

ÖZGEÇMİŞ (CV)

1. Adı Soyadı : BAYRAM ÜNAL

2. Doğum Tarihi : 23.01.1966

3. Unvanı : PROFESÖR

4. Öğrenim Durumu:

Derece	Alan	Üniversite	Yıl
Lisans	FİZİK MÜHENDİSLİĞİ	ANKARA ÜNİVERSİTESİ	1987
Y. Lisans	FİZİK MÜHENDİSLİĞİ	ANKARA ÜNİVERSİTESİ	1990
Doktora	KUANTUM ELEKTRONİĞİ	DE MONTFORT UNIVERSITY, LEİCESTER, İNGİLTERE	1999

5. Akademik Unvanlar:

Yardımcı Doçentlik Tarihi :01 Haziran 2007

Doçentlik Tarihi :15 Nisan 2010 (ÜAK)

Profesörlük Tarihi :01 Haziran 2015 (Vakıf)

Profesörlük Tarihi :11 Eylül 2019 (Devlet)

6.Yönetilen Yüksek Lisans ve Doktora Tezleri

6.1. Yüksek Lisans Tezleri

- Karatutlu, A.,** “Investigation of the Production of Photoluminescent Nanoporous Silicon Thin Films by Chemical Etching with Low Surface Tension”, 2009.
- İstengir S.** “Investigation of Structural and Luminescent Characterisation of Wet-etched Silicon” 2010
- Kokiçi S.** “Design and analysis of nanoscale antennas at optical frequencies” 2012
- Abdullahi H. B.** “Enhancement of Quantum Efficiency of Photovoltaic Devices based on NanoPorous Silicon” 2014
- Öz E.** “Determination of 24 STR DNA Profiles in Bosniaks Living in Turkey” (“Türkiye’de Yaşayan Boşnaklarda 24 STR DNA Profilinin Belirlenmesi”), 2021
- Dayanır Ö.** “11-Hidroksi THC’nin Analizine Yönelik Moleküler Damgalı Polimerin Sentezlenmesi ve Karakterizasyonu ” 2022
- Çetin A.** “Ardışık Olarak Yiv-Set Çekilen Namlulardan Elde Edilen Mermi Çekirdeklerinin İncelenmesi”, 2023
- Ulaş İ.** “Kadın Cinayeti Haberlerinin İstanbul Sözleşmesinin Kabulü Ve Feshi Sonrası İçerik Analizi” 2023

6.2. Doktora Tezleri

- İsa Şeker,** “Investigation of Structural, Optical and Electrical Properties of MBE Grown SiGe Thin Films”, 2015
- Şentürk E.** Adli Delil Niteliğindeki Tekstil Liflerinin Morfolojik İncelenmesi: PLM, LSCM, AFM ve SEM

7.Yayınlar

7.1. Uluslararası hakemli dergilerde yayınlanan makaleler (SCI & SSCI & Arts and Humanities)

- A1. **B. Ünal** and S.C. Bayliss, "Electroluminescence and Photovoltaic effects of anodically fabricated metal/porous silicon/Si sandwich structures based on n-type porous Si", J. Appl. Phys, 80 (1996) pp. 3532
- A2. **B. Ünal**, S.C. Bayliss and P.J. Harris, "Photovoltaic effects from nano- and micro-structured Si", SPIE Proc., 3179 (1997) pp. 33
- A3. **B. Ünal**, S.C. Bayliss, P. Phillips and E.H.C. Parker, "Intense visible photoluminescence from molecular beam epitaxial porous Si_{0.7}Ge_{0.3}grown on Si", Thin Solid Films, 305(1997) pp. 280
- A4. **B. Ünal** and S.C. Bayliss, "Photovoltaic effects from porous Si", J. of Phys. D: Appl. Phys, 30 (1997) pp. 2763
- A5. **B. Ünal** and S.C. Bayliss, "Electrical Characterization of Photovoltaic Porous Si", Journal of Porous Materials, 7 (2000) pp. 295
- A6. **B. Ünal**, S.C. Bayliss, and D.T. Clarke, "Spectral response of porous silicon based photovoltaic devices", J Appl. Phys, 87(7) (2000) pp. 3547
- A7. **B. Ünal**, M. Parkinson, S.C. Bayliss, T. Naylor and D. Schroder, "Photoluminescence Lifetime and Structure of Molecular Beam Epitaxy Porous Si_{1-x}Ge_x grown on Si", Journal of Porous Materials, 7 (2000) pp. 143
- A8. **B. Ünal**, A.N. Parbukov and S.C. Bayliss, "Photovoltaic properties of a novel stain-etched porous Si and its application in photosensitive devices", Optical Materials, 17(1-2) (2001) pp. 79.
- A9. LA Balagurov, SC Bayliss, AF Orlov, EA Petrova, **B. Ünal**, DG Yarkin, "Electrical properties of metal/porous silicon/p-Si structures with thin porous silicon layer", J Appl Phys, 90(8) (2001) pp. 4184
- A10. LA Balagurov, SC Bayliss, VS Kasatochkin, EA Petrova, **B. Ünal**, DG Yarkin, "Transport of carriers in metal/porous silicon/c-Si device structures based on oxidized porous silicon", J Appl Phys , 90(9) (2001) pp. 4543
- A11. LA Balagurov, SC Bayliss, SY Andrushin, AF Orlov, **B. Ünal**, DG Yarkin, EA Petrova, "Metal/PS/c-Si photodetectors based on unoxidized and oxidized porous silicon", Solid State Electron,45(9) (2001) pp. 1607
- A12. R H Dahm, R J Latham, **B. Ünal**, D R Gabe and M Ward, "Use of solutions of organic acids to produce low friction anodised surfaces", The International journal for surface engineering and coatings, 81(5) (2003)
- A13. C.Y. Tai, **B. Ünal**, J. S. Wilkinson, M. A. Ghanem, and P. N. Bartlett , "Optical coupling between a self-assembled microsphere grating and a rib waveguide", Appl. Phys. Lett, 84 (2004) pp. 3513
- A14. SY Andrushin, LA Balagurov, GV Liberova, BA Loginov, EA Petrova, A Sapelkin, **B. Ünal**, DG Yarkin, "Formation of porous silicon on a non-conductive substrate and its use as a sacrificial layer", Semiconduc. Scien. and Techno. 20(12) (2005) pp. 1217
- A15. **B. Ünal**, C.Y. Tai, D. P. Shepherd, J. S. Wilkinson, N. M. B. Perney, M. C. Netti, J. J. Baumberg, "Nd:Ta₂O₅ Rib Waveguide Lasers", Appl. Phys. Lett, 86 (2005) pp. 021110
- A16. **B. Ünal**, M.C. Netti, M.A. Hassan, P.J. Ayliffe, M.D.B. Charlton, F. Lahoz, N.M.B. Perney, D.P. Shepherd, C-Y Tai, J. S. Wilkinson, and G. J. Parker, "Neodymium-Doped Tantalum Pentoxide Waveguide Lasers", IEEE Journal of Quantum Electronics, 41(12) (2005) pp. 1565

