

## Assoc. Prof. GONCAGÜL SERDAROĞLU

### Personal Information

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### Education Information

Doctorate, Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, Kimya Bölümü, Turkey 2004 - 2008

Postgraduate, Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, Kimya Bölümü, Turkey 1999 - 2003

Undergraduate, Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, Kimya Bölümü, Turkey 1994 - 1998

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Sınır sinyal iletimini sağlayan bazı moleküllerin yapısal özelliklerinin ve etkinliklerinin moleküler orbital yöntemleriyle incelenmesi, Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2008

Postgraduate, Spektroskopik verilerden yararlanarak termodinamik büyüklüklerin hesaplanması, Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2003

### Research Areas

Chemistry, Computational Chemistry, Statistical Mechanics, Quantum Mechanics

### Academic Titles / Tasks

Associate Professor, Sivas Cumhuriyet University, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2019 - Continues

Assistant Professor, Sivas Cumhuriyet University, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2010 - Continues

Research Assistant, Sivas Cumhuriyet University, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2001 - 2010

### Courses

Öğretmenlik Uygulaması, Undergraduate, 2018 - 2019

Genel Kimya - I, Undergraduate, 2019 - 2020

Genel Kimya - I, Undergraduate, 2019 - 2020

Topluma Hizmet Uygulaması, Undergraduate, 2018 - 2019

Genel Kimya - II, Undergraduate, 2018 - 2019

Kimya - I, Undergraduate, 2019 - 2020  
IFO 1012 GENEL KİMYA II, Undergraduate, 2016 - 2017, 2017 - 2018  
Genel Kimya Lab - I, Undergraduate, 2018 - 2019  
İFÖ 4036 Öğretmenlik Uygulaması, Undergraduate, 2017 - 2018  
Genel Kimya - II, Undergraduate, 2017 - 2018  
IFO 1011 GENEL KİMYA I, Undergraduate, 2016 - 2017, 2017 - 2018  
Kimyada Özel Konular, Undergraduate, 2018 - 2019  
ILK 5015 FEN EGİTİMİNDE İLERİ KİMYA, Postgraduate, 2016 - 2017, 2017 - 2018  
IFO 1014 GENEL KİMYA LABORATUVARI II, Undergraduate, 2016 - 2017  
IFO 3020 TOPLUMA HİZMET UYGULAMALARI, Undergraduate, 2016 - 2017  
Genel Kimya Lab - II, Undergraduate, 2016 - 2017  
Öğretmenlik Uygulaması, Undergraduate, 2016 - 2017  
Topluma Hizmet Uygulamaları, Undergraduate, 2016 - 2017  
İSÖ 3024 TOPLUMA HİZMET UYGULAMALARI, Undergraduate, 2016 - 2017  
Fen Eğitiminde İleri Kimya, Postgraduate, 2017 - 2018  
IFO 1013 GENEL KİMYA LABORATUVARI I, Undergraduate, 2016 - 2017  
IFO 3017 KİMYADA OZEL KONULAR, Undergraduate, 2016 - 2017  
Genel Kimya Lab - I, Undergraduate, 2016 - 2017  
Kimyada Özel Konular, Undergraduate, 2016 - 2017  
Fen Teknoloji ve Toplum, Undergraduate, 2015 - 2016  
Fen Teknoloji ve Toplum, Undergraduate, 2015 - 2016  
Genel Kimya Lab - II, Undergraduate, 2015 - 2016  
Topluma Hizmet Uygulamaları, Undergraduate, 2015 - 2016  
Genel Kimya, Undergraduate, 2014 - 2015  
Topluma Hizmet Uygulamaları, Undergraduate, 2014 - 2015  
Çevre Kimyası, Undergraduate, 2014 - 2015  
Topluma Hizmet Uygulamaları, Undergraduate, 2014 - 2015  
Çevre Kimyası, Undergraduate, 2014 - 2015  
Topluma Hizmet Uygulaması, Undergraduate, 2014 - 2015  
Genel Kimya, Undergraduate, 2014 - 2015  
Öğretmenlik Uygulaması, Undergraduate, 2014 - 2015  
Genel Kimya, Undergraduate, 2009 - 2010  
Kimya-II, Undergraduate, 2009 - 2010

