

# **Prof. NURGÜL SEFEROĞLU**

## **Personal Information**

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## **International Researcher IDs**

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ScopusID: 8646814400

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## **Education Information**

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 2002 - 2007

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (Yıl) (Tezli), Turkey 1998 - 2001

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, Turkey 1993 - 1998

## **Foreign Languages**

English, B2 Upper Intermediate

## **Dissertations**

Doctorate, Üç Boyutlu Blume-Emery-Griffiths Modelin Faz Geçişlerinin Cellular Automaton ile Simülasyonu, Gazi University, Fen Bilimleri Enstitüsü, Fizik (Dr), 2007

Postgraduate, Mikroskopik safsızlık içeren sistemlerde sonlu büyülüklük analizi, Hacettepe University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (Yıl) (Tezli), 2001

## **Research Areas**

Atomic and Molecular Physics, Interdisciplinary Physics and Related Science and Technology Areas, Chemistry, Natural Sciences

## **Academic Titles / Tasks**

Professor, Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler , 2019 - Continues

Associate Professor, Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler, 2014 - 2019

Assistant Professor, Gazi University, Teknik Bilimler Meslek Yüksekokulu, Makine ve Metal Teknolojileri Bölümü, 2009 - 2014

Assistant Professor, Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler Anabilim Dalı (Disiplinlerarası), 2008 - 2014

Research Assistant, Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 1998 - 2001

## **Academic and Administrative Experience**

Manager of Research and Application Center, Gazi University, Teknolojik Boyarmaddeler Ve Malzemeler Uygulama Ve Araştırma Merkezi , 2021 - 2022

## **Courses**

Yeni Nesil Teknolojik Malzemeler ve Uygulama Alanları, Doctorate, 2021 - 2022, 2020 - 2021

Yoğunluk Fonksiyonel Teorisi I, Postgraduate, 2016 - 2017

## **Advising Theses**

Seferoğlu N., Ocak C., Asenkron Motorlarda Rotor Soğutma Kanallarının Elektromanyetik Analizi ve Optimum Tasarımı, Postgraduate, F.Teke(Student), Continues

Seferoğlu N., Kumarin İçeren Yeni Boyar Maddelerin Boya Duyarlı Güneş Hücrelerinde Kullanılabilirliğinin Belirlenmesi, Postgraduate, T.Olgı(Student), Continues

SEFEROĞLU N., Theoretical Investigations Of Anion Sensitivity Properties And Nlo Characteristics Of D-Π-A-Π-D Type Functional Dyes Including, Postgraduate, A.BURAK(Student), 2020

SEFEROĞLU N., Theoretical Investigation Of Photophysical Properties And The Tautomeric Structures Of New Organic Molecules Based On The Coumarin-Pyrazolone, Postgraduate, T.CANPOLAT(Student), 2019

SEFEROĞLU N., Theoretical Investigation Of The Structures Of A New Series Azo Dyes, Postgraduate, G.TOPRAKÇIOĞLU(Student), 2019

SEFEROĞLU N., Multicritical phase diagrams of spin-3/2 ising model, Postgraduate, G.SEZGİN(Student), 2011

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

### **I. D- π-A azo dyes bearing thiazole-diphenylamine units: Synthesis, photophysical and molecular structure properties, and use for dyeing of polyester fabrics**

YAMAN M., Renklitepe C., Kaplan G., Sakalli Y., SEFEROĞLU N., Şahin E., SEFEROĞLU Z.  
Dyes and Pigments, vol.222, 2024 (SCI-Expanded)

### **II. Colorimetric and fluorimetric detection of CN<sup>-</sup> ion using a highly selective and sensitive chemosensor derived from coumarin-hydrazone**

Bouali W., YAMAN M., SEFEROĞLU N., SEFEROĞLU Z.  
Journal of Photochemistry and Photobiology A: Chemistry, vol.448, 2024 (SCI-Expanded)

### **III. The syntheses, photophysical properties and pH-sensitive studies of heterocyclic azo dyes bearing coumarin-thiophene-thiazole**

Yahya M., Metin R., AYDINER B., SEFEROĞLU N., SEFEROĞLU Z.  
Analytical Sciences, vol.39, no.6, pp.829-842, 2023 (SCI-Expanded)

### **IV. Synthesis, nonlinear optical properties, photophysical, and theoretical studies of azo dye bearing coumarin-thiophene**

Yahya M., SEFEROĞLU N., Kaplan G., Nural Y., Barsella A., SEFEROĞLU Z.  
Journal of Molecular Structure, vol.1273, 2023 (SCI-Expanded)

### **V. The synthesis, photophysical properties, DFT study and textile applications of fluorescent azo dyes bearing coumarin-thiazole**

YAMAN M., İpek Dirin E., Kaplan G., SEFEROĞLU N., SEFEROĞLU Z.  
Journal of Molecular Liquids, vol.368, 2022 (SCI-Expanded)

### **VI. A Novel Fluorescent Probe for the Detection of Cyanide Ions in Solutions and Studies on Its Biophysical Interactions with ctDNA and Proteases**