- A17.** A.V. Sapelkin, S. C. Bayliss, **B. Ünal** and A. Charalambou, "Interaction of B50 rat hippocampal cells with stain - etched porous silicon", *Biomaterials*, 27(2006) pp. 842
- A18.** L.A. Balagurov, B.A. Loginov, E.A. Petrova, A. Sapelkin, **B. Ünal**, D.G. Yarkin, "Formation of porous silicon at elevated temperatures", *Electrochimica Acta*, 51 (2006) pp. 2938
- A19.** D. Mills, T. Kreouzis, A. Sapelkin, **B. Ünal**, Z. Zyuzikov, K.W. Kolasinski, "Surface texturing of Si, porous Si and TiO₂ by laser ablation", *Applied Surface Science*, 253 (2007) pp. 6575

2010

- A20.** A. Baykal, N. Bitrak, **B. Ünal**, H. Kavas, Z. Durmus, S.Özden, M.S.Toprak, " Polyol synthesis of (polyvinylpyrrolidone) PVP-Mn₃O₄ nanocomposite", *Journal of Alloys and Compounds*, 502 (2010) pp. 199
- A21.** **B. Ünal**, M.S. Toprak, Z. Durmuş, H. Sözeri, A. Baykal, "Synthesis, structural and conductivity characterization of alginic acid-Fe₃O₄ nanocomposite ", *J of Nanopart. Res.* 12 (2010) pp.3039
- A22.** **B. Ünal**, Z. Durmuş, A. Baykal, H. Sözeri, M.S. Toprak, L. Alpsoy, "L-Histidine coated iron oxide nanoparticles: Synthesis, structural and conductivity characterization", *Journal of Alloys and Compounds*, 505 (2010) pp. 172
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2011

- A24.** Z. Durmus, H. Sozeri, **B. Ünal**, A. Baykal, R. Topkaya, S. Kazan, M.S. Toprak, "Magnetic and dielectric characterization of alginic acid-Fe₃O₄ nanocomposite", *Polyhedron*, 30 (2011) pp. 322-328
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- A28.** S. Bahçeci, **B. Ünal**, A. Baykal, H. Sözeri, E. Karaoglu, B. Esat, "Synthesis and Characterization of Polypropiolate Sodium (PPNa)-Fe₃O₄ nanocomposite", *Journal of Alloys and Compounds*, 509 (2011) pp. 8825
- A29.** **B. Ünal**, "Quenching Influence of Cell Culture Medium on Photoluminescence and Morphological Structure of Porous Silicon", *Applied Surface Science*, 258 (2011) pp. 207-211

2012

- A30.** M. Aydın, **B. Ünal**, B. Esat, A. Baykal, E. Karaoğlu, M.S. Toprak, H. Sözeri, "Synthesis, magnetic and electrical characteristics of poly(2-thiophen-3-yl-malonic acid)/Fe₃O₄ nanocomposite", *Journal of Alloys and Compounds*, 514 (2012) pp. 45-53
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2013

- A34. **B. Ünal**, A. Baykal, M. Senel, H. Sozeri, "Synthesis and Characterization of Multiwall-Carbon Nanotubes Decorated with Nickel Ferrite Hybrid", *J Inorg Organomet Polym*, 23(2013) pp. 489-498
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- A38. **B. Ünal**, M. Senel, A. Baykal, H. Sozeri, "Multiwall-carbon nanotube/cobalt ferrite hybrid: Synthesis, Magnetic and Conductivity Characterization", *Current Applied Physics*, 13 (2013) pp. 1404-1412

