CURRICULUM VITAE AND PUBLICATIONS LIST

CURRICULUM VITAE

Name and Surname: Zehra DURMUŞ

Academic Title: Professor Dr.

Work Address:

Email: zehrad@biruni.edu.tr

Foreign Languages Known (Score and Year): English, C1 Advanced, 2022

Area of Expertise: Engineering and Technology
Health Sciences
Natural Sciences

Degree	Department/Program	University	Year
Master's Degree	BİLİM, TEKNOLOJİ VE TOPLUM (YL) (TEZLİ)(İNGİLİZCE)	Istanbul Technical University	Continues
Bachelor's Degree	BATI DİLLERİ VE EDEBİYATLARI BÖLÜMÜ	İstanbul University	2024
Doctorate	KİMYA (DR)(İNGİLİZCE)	Fatih University	2013
Master's Degree	KİMYA (YL) (TEZLİ)(İNGİLİZCE)	Fatih University	2009
Bachelor's Degree	KİMYA MÜHENDİSLİĞİ BÖLÜMÜ	İstanbul University	1999

Master's Thesis Title (abstract attached) and Thesis Supervisor(s):

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Doctoral Thesis/Proficiency Study/Medical Specialization Thesis Title (abstract attached) and Supervisor(s):

Synthesis and characterization of hexaferrite nanoparticles and nanocomposites

Position Title	Workplace	Year
Professor Dr.	Biruni University	2024-Continues
Associate Professor	Biruni University	2024
Assistant Professor	Biruni University	2023-2024
Expert		2021-2023
Assistant Professor	Bezmiâlem Vakıf University	2014-2017
Assistant Professor	Bezmiâlem Vakıf University	2013-2014

Administrative Duties:

1. Vice Dean - Biruni University (2026 - Continues)
2. Center Director - Biruni University (2024 - 2026)

3. Faculty Executive Board Member - Biruni University (2024 - Continues)
4. Head of Department - Biruni University (2023 - Continues)

PUBLICATIONS

A. Articles published in international peer-reviewed journals:

A1. Polat L. A., Mutlu S. N., Guven H., İnci T. G., Durmuş Z., "Magnetic Molecularly Imprinted Polymers for Selective Monitoring and Remediation of Bisphenol Endocrine Disruptors: A Critical Review of Design Strategies, Environmental Performance, and Translation Challenges", *Journal of Polymers and the Environment*, vol. 1, 2026.

A2. Carterette R., Sobola D., Yıldırım Y., Durmuş Z., Caglar M., Polat O., "Cobalt doped YMnO3 ceramics: A study of Raman, optical, and magnetic properties", *Solid State Sciences*, vol. 181, no. 1, pp. 108466, 2026.

A3. Durmuş Z., Alanalp M. B., Sivri N., Durmus A., Lindenberg T., Maijenburg A. W., "Synthesis and Characterization of Zr-MOF/g-C3N4 Nanocomposite Photocatalyst and Its Utilization in Decomposition of an Organic Dye Pollutant in Aqueous Medium", *Applied Organometallic Chemistry*, vol. 40, no. 6, 2026.

A4. Guven H., Mutlu S. N., Durmuş Z., "Advances in estrogen capture as endocrine-disrupting compounds (EDCs) by magnetic covalent organic frameworks (COFs)", *Journal of Water Process Engineering*, vol. 87, 2026.

A5. Durmuş Z., Kugu G., Çalışkaner Z. O., Köferstein R., Lindenberg T., Maijenburg A. W., "Ligand Functionalization and Fe Precursor Selection Modulated the Physicochemical Properties of Fe-MOFs and Their Biological Response on Prostate Cancer and Normal Prostate Cells", *ACS OMEGA*, vol. 1, no. 1, pp. 1-1, 2026.

A6. Carterette R., Coskun M., Sobola D., Yıldırım Y., Sen C., Durmuş Z., Caglar M., Polat O., "Dielectric relaxation and optical band-gap modulation in LuFe1−xCoxO3 powders", *Journal of the Korean Ceramic Society*, 2026.

A7. Mutlu S. N., Guven H., Durmuş Z., "Magnetic Nanoparticles in Cancer Therapy: Targeted Drug Delivery, Magnetic Hyperthermia, and Photo-Based Modalities", *Bratislava Medical Journal*, vol. 1, 2026.