- Doyuran B., GÖKOĞLU E., Zouitini A., Keles E., TAŞKIN TOK T., SEFEROĞLU N., SEFEROĞLU Z.  
JOURNAL OF FLUORESCENCE, vol.32, no.6, pp.2173-2188, 2022 (SCI-Expanded)
- VII. **Synthesis, characterization, molecular docking and in vitro screening of new metal complexes with coumarin Schiff base as anticholine esterase and antipancreatic cholesterol esterase agents**  
ŞAHİN Ö., Özmen Özdemir Ü., SEFEROĞLU N., Adem Ş., SEFEROĞLU Z.  
JOURNAL OF BIOMOLECULAR STRUCTURE & DYNAMICS, vol.40, no.10, pp.4460-4474, 2022 (SCI-Expanded)
- VIII. **Novel carbazole based hydrazone type light-up chemosensors**  
Uzgören-Baran A., Keskin E., Çakmaz D., AYDINER B., ÖZER D., SEFEROĞLU N., SEFEROĞLU Z.  
Journal of Molecular Structure, vol.1250, 2022 (SCI-Expanded)
- IX. **Novel fluorescent coumarin-thiazole based sensors for selective determination of cyanide in aqueous media**  
Kandemir E., ÖZKÜTÜK M., AYDINER B., SEFEROĞLU N., ERER H., SEFEROĞLU Z.  
Journal of Molecular Structure, vol.1249, 2022 (SCI-Expanded)
- X. **Synthesis of novel acylthioureas bearing naphthoquinone moiety as dual sensor for high-performance naked-eye colorimetric and fluorescence detection of CN<sup>-</sup> and F<sup>-</sup> ions and its application in water and food samples**  
Nural Y., Karasu E., Keleş E., AYDINER B., SEFEROĞLU N., Efeoğlu Ç., ŞAHİN E., SEFEROĞLU Z.  
Dyes and Pigments, vol.198, 2022 (SCI-Expanded)
- XI. **New naphthoquinone-imidazole hybrids: Synthesis, anion recognition properties, DFT studies and acid dissociation constants**  
Nural Y., Keleş E., AYDINER B., SEFEROĞLU N., Atabay H., SEFEROĞLU Z.  
Journal of Molecular Liquids, vol.327, 2021 (SCI-Expanded)
- XII. **Synthesis and investigation of photophysical, NLO and thermal properties of D-π-A-π-D dyes**  
Özarslan A., Çakmaz D., Erol F., Şenöz H., Seferoğlu N., Barsella A., Seferoğlu Z.  
Journal of Molecular Structure, vol.1229, 2021 (SCI-Expanded)
- XIII. **Amino-substituted-1,1-dicyano-2,4-diaryl-1,3-butadiene chromophores: Synthesis and photophysical properties**  
Yahya M., SEFEROĞLU N., Barsella A., Achelle S., SEFEROĞLU Z.  
Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, vol.248, 2021 (SCI-Expanded)
- XIV. **The novel sensitive and selective chemosensors for determination of multiple analytes**  
Cakmaz D., Ozarslan A., AYDINER B., Eroglu A. B., SEFEROĞLU N., ŞENÖZ H., SEFEROĞLU Z.  
DYES AND PIGMENTS, vol.183, 2020 (SCI-Expanded)
- XV. **A highly sensitive and selective fluorescent turn-on chemosensor bearing a 7-diethylaminocoumarin moiety for the detection of cyanide in organic and aqueous solutions**  
AYDINER B., Sahin O., Cakmaz D., Kaplan G., Kaya K., ÖZDEMİR ÖZMEN Ü., SEFEROĞLU N., SEFEROĞLU Z.  
NEW JOURNAL OF CHEMISTRY, vol.44, no.44, pp.19155-19165, 2020 (SCI-Expanded)
- XVI. **Indole based push-pull dyes bearing azo and dimethine: Synthesis, spectroscopic, NLO, anion affinity properties and thermal characterization**  
Keles E., Yahya M., Aktan E., Aydiner B., Seferoğlu N., Barsella A., Seferoğlu Z.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.402, 2020 (SCI-Expanded)
- XVII. **Experimental and theoretical studies on monoazo dye including diphenylamine and N-methyldiphenylamine derivatives**  
Aksungur T., Erol F., Seferoğlu N., Seferoğlu Z.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1217, 2020 (SCI-Expanded)
- XVIII. **Polysubstituted pyrrolidines linked to 1,2,3-triazoles: Synthesis, crystal structure, DFT studies, acid dissociation constant, drug-likeness, and anti-proliferative activity**  
İNCE T., SERTTAŞ R., DEMİR B., Atabay H., SEFEROĞLU N., ERDOGAN S., ŞAHİN E., Erat S., NURAL Y.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1217, 2020 (SCI-Expanded)
- XIX. **Styryl-based new organic chromophores bearing free amino and azomethine groups: synthesis, photophysical, NLO, and thermal properties**  
Putra A. U., Cakmaz D., SEFEROĞLU N., Barsella A., SEFEROĞLU Z.