2014

- A39. **B. Ünal**, A. Baykal, "Effect of Zn Substitution on Electrical Properties of Nanocrystalline Cobalt Ferrite", *Journal of Superconductivity and Novel Magnetism*, 27 (2014) pp. 469-479
- A40. S. Shafiu, **B. Ünal** and A. Baykal, "Polyaniline–MnFe₂O₄–CTAB Nanocomposite in Ionic Liquid : Electrical Properties", *J. Supercon. Nov. Magn.*, 27 (2014) pp. 1073-1078
- A41. M. Karakız, B. Toydemir, **B. Ünal** and L.C. Arslan, "Growth of shape controlled silicon nanowhiskers by electron beam evaporation" *Eur.Phys. J. Appl. Phys.* 65 (2014) pp. 20403.
- A42. A. K. Tuncer and **B. Ünal**, "Comparison of Sealer Penetration Using the EndoVac Irrigation System and Conventional Needle Root Canal Irrigation", *Journal of Endodontics*, 40 (2014) pp. 613-617. <http://dx.doi.org/10.1016/j.joen.2013.11.017>

2015

- A43. F. Genc, **B. Ünal**, A. Baykal, H. Sozeri, "Electrical Properties of Mn-Doped Ni_xZn_{0.9-x}Fe₂O₄ Particles" *J Supercond Nov Magn* 28 (2015) pp.1055–1064. DOI 10.1007/s10948-014-2833-4
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- A45. **B. Ünal**, "Investigation of the quenched surfaces of visibly luminescent macro/nanoporous silicon under the exposure of typical neuron culture media" *Surface Engineering and Applied Electrochemistry*, 51(4) (2015) pp.318-325.
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- A47. A Baykal, M. Demir, **B. Ünal**, H. Sözeri, M. S. Toprak, "Synthesis, Characterization, and Dielectric Properties of BaFe₁₀(Mn²⁺Zn²⁺Zn²⁺)O₁₉ Hexaferrite" *J Supercond Nov Magn* (2016) 29:199–205; doi:10.1007/s10948-015-3232-1,
- A48. H. Sözeri, F. Genç, **B. Ünal**, A. Baykal, B. Aktas, "Magnetic, electrical and microwave properties of Mn-Co substituted Ni_xZn_{0.8-x}Fe₂O₄ nanoparticles", *Journal of Alloys and Compounds* 660 (2016) 324-335. doi:10.1016/j.jallcom.2015.11.123,

- A49.** I.A. Auwal, **B. Ünal**, H. Güngüneş, Sagar E. Shirsath, A. Baykal, “Dielectric properties, cationic distribution calculation and hyperfine interactions of La^{3+} and Bi^{3+} doped strontium hexaferrites” *Ceramics International* 42 (2016) 9100–9115, <http://dx.doi.org/10.1016/j.ceramint.2016.02.175>
- A50.** Y. Bakış, I.A. Auwal, **B. Ünal**, A. Baykal, “Conductivity and dielectric properties of $\text{SrLa}_x\text{Bi}_x\text{Y}_x\text{Fe}_{12-3x}\text{O}_{19}$ ($0.0 \leq x \leq 0.33$) hexaferrites” *Ceramics International*, 42 (2016) 11780-11795 [doi:10.1016/j.ceramint.2016.04.099](https://doi.org/10.1016/j.ceramint.2016.04.099)
- A51.** Y. Bakış, I.A. Auwal, **B. Ünal**, A. Baykal, “Maxwell-Wagner relaxation in grain boundary of $\text{BaBi}_x\text{La}_x\text{Y}_x\text{Fe}_{12-3x}\text{O}_{19}$ ($0.0 < x < 0.33$) hexaferrites” *Composites Part B* 99 (2016) 248-256. [doi:10.1016/j.compositesb.2016.06.047](https://doi.org/10.1016/j.compositesb.2016.06.047)
- A52.** **B. Ünal**, İ.S. Ünver, H. Güngüneş, U. Topal, A. Baykal, Hüseyin Sözeri "Microwave, dielectric and magnetic properties of Mg-Ti substituted NiZn-ferrite nanoparticles" *Ceramics International*, 42 (2016) 17317-17331, <http://dx.doi.org/10.1016/j.ceramint.2016.08.028>

2017

- A53.** I. Auwal, **B. Ünal**, A. Baykal, U. Kurtan, Md Amir, A. Yıldız, Murat Sertkol “Electrical and Dielectric Properties of Y^{3+} -Substituted Barium Hexaferrites ” *J Supercond Nov Magn* (2017) 30:1813-1826, [doi:10.1007/s10948-017-3978-8](https://doi.org/10.1007/s10948-017-3978-8)
- A54.** I.A. Auwal, **B. Ünal**, A. Baykal, Ü. Kurtan, A. Yıldız, “Electrical and Dielectric Characterization of Bi–La Ion-Substituted Barium Hexaferrites” *J Supercond Nov Magn* (2017) 30:1499-1514 [doi:10.1007/s10948-016-3945-9](https://doi.org/10.1007/s10948-016-3945-9)
- A55.** A. Karatutlu, S. Istengir, S. Cosgun, I. Seker, **B. Ünal**, “Decalin-assisted light emitting porous Si formation and its optical, surface and morphological properties” *Applied Surface Science* 422 (2017) 498–503. <https://doi.org/10.1016/j.apsusc.2017.06.057>.