A8. Durmuş Z., Ozdemir F., Çalışkaner Z. O., Maijenburg A. W., Durmuş A., Köferstein R., "Effect of the structural features of graphitic carbon nitride (g-C3 N4) synthesized via thermal polycondensation of different precursors on the in vitro tumor cell cytotoxicity", *Diamond and Related Materials*, vol. 160, 2025.

A9. Hosseini M. G., Farzaneh A., Shahryari E., Adli R. G., Durmuş Z., Yalcin E., "Fabrication of strontium hexaferrite/reduced expanded graphene oxide/polyaniline ternary hybrids as supercapacitor electrodes", *JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS*, vol. 36, no. 10, 2025.

A10. Durmuş Z., Köferstein R., Özgen A., Lindenberg T., Maijenburg A. W., Durmus A., "Novel and Highly Efficient Antibacterial PLA Composites Prepared with Liquidambar Orientalis Oil and Ag@g-C3N4 Nanocomposite", *Journal of Polymers and the Environment*, vol. 33, no. 5, pp. 2249-2266, 2025.

A11. Coskun M., Polat O., Orak I., Coskun F., Yildirim Y., Sobola D., Sen C., Durmuş Z., Caglar Y., Caglar M. vd., "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*, vol. 35, no. 17, 2024.

A12. Polat O., Coskun M., Yildirim Y., Coskun F., Durmuş Z., Sen C., Caglar Y., Caglar M., Turut A., "A comprehensive investigation of the structural, chemical, and dielectric properties of co-doped YMnO3 multiferroic component", *Applied Physics A: Materials Science and Processing*, vol. 130, no. 3, 2024.

A13. Polat O., Coskun M., Yildirim Y., Roupcova P., Sobola D., Sen C., Durmuş Z., Caglar M., Turut A., "Variation in the dielectric and magnetic characteristics of multiferroic LuFeO3 as a result of cobalt substitution at Fe sites", *Journal of Alloys and Compounds*, vol. 963, 2023.

A14. Durmuş Z., Köferstein R., Lindenberg T., Lehmann F., Hinderberger D., Maijenburg A. W., "Preparation and characterization of Ce-MOF/g-C3N4 composites and evaluation of their photocatalytic performance", *Ceramics International*, vol. 49, no. 14, pp. 24428-24441, 2023.

A15. Polat O., Coskun F., Yildirim Y., Sobola D., Ercelik M., Arikan M., Coskun M., Sen C., Durmuş Z., Caglar Y. vd., "The structural studies and optical characteristics of phase-segregated Ir-doped LuFeO3−δ films", *Applied Physics A: Materials Science and Processing*, vol. 129, no. 3, 2023.

A16. Coskun M., Polat O., Yildirim Y., Durmuş Z., Sen C., Caglar Y., Caglar M., Turut A., "High resistivity and low dielectric loss of LuFe1−xOs xO3 (x = 0.0–0.10) ferrites", *Journal of Materials Science: Materials in Electronics*, vol. 34, no. 8, 2023.

A17. Durmuş Z., Maijenburg A. W., "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*, vol. 47, no. 87, pp. 36784-36813, 2022.

A18. Polat O., Coskun M., Roupcova P., Sobola D., Durmuş Z., Caglar M., Sikola T., Turut A., "The Os substitution into Fe sites in LuFeO3 multiferroic and its effects on the electrical and dielectric features", *Journal of Alloys and Compounds*, vol. 911, 2022.

A19. Polat O., Coskun M., Roupcova P., Sobola D., Durmuş Z., Caglar M., Sikola T., Turut A., "Influence of iridium (Ir) doping on the structural, electrical, and dielectric properties of LuFeO3 perovskite compound", *Journal of Alloys and Compounds*, vol. 877, 2021.

A20. Şenel M., Durmuş Z., Alachkar A., "Measurement of the Antipsychotic Clozapine Using Reduced Graphene Oxide Nanocomposites-Au/Pd/Pt Electrodes", *Electroanalysis*, vol. 33, no. 6, pp. 1585-1595, 2021.

A21. Coskun M., Polat O., Sobola D., Konečný M., Coskun F., Durmuş Z., Caglar M., Öcal A., Turut A., "Frequency and temperature impact on the electrical properties of LaCr0.99Pd0.01O3-δ compound", *Journal of Materials Science: Materials in Electronics*, vol. 31, no. 18, pp. 15407-15421, 2020.

A22. Omurtag Ozgen P. S., Atasoy S., Zengin Kurt B., Durmuş Z., Yigit G., Dag A., "Glycopolymer decorated multiwalled carbon nanotubes for dual targeted breast cancer therapy", *Journal of Materials Chemistry B*, vol. 8, no. 15, pp. 3123-3137, 2020.