- BEILSTEIN JOURNAL OF ORGANIC CHEMISTRY, vol.16, pp.2282-2296, 2020 (SCI-Expanded)
- XX. **A new mechanism for selective recognition of cyanide in organic and aqueous solution**  
Keles E., AYDINER B., NURAL Y., SEFEROĞLU N., ŞAHİN E., SEFEROĞLU Z.  
EUROPEAN JOURNAL OF ORGANIC CHEMISTRY, vol.2020, no.30, pp.4681-4692, 2020 (SCI-Expanded)
- XXI. **Microwave-enhanced and conventional procedures for the synthesis of coumarin-thiophene amides, sulfonamide, and urea derivatives: Synthesis, photophysical activities, and multiple anions signalling via different mechanisms**  
Yahaya I., Keles E., Putra A. U., Yahya M., Seferoğlu N., Seferoğlu Z.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1204, 2020 (SCI-Expanded)
- XXII. **Substituent dependent selectivity of fluorescent chemosensors derived from coumarin for biologically relevant DNA structures and anions**  
Chemchem M., Yahaya I., AYDINER B., Doluca O., SEFEROĞLU N., SEFEROĞLU Z.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.305, 2020 (SCI-Expanded)
- XXIII. **Novel highly functionalized 1,4-naphthoquinone 2-iminothiazole hybrids: Synthesis, photophysical properties, crystal structure, DFT studies, and anti(myco)bacterial/antifungal activity**  
GEMİLİ M., NURAL Y., Keles E., AYDINER B., SEFEROĞLU N., ÜLGER M., ŞAHİN E., Erat S., SEFEROĞLU Z.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1196, pp.536-546, 2019 (SCI-Expanded)
- XXIV. **Novel benzildihydrazone based Schiff bases: Syntheses, characterization, thermal properties, theoretical DFT calculations and biological activity studies**  
ELMACI G., Duyar H., AYDINER B., Yahaya I., SEFEROĞLU N., ŞAHİN E., Celik S. P., AÇIK L., SEFEROĞLU Z.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1184, pp.271-280, 2019 (SCI-Expanded)
- XXV. **Detailed theoretical characterization of azo chromophores containing dicyanomethylene acceptor and various coupling components by DFT**  
SEFEROĞLU N., Toprakcioglu G.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1181, pp.360-372, 2019 (SCI-Expanded)
- XXVI. **Improved one-pot synthetic conditions for synthesis of functionalized fluorescent coumarin-thiophene hybrids: Syntheses, DFT studies, photophysical and thermal properties**  
Yahaya I., SEFEROĞLU N., SEFEROĞLU Z.  
TETRAHEDRON, vol.75, no.14, pp.2143-2154, 2019 (SCI-Expanded)
- XXVII. **Novel fluorescent coumarin-thiophene-derived Schiff bases: Synthesis, effects of substituents, photophysical properties, DFT calculations, and biological activities**  
Yahaya I., Chemchem M., AYDINER B., SEFEROĞLU N., Tepe F. E., AÇIK L., Cerci N. A., TÜRK M., SEFEROĞLU Z.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.368, pp.296-306, 2019 (SCI-Expanded)
- XXVIII. **A novel and synthetically facile coumarin-thiophene-derived Schiff base for selective fluorescent detection of cyanide anions in aqueous solution: Synthesis, anion interactions, theoretical study and DNA-binding properties**  
Chemchem M., Yahaya I., AYDINER B., SEFEROĞLU N., Doluca O., Merabet N., SEFEROĞLU Z.  
TETRAHEDRON, vol.74, no.48, pp.6897-6906, 2018 (SCI-Expanded)
- XXIX. **Novel 1,4-naphthoquinone N-arylthioureas: Syntheses, crystal structure, anion recognition properties, DFT studies and determination of acid dissociation constants**  
GEMİLİ M., NURAL Y., Keles E., AYDINER B., SEFEROĞLU N., ŞAHİN E., SARI H., SEFEROĞLU Z.  
JOURNAL OF MOLECULAR LIQUIDS, vol.269, pp.920-932, 2018 (SCI-Expanded)
- XXX. **Triphenylamine-based allylidemalononitrile chromophores: synthesis, and photophysical and second-order nonlinear optical properties**  
Catal E., Keles E., SEFEROĞLU N., Achelle S., Barsella A., le Guen F. R., SEFEROĞLU Z.  
NEW JOURNAL OF CHEMISTRY, vol.42, no.18, pp.15052-15060, 2018 (SCI-Expanded)
- XXXI. **A coumarin-pyrazolone based fluorescent probe for selective colorimetric and fluorimetric fluoride detection: Synthesis, spectroscopic properties and DFT calculations**  
Babur B., SEFEROĞLU N., SEFEROĞLU Z.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1161, pp.218-225, 2018 (SCI-Expanded)
- XXXII. **The syntheses, molecular structure analyses and DFT studies on new benzil monohydrazone based**