2018

- A56.** MA Almessiere, **B. Ünal**, A Baykal, “Dielectric and Microstructural Properties of YAG:Dy^{3+} Ceramics”, *Journal of Rare Earths* (2018) 36(12) pp. 1310-1318, <https://doi.org/10.1016/j.jre.2018.04.011>.

2019

- A57.** M. A. Almessiere, **B. Ünal**, A. Baykal and I.Ercan “The effect of Yb^{3+} ion substitution on dielectric and microstructural properties of $\text{Y}_3\text{Al}_5\text{O}_{12}$ ceramics” *J Mater Sci: Mater Electron* (2019) 30(1):609–623. <https://doi.org/10.1007/s10854-018-0327-z>.
- A58.** M. A. Almessiere, **B. Ünal**, A. Baykal and I.Ercan, “Electrical Properties of Cerium and Yttrium Co-substituted Strontium Nano-hexaferrites” *Journal of Inorganic and Organometallic Polymers and Materials* (2019) 29(2) pp.402-415 <https://doi.org/10.1007/s10904-018-1010-9>.
- A59.** M. A. Almessiere, **B. Ünal**, A. Baykal, I.Ercan and M. Yildiz, "The impact of Eu^{+3} Ion substitution on Dielectric Properties of $\text{Y}_{3-x}\text{Eu}_x\text{Al}_5\text{O}_{12}$ ($0.00 \leq x \leq 0.10$) Ceramics” *J Mater Sci: Mater Electron* 30(3): (2019) 2489–2500. <https://doi.org/10.1007/s10854-018-0523-x>
- A60.** Y. Slimani, **B. Ünal**, E. Hannachi, A. Selmi, Almessiere, M. Nawaz, A. Baykal, I. Ercan, M. Yildiz, “Frequency and dc bias voltage dependent dielectric properties and electrical conductivity of $\text{BaTiO}_3/\text{SrTiO}_3/(\text{SiO}_2)_x$ nanocomposites”, *Ceramics International* (2019), <https://doi.org/10.1016/j.ceramint.2019.03.092>.
- A61.** M.A. Almessiere, **B. Ünal**, Y. Slimani, A. Demir Korkmaz, N.A. Algarou, A. Baykal, Electrical and dielectric properties of Nb^{3+} ions substituted Ba-hexaferrites, *Results in Physics* (2019) 14 :102468. <https://doi.org/10.1016/j.rinp.2019.102468>,
- A62.** **B. Ünal**; M Almessiere; y. Slimani; a. Baykal; AV. Trukhanov; I. Ercan; “The Conductivity and Dielectric Properties of Neobium Substituted Sr-Hexaferrites” *Nanomaterials*, (2019) 9(8) :1168, <https://doi.org/10.3390/nano9081168>

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A65.Y. Slimani, **B. Ünal**, M. A. Almessiere, E. Hannachi, G. Yasin, A. Baykal and I. Ercan, “Role of WO_3 nanoparticles in electrical and dielectric properties of BaTiO_3 – SrTiO_3 ceramics” Journal of Materials Science: Materials in Electronics 31(2020) :7786–7797. <https://doi.org/10.1007/s10854-020-03317-7> [IF:2.22] WOS:000523090200003

A66.Y. Slimania, **B. Ünal**, M.A. Almessiere, A. Demir-Korkmaz, S. E. Shirsath, G. Yasmine, A.V. Trukhanov and A. Baykal, “Investigation of structural and physical properties of Eu^{3+} ions substituted $\text{Ni}_{0.4}\text{Cu}_{0.2}\text{Zn}_{0.4}\text{Fe}_2\text{O}_4$ spinel ferrite nanoparticles prepared via sonochemical approach” Results in Physics 17 (2020) 103061, <https://doi.org/10.1016/j.rinp.2020.103061> , [IF:4.019] WOS:000548698400011

A67.F. Alahmari, M.A. Almessiere, **B. Ünal**, Y. Slimani and A. Baykal “Electrical and optical properties of $\text{Ni}_{0.5}\text{Co}_{0.5-x}\text{Cd}_x\text{Nd}_{0.02}\text{Fe}_{1-78}\text{O}_4$ ($x \leq 0.25$) spinel ferrite nanofibers” Ceramics International 46 (2020) 24605–24614 <https://doi.org/10.1016/j.ceramint.2020.06.249>, [IF:3.83] WOS:000564517000008

A68.M.A. Almessiere, Y. Slimani, **B. Ünal**, T.I. Zubar, A. Sadaqate, A.V. Trukhanov, A. Baykal “Microstructure, dielectric and microwave features of $[\text{Ni}_{0.4}\text{Cu}_{0.2}\text{Zn}_{0.4}](\text{Fe}_{2-x}\text{Tb}_x)\text{O}_4$ ($x \leq 0.1$) nanospinel ferrites” Journal of Materials Research and Technology, 9(5), (2020) pp.10608-10623, <https://doi.org/10.1016/j.jmrt.2020.07.094> [IF:5.289] WOS:000579367500106