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **PEPPSI type complexes: Synthesis, x-ray structures, spectral studies, molecular docking and theoretical investigations**  
SERDAROĞLU G., ŞAHİN N., ÜSTÜN E., Tahir M. N. , Arici C., GÜRBÜZ N., ÖZDEMİR İ.  
POLYHEDRON, vol.204, 2021 (Journal Indexed in SCI)
- II. **Modeling the DFT structural and reactivity studies of a pyrimidine-6-carboxylate derivative with reference to its wavefunction-dependent, MD simulations and evaluation for potential antimicrobial activity**  
Smitha M., Mary Y. S. , Mary Y. S. , SERDAROĞLU G., Chowdhury P., Rana M., Umamahesvari H., Sarojini B. K. , Mohan B. J. , Pavithran R.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1237, 2021 (Journal Indexed in SCI)
- III. **Synthesis, identification, density functional and Hirshfeld surface studies of 2,2 '-disulfanediybis(tetrahydro-4H-cyclopenta[d][1,3,2]dioxaphosphole-2-sulfide)**  
Mkadmh A. M. , Safi Z. S. , Elkhaldy A. A. , Staples R. J. , KAYA S., SERDAROĞLU G.  
JOURNAL OF COMPUTATIONAL CHEMISTRY, 2021 (Journal Indexed in SCI)

- IV. **Two empirical formulae for estimating standard entropy of inorganic ionic solids and a possible connection between two associated electronic structure principles**  
KAYA S., Chattaraj P. K. , SERDAROĞLU G.  
POLYHEDRON, vol.202, 2021 (Journal Indexed in SCI)
- V. **Zeolite/Cellulose Acetate (ZCA) in Blend Fiber for Adsorption of Erythromycin Residue From Pharmaceutical Wastewater: Experimental and Theoretical Study**  
Jodeh S., Erman I., Hamed O., Massad Y., Hanbali G., Samhan S., Dagdag O., KAYA S., SERDAROĞLU G.  
FRONTIERS IN CHEMISTRY, vol.9, 2021 (Journal Indexed in SCI)
- VI. **The composite microbeads of alginate, carrageenan, gelatin, and poly(lactic-co-glycolic acid): Synthesis, characterization and Density Functional Theory calculations**  
BAYBAŞ D., SERDAROĞLU G., Semerci B.  
International Journal of Biological Macromolecules, vol.181, pp.322-338, 2021 (Journal Indexed in SCI Expanded)
- VII. **Adsorption of Eriochrome Black T on the chitin surface: Experimental study, DFT calculations and molecular dynamics simulation**  
Boumya W., Khnifira M., Machrouhi A., Abdennouri M., Sadiq M., Achak M., SERDAROĞLU G., KAYA S., ŞİMŞEK S., Barka N.  
Journal of Molecular Liquids, vol.331, 2021 (Journal Indexed in SCI Expanded)
- VIII. **Structural, electronic, and spectroscopic study on 1,5-methanoazocino[4,3-b]indole synthesized by TFB-based route**  