### **Schiff bases**

- ELMACI G., DUYAR H., AYDINER B., SEFEROĞLU N., NAZIRI M. A., ŞAHİN E., SEFEROĞLU Z.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1162, pp.37-44, 2018 (SCI-Expanded)
- XXXIII. **Synthesis, crystal structure, DFT studies, acid dissociation constant, and antimicrobial activity of methyl 2-(4-chlorophenyl)-7a-((4-chlorophenyl)carbamothioyl)-1-oxo-5,5-diphenyl-3-thioxohexahydro-1H-pyrrrolo[1,2-e]imidazole-6-carboxylate**  
NURAL Y., GEMİLİ M., SEFEROĞLU N., ŞAHİN E., ÜLGER M., SARI H.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1160, pp.375-382, 2018 (SCI-Expanded)
- XXXIV. **A novel coumarin-pyrazole-triazine based fluorescence chemosensor for fluoride detection via deprotonation process: Experimental and theoretical studies**  
YALCİN E., ALKIS M., SEFEROĞLU N., SEFEROĞLU Z.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1155, pp.573-581, 2018 (SCI-Expanded)
- XXXV. **New platinum (II) and palladium (II) complexes of coumarin-thiazole Schiff base with a fluorescent chemosensor properties: Synthesis, spectroscopic characterization, X-ray structure determination, in vitro anticancer activity on various human carcinoma cell lines and computational studies**  
SAHİN O., ÖZDEMİR ÖZMEN Ü., SEFEROĞLU N., KARAGÖZ GENÇ Z., KAYA K., AYDINER B., TEKİN S., SEFEROĞLU Z.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY, vol.178, pp.428-439, 2018 (SCI-Expanded)
- XXXVI. **Synthesis, X-ray crystal structure and DFT studies of cobalt(II) and vanadium(V) complexes with N,N,O-tridentate aroyl-hydrazone based ligand**  
NAZIRI M. A., ŞAHİN E., SEFEROĞLU N., SHAABANI B.  
JOURNAL OF COORDINATION CHEMISTRY, vol.71, no.1, pp.89-103, 2018 (SCI-Expanded)
- XXXVII. **8-Hydroxyquinoline based push-pull azo dye: Novel colorimetric chemosensor for anion detection**  
ARSLAN O., AYDINER B., YALCİN E., BABUR B., SEFEROĞLU N., SEFEROĞLU Z.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1149, pp.499-509, 2017 (SCI-Expanded)
- XXXVIII. **Synthesis and investigation of various properties of a novel series of nonlinear optical (NLO) chromophores bearing dicyanovinyl (DCV) moiety**  
SEFEROĞLU N., BAYRAK Y., YALCİN E., SEFEROĞLU Z.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1149, pp.510-519, 2017 (SCI-Expanded)
- XXXIX. **Coumarin-indole conjugate donor-acceptor system: Synthesis, photophysical properties, anion sensing ability, theoretical and biological activity studies of two coumarin-indole based push-pull dyes**  
AKSUNGUR T., AYDINER B., SEFEROĞLU N., ÖZKÜTÜK M., ARSLAN L., REIS Y., AÇIK L., SEFEROĞLU Z.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1147, pp.364-379, 2017 (SCI-Expanded)
- XL. **Combined spectroscopic, XRD crystal structure and DFT studies on 2-(ethylthio)pyrimidine-4,6-diamine**  
AKTAN E., BABUR B., SEFEROĞLU N., ÇATIKKAŞ B., KAYNAK F. B., SEFEROĞLU Z.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1145, pp.152-159, 2017 (SCI-Expanded)
- XLI. **Synthesis, theoretical calculation, electrochemistry and total antioxidant capacity of 5-benzoyl-6-phenyl-4-(4-methoxyphenyl)-1,2,3,4-tetrahydro-2-thioxopyrimidine and derivatives**  
ERGAN E., AKBAŞ E., LEVENT A., SAHİN E., KONUŞ M., SEFEROĞLU N.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1136, pp.231-243, 2017 (SCI-Expanded)
- XLII. **A highly selective and sensitive chemosensor derived coumarin-thiazole for colorimetric and fluorimetric detection of CN- ion in DMSO and aqueous solution: synthesis, sensing ability, Pd(II)/Pt(II) complexes and theoretical studies**  
SAHİN O., ÖZDEMİR ÖZMEN Ü., SEFEROĞLU N., AYDINER B., SARI M., TUNÇ T., SEFEROĞLU Z.  
TETRAHEDRON, vol.72, no.39, pp.5843-5852, 2016 (SCI-Expanded)
- XLIII. **A novel fluorescence turn-on coumarin-pyrazolone based monomethine probe for biothiol detection**  
BABUR B., SEFEROĞLU N., OCAL M., SONUGUR G., AKBULUT H., SEFEROĞLU Z.  
TETRAHEDRON, vol.72, no.30, pp.4498-4502, 2016 (SCI-Expanded)
- XLIV. **Photophysical and theoretical studies on newly synthesized N,N-diphenylamine based azo dye**  
AKSUNGUR T., ARSLAN O., SEFEROĞLU N., SEFEROĞLU Z.

