi Uzmanlar Kurulu, Yönetim Kurulu Üyesi, 2013 - Devam Ediyor

## Bilimsel Yayınlarda Hakemlikler

MATHCHEMPHYS, SCI Kapsamındaki Dergi, Şubat 2015

Sigma mühendislik ve Fen Bilimleri Dergisi, Hakemli Bilimsel Dergi, Şubat 2015

MATHCHEMPHYS, SCI Kapsamındaki Dergi, Ocak 2015

Turkish Journal of Chemistry, Hakemli Bilimsel Dergi, Ocak 2015

MATHCHEMPHYS, SCI Kapsamındaki Dergi, Kasım 2014

MATHCHEMPHYS, SCI Kapsamındaki Dergi, Eylül 2014

MATHCHEMPHYS, SCI Kapsamındaki Dergi, Haziran 2014

## Bilimsel Projelerde Hakemlikler

TÜBİTAK Projesi, Mart 2015  
TÜBİTAK Projesi, Ocak 2015  
TÜBİTAK Projesi, Aralık 2014  
TÜBİTAK Projesi, Kasım 2014  
TÜBİTAK Projesi, Ağustos 2014  
TÜBİTAK Projesi, Temmuz 2014  
TÜBİTAK Projesi, Temmuz 2014  
TÜBİTAK Projesi, Haziran 2014  
TÜBİTAK Projesi, Haziran 2014  
TÜBİTAK Projesi, Haziran 2014  
TÜBİTAK Projesi, Mayıs 2014  
TÜBİTAK Projesi, Nisan 2014  
TÜBİTAK Projesi, Ocak 2014  
TÜBİTAK Projesi, Kasım 2013  
TÜBİTAK Projesi, Kasım 2013  
TÜBİTAK Projesi, Kasım 2013  
TÜBİTAK Projesi, Kasım 2013  
TÜBİTAK Projesi, Kasım 2013  
TÜBİTAK Projesi, Kasım 2013  
TÜBİTAK Projesi, Temmuz 2013  
TÜBİTAK Projesi, Haziran 2013  
TÜBİTAK Projesi, Haziran 2013  
TÜBİTAK Projesi, Haziran 2013

## Metrikler

Yayın: 85  
Atıf (WoS): 703  
Atıf (Scopus): 788  
H-İndeks (WoS): 16  
H-İndeks (Scopus): 18

## Kongre ve Sempozyum Katılımı Faaliyetleri

5th EuCheMS (European Association for Chemical and Molecular Sciences)-Chemistry Congress, Katılımcı, İstanbul, Türkiye, 2014  
44th World Chemistry Congress, IUPAC, Katılımcı, İstanbul, Türkiye, 2013  
XV. International Symposium on Relations Between Homogeneous and Heterogeneous Catalysis, Katılımcı, Berlin, Türkiye, 2011  
GDCh (German Chemical Society) 15th Meeting of the Wöhler-Association, Katılımcı, Freiburg, Almanya, 2010  
3rd EuCheMS (European Association for Chemical and Molecular Sciences)-Chemistry Congress, Katılımcı, Nürnberg, Almanya, 2010  
GDCh (German Chemical Society)-Science Forum Chemistry, Katılımcı, Frankfurt am Main , Türkiye, 2010  
GDCh (German Chemical Society) Catalysis and Photochemistry for Energy Technologies, Katılımcı, Rostock, Almanya,

2010

EUROMAT 2009 (European Congress and Exhibition on Advanced Materials and Processes), Katılımcı, Glasgow, Birleşik Krallık, 2009

" Summer School "Science to Business": Nanotronics, Davetli Konuşmacı, Almanya, 2006

## **Burslar**

DFG Doktora-Stipendium, Yabancı Ülkelerin Resmi Kurumları, 1998 - Devam Ediyor

## **Ödüller**

Aksu Y., Atkesen B., Fire-Stopper- Yerli Maden Atıkları kullanılarak, Çevre Dostu, Nano Alev Önleyicilerin Üretilmesi ve Polimerik Malzemelere Uygulanması, Antalya Sanayici Ve İşadamları Derneği (Ansiad), Aralık 2021

Aksu Y., Atkesen B., Metil Selülozun Endüstriyel Üretimi için Yeni Bir Yöntem Geliştirilmesi , T.C. Ticaret Bakanlığı, Türkiye İhracatçılar Meclisi (Tim) Ve Tübitak Destekçiliğiyle İstanbul Kimyevi Maddeler Ve Mamulleri İhracatçılar Birliği (İkmib) , Kasım 2021