SERDAROĞLU G., ULUDAĞ N.  
CHEMICAL PAPERS, 2021 (Journal Indexed in SCI)
- IX. **Conformational Analysis, Spectroscopic Insights, Chemical Descriptors, ELF, LOL and Molecular Docking Studies of Potential Pyrimidine Derivative with Biological Activities**  
Mary Y. S. , Mary Y. S. , SERDAROĞLU G., KAYA S., Sarojini B. K. , Umamahesvari H., Mohan B. J.  
POLYCYCLIC AROMATIC COMPOUNDS, 2021 (Journal Indexed in SCI)
- X. **Hydroxy phenyl hydrazides and their role as corrosion impeding agent: A detail experimental and theoretical study**  
Singh A. K. , Chugh B., Singh M., Thakur S., Pani B., Guo L., KAYA S., SERDAROĞLU G.  
JOURNAL OF MOLECULAR LIQUIDS, vol.330, 2021 (Journal Indexed in SCI)
- XI. **Carbazole derivatives: Synthesis, spectroscopic characterization, antioxidant activity, molecular docking study, and the quantum chemical calculations**  
SERDAROĞLU G., ULUDAĞ N., Ercag E., Sugumar P., Rajkumar P.  
JOURNAL OF MOLECULAR LIQUIDS, vol.330, 2021 (Journal Indexed in SCI)
- XII. **Adsorption of adipic acid in Al/B-N/P nanocages: DFT investigations**  
Al-Otaibi J. S. , Mary Y. S. , Mary Y. S. , SERDAROĞLU G.  
JOURNAL OF MOLECULAR MODELING, vol.27, no.4, 2021 (Journal Indexed in SCI)
- XIII. **Experimental and DFT Modeling Studies for the Adsorptive Removal of Reactive Dyes from Wastewater**  
Junejo R., Shams Jalbani N., KAYA S., SERDAROĞLU G., ŞİMŞEK S., Memon S.  
SEPARATION SCIENCE AND TECHNOLOGY, 2021 (Journal Indexed in SCI)
- XIV. **A combined molecular dynamic simulation, DFT calculations, and experimental study of the eriochrome black T dye adsorption onto chitosan in aqueous solutions**  
Khnifira M., Boumya W., Abdennouri M., Sadiq M., Achak M., SERDAROĞLU G., KAYA S., ŞİMŞEK S., Barka N.  
International Journal of Biological Macromolecules, vol.166, pp.707-721, 2021 (Journal Indexed in SCI)
- XV. **Synthesis, crystal structure, hirshfeld surface analysis, spectroscopic, biological and first-principles studies of novel aminocoumarins**  
Bejaoui L., Brahmia A., Marzouki R., Dusek M., Eigner V., SERDAROĞLU G., KAYA S., Bour M. E. , Hassen R. B.  
Journal of Molecular Structure, vol.1221, 2020 (Journal Indexed in SCI Expanded)
- XVI. **Eco-friendly sodium gluconate and trisodium citrate inhibitors for low carbon steel in simulated cooling water system: Theoretical study and molecular dynamic simulations**  
SERDAROĞLU G., KAYA S., Tourir R.