- JOURNAL OF MOLECULAR STRUCTURE, vol.1099, pp.543-550, 2015 (SCI-Expanded)
- XLV. **Synthesis, molecular structure and computational study of (Z)-2-((E)-4-nitrobenzylidene)hydrazone-1,2-diphenylethan-1-one**  
ELMACI G., AKTAN E., SEFEROĞLU N., HÖKELEK T., SEFEROĞLU Z.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1099, pp.83-91, 2015 (SCI-Expanded)
- XLVI. **Styryl-based NLO chromophores: synthesis, spectroscopic properties, and theoretical calculations**  
Yalcin E., Achelle S., Bayrak Y., SEFEROĞLU N., Barsella A., SEFEROĞLU Z.  
TETRAHEDRON LETTERS, vol.56, no.20, pp.2586-2589, 2015 (SCI-Expanded)
- XLVII. **A ratiometric fluorescence chemosensor based on a coumarin-pyrazolone hybrid: the synthesis and an investigation of the photophysical, tautomeric and anion binding properties by spectroscopic techniques and DFT calculations**  
Babur B., SEFEROĞLU N., SEFEROĞLU Z.  
TETRAHEDRON LETTERS, vol.56, no.17, pp.2149-2154, 2015 (SCI-Expanded)
- XLVIII. **Phenylazoindole dyes 3: Determination of azo-hydrazone tautomers of new phenylazoindole dyes in solution and solid state**  
Babur B., SEFEROĞLU N., AKTAN E., HÖKELEK T., ŞAHİN E., SEFEROĞLU Z.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1081, pp.175-181, 2015 (SCI-Expanded)
- XLIX. **Switching Off the Charge Transfer and Closing the S-1-T-1 ISC Channel in Excited States of Quinolizinium Derivatives: A Theoretical Study**  
Yalcin S., Thomas L., Tian M., SEFEROĞLU N., Ihmels H., DEDE Y.  
JOURNAL OF ORGANIC CHEMISTRY, vol.79, no.9, pp.3799-3808, 2014 (SCI-Expanded)
- L. **Phenylazoindole dyes 2: The molecular structure characterizations of new phenylazo indoles derived from 1,2-dimethylindole**  
Babur B., SEFEROĞLU N., AKTAN E., HÖKELEK T., ŞAHİN E., SEFEROĞLU Z.  
DYES AND PIGMENTS, vol.103, pp.62-70, 2014 (SCI-Expanded)
- LI. **Phenylazoindole dyes - Part I: The syntheses, characterizations, crystal structures, quantum chemical calculations and antimicrobial properties**  
SEFEROĞLU Z., Yalcin E., Babur B., SEFEROĞLU N., HÖKELEK T., Yilmaz E., ŞAHİN E.  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.113, pp.314-324, 2013 (SCI-Expanded)
- LII. **MULTICRITICAL BEHAVIORS OF THE SPIN-3/2 BLUME-EMERY-GRIFFITHS MODEL ON A CELLULAR AUTOMATON**  
Seferoglu N., Sezgin G.  
ROMANIAN JOURNAL OF PHYSICS, no.7-8, pp.1053-1064, 2012 (SCI-Expanded)
- LIII. **Simulation of Spin-3/2 Blume-Capel Model on a Cellular Automaton with Heating and Cooling Algorithm**  
Seferoglu N.  
COMMUNICATIONS IN THEORETICAL PHYSICS, vol.56, no.1, pp.168-172, 2011 (SCI-Expanded)
- LIV. **The Study of the Three-Dimensional Spin-3/2 Ising Model on a Cellular Automaton**  
Seferoglu N.  
COMMUNICATIONS IN COMPUTATIONAL PHYSICS, vol.7, no.4, pp.779-792, 2010 (SCI-Expanded)
- LV. **The ferrimagnetic phase of the Blume-Emery-Griffiths model on the cellular automaton**  
Seferoglu N., Kutlu B.  
CENTRAL EUROPEAN JOURNAL OF PHYSICS, vol.6, no.2, pp.230-237, 2008 (SCI-Expanded)
- LVI. **Critical behavior of the Blume-Emery-Griffiths model for a simple cubic lattice on the cellular automaton**  
Seferoglu N., Kutlu B.  
JOURNAL OF STATISTICAL PHYSICS, vol.129, no.3, pp.453-468, 2007 (SCI-Expanded)
- LVII. **Critical exponents for the re-entrant phase transitions in the three-dimensional Blume-Emery-Griffiths model on the cellular automaton**  
Seferoglu N., Kutlu B.

