

Prof. Huriye AKDAŞ KILIÇ

Personal Information

Email: hakdas@yildiz.edu.tr

Web: <https://avesis.yildiz.edu.tr/hakdas>

Address: Yıldız Teknik Üniversitesi Davutpaşa Kampüsü

International Researcher IDs

ORCID: 0000-0002-5645-1412

Publons / Web Of Science ResearcherID: AAG-4826-2019

ScopusID: 28567474100

Yoksis Researcher ID: 278166

Education Information

Doctorate, Université Louis-Pasteur: Strasbourg I, Faculte de Chimie, Kimya, France 1999 - 2002

Postgraduate, Université Louis-Pasteur: Strasbourg I, Faculte de Chimie, Kimya, France 1997 - 1999

Foreign Languages

German, B1 Intermediate

French, C2 Mastery

English, C1 Advanced

Turkish, C1 Advanced

Dissertations

Postgraduate, Thiocalix[4]arenes synthesis and their uses in molecular tectonic, Université Louis-Pasteur: Strasbourg I, Faculte de Chimie, Kimya, 1999

Research Areas

Photochemistry of Organics

Academic Titles / Tasks

Professor, Yildiz Technical University, Faculty Of Arts & Science, Department Of Chemistry, 2022 - Continues

Assistant Professor, Yildiz Technical University, Faculty Of Arts & Science, Department Of Chemistry, 2021 - 2022

Published journal articles indexed by SCI, SSCI, and AHCI

1. Smart design of highly luminescent octupolar mesogenic tetra styryl-alkynyl bipyrimidine-based chromophores presenting non-linear optical properties

Vardar D., Abdallah S., Mhanna R., Nicolas P., Dok A., de Coene Y., Van Cleuvenbergen S., Jeannin O., Malval J., Verbiest T., et al.

Dyes and Pigments, vol.230, 2024 (SCI-Expanded)