- JOURNAL OF MOLECULAR LIQUIDS, vol.319, 2020 (Journal Indexed in SCI)
- XVII. **The electronic and spectroscopic investigation of ( +/- )- Dasycarpidone**  
SERDAROĞLU G., Uludag N.  
VIBRATIONAL SPECTROSCOPY, vol.111, 2020 (Journal Indexed in SCI)
- XVIII. **Conformational analysis and quantum descriptors of two bifonazole derivatives of immense anti-tuber potential by using vibrational spectroscopy and molecular docking studies**  
Mary Y. S. , Mary Y. S. , SERDAROĞLU G., Sarojini B. K.  
STRUCTURAL CHEMISTRY, 2020 (Journal Indexed in SCI)
- XIX. **Mixed ligand copper(II) chelates derived from an O, N, S- donor tridentate thiosemicarbazone: Synthesis, spectral aspects, FMO, and NBO analysis**  
Jacob J. M. , Kurup M. R. P. , Nisha K., SERDAROĞLU G., KAYA S.  
POLYHEDRON, vol.189, 2020 (Journal Indexed in SCI)
- XX. **Computational Study of 2,3-dihydrospiro[carbazole-1,2'-xx-[1,3]dithiolan]-4(9H)-one compound: Structure, FT-IR, NMR, NLO, and NBO Analyses**  
Serdaroglu G., Uludag N.  
Journal Of The Indian Chemical Society, vol.97, no.10, pp.2026-2030, 2020 (Journal Indexed in SCI Expanded)
- XXI. **Harmine derivatives: a comprehensive quantum chemical investigation of the structural, electronic (FMO, NBO, and MEP), and spectroscopic (FT-IR and UV-Vis) properties**  
SERDAROĞLU G.  
RESEARCH ON CHEMICAL INTERMEDIATES, vol.46, no.1, pp.961-982, 2020 (Journal Indexed in SCI)
- XXII. **Synthesis, in vitro anticancer activities, and quantum chemical investigations on 1,3-bis-(2-methyl-2-propenyl)benzimidazolium chloride and its Ag(I) complex**  
SERDAROĞLU G., ŞAHİN BÖLÜKBAŞI S., Barut-Celepçi D., Sevinçek R., ŞAHİN N., GÜRBÜZ N., ÖZDEMİR İ.  
Journal of Chemical Research, 2020 (Journal Indexed in SCI Expanded)
- XXIII. **Equilibrium, thermodynamic, and density functional theory modeling studies for the removal of dichromate ions from wastewater using calix[4]arene modified silica resin**  
Junejo R., Jalbani N. S. , Memon S., KAYA S., ERKAN S., SERDAROĞLU G., Palabiyik I. M.  
Journal of Chemical and Engineering Data, 2020 (Journal Indexed in SCI Expanded)
- XXIV. **The synthesis and spectroscopic characterization of (+)-demethoxyaspidospermine: Density functional theory calculations of the structural, electronic, and non-linear optic and spectroscopic properties**  
Serdaroglu G., Uludag N.  
JOURNAL OF CHEMICAL RESEARCH, vol.43, pp.531-541, 2019 (Journal Indexed in SCI)
- XXV. **Direct arylation of heteroarenes by PEPPSI-type palladium-NHC complexes and representative quantum chemical calculations for the compound which the structure was determined by X-ray crystallography**  
ŞAHİN N., SERDAROĞLU G., Dusunceli S. D. , Tahir M. N. , Arici C., ÖZDEMİR İ.  
JOURNAL OF COORDINATION CHEMISTRY, vol.72, pp.3258-3284, 2019 (Journal Indexed in SCI)
- XXVI. **An efficient method for the azocino[4,3-b]indole framework of strychnos alkaloids: OFT investigations on the electronic and spectroscopic properties**  
Uludag N., SERDAROĞLU G., Colak N.  
JOURNAL OF THE INDIAN CHEMICAL SOCIETY, vol.96, no.9, pp.1221-1226, 2019 (Journal Indexed in SCI)
- XXVII. **Spectroscopic (FT-IR, NMR) and Computational Investigation of 2-(2-Aminoethyl)-1,2,3,4,9-Tetrahydrocarbazole: NBO, NLO, FMO, MEP Analysis**  
SERDAROĞLU G., Uludag N.  
JOURNAL OF STRUCTURAL CHEMISTRY, vol.60, no.8, pp.1267-1284, 2019 (Journal Indexed in SCI)
- XXVIII. **A DFT Investigation on the Structure, Spectroscopy (FT-IR and NMR), Donor-Acceptor Interactions and Non-Linear Optic Properties of (+/-)-1,2-Dehydroaspidospermidine**  
Uludag N., SERDAROĞLU G.  
CHEMISTRYSELECT, vol.4, no.23, pp.6870-6878, 2019 (Journal Indexed in SCI)
- XXIX. **The synthesis and characterization of 1-(Allyl)-3-(2-methylbenzyl) benzimidazolium chloride: FT-IR,**