- CHINESE PHYSICS LETTERS, vol.24, no.7, pp.2040-2043, 2007 (SCI-Expanded)
- LVIII. **Re-entrant phase transitions of the Blume-Emery-Griffiths model for a simple cubic lattice on the cellular automaton**  
Seferoglu N., Kutlu B.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.374, no.1, pp.165-172, 2007 (SCI-Expanded)
- LIX. **Finite size effect for the first-order phase transition of the three-dimensional Blume-Capel model on a cellular automaton**  
Seferoglu N., Ozkan A., Kutlu B.  
CHINESE PHYSICS LETTERS, vol.23, no.9, pp.2526-2529, 2006 (SCI-Expanded)
- LX. **Critical exponents of the three-dimensional Blume-Capel model on a cellular automaton**  
Ozkan A., Seferoglu N., Kutlu B.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.362, no.2, pp.327-337, 2006 (SCI-Expanded)
- LXI. **The tricritical behavior of the 3D Blume-Capel model on a cellular automaton**  
Kutlu B., Ozkan A., Seferoglu N., Solak A., Binal B.  
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.16, no.6, pp.933-950, 2005 (SCI-Expanded)
- LXII. **Finite size scaling by using scaling functions in two-dimensional q=2 and 7 state Potts models**  
Demirturk S., Seferoglu N., Aydin M., Gunduc Y.  
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.12, no.3, pp.403-412, 2001 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Molecular Structure Analysis and Spectroscopic Properties of Monoazo Disperse Dye From N,N-Dimethylaniline**  
Arslan O., Yalcin E., SEFEROĞLU N., Yaman M., SEFEROĞLU Z.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.30, no.1, pp.175-189, 2017 (ESCI)

### Refereed Congress / Symposium Publications in Proceedings

- I. **"SYNTHESIS AND INVESTIGATION OF ANION SENSITIVITY PROPERTIES OF TWO D- $\pi$ -A- $\pi$ -D TYPE DYES BEARING INDOLE**  
Eroğlu A. B., Özarslan A., Çakmaz D., Aydiner B., Seferoglu N., Şenöz H., Seferoglu Z.  
İstanbul International Organic Electronic Symposium, İstanbul, Turkey, 2 - 04 December 2019
- II. **A Novel Series Of Indole-Based Colorimetric Chemosensors**  
Çakmaz D., Keleş E., YAHYA M., PUTRA A. U., SEFEROĞLU Z., AKTAN E., SEFEROĞLU N.  
10th EurAsian Meeting on Heterocyclic Chemistry, Milano Matittima-Cervia, Ravenna, Italy, 15 - 19 September 2019
- III. **Mono-, Di- ve Trivinil Köprüsü İçeren Yeni Fonksiyonel Boyar Maddelerin Sentezi, Spektroskopik ve NLO Özelliklerinin İncelenmesi**  
Çatal E., Seferoglu Z., Seferoglu N.  
29. Ulusal Kimya Kongresi, Ankara, Turkey, 10 - 14 September 2017, pp.1
- IV. **Kumarin-Pirazolon Temelli Bir Seri Yeni Floresans Moleküllerin Tautomerik Yapılarının Ve Fotofiziksel Özelliklerinin İncelenmesi**  
canpolat t., babür b., SEFEROĞLU N., SEFEROĞLU Z.  
29. Ulusal Kimya Kongresi, Turkey, 10 - 14 September 2017
- V. **Trifenilamin Temelli Sitril Boyarmaddelerinin Sentezi ve Anyon İlgilerinin Deneysel ve Teorik Olarak İncelenmesi**  
Keleş E., Seferoglu Z., Seferoglu N.  
29. Ulusal Kimya Kongresi, Ankara, Turkey, 10 - 14 September 2017, pp.1
- VI. **Coumarin-indole conjugate donor-acceptor system: Synthesis and biological activity studies of two coumarin-indole based push-pull dyes**