- II. **Innovative triazine-core octupolar chromophores: unlocking new Frontiers in nonlinear optics**
El Karout H., Özkonstanyan A., Sentürk E., BİLGİN ERAN B., Taboukhat S., Zawadzka A., Szukalski A., El-Ghayoury A., AKDAŞ KILIÇ H., Sahraoui B.
Journal of Materials Chemistry C, vol.12, no.30, pp.11458-11473, 2024 (SCI-Expanded)
- III. **Non-Linear Optical Activity of Chiral Bipyrimidine-Based Thin Films**
Nicolas P., Abdallah S., Dok A., de Coene Y., Jeannin O., Bellec N., Malval J., Verbiest T., Clays K., Van Cleuvenbergen S., et al.
Chemistry - An Asian Journal, vol.19, no.9, 2024 (SCI-Expanded)
- IV. **New Multifunctional Bipyrimidine-Based Chromophores for NLO-Active Thin-Film Preparation****
Bora U., Abdallah S., Mhanna R., Nicolas P., Dok A., de Coene Y., Van Cleuvenbergen S., Jeannin O., Malval J., Clays K., et al.
Chemistry - A European Journal, vol.30, no.4, 2024 (SCI-Expanded)
- V. **Multiphoton-And SHG-Active Pyrimidine-Based Liquid Crystalline Thin Films Toward 3D Optical Data Storage**
Nicolas P., Minon C., Abdallah S., Chen D., Rizzi G., de Coene Y., Liu W., Jeannin O., Verbiest T., Clays K., et al.
Advanced Optical Materials, 2024 (SCI-Expanded)
- VI. **Micropatterning of electrochemiluminescent polymers based on multipolar Ru-complex two-photon initiators**
Mhanna R., Durand N., Savel P., Akdas-Kilic H., Abdallah S., Versace D., Soppera O., Fillaut J., Sojic N., Malval J.
CHEMICAL COMMUNICATIONS, vol.58, no.69, pp.9678-9681, 2022 (SCI-Expanded)
- VII. **Two-Photon Absorption Cooperative Effects within Multi-Dipolar Ruthenium Complexes: The Decisive Influence of Charge Transfers**
Durand N., Amar A., Mhanna R., Akdas-Kiliç H., Soppera O., Malval J., Boucekkine A., Fillaut J.
Molecules, vol.27, no.5, 2022 (SCI-Expanded)
- VIII. **Synthesis and mesomorphic properties of new organosiloxane chiral calamitic liquid crystals**
OCAK H., Karaağaç B., AKDAŞ KILIÇ H., Jeannin O., Camerel F., BİLGİN ERAN B.
Journal of Molecular Liquids, vol.348, 2022 (SCI-Expanded)
- IX. **New 2-D silver(I) coordination network constructed from thiomethyl group-substituted p-tert-butylthiacalix[4]arene**
Akdaş Kılıç H., Graf E., Hosseini M. W., Kyritsakas N.
TURKISH JOURNAL OF CHEMISTRY, vol.46, no.5, pp.1541-1547, 2022 (SCI-Expanded)
- X. **1-D and 2-D coordination networks based on tetrathiacalix[4]arene derivative generated with mercury and cobalt salts**
AKDAŞ KILIÇ H., Graf E., Hosseini M. W., Kyritsakas N.
Turkish Journal of Chemistry, vol.46, no.4, pp.1245-1252, 2022 (SCI-Expanded)
- XI. **Poly(dimethylsiloxane) functionalized with complementary organic and inorganic emitters for the design of white emissive waveguides**
Khelifi S., Bigeon J., Amela-Cortes M., Dumait N., Akdas-Kilic H., Taupier G., Freslon S., Cordier S., Derien S., Achard M., et al.
Journal of Materials Chemistry C, vol.9, no.22, pp.7094-7102, 2021 (SCI-Expanded)
- XII. **Illuminating of mild steel/HCl interface in the presence of 5-DAT inhibitor**
Yerlikaya G., Ahmad A., Farsak M., Kilig H., KARDAŞ G., KAYA S.
JOURNAL OF MOLECULAR LIQUIDS, vol.326, 2021 (SCI-Expanded)
- XIII. **Synthesis and characterization of new pyridine-based chiral calamitic liquid crystals**
Vardar D., OCAK H., Akdaş Kılıç H., Jeannin O., Camerel F., Eran B. B.
Liquid Crystals, vol.48, no.6, pp.850-861, 2021 (SCI-Expanded)
- XIV. **Pyridine-based chiral smectogens: effects of polar end groups on liquid crystal properties**
Vardar D., Akdaş Kılıç H., Ocak H., Jeannin O., Camerel F., Eran B. B.