## **NMR, and DFT computational investigation**

SERDAROĞLU G., ŞAHİN N.

JOURNAL OF MOLECULAR STRUCTURE, vol.1178, pp.212-221, 2019 (Journal Indexed in SCI)

- XXX. **Concise total synthesis of (+/-)-aspidospermidine and computational study: FT-IR, NMR, NBO, NLO, FMO, MEP diagrams**  
SERDAROĞLU G., ULUDAĞ N.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1166, pp.286-303, 2018 (Journal Indexed in SCI)
- XXXI. **A novel synthesis of octahydropyrido[3,2-c]carbazole framework of aspidospermidine alkaloids and a combined computational, FT-IR, NMR, NBO, NLO, FMO, MEP study of the cis-4a-Ethyl-1(2hydroxyethyl)-2,3,4,4a,5,6,7,11c-octahydro-1H-pyrido[3,2-c] carbazole**  
ULUDAĞ N., SERDAROĞLU G., YİNANÇ A.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1161, pp.152-168, 2018 (Journal Indexed in SCI)
- XXXII. **An improved synthesis, spectroscopic (FT-IR, NMR) study and DFT computational analysis (IR, NMR, UV-Vis, MEP diagrams, NBO, NLO, FMO) of the 1,5-methanoazocino[4,3-b]indole core structure**  
ULUDAĞ N., SERDAROĞLU G.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1155, pp.548-560, 2018 (Journal Indexed in SCI)
- XXXIII. **A computational study on relationship between quantum chemical parameters and reactivity of the zwitterionic GABA and its agonists: Solvent effect**  
SERDAROĞLU G.  
INDIAN JOURNAL OF CHEMISTRY SECTION A-INORGANIC BIO-INORGANIC PHYSICAL THEORETICAL & ANALYTICAL CHEMISTRY, vol.56, no.11, pp.1143-1153, 2017 (Journal Indexed in SCI)
- XXXIV. **Ab Initio Calculations on some Antiepileptic Drugs such as Phenytoin, Phenbarbital, Ethosuximide and Carbamazepine**  
Serdaroglu G., Ortiz J. V.  
STRUCTURAL CHEMISTRY, vol.28, no.4, pp.957-964, 2017 (Journal Indexed in SCI)
- XXXV. **DFT and Ab Initio Computational Study on the Reactivity Sites of the GABA and its Agonists, Such as CACA, TACA, DABA, and Muscimol: In the Gas Phase and Dielectric Media**  
Serdaroglu G.  
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.111, no.14, pp.3938-3948, 2011 (Journal Indexed in SCI)
- XXXVI. **A DFT Study of Determination of the Reactive Sites of the Acetylcholine and Its Agonists: In the Gas Phase and Dielectric Medium**  
Serdaroglu G.  
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.111, no.10, pp.2464-2475, 2011 (Journal Indexed in SCI)
- XXXVII. **DFT and statistical mechanics entropy calculations of diatomic and polyatomic molecules**  
Serdaroglu G., Durmaz S.  
INDIAN JOURNAL OF CHEMISTRY SECTION A-INORGANIC BIO-INORGANIC PHYSICAL THEORETICAL & ANALYTICAL CHEMISTRY, vol.49, no.7, pp.861-866, 2010 (Journal Indexed in SCI)

## **Articles Published in Other Journals**

- I. **Conformational analysis and DFT investigations of two triazole derivatives and its halogenated substitution by using spectroscopy, AIM and Molecular docking**  
KUMAR V. S. , Mary Y. S. , Mary Y. S. , SERDAROĞLU G., Rad A. S. , Roxy M. S. , Manjula P., Sarojini B.  
Chemical Data Collections, vol.31, pp.100625, 2021 (Refereed Journals of Other Institutions)
- II. **Conformational analysis and quantum descriptors of two new imidazole derivatives by experimental, DFT, AIM, molecular docking studies and adsorption activity on graphene**  
Kumar V. S. , Mary Y. S. , Pradhan K., Brahman D., Mary Y. S. , SERDAROĞLU G., Rad A. S. , Roxy M. S.  
HELIYON, vol.6, no.10, 2020 (Journal Indexed in ESCI)

