

ÖZGEÇMİŞ VE ESERLER LİSTESİ

<u>ÖZGEÇMİŞ</u>

| Adı ve Soyadı: | Zehra DURMUŞ |
|------------------|--------------|
| Doğum Tarihi: | 1977 |
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Bildiği Yabancı Diller (Puan ve Yılı): İngilizce, C1 İleri, 2022

Uzmanlık Alanı: Mühendislik ve Teknoloji

Sağlık Bilimleri Temel Bilimler

| Derece | Bölüm/Program | Üniversite | Yıl |
|---------------|--|------------------------------|--------------|
| Yüksek Lisans | BİLİM, TEKNOLOJİ VE TOPLUM (YL) (TEZLİ) | İstanbul Teknik Üniversitesi | Devam Ediyor |
| Lisans | BATI DİLLERİ VE EDEBİYATLARI BÖLÜMÜ | İstanbul Üniversitesi | 2024 |
| Doktora | KİMYA (DR) | Fatih Üniversitesi | 2013 |
| Yüksek Lisans | KİMYA (YL) (TEZLİ) | Fatih Üniversitesi | 2009 |
| Lisans | KİMYA MÜHENDİSLİĞİ BÖLÜMÜ | İstanbul Üniversitesi | 1999 |

Yüksek Lisans Tez Başlığı (özeti ekte) ve Tez Danışman(lar)ı:

Doktora Tezi/S. Yeterlik Çalışması/Tıpta Uzmanlık Tezi Başlığı (özeti ekte) ve Danışman(lar)ı:

Synthesis and characterization of hexaferrite nanoparticles and nanocomposites

| Görev Unvanı | Görev Yeri | Yıl |
|----------------|---|-------------------|
| Prof. Dr. | Biruni Üniversitesi | 2024-Devam Ediyor |
| Doç. Dr. | Biruni Üniversitesi | 2024-2024 |
| Dr. Öğr. Üyesi | Biruni Üniversitesi | 2023-2024 |
| Uzman | Martin-Luther-Universitaet Halle-Wittenberg | 2021-2023 |
| Dr. Öğr. Üyesi | Bezmiâlem Vakıf Üniversitesi | 2014-2017 |
| Dr. Öğr. Üyesi | Bezmiâlem Vakıf Üniversitesi | 2013-2014 |

İdari Görevler:

ESERLER

A. Uluslararası hakemli dergilerde yayımlanan makaleler:

- A1. "Fabrication of strontium hexaferrite/reduced expanded graphene oxide/polyaniline ternary hybrids as supercapacitor electrodes", JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, 2025.
- A2. "Novel and Highly Efficient Antibacterial PLA Composites Prepared with Liquidambar Orientalis Oil and Ag@g-C3N4 Nanocomposite", Journal of Polymers and the Environment, 2025.
- A3. "The electrical and dielectric features of Al/YbFeO3/p-Si/Al and Al/YbFe0.90Co0.10O3/p-Si/Al structures with interfacial perovskite-oxide layer depending on bias voltage and frequency", Journal of Materials Science: Materials in Electronics, 2024.
- A4. "A comprehensive investigation of the structural, chemical, and dielectric properties of co-doped YMnO3 multiferroic component", Applied Physics A: Materials Science and Processing, 2024.
- A5. "Variation in the dielectric and magnetic characteristics of multiferroic LuFeO3 as a result of cobalt substitution at Fe sites", Journal of Alloys and Compounds, 2023.
- A6. "Preparation and characterization of Ce-MOF/g-C3N4 composites and evaluation of their photocatalytic performance", Ceramics International, 2023.
- A7. "The structural studies and optical characteristics of phase-segregated Ir-doped LuFeO3-δ films", Applied Physics A: Materials Science and Processing, 2023.
- A8. "High resistivity and low dielectric loss of LuFe1-xOs xO3 (x = 0.0-0.10) ferrites", Journal of Materials Science: Materials in Electronics, 2023.
- A9. "A review on graphitic carbon nitride (g-C3N4) metal organic framework (MOF) heterostructured photocatalyst materials for photo(electro)chemical hydrogen evolution", International Journal of Hydrogen Energy, 2022.
- A10. "The Os substitution into Fe sites in LuFeO3 multiferroic and its effects on the electrical and dielectric features", Journal of Alloys and Compounds, 2022.
- A11. "Influence of iridium (Ir) doping on the structural, electrical, and dielectric properties of LuFeO3 perovskite compound", Journal of Alloys and Compounds, 2021.
- A12. "Measurement of the Antipsychotic Clozapine Using Reduced Graphene Oxide Nanocomposites-Au/Pd/Pt Electrodes", Electroanalysis, 2021.
- A13. "Frequency and temperature impact on the electrical properties of LaCr0.99Pd0.01O3-δ compound", Journal of Materials Science: Materials in Electronics, 2020.
- A14. "Glycopolymer decorated multiwalled carbon nanotubes for dual targeted breast cancer therapy", Journal of Materials Chemistry B, 2020.
- A15. "The influence of cobalt (Co) doping on the electrical and dielectric properties of LaCr1-xCoxO3 perovskite-oxide compounds", Materials Science in Semiconductor Processing, 2020.
- A16. "Influence of transition element Os substitution on the structural and electrical features of perovskite structure LaCr1-xOsxO3", Materials Research Bulletin, 2020.
- A17. "Spectrofluorimetric Determination of Aflatoxin B1 in Winter Herbal Teas via Magnetic Solid Phase Extraction Method by using Metal-Organic Framework (MOF) Hybrid Structures Anchored with Magnetic Nanoparticles", Applied Organometallic Chemistry, 2020.
- A18. "The impact of Ir doping on the electrical properties of YbFe1-xIrxO3 perovskite-oxide compounds", Journal of Materials Science: Materials in Electronics, 2020.
- A19. "The current and capacitance characteristics as a function of sample temperature in YMn0.90Os0.10O3/p-Si structures", Materials Science in Semiconductor Processing, 2019.
- A20. "In situ reduction of graphene oxide by different plant extracts as a green catalyst for selective hydrogenation of nitroarenes", International Journal of Hydrogen Energy, 2019.
- A21. "Synthesis, characterization and wide range frequency and temperature dependent electrical modulus study of LaCrO3 and cobalt (Co) doped LaCrO3 perovskite compounds", Materials Science and Engineering: B, 2019.
- A22. "Co doped YbFeO3: exploring the electrical properties via tuning the doping level", Ionics, 2019.
- A23. "Co effect on the structural, chemical and frequency depended electrical properties of YbFeO3 perovskite oxide compound", Journal of Materials Science: Materials in Electronics, 2019.
- A24. "Temperature dependent current transport mechanism in osmium-doped perovskite yttrium manganite-based heterojunctions", Journal of Applied Physics, 2019.