- Liquid Crystals, vol.48, no.5, pp.616-625, 2021 (SCI-Expanded)
- XV. **Chiral polymorphism in new imine based rod-like liquid crystals**
Çağlar F. P., Akdaş-Kılıç H., Ocak H., Eran B. B.
Journal of Molecular Structure, vol.1220, 2020 (SCI-Expanded)
- XVI. **Unexpected disruption of the dimensionality-driven two-photon absorption enhancement within a multipolar polypyridyl ruthenium complex series**
Durand N., Mhanna R., Savel P., Akdas-Kilic H., Malval J., Soppera O., Fillaut J.
Chemical Communications, vol.56, no.84, pp.12801-12804, 2020 (SCI-Expanded)
- XVII. **Self-erasable inkless imprinting using a dual emitting hybrid organic-inorganic material**
Khlifi S., Le Ray N. F., Paofai S., Amela-Cortes M., Akdas-Kilic H., Taupier G., Derien S., Cordier S., Achard M., Molard Y.
MATERIALS TODAY, vol.35, pp.34-41, 2020 (SCI-Expanded)
- XVIII. **Porosity-driven large amplitude dynamics for nitroaromatic sensing with fluorescent films of alternating D-pi-A molecules**
Malval J., Cranney M., Achelle S., Akdas-Kilic H., Fillaut J., Cabon N., Robin-le Guen F., Soppera O., Molard Y.
CHEMICAL COMMUNICATIONS, vol.55, no.95, pp.14331-14334, 2019 (SCI-Expanded)
- XIX. **Conformational studies of bipyrimidine-based mesogens by combination of DFT calculations and temperature-dependent infrared studies**
Barszcz B., Bogucki A., Swietlik R., AKDAŞ KILIÇ H., Camerel F., Roisnel T.
LIQUID CRYSTALS, vol.46, no.9, pp.1403-1414, 2019 (SCI-Expanded)
- XX. **Modulation of emission properties of phosphine-sulfonate ligand containing copper complexes: playing with solvato-, thermo-, and mechanochromism**
Vacher A., Amar A., Camerel F., Molard Y., Latouche C., Roisnel T., Dorcet V., Boucekkine A., AKDAŞ KILIÇ H., Achard M.
DALTON TRANSACTIONS, vol.48, no.6, pp.2128-2134, 2019 (SCI-Expanded)
- XXI. **Azobased iminopyridine ligands and their rhenium metal complexes: Syntheses, spectroscopic, trans-cis photoisomerization and theoretical studies**
Benmensour M. A., Ayadi A., Akdas-Kilig H., Boucekkine A., Fillaut J., El-Ghayoury A.
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.368, pp.78-84, 2019 (SCI-Expanded)
- XXII. **Access to 3-Oxindoles from Allylic Alcohols and Indoles**
Lauwick H., Sun Y., Akdas-Kilig H., Derien S., Achard M.
CHEMISTRY-A EUROPEAN JOURNAL, vol.24, no.31, pp.7964-7969, 2018 (SCI-Expanded)
- XXIII. **Chiral Side Groups Trigger Second Harmonic Generation Activity in 3D Octupolar Bipyrimidine-Based Organic Liquid Crystals**
van Cleuvenbergen S., Kedziora P., Fillaut J., Verbiest T., Clays K., Akdas-Kilig H., Camerel F.
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION, vol.56, no.32, pp.9546-9550, 2017 (SCI-Expanded)
- XXIV. **Tuning the nonlinear optical properties of BODIPYs by functionalization with dimethylaminostyryl substituents**
Kulyk B., Taboukhat S., Akdas-Kilig H., Fillaut J., Karpierz M., Sahraoui B.
DYES AND PIGMENTS, vol.137, pp.507-511, 2017 (SCI-Expanded)
- XXV. **Nonlinear refraction and absorption activity of dimethylaminostyryl substituted BODIPY dyes**
Kulyk B., Taboukhat S., Akdas-Kilig H., Fillaut J. -, Boughaleb Y., Sahraoui B.
RSC ADVANCES, vol.6, no.88, pp.84854-84859, 2016 (SCI-Expanded)
- XXVI. **Neutral copper(I) complexes featuring phosphinesulfonate chelates**
Vazart F., Savel P., Latouche C., Barone V., Camerel F., Roisnel T., Fillaut J. -, Akdas-Kilig H., Achard M.
DALTON TRANSACTIONS, vol.45, no.15, pp.6566-6573, 2016 (SCI-Expanded)
- XXVII. **Nonlinear optical properties of intriguing Ru sigma-acetylide complexes and the use of a photocrosslinked polymer as a springboard to obtain SHG active thin films**
Colombo A., Dragonetti C., Marinotto D., Righetto S., Griffini G., Turri S., Akdas-Kilig H., Fillaut J., Amar A., Boucekkine A., et al.
DALTON TRANSACTIONS, vol.45, no.27, pp.11052-11060, 2016 (SCI-Expanded)