- III. **Experimental and theoretical investigations on electronic structure of 5-(hydroxymethyl)-2-furaldehyde: An antisickling agent identified from terminalia bellirica**  
P R., S S., Suganya R., M Kesavan K., SERDAROĞLU G., Gunasekaran S.  
Chemical Data Collections, vol.29, pp.100498, 2020 (Refereed Journals of Other Institutions)
- IV. **New route for synthesis of 2-(2,2-dimethoxyethyl)-1,2,3,4,5,6-hexahydro-1,5-methanoazocino[4,3-b]indole and DFT investigation**  
ULUDAĞ N., SERDAROĞLU G.  
HELIYON, vol.6, no.6, 2020 (Journal Indexed in ESCI)
- V. **Effect of substitution on corrosion inhibition properties of three Imidazole derivatives on mild steel in 1M HCl**  
Boukalah M., Elmsellem H., Krim O., SERDAROĞLU G., B H., Elidrissi A., KAYA S., I Warad I. W.  
Arabian Journal of Chemical and Environmental Researches, vol.7, no.2, pp.126-143, 2020 (Refereed Journals of Other Institutions)
- VI. **A Computational study predicting the chemical reactivity behavior of 1-substituted 9-ethyl- $\beta$ CCM derivatives: DFT- Based Quantum Chemical Descriptors**  
Serdaroğlu G., Elik M.  
Turkish Computational and Theoretical Chemistry, vol.2, no.1, pp.1-11, 2018 (Refereed Journals of Other Institutions)
- VII. **An entry to the synthesis of uleine-type alkaloids by Fischer indole synthesis reactions: FT-IR, NMR spectroscopy and computational study of the substituted carbazole compound**  
SERDAROĞLU G., Uludag N.  
Bulgarian Chemical Communications, vol.50, pp.25-37, 2018 (Refereed Journals of Other Institutions)
- VIII. **A Computational Study of 1-Substituted Methyl 9-Methyl-9H-Pyrido[3,4-b]indole-3-Carboxylate: Quantum Chemical Descriptors, FMO and NBO**  
Elik M., Serdaroğlu G.  
Cumhuriyet Science Journal, vol.38, no.4, pp.138-155, 2017 (Other Refereed National Journals)
- IX. **DFT Based Quantum Chemical Descriptors of 1-Substituted TH $\beta$ C, DH $\beta$ C,  $\beta$ C Derivatives**  
Serdaroğlu G., Elik M.  
Cumhuriyet Science Journal, vol.38, no.4, pp.647-660, 2017 (Other Refereed National Journals)
- X. **Mirisetin ve Kuersetin Bileşiklerinin Antioksidan Etkinliklerinin DFT Yöntemleriyle İncelenmesi**  
ELİK M., SERDAROĞLU G., Özkan R.  
C.Ü. Fen Edebiyat Fakültesi Fen Bilimleri Dergisi, vol.28, no.2, pp.53-65, 2007 (Other Refereed National Journals)
- XI. **Dopamin ve Amfetamin Moleküllerinin Elektron Yük Dağılımları ve Elektrostatik Özelliklerinin Moleküler Orbital Yöntem ile İncelenmesi**  
SERDAROĞLU G., ELİK M.  
C.Ü. Fen Edebiyat Fakültesi Fen Bilimleri Dergisi, vol.28, no.2, pp.39-52, 2007 (Other Refereed National Journals)

### Refereed Congress / Symposium Publications in Proceedings

- I. **A THEORETICAL AND COMPUTATIONAL INSIGHT ON THE TOXICITY OF THE ORGANIC CHEMICALS**  
SERDAROĞLU G., KAYA S.  
The Third Edition of The International Congress On Water And Environment Studies, Morocco, Morocco, 10 December 2020
- II. **Electrochemical and theoretical study of the behaviour of a Carbon steel in HCl medium by some triazole type compounds**  
Merimi İ., B H., Merimi C., SZUMIATA T., SERDAROĞLU G., KAYA S.  
4th Edition of the International Virtual Conference on Materials & Environmental Science, Morocco, Morocco, 18 November 2020
- III. **The metal chelation effect on the chemical reactivity of the (E)-2-(2-(pyridin-2-ylmethylene)hydrazineyl) phenol: Theoretical and computational investigation**

Kaya S., Serdaroğlu G., Merimi İ.

4th Edition of the International Virtual Conference on Materials & Environmental Science, 18 - 27 November 2020, pp.15-21