A23. Coskun M., Polat O., Coskun F., Durmuş Z., Caglar M., Turut A., "The influence of cobalt (Co) doping on the electrical and dielectric properties of LaCr1-xCoxO3 perovskite-oxide compounds", *Materials Science in Semiconductor Processing*, vol. 109, 2020.

A24. Polat O., Coskun M., Coskun F., Zlamal J., Durmuş Z., Caglar M., Turut A., "Influence of transition element Os substitution on the structural and electrical features of perovskite structure LaCr1−xOsxO3", *Materials Research Bulletin*, vol. 124, 2020.

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A35. Coşkun M., Polat Ö., Coşkun F., Durmuş Z., Çağlar M., Turut A., "Effect of Os doping on electrical properties of YMnO3 multiferroic perovskite-oxide compounds", *Materials Science in Semiconductor Processing*, vol. 91, pp. 281-289, 2019.

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A38. Bakkal M., Yılmaz B., Durmus A., Durmuş Z., Ozalp S., "Polymerization characteristics of colored compomers cured with different LED units", *Journal of Applied Biomaterials and Functional Materials*, vol. 17, no. 1, 2019.

A39. Polat O., Coskun M., Coskun F., Durmuş Z., Caglar M., Turut A., "The characterization of electrical properties of Pd–doped LaCrO3 perovskite structure", *Journal of Materials Science: Materials in Electronics*, vol. 29, no. 19, pp. 16939-16955, 2018.

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A43. Kaya M. S., Bakkal M., Durmus A., Durmuş Z., "Structural and mechanical properties of a giomer-based bulk fill restorative in different curing conditions", *Journal of Applied Oral Science*, vol. 26, 2018.

A44. Coşkun M., Polat A., Coşkun F., Durmuş Z., Caglar C., Türüt A., "The electrical modulus and other dielectric properties by the impedance spectroscopy of LaCrO3 and LaCr0.90Ir0.10O3 perovskites", *RSC Advances*, vol. 8, no. 9, pp. 4634-4648, 2018.

A45. Unver I. S., Durmuş Z., "Magnetic and Microwave Absorption Properties of Magnetite (Fe3O4)@Conducting Polymer (PANI, PPY, PT) Composites", *IEEE Transactions on Magnetics*, vol. 53, no. 10, 2017.

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A49. Durmuş Z., Durmus A., Bektay M. Y., Kavas H., Unver I. S., Aktas B., "Quantifying structural and electromagnetic interference (EMI) shielding properties of thermoplastic polyurethane–carbon nanofiber/magnetite nanocomposites", *Journal of Materials Science*, vol. 51, no. 17, pp. 8005-8017, 2016.

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A51. Dervisevic M., Çevik E., Durmuş Z., Şenel M., "Electrochemical sensing platforms based on the different carbon derivative incorporated interface", *Materials Science and Engineering C*, vol. 58, pp. 790-798, 2016.

A52. Kurt B. Z., Durmuş Z., Durmus A., "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*, vol. 51, pp. 51-58, 2016.

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A60. Durmuş Z., Baykal A., Sozeri H., Toprak M., "Preparation of PVP (Polyvinyl Pyrrolidone)/Ba-Sr hexaferrites via gel to crystalline method", *Synthesis and Reactivity in Inorganic, Metal-Organic and Nano-Metal Chemistry*, vol. 42, no. 10, pp. 1390-1397, 2012.

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A63. Durmuş Z., Sozeri H., Toprak M., Baykal A., "Effect of fuel on the synthesis and properties of poly(methyl methacrylate) modified SrFe 12O 19 nanoparticles", *Journal of Superconductivity and Novel Magnetism*, vol. 25, no. 6, pp. 1957-1963, 2012.

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A72. Unal B., Durmuş Z., Baykal A., Toprak M., Sozeri H., Bozkurt A., "Synthesis, dielectric and magnetic characteristics of poly(1-vinyl-1,2,4- triazole) (PVTri)-barium hexaferrite composite", *Journal of Alloys and Compounds*, vol. 509, no. 32, pp. 8199-8206, 2011.

A73. Durmuş Z., Tomaş M., Baykal A., Kavas H., Toprak M. S., "PEG-assisted synthesis of Mn3O4 nanoparticles: A structural and magnetic study", *Synthesis and Reactivity in Inorganic, Metal-Organic and Nano-Metal Chemistry*, vol. 41, no. 7, pp. 768-773, 2011.

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