- XXVIII. **UV-Induced Micropatterning of Complex Functional Surfaces by Photopolymerization Controlled by Alkoxyamines**
Telitel S., Telitel S., Bosson J., Lalevee J., Clement J., Godfroy M., Fillaut J., Akdas-Kilig H., Guillaneuf Y., Gignes D., et al.
LANGMUIR, vol.31, no.36, pp.10026-10036, 2015 (SCI-Expanded)
- XXIX. **Photoisomerisation in Aminoazobenzene-Substituted Ruthenium(II) Tris(bipyridine) Complexes: Influence of the Conjugation Pathway**
Amar A., Savel P., Akdas-Kilig H., Katan C., Meghezzi H., Boucekkine A., Malval J., Fillaut J.
CHEMISTRY-A EUROPEAN JOURNAL, vol.21, no.22, pp.8262-8270, 2015 (SCI-Expanded)
- XXX. **Mesogenic, Luminescence, and Nonlinear Optical Properties of New Bipyrimidine-Based Multifunctional Octupoles**
Akdas-Kilig H., Godfroy M., Fillaut J., Donnio B., Heinrich B., Kedziora P., Malval J., Spangenberg A., van Cleuvenbergen S., Clays K., et al.
JOURNAL OF PHYSICAL CHEMISTRY C, vol.119, no.7, pp.3697-3710, 2015 (SCI-Expanded)
- XXXI. **Theoretical evidence of metal-induced structural distortions in a series of bipyrimidine-based ligands**
Latouche C., Akdas-Kilig H., Malval J., Fillaut J., Boucekkine A., Barone V.
DALTON TRANSACTIONS, vol.44, no.2, pp.506-510, 2015 (SCI-Expanded)
- XXXII. **Effect of metal complexation on the nonlinear optical response of a conjugated ligand**
Khammar F., Kerasidou A. P., Iliopoulos K., Savel P., Akdas-Kilig H., Hamaizi Y., Fillaut J. -, Sahraoui B.
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, vol.31, no.7, pp.1555-1560, 2014 (SCI-Expanded)
- XXXIII. **Heteroleptic copper(I)-polypyridine complexes as efficient sensitizers for dye sensitized solar cells**
Sandroni M., Favereau L., Planchat A., Akdas-Kilig H., Szuwarski N., Pellegrin Y., Blart E., Le Bozec H., Boujtita M., Odobel F.
JOURNAL OF MATERIALS CHEMISTRY A, vol.2, no.26, pp.9944-9947, 2014 (SCI-Expanded)
- XXXIV. **Supramolecular Ruthenium-Alkynyl Multicomponent Architectures: Engineering, Photophysical Properties, and Responsiveness to Nitroaromatics**
Gatri R., Ouerfelli I., Efrat M. L., Serein-Spirau F., Lere-Porte J., Valvin P., Roisnel T., Bivaud S., Akdas-Kilig H., Fillaut J.
ORGANOMETALLICS, vol.33, no.3, pp.665-676, 2014 (SCI-Expanded)
- XXXV. **Metal-induced dimensionality tuning in a series of bipyrimidine-based ligands: a tool to enhance two-photon absorption**
Savel P., Akdas-Kilig H., Malval J., Spangenberg A., Roisnel T., Fillaut J.
JOURNAL OF MATERIALS CHEMISTRY C, vol.2, no.2, pp.295-305, 2014 (SCI-Expanded)
- XXXVI. **Synthesis, Photophysics and Nonlinear Optical Properties of Stilbenoid Pyrimidine-Based Dyes Bearing Methylenepyran Donor Groups**
Achelle S., Malval J., Aloise S., Barsella A., Spangenberg A., Mager L., Akdas-Kilig H., Fillaut J., Caro B., Robin-le Guen F.
CHEMPHYSICHEM, vol.14, no.12, pp.2725-2736, 2013 (SCI-Expanded)
- XXXVII. **Switching of Reverse Charge Transfers for a Rational Design of an OFF-ON Phosphorescent Chemodosimeter of Cyanide Anions**
Fillaut J., Akdas-Kilig H., Dean E., Latouche C., Boucekkine A.
INORGANIC CHEMISTRY, vol.52, no.9, pp.4890-4897, 2013 (SCI-Expanded)
- XXXVIII. **Heteroleptic diimine copper(I) complexes with large extinction coefficients: synthesis, quantum chemistry calculations and physico-chemical properties**
Sandroni M., Kayanuma M., Rebarz M., Akdas-Kilig H., Pellegrin Y., Blart E., Le Bozec H., Daniel C., Odobel F.
DALTON TRANSACTIONS, vol.42, no.40, pp.14628-14638, 2013 (SCI-Expanded)
- XXXIX. **Cyclometalated platinum(II) with ethynyl-linked azobenzene ligands: an original switching mode**
Savel P., Latouche C., Roisnel T., Akdas-Kilig H., Boucekkine A., Fillaut J.
DALTON TRANSACTIONS, vol.42, no.48, pp.16773-16783, 2013 (SCI-Expanded)
- XL. **Enhancement of Two-Photon Initiating Efficiency of a 4,4'-Diaminostyryl-2,2'-bipyridine Derivative Promoted by Complexation with Silver Ions**