- Seferoğlu Z., Reis Y., Seferoğlu N., Ozkutuka M., Aydiner B., Aksungur T., Arslan L., Açık L.  
European Biotechnology Congress, Dubrovnik, Croatia, 25 - 27 May 2017, vol.256
- VII. **MOLECULAR STRUCTURE ANALYSES AND DFT STUDIES ON NEW BENZILMONOHYDRAZONE BASED SCHIFF BASES**  
ŞAHİN E., ELMACI G., duyar h., AYDINER B., TUNÇ T., SEFEROĞLU N., SEFEROĞLU Z.  
1th INTERNATIONAL CONFERENCE ON ADVANCES IN ENGINEERING SCIENCES, Thailand, 3 - 05 July 2017, pp.32
- VIII. **X-ray and DFT studies of new benzildihydrazone based Schiff bases**  
ŞAHİN E., ELMACI G., duyar h., AYDINER B., SEFEROĞLU N., SEFEROĞLU Z.  
1th INTERNATIONAL CONFERENCE ON ADVANCES IN ENGINEERING SCIENCES, 3 - 05 July 2017
- IX. **Donör Ve Akseptör Grupları İçeren Yeni Bir Seri Azo Boyarmaddelerin Fotofiziksel Ve Doğrusal Olmayan Optik (NLO) Özelliklerinin İncelenmesi**  
Toprakçıoğlu G., ARSLAN Ö., SEFEROĞLU N., SEFEROĞLU Z.  
29.Uluslararası Kimya Kongresi, Turkey, 10 - 14 September 2016
- X. **Coumarin-thiazole based schiff base for anion and cation detection:A Combined Experimental and Theoretical (DFT)**  
Şahin Ö., AYDINER B., SEFEROĞLU N., ÖZDEMİR ÖZMEN Ü., SEFEROĞLU Z.  
Mediterranean Colloquium on Heterocyclic Chemistry, 11-15 November Antalya, 11 - 15 November 2015
- XI. **Investigation of NLO and photophysical properties of new styryl based dyes bearing strong donor acceptor groups**  
Bayrak Y., YALÇIN E., SEFEROĞLU N., SEFEROĞLU Z.  
Trans Mediterranean Colloquium on Heterocyclic Chemistry TRAMECH VIII, 11 - 15 November 2015
- XII. **Kumarin İndol floresans hibrit sisteminin sentezi ve kemosensör potansiyelinin teorik deneysel çalışmalarla araştırılması**  
Aksungur T., Aydiner B., Özktük M., Seferoğlu N., Seferoğlu Z.  
27. Ulusal Kimya Kongresi, Çanakkale, Turkey, 23 - 28 August 2015, pp.403
- XIII. **Kumarin Flurofor Grubunu İçeren Bir Seri Yeni Pirazolon Bileşığının Sentezi ve Tautomerik Davranışlarının Deneysel ve Teorik Yöntemlerle Belirlenmesi**  
Babür B., Seferoğlu N., Seferoğlu Z.  
2. Ulusal Organik Kimya Kongresi, Ankara, Turkey, 24 - 26 September 2014, pp.1
- XIV. **Spin-3/2 Ising Modelin Çoklu Kritik Faz Diyagramları**  
UMURHAN G., SEFEROĞLU N.  
18. Yoğun Madde Fiziği Ankara Toplantısı (ODTÜ), Ankara, Turkey, 01 September 2011
- XV. **Benzaldehit-4-Nitro-2-(2-okso-1,2-difeniletiliden)hidrazon bileşığının sentezi, karakterizasyonu ve yapısal özelliklerinin teorik hesaplamalarla belirlenmesi**  
Elmacı G., Aktan E., Seferoğlu N., Hökelek T., Şahin E., Seferoğlu Z.  
III. ULUSAL ANORGANİK KİMYA KONGRESİ, Çanakkale, Turkey, 19 - 22 May 2011, pp.1
- XVI. **Spin-3/2 Blume-Capel Modelin ısıtma ve soğutma işlemleri ile cellular automatonda simülasyonu**  
Sezgin G., Seferoğlu N.  
Turkish Physical Society 26. International Physics Conference, Muğla, Turkey, 24 - 27 September 2009, pp.155
- XVII. **The phase diagram of the Spin-3/2 Blume-Capel Model on a cellular automata**  
Sezgin G., Seferoğlu N.  
7th International student conference of the Balkan Physical Union, Muğla, Turkey, 4 - 07 September 2009, pp.70
- XVIII. **Simulation of Spin-3/2 Blume-Capel Model on a Cellular Automaton with Heating and Cooling Algorithm**  
UMURHAN G., SEFEROĞLU N.  
Türk Fizik Derneği 26. Uluslararası Fizik Kongresi, Turkey, 01 September 2009
- XIX. **The Phase Diagram of The Spin-3/2 Blume-Capel Model on a Cellular Automaton**  
UMURHAN G., SEFEROĞLU N.  
7. Uluslararası Balkan Fizik Birliği Öğrenci Konferansı, Turkey, 01 August 2009
- XX. **3-boyutlu Blume-Emery-Griffiths modelde re-entrant faz geçişleri**  
Seferoğlu N., Kutlu B.