- IV. **The Computational Study on methyl (1R,4S,5R)-4-hydroxy-6-oxo-1,3,4,5,6,7-hexahydro-2H-1,5-methanoazocino[4,3-b]indole-2-carboxylate: FT-IR, NMR, NBO, and FMO Analyses**  
SERDAROĞLU G., ULUDAĞ N.  
4th Edition of the International Virtual Conference on Materials & Environmental Science, Morocco, Morocco, 18 - 27 November 2020
- V. **The substituent effect on chemical reactivity of (9H-pyrido[3,4-b]indole-3-yl)methanol: Spectroscopic and electronic investigation**  
SERDAROĞLU G., KAYA S.  
4th Edition of the International Virtual Conference on Materials & Environmental Science, Morocco, Morocco, 18 - 27 November 2020
- VI. **DFT investigation of Chloro[1-(2-Methyl-2-propenyl)-3-(4-chlorobenzyl)benzimidazole-2-ylidene]silver(I)**  
SERDAROĞLU G., ŞAHİN N.  
5nd International Conference on Material Science and Technology, Kapadokya, Turkey, 16 October 2020, vol.5, pp.214-217
- VII. **A Computational Study Of 2,3-Dihydrospiro[Carbazole-1,2'-[1,3]Dithiolan]-4(9H)-One Compound: Structure, FT-IR, NMR, NLO, and NBO Analyses**  
SERDAROĞLU G., ULUDAĞ N.  
6 th International Conference on New Trends in Chemistry, Girne, Cyprus (Kkctc), 16 October 2020, vol.97, pp.1-6
- VIII. **A NEW EQUATION TO CALCULATE THE CHEMICAL HARDNESS OF THE MOLECULES**  
KAYA S., SERDAROĞLU G., Katin K. P.  
5nd International Conference on Material Science and Technology, Kapadokya, Turkey, 16 October 2020, vol.5, pp.282
- IX. **New Developments on the Application Maximum Entropy Principle: A Theoretical Study**  
SERDAROĞLU G., KAYA S.  
5nd International Conference on Material Science and Technology, Kapadokya, Turkey, 16 October 2020, vol.5, pp.281
- X. **A DFT Investigation on 2-((3R)-3-ethyl-2,3,4,9-tetrahydrospiro[carbazole-1,2'xx-[1,3]dithiolan]-2-yl)-1-(methyl-azaneyl)ethan-1-one**  
SERDAROĞLU G., ULUDAĞ N.  
4nd International Conference on Material Science and Technology, Ankara, Turkey, 18 - 20 October 2019, vol.4, pp.770-774
- XI. **The electronic and spectroscopic investigation of uleine: A Computational Study**  
SERDAROĞLU G., ULUDAĞ N.  
4. International Conference on Material Science and Technology, Ankara, Turkey, 18 - 20 October 2019, vol.4, pp.775-779
- XII. **THE STRUCTURAL, ELECTRONIC AND PHYSICAL PROPERTIES OF CATIONIC NHC-AG(II) COMPLEX: A DFT STUDY**  
SERDAROĞLU G., ŞAHİN N.  
4. International Conference on Material Science and Technology, Ankara, Turkey, 18 - 20 October 2019, vol.4, pp.765-769
- XIII. **A QUANTUM CHEMICAL INVESTIGATION ON CATIONIC 2-BROMO-1-(4-(TERT-BUTYL)BENZYL)-3-(2-METHYLALLYL)-2,3-DIHYDRO-1H-BENZO[D]IMIDAZOLE**  
SERDAROĞLU G.  
I. International Cancer Days, Sivas, Turkey, 19 - 21 September 2019, vol.1, pp.561-567
- XIV. **INTRAMOLECULAR INTERACTIONS OF (S)-2-(1-(ANTHRACEN-9-YL)-9-ETHYL-9H-PYRIDO[3,4-B]INDOL-3-YL)PROPANE-2-OL**  
SERDAROĞLU G.