Spangenberg A., Malval J., Akdas-Kilig H., Fillaut J., Stehlin F., Hobeika N., Morlet-Savary F., Soppera O.
MACROMOLECULES, vol.45, no.3, pp.1262-1269, 2012 (SCI-Expanded)

- XLII. **The synthesis of tetrahedral bipyridyl metallo-octupoles with large second- and third-order nonlinear optical properties**
Akdas-Kilig H., Malval J., Morlet-Savary F., Singh A., Toupet L., Ledoux-Rak I., Zyss J., Le Bozec H.
DYES AND PIGMENTS, vol.92, no.1, pp.681-688, 2012 (SCI-Expanded)
- XLIII. **A new class of bipyrimidine-based octupolar chromophores: synthesis, fluorescent and quadratic nonlinear optical properties**
Akdas-Kilig H., Roisnel T., Ledoux I., Le Bozec H.
NEW JOURNAL OF CHEMISTRY, vol.33, no.7, pp.1470-1473, 2009 (SCI-Expanded)
- XLIV. **Dioxygen activation at a mononuclear Cu(I) center embedded in the calix[6]arene-tren core**
Izzet G., Zeitouny J., Akdas-Kilig H., Frapart Y., Menage S., Douziech B., Jabin I., Le Mest Y., Reinaud O.
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol.130, no.29, pp.9514-9523, 2008 (SCI-Expanded)
- XLV. **Drastic effects of the second coordination sphere on neutral vs. anionic guest binding to a biomimetic Cu(II) center embedded in a calix[6]aza-cryptand**
Izzet G., Zeng X., Akdas H., Marrot J., Reinaud O.
CHEMICAL COMMUNICATIONS, no.8, pp.810-812, 2007 (SCI-Expanded)
- XLVI. **Supramolecular assemblies with calix[6]arenes and copper ions: from dinuclear to trinuclear linear arrangements of hydroxo-cu(II) complexes**
Izzet G., Akdas H., Hucher N., Giorgi M., Prange T., Reinaud O.
INORGANIC CHEMISTRY, vol.45, no.3, pp.1069-1077, 2006 (SCI-Expanded)
- XLVII. **Synthesis, crystal structure, and nonlinear optical behavior of beta-unsubstituted meso-meso E-vinylene-linked porphyrin dimers**
Frampton M., Akdas H., Cowley A., Rogers J., Slagle J., Fleitz P., Drobizhev M., Rebane A., Anderson H.
ORGANIC LETTERS, vol.7, no.24, pp.5365-5368, 2005 (SCI-Expanded)
- XLVIII. **Reverse saturable absorption in the near-infrared by fused porphyrin dimers**
McEwan K., Fleitz P., Rogers J., Slagle J., McLean D., Akdas H., Katterle M., Blake I., Anderson H.
ADVANCED MATERIALS, vol.16, no.21, pp.1933-1936, 2004 (SCI-Expanded)
- XLIX. **Molecular tectonics: design, synthesis and structural analysis of thiacalixarene-based tectons**
Akdas H., Graf E., Hosseini M., De Cian A., Kyritsakas-Gruber N.
COMPTES RENDUS CHIMIE, vol.6, no.5-6, pp.565-572, 2003 (SCI-Expanded)
- L. **Molecular baskets based on tetramercaptotetrathiacalix[4]arene and tetrathiacalix[4]arene**
Akdas H., Bringel L., Bulach W., Graf E., Hosseini M., De Cian A.
TETRAHEDRON LETTERS, vol.43, no.49, pp.8975-8979, 2002 (SCI-Expanded)
- L. **Koiland from thiophiles: mercury(II) clusters from thiacalixarenes**
Akdas H., Graf E., Hosseini M., De Cian A., Bilyk A., Skelton B., Koutsantonis G., Murray I., Harrowfield J., White A.
CHEMICAL COMMUNICATIONS, no.10, pp.1042-1043, 2002 (SCI-Expanded)
- LI. **Synthesis and solid state structural analysis of 1,3-alternate conformer of tetrathiacalix[4]arene tetra-ester, -acid and -ether derivatives**
Akdas H., Jaunky W., Graf E., Hosseini M., Planeix J., De Cian A., Fischer J.
TETRAHEDRON LETTERS, vol.41, no.19, pp.3601-3606, 2000 (SCI-Expanded)
- LII. **Design, synthesis and structural investigation of a 2-D coordination network based on the self-assembly of the tetracarboxylate derivative of tetrathiacalix[4]arene and silver cation**
Akdas H., Graf E., Hosseini M., De Cian A., Harrowfield J.
CHEMICAL COMMUNICATIONS, no.22, pp.2219-2220, 2000 (SCI-Expanded)
- LIII. **Synthesis and solid state structural analysis of conformers of tetrakis((ethoxycarbonyl)methoxy)tetrathiacalix[4]arene**
Akdas H., Mislin G., Graf E., Hosseini M., De Cian A., Fischer J.
TETRAHEDRON LETTERS, vol.40, no.11, pp.2113-2116, 1999 (SCI-Expanded)
- LIV. **Thiacalixarenes: Synthesis and structural analysis of thiacalix[4]arene and of p-tert-butylthiacalix[4]arene**