13. Yoğun Madde Fiziği-Ankara Toplantısı, Ankara, Turkey, 03 November 2006, pp.93
- XXI. **3 Boyutlu Blume Capel Modelde Soğutma Hızının Etkisi**  
Kutlu B., Özkan A., Seferoğlu N.  
XI. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 03 December 2004
- XXII. **Finite size scaling by using scaling functions in 2D q=2 and q=7 state Potts Model**  
Demirtürk S., Seferoğlu N., Aydin M., Gündüz Y.  
8. İstatistik Fizik Günleri, İstanbul, Turkey, 5 - 06 July 2001, pp.3
- ## Supported Projects
- Aydiner B., Seferoğlu Z., Seferoğlu N., TUBITAK Project, Farklı pi-Köprüleri İçeren D-pi-A Sistemine Sahip Yeni NIR Boyarmaddelerin Sentezi, Karakterizasyonu, Elektro-Optik ve NLO Özelliklerinin İncelenmesi, 2023 - 2026
- Aydiner B., Seferoğlu Z., Seferoğlu N., Doluca O., TÜBİTAK International Bilateral Joint Cooperation Program Project, Synthesis And Investigation Of Thioflavin T-Type Ligands For Quadruplex DNA, 2023 - 2026
- Aydiner B., Seferoğlu N., TUBITAK Project, Donör-pi-Akseptör-pi-Donör (D-pi-A-pi-D) Sistemine Sahip 2-indanon temelli yeni NIR boyar maddelerinin sentezi, fotofiziksel, NLO ve Kemosensor Özelliklerinin İncelenmesi, 2023 - 2023
- SEFEROĞLU N., Kandemir B., Keleş E., AYDINER B., OCAK C., SEFEROĞLU Z., Project Supported by Higher Education Institutions, Donör-akseptör sistemine sahip yeni boyar maddelerin sentezi, boyalı duyarlı güneş hücrelerinde (DSSC) kullanılabilirliğinin belirlenmesi ve fabrikasyonu, 2020 - 2023
- Seferoğlu Z., Seferoğlu N., TUBITAK Project, Yeni Donör-π-Akseptör (D-π-A) Bileşiklerinin Sentezi, Fotofiziksel, Nlo, Termal Özelliklerinin Ve Anyon İlgilerinin Belirlenmesi, 2021 - 2022
- Seferoğlu Z., Seferoğlu N., TUBITAK Project, Siyanür Anyonunun Yüksek Seçicilikte Belirlenmesi Üzerine Önerilen Mekanizmaların Deneysel Ve Teorik Olarak Açıklanması, 2021 - 2022
- Seferoğlu N., Seferoğlu Z., Yaman M., Project Supported by Higher Education Institutions, Kuvvetli donör-akseptör gruplarına sahip azo/monometin/dimetin ve tiyazol köprülerinden geliştirilen yeni doğrusal olmayan optik (Non-Linear Optic-NLO) adayı kromoforların sentezi, fotofiziksel ve NLO özelliklerinin incelenmesi, 2021 - 2022
- Aydiner B., Seferoğlu Z., Seferoğlu N., Yalçın E., SÜLEYMANOĞLU N., Project Supported by Higher Education Institutions, G4-DNA'yi kararlı kılan yeni nesil floresans ligandlarının sentezi, teorik çalışmaları, ligand-DNA etkileşim mekanizmalarının spektroskopik yöntemlerle açıklanması , 2018 - 2021
- Seferoğlu Z., Seferoğlu N., TUBITAK Project, Yeni Fonksiyonel Boyarmaddelerin Fotofiziksel, NLO (Doğrusal Olmayan Optik) ve Kemosensör Özelliklerinin Deneysel ve Teorik Yöntemlerle Araştırılması, 2017 - 2019
- Aydiner B., Seferoğlu N., Seferoğlu Z., TUBITAK Project, Algılamacı/Etiket Olarak Kullanılma Potansiyeline Sahip Akıllı Moleküller: Farklı Rezeptör Bölgelere Sahip Yeni Kumarin-Tiyofen Temelli Algılamacıların Sentezi, Anyon Algılama Kapasitelerinin ve Tiyol Grubu İçeren Biyomoleküller ile Etkileşim Çalışmalarının Spektroskopik Yöntemlerle ve Teorik Hesaplamalarla Araştırılması, 2015 - 2018
- Seferoğlu Z., Seferoğlu N., TUBITAK Project, Trifenilamin Temelli Donor-Akseptör Grubuna Sahip, Mono-, Di- Ve Trivinil Köprüsü İçeren Yeni Fonksiyonel Boyarmaddelerin Ve Türevlerinin Sentezi, Spektroskopik, Optik Ve Anyon İlgisi Çalışmalarının Deneysel Ve Teorik Olarak İncelenmesi, 2016 - 2017
- Seferoğlu Z., Seferoğlu N., TUBITAK Project, Kuvvetli Donör Ve Akseptör Grupları İçeren Yeni Sitiril Temelli Boyarmaddelerin Çeşitli Fotofiziksel Ve NLO Özelliklerinin Teorik Olarak İncelenmesi, 2014 - 2015
- Seferoğlu N., Project Supported by Higher Education Institutions, Bazı yeni fenilazo indol boyarmaddelerinin tautomerik yapılarının teorik olarak incelenmesi, 2011 - 2012
- SEFEROĞLU N., Project Supported by Higher Education Institutions, Spin-3/2 Ising Modelin Çoklu Kritik Faz Diyagramları, 2009 - 2011
- Umurhan G., Seferoğlu N., Project Supported by Higher Education Institutions, Spin-3/2 Ising Modelin Çoklu Kritik Faz Diyagramları, 2009 - 2011
- Seferoğlu N., TUBITAK Project, Investigation of the Critical Behavior of the Spin-3/2 Ising Model with Cellular Automaton, 2009 - 2011
- Seferoğlu N., TUBITAK Project, Spin 3 2 Ising Modelin Kritik davranışlarının Cellular Automaton ile İncelenmesi, 2009 - 2010

## **Metrics**

Publication: 86

Citation (WoS): 820

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## **Scholarships**

YÖK Bursu, YOK, 2012 - 2012

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Ministry, Bayındırlık ve İskan Müdürlüğü, Afet İşleri Genel Müdürlüğü