A69.N.A. Algarou, Y. Slimani, M.A. Almessiere, S. Rehman, M. Younas, **B. Ünal**, A. Demir Korkmaz, M.A. Gondal, A.V. Trukhanov, A. Baykal, I. Nahvi “Developing the magnetic, dielectric and anticandidal characteristics of $\text{SrFe}_{12}\text{O}_{19}/(\text{Mg}_{0.5}\text{Cd}_{0.5}\text{Dy}_{0.03}\text{Fe}_{1.97}\text{O}_4)_x$ hard/soft ferrite nanocomposites” Journal of the Taiwan Institute of Chemical Engineers 113 (2020) pp. 344-362. <https://doi.org/10.1016/j.jtice.2020.07.022> [IF:4.794] WOS:000578016300033

2021

A70. Y. Slimani, **B. Ünal**, M.A. Almessiere, A. Demir Korkmaz, A. Baykal, “Investigation of AC susceptibility, dielectric and electrical properties of Tb-Tm co-substituted M-type Sr hexaferrites” Materials Chemistry and Physics, 260, (2021) 124162, <https://doi.org/10.1016/j.matchemphys.2020.124162>. [IF:2.880] (Birinci merkezde iki yazarlı ikinci merkezde tek yazar 40x0.6x0.8=19.2 puan) WOS:000620382000004

A71. M. A. Almessiere, **B. Ünal**, I. A. Auwal, Y. Slimani, H. Aydin, A. Manikandan & A. Baykal “Impact of calcination temperature on electrical and dielectric properties of $\text{SrGa}_{0.02}\text{Fe}_{11.98}\text{O}_{19}$ – $\text{Zn}_{0.5}\text{Ni}_{0.5}\text{Fe}_2\text{O}_4$ hard/soft nanocomposites” J Mater Sci: Mater Electron 32, (2021) pp.16589–16600 <https://doi.org/10.1007/s10854-021-06214-9> [IF: 2.220] (Birinci merkezde iki yazarlı ikinci merkezde tek yazar 40x0.6x0.8=19.2puan) WOS:000652936200001

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A73. M.A. Almessiere, **B. Ünal**, Y. Slimani, H. Gungunes, M.S. Toprak, N. Tashkand, A. Baykal, M. Sertkol, A.V. Trukhanov, A. Yıldız, A. Manikandan, “Effects of Ce-Dy rare earths co-doping on various features of Ni-Co spinel ferrite microspheres prepared via hydrothermal approach” Journal of Materials Research and Technology, 14 (2021) pp.2534-2553 <https://doi.org/10.1016/j.jmrt.2021.07.142> [IF:

5.039] (Birinci merkezde tek yazarlı üçüncü merkezde tek yazar 40x0.8=32 puan)
WOS:000702874100011

A74. M.A. Almessiere, **B. Ünal**, A. Demir Korkmaz, S.E. Shirsath, A. Baykal, Y. Slimani, M.A. Gondal, U. Baig, A.V. Trukhanov, “Electrical and dielectric properties of rare earth substituted hard-soft ferrite $(\text{Co}_{0.5}\text{Ni}_{0.5}\text{Ga}_{0.01}\text{Gd}_{0.01}\text{Fe}_{1.98}\text{O}_4)_x / (\text{ZnFe}_2\text{O}_4)_y$ nanocomposites” *Journal of Materials Research and Technology*, **15** (2021) pp.969-983 <https://doi.org/10.1016/j.jmrt.2021.08.049> **[IF: 5.039]** WOS:000760564500005 (Birinci merkezde tek yazarlı üçüncü merkezde tek yazar 40x0.8=32 puan)

A75. M.A. Almessiere, **B. Ünal**, Y. Slimani, I. Auwal, A. Manikandan, A.V. Trukhanov, A. Baykal; “Investigation on electrical and dielectric properties of hard/soft spinel ferrite nanocomposites of $\text{CoFe}_2\text{O}_4 / (\text{NiSc}_{0.03}\text{Fe}_{1.97}\text{O}_4)_x$ ” *Vacuum* **194** (2021) 110628 <https://doi.org/10.1016/j.vacuum.2021.110628>, **[IF: 3.627]** WOS: 000706061600003 (Birinci merkezde tek yazarlı üçüncü merkezde tek yazar 40x0.8=32 puan)

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A76. **B. Ünal**, M.A. Almessiere, A.V.Trukhanov, A. Baykal, Y. Slimani, M.V. Silibin, A. Manikandan, “A study on the conductivity, dielectric, and microwave properties of $\text{SrNb}_x\text{Y}_x\text{Fe}_{12-2x}\text{O}_{19}$ ($0.00 \leq x \leq 0.05$) nanohehexaferrites” *Journal of Materials Research and Technology*, **17** (2022) 2975-2986 <https://doi.org/10.1016/j.jmrt.2022.02.036> **[IF: 5.039]** WOS:000782648200002 (Birinci merkezde tek yazarlı 40x1=40 puan)