Akdas H., Bringel L., Graf E., Hosseini M., Mislin G., Pansanel J., De Cian A., Fischer J.
TETRAHEDRON LETTERS, vol.39, no.16, pp.2311-2314, 1998 (SCI-Expanded)

Articles Published in Other Journals

- I. **Metal-based NLO chromophores: From tuning to switching the quadratic nonlinearities**
Le Bozec H., Guerchais V., Akdas-Kilig H., Maury O., Ordroneau L., Boucekkine A., Singh A., Ledoux I., Zyss J.
Nonlinear Optics Quantum Optics, vol.43, no.1-4, pp.187-196, 2012 (Scopus)
- II. **Tetramercaptotetrathiacalix[4]arene the most sulfur enriched ligand: Synthesis and structural analysis**
Akdas H., Graf E., Hosseini M. W., Rao P., De Cian A.
Journal of Supramolecular Chemistry, vol.2, no.1-3, pp.21-28, 2002 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **Bipirimidin Türevi Yeni Sıvı Kristal Bileşiklerin Sentezi, Karakterizasyonu, Mesomorfik Ve Optik Özelliklerinin İncelenmesi**
Bora U., Ocak H., Akdaş Kılıç H., Bilgin Eran B.
34. Ulusal Kimya Kongresi, Yalova Üniversitesi, PS-196, Yalova, Turkey, 1 - 06 September 2022, pp.1
- II. **Triazin Esaslı Azo Bağlayıcı Gruplu Bileşiğin Sentezi Ve Karakterizasyonu**
Şentürk E., Özkonstanyan A., Akdaş Kılıç H., Ocak H., Bilgin Eran B.
34. Ulusal Kimya Kongresi, Yalova Üniversitesi, PS-216, Yalova, Turkey, 1 - 06 September 2022, pp.1
- III. **Bipirimidin Esaslı Yeni Sıvı Kristal Moleküllerin Sentezi, Karakterizasyonu ve Mesomorfik Özelliklerinin İncelenmesi**
Vardar D., Akdaş Kılıç H., Ocak H., Bilgin Eran B.
34. Ulusal Kimya Kongresi, Yalova Üniversitesi, SS-080, Yalova, Turkey, 1 - 06 September 2022, pp.1
- IV. **Bipirimidin Türevi Yeni Sıvı Kristal Molekül Sentezi, Karakterizasyonu ve Mesomorfik Özelliklerinin İncelenmesi**
Bora U., Ocak H., Akdaş Kılıç H., Bilgin Eran B.
33. Ulusal Kimya Kongresi, Tekirdağ Namık Kemal Üniversitesi, 07-09 Ekim 2021, PS-032, Tekirdağ, Turkey, 7 - 09 October 2021, pp.1
- V. **Polypyridyl ruthenium complexes: Versatile tools for linear and non-linear optics**
Durand N., Savel P., Akdas-Kiliç H., Boucekkine A., Malval J., Fillaut J.
21st International Conference on Transparent Optical Networks, ICTON 2019, Angers, France, 9 - 13 July 2019, vol.2019-July

Metrics

Publication: 61
Citation (WoS): 1393
Citation (Scopus): 855
H-Index (WoS): 20
H-Index (Scopus): 15