- A25. "Electrical characterization of Ir doped rare-earth orthoferrite YbFeO3", Journal of Alloys and Compounds, 2019.
- A26. "The current-voltage characteristics of the ferroelectric p-YMnO3 thin film/bulk p-Si heterojunction over a broad measurement temperature range", Journal of Alloys and Compounds, 2019.
- A27. "Effect of Os doping on electrical properties of YMnO3 multiferroic perovskite-oxide compounds", Materials Science in Semiconductor Processing, 2019.
- A28. "Tailoring the band gap of ferroelectric YMnO 3 through tuning the Os doping level", Journal of Materials Science: Materials in Electronics, 2019.
- A29. "Synthesis and Characterization of Graphene Oxide/Zinc Oxide (GO/ZnO) Nanocomposite and Its Utilization for Photocatalytic Degradation of Basic Fuchsin Dye", ChemistrySelect, 2019.
- A30. "Polymerization characteristics of colored componers cured with different LED units", Journal of Applied Biomaterials and Functional Materials, 2019.
- A31. "The characterization of electrical properties of Pd-doped LaCrO3 perovskite structure", Journal of Materials Science: Materials in Electronics, 2018.
- A32. "Os doped YMnO3 multiferroic: A study investigating the electrical properties through tuning the doping level", Journal of Alloys and Compounds, 2018.
- A33. "Frequency and temperature dependent electrical and dielectric properties of LaCrO3 and Ir doped LaCrO3 perovskite compounds", Journal of Alloys and Compounds, 2018.
- A34. "Engineering the band gap of LaCrO3 doping with transition metals (Co, Pd, and Ir)", Journal of Materials Science, 2018.
- A35. "Structural and mechanical properties of a giomer-based bulk fill restorative in different curing conditions", Journal of Applied Oral Science, 2018.
- A36. "The electrical modulus and other dielectric properties by the impedance spectroscopy of LaCrO3 and LaCr0.90Ir0.10O3 perovskites", RSC Advances, 2018.
- A37. "Magnetic and Microwave Absorption Properties of Magnetite (Fe3O4)@Conducting Polymer (PANI, PPY, PT) Composites", IEEE Transactions on Magnetics, 2017.
- A38. "Magnetic solid phase extraction for a new HPLC method for the determination of gemifloxacin in human plasma and breast milk", Journal of the Chilean Chemical Society, 2017.
- A39. "Chitosan and carboxymethyl cellulose based magnetic nanocomposites for application of peroxidase purification", International Journal of Biological Macromolecules, 2017.
- A40. "Determination of atorvastatin in human plasma by magnetic solid-phase extraction combined with HPLC and application to a pharmacokinetic study", Journal of Liquid Chromatography and Related Technologies, 2016.
- A41. "Quantifying structural and electromagnetic interference (EMI) shielding properties of thermoplastic polyurethane—carbon nanofiber/magnetite nanocomposites", Journal of Materials Science, 2016.
- A42. "Preparation and in vitro evaluation of 5-flourouracil loaded magnetite-zeolite nanocomposite (5-FU-MZNC) for cancer drug delivery applications", Biomedicine and Pharmacotherapy, 2016.
- A43. "Electrochemical sensing platforms based on the different carbon derivative incorporated interface", Materials Science and Engineering C, 2016.
- A44. "Preparation and characterization of platinum (Pt) and palladium (Pd) nanoparticle decorated graphene sheets and their utilization for the elimination of basic fuchsin and indigo carmine dyes", Solid State Sciences, 2016.
- A45. "Electrochemical biosensor based on REGO/Fe3O4 bionanocomposite interface for xanthine detection in fish sample", Food Control, 2015.
- A46. "Erratum: Structural and magnetic properties of triethylene glycol stabilized ZnxCo1-xFe2O4 nanoparticles (Mater. Res. Bull. (2012) 47 (2442-2448))", Materials Research Bulletin, 2015.
- A47. "Synthesis and micro-structural characterization of graphene/strontium hexaferrite (SrFe12O19) nanocomposites", Materials Chemistry and Physics, 2015.
- A48. "Synthesis and characterization of structural and magnetic properties of graphene/hard ferrite nanocomposites as microwave-absorbing material", Journal of Materials Science, 2015.
- A49. "Synthesis, structural, magnetic and electrical properties of Co 1-xZnxFe2O4 (x = 0.0, 0.2) nanoparticles", Materials Research Bulletin, 2013.
- A50. "Effect of conducting polymer layer on microwave absorption properties of BaFe12O19-TiO2 composite", Physica Status Solidi (A) Applications and Materials Science, 2013.
- A51. "Surface spin disorder and spin-glass-like behaviour in manganese- substituted cobalt ferrite nanoparticles", Journal of Nanoparticle Research, 2012.
- A52. "Structural and magnetic properties of triethylene glycol stabilized Zn xCo 1-xFe 2O 4 nanoparticles", Materials Research Bulletin, 2012.
- A53. "Effect of fuel on the synthesis and properties of poly(methyl methacrylate) modified SrFe 12O 19 nanoparticles", Journal of Superconductivity and Novel Magnetism, 2012.
- A54. "Hydrothermal synthesis of SrFe 12O 19 and its characterization", Journal of Superconductivity and Novel Magnetism, 2012.