A77. M.A.Almessiere, **B.Ünal**, S.Ali, A.Baykal, Y.Slimani, A.V.Trukhanov, "One-pot synthesis of hard/soft $\text{SrFe}_{10}\text{O}_{19}/x(\text{Ni}_{0.8}\text{Zn}_{0.2}\text{Fe}_{1.8}\text{Cr}_{0.2}\text{O}_4)$ nanocomposites: Electrical features and reflection losses", *Ceramics International*, **48**(17), (2022) 25390-25401**[IF:5.532]** WOS:000833743200002 (Birinci merkezde tek yazarlı 40x1=40 puan)

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A81. **B. Ünal**, M.A. Almessiere, I.A. Auwal, Y. Slimani, A. Baykal, “The role of Pr^{3+} , Pr^{3+} - Y^{3+} and Pr^{3+} - Y^{3+} - Dy^{3+} ions substitutions on the electrical and dielectric properties of NiCo nanospinel ferrites” *Journal of Alloys and Compounds* **944** (2023) 169096 **[IF:6.371]** <https://doi.org/10.1016/j.jallcom.2023.169096>

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7.2. Uluslararası diğer hakemli dergilerde yayınlanan makaleler

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- B21.** B. Ünal and S.C. Bayliss, "PV effects of anodically fabricated metal/PS/Si sandwich structures based on n-type PS", [O] *Chelsea Amorphous and Organic Semiconductor Conference*, London/UK, 18-19 Apr. 1996,

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7.3. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitabında (Proceedings) basılan bildiriler

- C1.** Optical Spectroscopy Of Neodymium-Doped Tantalum Pentoxide Slab Waveguides, "5. B.Ünal, M.C.Netti, N.M.B.Perney, M.Hassan D.P.Shepherd, J.J.Baumberg and J.S.Wilkinson ", CLEO, Tapei/Taiwan, Dec. 2005
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- C4.** B. Ünal and S.C. Bayliss, "Electrical Characterisation of Photovoltaic Porous Si", Materials of International Conference , Mallorca, Spain, Mar. 1998 P1-26,
- C5.** M.J. Parkinson, P.J. Harris, S.C. Bayliss, B. Ünal and D. Schröder, "Oxide growth and related effects on nanostructure sizes", IOP-CMMP'97 Conference, Exeter/UK, Dec. 1997
- C6.** B. Ünal and S C Bayliss , "Excitation Energy and Temperature Dependences of Visible Photoluminescence from Porous SiGe Grown on Si", the IOP-CMMP'96 , York/UK, Dec. 1996
- C7.** B. Ünal, S.C. Bayliss, W. Frentrop, A. Sapelkin and P. Harris , "Local Structure of Porous Si_{1-x}Ge_x on Si", Bessy Annual Scientific Report, Berlin/Germany, Oct. 1996 256-258,
- C8.** B. Ünal and S.C. Bayliss, "Electroluminescence and photovoltaic effects from metal / porous Si /Si sandwich structures", Daresbury Annual Conference, Warrington/UK, Sep. 1996
- C9.** B. Ünal and S.C. Bayliss, "Electroluminescence and Photovoltaic effects of anodically fabricated metal/porous silicon/Si sandwich structures based on n-type porous Si", IOP-CMMP'95 Conference, Liverpool/UK, Dec. 1995

7.4. Yazılan uluslararası kitaplar veya kitaplarda bölümler

- D1.** E. ŞENTÜRK, B. ÜNAL “ Bölüm 21: ADLİ MÜHENDİSLİK VE NANOTEKNOLOJİ
- D2.** M. F. ERGİN, B. ÜNAL “Yangın Ve Patlamanın Adli Bilimler Yönünden Değerlendirilmesi **Bölüm Adı:**Yangın Ve Patlama Olaylarında Nanoteknolojinin Kullanımı” Nobel Yayın Dağıtım, (2020)
- D3.** Bayram ÜNAL, Necmi SERİN ve diğerleri, "Lineer elektronik laboratuvarı deney notları-1", Ankara Üniversitesi, 09/1991
- D4.** Bayram ÜNAL, Necmi SERİN ve diğerleri, "Lineer elektronik laboratuvarı deney notları-2", Ankara Üniversitesi, 09/1991

7.5. Ulusal hakemli dergilerde yayınlanan makaleler

7.6. Ulusal bilimsel toplantılarda sunulan ve bildiri kitabında basılan bildiriler

- F1.** B. Ünal, “Rib Waveguide lasers based on Nd:Ta₂O₅ deposited on SiO₂/Si substrates” Fatih Üniversitesi, İstanbul, (16 Ocak 2007),
- F2.** B. Ünal, “Nd Katkılı Ta₂O₅ Dalga klavuzlu lazerlerin Üretimi ve Karakterizasyonu” Gebze Yüksek Teknoloji Enstitüsü, Gebze Adapazarı, (26 Temmuz 2006),
- F3.** B. Ünal, "Fabrication and characterization of neodymium doped tantalum rib waveguide lasers", *Molecular and Materials Group Seminar*, Queen Mary University of London, Londra, İngiltere (28 Mar. 2005),

