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International Researcher IDs

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Education Information

Doctorate, Gazi University, Fen Fakültesi, Kimya, Turkey 2020 - Continues

Postgraduate, Gazi University, Fen Fakültesi, Kimya, Turkey 2018 - 2020

Undergraduate, Ihsan Dogramaci Bilkent University, Faculty Of Science, Department Of Chemistry, Turkey 2005 - 2012

Foreign Languages

English, C2 Mastery

Dissertations

Postgraduate, Active center design of non-heme enzymes based on secondary sphere effects , Gazi University, Fen Fakültesi, Kimya, 2020

Research Areas

Computational Chemistry, Chemical Kinetics, Quantum Mechanics, Transition Metals, Photochemistry of Inorganic Molecules, Inorganic Reaction Mechanisms and Kinetics, Catalysis, Coordination Chemistry, Chemistry of Dyes and Pigments

Academic Titles / Tasks

Research Assistant, Gazi University, Fen Fakültesi, Kimya, 2020 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. Homoprotocatechuate dioxygenase active site: Imitating the secondary sphere base via computational design**
BÜYÜKTEMİZ M., DEDE Y.
Turkish Journal of Chemistry, vol.47, no.5, pp.1116-1124, 2023 (SCI-Expanded)
- II. The Role of the Redox Non-Innocent Hydroxyl Ligand in the Activation of O₂ Performed by [Ni(H**

(OH)].

Kim J., Büyüktemiz M., Alici G., Baik M., Dede Y.

CHEMISTRY - A EUROPEAN JOURNAL, vol.2022, 2022 (SCI-Expanded)

- III. **Light-Driven Water Oxidation with Ligand-Engineered Prussian Blue Analogues**
Ahmad A. A., Ghobadi T. G. U., BÜYÜKTEMİZ M., ÖZBAY E., DEDE Y., KARADAŞ F.
INORGANIC CHEMISTRY, vol.61, no.9, pp.3931-3941, 2022 (SCI-Expanded)
- IV. **Building an Iron Chromophore Incorporating Prussian Blue Analogue for Photoelectrochemical Water Oxidation**
Ghobadi T. G. U., Ghobadi A., Demirtas M., BÜYÜKTEMİZ M., Ozvural K. N., YILDIZ E., Erdem E., YAĞLIOĞLU H. G., DURGUN E., DEDE Y., et al.
CHEMISTRY-A EUROPEAN JOURNAL, vol.27, no.35, pp.8966-8976, 2021 (SCI-Expanded)
- V. **When Does Fusing Two Rings Not Yield a Larger Ring? The Curious Case of BOPHY**
BÜYÜKTEMİZ M., Kilic M., Che Y., Zhao J., DEDE Y.
JOURNAL OF ORGANIC CHEMISTRY, vol.86, no.6, pp.4547-4556, 2021 (SCI-Expanded)
- VI. **Excited state structures projected onto two dimensions: correlations with luminescent behavior**
DEDE Y., Yalcin S., BÜYÜKTEMİZ M.
JOURNAL OF MATHEMATICAL CHEMISTRY, vol.58, no.10, pp.2254-2272, 2020 (SCI-Expanded)
- VII. **A Robust, Precious-Metal-Free Dye-Sensitized Photoanode for Water Oxidation: A Nanosecond-Long Excited State Lifetime through a Prussian Blue Analogue**
Ghobadi T. G. U., Ghobadi A., BÜYÜKTEMİZ M., YILDIZ E., Yildiz D. B., YAĞLIOĞLU H. G., DEDE Y., ÖZBAY E., KARADAŞ F.
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION, vol.59, no.10, pp.4082-4090, 2020 (SCI-Expanded)
- VIII. **Control of triboelectric charges on common polymers by photoexcitation of organic dyes**
Cezan S. D., Nalbant A. A., BÜYÜKTEMİZ M., DEDE Y., BAYTEKİN H. T., BAYTEKİN B.
NATURE COMMUNICATIONS, vol.10, 2019 (SCI-Expanded)
- IX. **A Noble-Metal-Free Heterogeneous Photosensitizer-Relay Catalyst Triad That Catalyzes Water Oxidation under Visible Light**
Ghobadi T. G. U., YILDIZ E., BÜYÜKTEMİZ M., Akbari S. S., Topkaya D., İŞÇİ Ü., DEDE Y., YAĞLIOĞLU H. G., KARADAŞ F.
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION, vol.57, no.52, pp.17173-17177, 2018 (SCI-Expanded)
- X. **Intracellular Modulation of Excited-State Dynamics in a Chromophore Dyad: Differential Enhancement of Photocytotoxicity Targeting Cancer Cells**
Kolemen S., Isik M., Kim G. M., Kim D., Geng H., Buyuktemiz M., Karatas T., Zhang X., DEDE Y., Yoon J., et al.
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION, vol.54, no.18, pp.5340-5344, 2015 (SCI-Expanded)
- XI. **Synthesis and dye sensitized solar cell applications of Bodipy derivatives with bis-dimethylfluorenyl amine donor groups**
Cakmak Y., Kolemen S., BÜYÜKTEMİZ M., DEDE Y., ERTEN ELA Ş.
NEW JOURNAL OF CHEMISTRY, vol.39, no.5, pp.4086-4092, 2015 (SCI-Expanded)
- XII. **Design and characterization of Bodipy derivatives for bulk heterojunction solar cells**
Kolemen S., Cakmak Y., Ozdemir T., ERTEN ELA Ş., BÜYÜKTEMİZ M., DEDE Y., AKKAYA E. U.
TETRAHEDRON, vol.70, no.36, pp.6229-6234, 2014 (SCI-Expanded)
- XIII. **Luminescence of BODIPY and Dipyrin: An MCSCF Comparison of Excited States**
BÜYÜKTEMİZ M., Duman S., DEDE Y.
JOURNAL OF PHYSICAL CHEMISTRY A, vol.117, no.7, pp.1665-1669, 2013 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Electronic Structure of BOPHY – When Does Adding Two Rings Not Make a Larger Ring?**
Büyüktemiz M., Dede Y.
CPC - XII, Karabük, Turkey, 12 - 13 October 2018

- II. **Quantum Chemical Analysis of Intersystem Crossing in Organic Fluorophores**
Yıldız D. B., Büyüktemiz M., Dede Y.
CPC - XII, Karabük, Turkey, 12 - 13 October 2018
- III. **Mimicking the Secondary Sphere of Homoprotocatechuate Dioxygenase HPCD Enzyme Active Site A Theoretical Study**
Büyüktemiz M., Dede Y.
COST ECOSTBio Meeting - Prague, Karabük, Turkey, 13 - 15 April 2016
- IV. **Secondary Sphere Histidine of Homoprotocatechuate Dioxygenase A Modified Model of the Enzymatic Core 21st 23rd 2016**
Büyüktemiz M., Dede Y.
COST Action CM1205 -CARISMA , Ljubljana, Karabük, Turkey, 21 - 23 March 2016

Metrics

Publication: 17

Citation (WoS): 342

Citation (Scopus): 339

H-Index (WoS): 8

H-Index (Scopus): 8