- A55. "Synthesis and characterization of PEG-Sr hexaferrite by sol-gel conversion", Journal of Superconductivity and Novel Magnetism, 2012.
- A56. "Triethylene glycol stabilized CoFe 2O 4 nanoparticles", Journal of Superconductivity and Novel Magnetism, 2012.
- A57. "Preparation of high quality, single domain BaFe12O19 particles by the citrate sol-gel combustion route with an initial Fe/Ba molar ratio of 4", Materials Science and Engineering: B, 2012.
- A58. "Synthesis and characterization of dendrimer-encapsulated iron and iron-oxide nanoparticles", Journal of Superconductivity and Novel Magnetism, 2012.
- A59. "Poly(vinyl phosphonic acid) (PVPA)-BaFe 12O 19 nanocomposite", Journal of Superconductivity and Novel Magnetism, 2012.
- A60. "Synthesis, structural and electrical properties of triethylene glycol (TREG) stabilized Mn 0.2Co 0.8Fe 2O 4 NPs", Materials Research Bulletin, 2012.
- A61. "Synthesis and magnetic properties of a porphine-based photosynthesizer with magnetic nano-carriers", Polyhedron, 2011.
- A62. "Synthesis, dielectric and magnetic characteristics of poly(1-vinyl-1,2,4- triazole) (PVTri)-barium hexaferrite composite", Journal of Alloys and Compounds, 2011.
- A63. "Synthesis and characterization of poly(1-vinyl-1,2,4-triazole) (PVTri)barium hexaferrite nanocomposite", Physica B: Condensed Matter, 2011.
- A64. "Fabrication and characterization of dendrimer-encapsulated monometallic Co nanoparticles", Journal of Alloys and Compounds, 2011.
- A65. "Synthesis and characterization of poly(3-thiophenyl acetic acid) (P3TAA)-BaFe12O19 nanocomposite", Polyhedron, 2011.
- A66. "Synthesis and characterization of poly(3-thiophene acetic acid)/Fe 3O4 nanocomposite", Polyhedron, 2011.
- A67. "Preparation and characterization of polyaniline (PANI)Mn3O 4 nanocomposite", Physica B: Condensed Matter, 2011.
- A68. "Synthesis and characterization of l-carnosine coated iron oxide nanoparticles", Journal of Alloys and Compounds, 2011.
- A69. "Magnetic and dielectric characterization of alginic acid-Fe 3O4 nanocomposite", Polyhedron, 2011.
- A70. "Synthesis and characterization of poly(vinyl phosphonic acid) (PVPA)-Fe3O4 nanocomposite", Polyhedron, 2011.
- A71. "A simple approach for the synthesis of Co 3 O 4 nanocrystals", Inorganic Materials, 2011.
- A72. "The effect of condensation on the morphology and magnetic properties of modified barium hexaferrite (BaFe12O19)", Nano-Micro Letters, 2011.
- A73. "Synthesis, structural and conductivity characterization of alginic acid-Fe3O4 nanocomposite", Journal of Nanoparticle Research, 2010.
- A74. "Synthesis, conductivity and dielectric characterization of salicylic acid-Fe3O4 nanocomposite", Materials Chemistry and Physics, 2010.
- A75. "L-Histidine coated iron oxide nanoparticles: Synthesis, structural and conductivity characterization", Journal of Alloys and Compounds, 2010.
- A76. "Polyol synthesis of (polyvinylpyrrolidone) PVP-Mn3O4 nanocomposite", Journal of Alloys and Compounds, 2010.
- A77. "Sonochemical synthesis and chracterization of Mn3O4 nanoparticles", Central European Journal of Chemistry, 2010.
- A78. "CTAB-Mn3O4 nanocomposites: Synthesis, NMR and low temperature EPR studies", Polyhedron, 2010.
- A79. "Synthesis and conductivity evaluation of PVTri-Fe3O4 nanocomposite", Journal of Non-Crystalline Solids, 2010.
- A80. "The effect of neutralizing agent on the synthesis and characterization of Mn 3 O 4 nanoparticles", Russian Journal of Inorganic Chemistry, 2010.
- A81. "I-lysine coated iron oxide nanoparticles: Synthesis, structural and conductivity characterization", Journal of Alloys and Compounds, 2009.
- A82. "Ovalbumin mediated synthesis of Mn3O4", Polyhedron, 2009.
- A83. "Reflux synthesis of Co3O4 nanoparticles and its magnetic characterization", Journal of Magnetism and Magnetic Materials, 2009.

C. Yazılan ulusal/uluslararası kitaplar veya kitaplardaki bölümler:

C2. Yazılan ulusal/uluslararası kitaplardaki bölümler:

- C2.1. "Engineering Applications of Polymer based Nano Blends, Adv Struct Materials", Springer NATURE, 2025.
- C2.2. "Engineering Applications of Polymer-Based Nanocomposites, Advanced Structural Materials", Springer-NATURE, 2025.

D. Ulusal hakemli dergilerde yayımlanan makaleler:

- D1. "Increasing the biocompatibility of graphene-based hybrid nanostructures with glycopolymer", Turkish Journal of Chemistry, 2022.
- D2. "Magnetic solid phase extraction applications combined with analytical methods for determination of drugs in different matrices review", Journal of the Chilean Chemical Society, 2019.
- D3. "A comparative study on magnetostructural properties of barium hexaferrite powders prepared by polyethylene glycol", Journal of Nanomaterials, 2014.
- D4. "Preparation of PVP (Polyvinyl Pyrrolidone)/Ba-Sr hexaferrites via gel to crystalline method", Synthesis and Reactivity in Inorganic, Metal-Organic and Nano-Metal Chemistry, 2012.
- D5. "PEG-assisted synthesis of Mn3O4 nanoparticles: A structural and magnetic study", Synthesis and Reactivity in Inorganic, Metal-Organic and Nano-Metal Chemistry, 2011.
- D6. "A green chemical route for the synthesis of Mn3O4 nanoparticles", Central European Journal of Chemistry, 2009.
- D7. "CTAB-Assisted Hydrothermal Synthesis and Magnetic Characterization of NixCo1-xFe2O4 Nanoparticles (x = 0.0, 0.6, 1.0)", Turkish Journal of Chemistry, 2009.