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- F13. B. Ünal, S.C. Bayliss, W. Frentrop, A. Sapelkin and P. Harris , "Local Structure of Porous Si_{1-x}Ge_x on Si",[P] *BESSY Annual Conference*, pp.256-258, Berlin/Germany, (Oct. 1996)
- F14. B. Ünal, S.C. Bayliss, W. Frentrop, and P. Harris, "Local Structure of Porous Si_{1-x}Ge_x On Si : an O K-edge study" [P] *BESSY Annual Conference*, Berlin, Germany, (Oct. 1996).
- F15. B. Ünal, S.C. Bayliss and P.J. Harris , "Photovoltaic effects from nano- and micro-structured Si", [O] *Solid State Crystal in Optoelectronics and Semiconductor Technology Conference*, Zakopane, Poland, (7-11 Oct. 1996)

7.7. Diğer yayınlar

8. Projeler

1. Adli delil niteliğindeki tekstil liflerinin morfolojik incelemesi: PLM, LSCM, AFM ve SEM, BAP (Dr Projesi) İstanbul Üniversitesi Cerrahpaşa, 2023-24, Yürütücü, Bütçe:45.000TL
2. Tetrahydrocannabinol THC Analizine Yönelik Moleküler Olarak Damgalanmış Polimerlerin Sentezlenmesi ve Karakterizasyonu, BAP (Yüksek Lisans Projesi) İstanbul Üniversitesi Cerrahpaşa, 2021-22, Yürütücü, Bütçe:25.000TL
3. Yanal Üç Boyutlu ve Nanosütun Kapılı Organik Alan Etkili Transistörlerin (L3d-Ofet Ve Pin Gate-Ofet) Üretilmesi ve Karakterizasyonu, TÜBİTAK 2014, 2014-2017, Araştırmacı, Bütçe:348.000TL
4. Yüksek Frekans Pasif Tümlleşik Devre Elemanları İçin Tümlleşik Devre Süreçleri İle Uyumlu Manyetik İnce Film Üretim Modülü Geliştirilmesi, TÜBİTAK-2013, 2013-16, Danışman, Bütçesi: 238.000 TL.
5. 7'den 70'e Nanoteknoloji Farkındalığının oluşturulması, TUBITAK 2013 Apr 2013-Apr 2013, Araştırmacı, Bütçe: 120.000TL.
6. *Catalyzing New International Collaborations: Research and Education in nano-organics for renewable energy harvest and storage*, USA: N.S.F. 2014, Yürütücü Yrd. Bütçe: 100.000\$.

7. *Ferromanyetik Metal Aşıl原因mış ZnO Heteroyapılarda Spin Enjeksiyonu ve Rashba Etkisinin Teorik ve Deneyisel Olarak İncelenmesi*, TUBITAK, Apr 2011-Apr 2014, Araştırmacı, Bütçe: 318.871,00TL.
8. *Moleküler demet epitaksi yöntemiyle Si/SiGe ince filmlerin üretilmesi, özelliklerinin incelenmesi ve kuantum kaskatlı lazer uygulaması*, Üniversite Araştırma Proje Fonu 2013. Yürütücü Bütçe:12.000TL
9. *Sandviç Yapıdaki Gözenekli Silisyum Cihazlarının Fotovoltaik Etkisinin Karakterizasyonu*, Üniversite Araştırma Proje Fonu, Apr 2011-Apr 2012, Ana Yönetici, Bütçe:14.000TL.
10. *İç Hava Kirleticilerinin Dolmabahçe Saray Envanterinde Bulunan Tarihi ve Kültürel Mirasa Etkilerinin Araştırılması, Risk Değerlendirmesi ve Uygun Kirlilik Kontrol Sistemlerinin Önerilmesi*, TUBITAK, Jan 2010-Jan 2012, Araştırmacı, Bütçe: 240.000 TL.
11. *Kimyasal Aşındırma ve NanoParçacık Üretim Tekniğıyle Silisyum İnce Film ve nanoparçacıklarının Üretimi ve Karakterizasyonu.*, Üniversite Araştırma Proje Fonu, Jan 2010-Dec 2010, Ana Yönetici; Bütçe: 13.400TL.
12. *BiyoNanoTeknoloji Araştırma Laboratuvarı Altyapı Projesi*, D.P.T. Altyapı Projesi, Proje Yöneticisi, Oct 2008-Dec 2010 Toplam Bütçe : 9.2 Milyon TL (~7.3 Milyon US\$)
13. *Düşük Yüzey Gerilimli Kimyasal Aşındırma Tekniğıyle Tekdüze Nanogözenekli Işıldamalı Silisyum İnce Film Üretiminin Araştırılması*, Üniversite Araştırma Projesi, Feb 2008-Dec 2008, Proje Yöneticisi, Proje No:P50010801-1; Bütçe: 12.500 bin TL
14. *Bi-directional interfacing of electronics and cultured neurons*, EPSRC- İngiltere, Nov 2003-Oct 2006, Yardımcı Yönetici, Bütçesi : ~500 bin TL
15. *Photonic Crystal Circuits and Devices (PcCAD)s*, EPSRC- İngiltere, Mar 2001-Nov 2003, Araştırmacı Bütçesi:900 bin TL
16. *Electrochemical Etching and Electroplating of Aluminium and its Compound for Low Friction Technology*, DeMontfort University, İngiltere, Araştırmacı Oct 1999-Nov 2000. Bütçesi:260.000TL
17. *Fabrication and Characterisation of Porous Nanostructures of Group IV Semiconductors*, DeMontfort University, İngiltere, Araştırmacı Oct 1995-Nov 1999. Bütçesi:180.000TL