I. International Cancer Days, Sivas, Turkey, 19 - 21 September 2019, vol.1, pp.555-560

- XV. **SOLVENT EFFECT ON THE ELECTRONIC STRUCTURE, PHYSICOCHEMICAL PROPERTIES AND QUANTUM CHEMICAL PARAMETERS OF THE SUBSTITUTED INDOLE COMPOUND**  
SERDAROĞLU G., ŞAHİN N.  
III. Battalgazi Bilimsel Araştırmalar Kongresi, Malatya, Turkey, 21 - 23 September 2019, vol.1, pp.771-777
- XVI. **CONFORMATIONAL DEPENDENCE OF THE INTRA MOLECULAR INTERACTIONS IN N-HETEROCYCLIC CARBENE COMPLEX**  
ŞAHİN N., SERDAROĞLU G.  
III. Uluslararası Battalgazi Bilimsel Çalışmalar Kongresi, Malatya, Turkey, 21 - 23 September 2019, vol.1, pp.766-770
- XVII. **A DFT AND AB INITIO INVESTIGATION ON THE STRUCTURAL, ELECTRONIC AND SPECTROSCOPIC (FT-IR, UV-VIS) PROPERTIES OF THE TRYPTOLINES**  
SERDAROĞLU G.  
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SERDAROĞLU G.  
21. Ulusal Kimya Kongresi, Turkey, 23 - 27 August 2007
- LIV. **Spektroskopik Verilerin Kullanılması ile Termodinamik Büyüklüklerin Hesaplanması**  
SERDAROĞLU G.  
XVIII. Ulusal Kimya Kongresi, Turkey, 5 - 09 July 2004, vol.23, pp.614

## Supported Projects

Serdaroğlu G., Project Supported by Higher Education Institutions, Dasikarpidon türevi bileşiklerin yapısal, elektronik, spektroskopik ve optik özelliklerinin moleküler orbital yöntemlerle incelenmesi, 2019 - 2020

SERDAROĞLU G., Project Supported by Higher Education Institutions, 1,5-Metanoazosino[4,3-b] indollerin sentezinde kullanılan bileşiklerin elektronik ve optik özelliklerinin kuantum kimyasal yöntemlerle incelenmesi, 2018 - 2018

SERDAROĞLU G., Project Supported by Higher Education Institutions, 1, 3- disüstitüte- 9H-pyrido[3,4-b] indollerin kimyasal aktiviteleri üzerine süstitüent etkisinin Hesaplamalı Kimya ile incelenmesi, 2017 - 2018

SERDAROĞLU G., ELİK M., Project Supported by Higher Education Institutions, Beta Karbonil Bileşiklerinin Antitümör Özellikleri Üzerine Hesaplamalı Kimya Çalışması, 2016 - 2017

SERDAROĞLU G., Project Supported by Higher Education Institutions, Antiepileptik ilaç moleküllerinin etkinliklerinin açıklanmasında Elektron Propagator Teorinin EPT kullanılması üzerine hesaplamalı Çalışma, 2013 - 2014

SERDAROĞLU G., Project Supported by Higher Education Institutions, Sinir Sinyal İletimini Sağlayan Bazı Moleküllerin Yapısal Özelliklerinin Ve Etkinliklerinin Moleküler Orbital Yöntemleriyle İncelenmesi, 2006 - 2008

## Activities in Scientific Journals

Turkish Computational and Theoretical Chemistry, Editor, 2017 - Continues

## Tasks In Event Organizations

Serdaroğlu G., 2nd International Conference on Physical Chemistry and Functional Materials, Scientific Congress, Nevşehir, Turkey, Haziran 2019

Serdaroğlu G., 8th European Chemistry Congress, Scientific Congress, France, Haziran 2018

Serdaroğlu G., II.Ulusal Okul Öncesi Eğitimi Öğrenci Kongresi, Scientific Congress, Sivas, Turkey, Mayıs 2007

## Mobility Activity

Post Doc, Post Doc, Auburn University, United States Of America, 2013 - 2014

Erasmus Programme, Lecturing, Aalborg Universitet (Aalborg University), Denmark, 2010 - 2010

## Edit Congress and Symposium Activities

Biyomolekül Modelleme Teknikleri ve Uygulamaları, Working Group, İstanbul, Turkey, 2010

## Citations

Total Citations (WOS):111

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## Awards

Serdaroğlu G., Kaya S., EN İYİ SÖZLÜ SUNUM ÖDÜLÜ, Abdelmalek Essaadi University, December 2020

Serdaroğlu G., EN İYİ POSTER ÖDÜLÜ, International Conference On Physical Chemistry And Functional Materials, Royal Society Of Chemistry, July 2018

Serdaroğlu G., POSTER ÖDÜLÜ, 9Th Global Chemistry Congress, June 2018