9. İdari Görevler

Görev Unvanı	Görev Yeri	Yıl
Araş.Gör.	Fen ve Mühendislik Fakültesi, Ankara Üniversitesi, Türkiye	1988-1993
Araş.Gör.	Fen-Edebiyat Fakültesi, Mersin Üniversitesi, Türkiye	1993-1999
Dr. Araş. Gör	Uygulamalı Fen Fakültesi, Leicester De Montfort Üniversitesi, İngiltere	1999-2000
Post. Doc.	Elektronik ve Bilgisayar Fakültesi, Southampton Üniversitesi, İngiltere	2001-2003
Post. Doc.	Sağlık Fakültesi, Leicester De Montfort Üniversitesi, İngiltere	2004-2004
Post. Doc.	Fen Fakültesi, Londra Queen Mary Üniversitesi, İngiltere	2004-2006
Yrd. Doç.Dr.	Fen-Edebiyat Fakültesi, Fatih Üniversitesi, Türkiye	2007-2010
Doç. Dr.	Fen-Edebiyat Fakültesi, Fatih Üniversitesi, Türkiye	2010-2011
Doç. Dr.	Elektrik-Elektronik Müh., Fatih Üniversitesi, Türkiye	2011-2014
Kurucu Müdür	BiyoNanoTeknoloji Ar-Ge Merkezi	2010-2013
Kurucu Müdür	BiyoNanoTeknoloji Enstitüsü	2012-2014
Doç. Dr.	MDB Fakültesi, İstanbul Zaim Üniversitesi, Bilgisayar Mühendisliği.	2014-2015
Prof. Dr.	Bilgisayar Mühendisliği; MDB Fakültesi, İstanbul Zaim Üniversitesi	2015-2019
Üye	Kalite Komisyon Üyesi İstanbul Zaim Üniversitesi	2015-2018
Üye	MDB Fakültesi, Yönetim Kurulu Üyesi	2015-2018
Koordinatör	Teknopark Koordinatörü, İstanbul Zaim Üniversitesi	2015-2017
Enstitü Müdürü	Fen Bilimler Enstitüsü, İstanbul Zaim Üniversitesi	2015-2017
Bölüm Başkanı	Yazılım Mühendisliği; MDB Fakültesi, İstanbul Zaim Üniversitesi	2015-2019
Prof.Dr.	İstanbul Üniversitesi-Cerrahpaşa, Adli Tıp ve Adli Bilimler Enstitüsü	2019-Şu an
Enstitü Müdürü	İstanbul Üniversitesi-Cerrahpaşa, Nanoteknoloji ve Biyoteknoloji Enstitüsü	2019-2020
YK Üyesi	İstanbul Üniversitesi-Cerrahpaşa, Adli Tıp ve Adli Bilimler Enstitüsü	2020-2023

10. Bilimsel ve Mesleki Kuruluşlara Üyelikler

11. Ödüller

- ❖ Türk Fizik Derneği Lisans Öğrenci Bursu (1985-1987);
- ❖ YÖK Yurtdışı Lisansüstü Bursu (1993-1998),
- ❖ Leicester DeMontfort Üniversitesi Misafir Bilim Adamı (18ay süreli) (1998)
- ❖ Leicester DeMontfort Üniversitesi Rektör Laxton Sertifika Ödülü. (1998)
- ❖ Leicester DeMontfort Üniversitesi LAXTON BEQUEST Finans Ödülü (1000 Sterlin) (1998)
- ❖ Rusya Ortaklık Şeref Nişanesi ve Ödülü (1300 Sterlin) (1999)
- ❖ DPT Altyapı Proje Teşvik Ödülü (2009)
- ❖ 2010-2011 Akademik yılı Yayında en İyi Akademisyen Başarı Ödülü, Rektörlük
- ❖ 2011-2012 Akademik yılı Yayında en İyi Akademisyen Başarı Ödülü, Rektörlük
- ❖ 2017-2108 Akademik yılı Yayın Performans Ödülü, Rektörlük.

12. Son iki yılda verdiğiniz lisans ve lisansüstü düzeydeki dersler için aşağıdaki tabloyu doldurunuz.

Akademik Yıl	Dönem	Dersin Adı	Haftalık Saati		Öğrenci Sayısı
			Teorik	Uygulama	
2021-2022	Güz	Adli Bilimlerde ve Mühendislikte Nanoteknoloji (Dr)	2	0	4
		Adli Bilimlerde İstatistik (YL)	2	0	1
		Kriminalistik (2 Hafta) (YL)	2/14		32
	İlkbahar	Adli Mikrokopi Teknikleri (Dr)	2	0	4
2022-2023	Güz	Adli Bilimlerde İstatistik	2	0	1
		Adli Bilimlerde & Mühendislikte Nanoteknoloji (Dr)	2		
		Adli Bilişim (YL)	2	0	1
		Kriminalistik (2 Hafta) (YL)	2/14		30
	İlkbahar	Adli Mikrokopi Teknikleri (Dr)	2	0	

Not: Açılmışsa, yaz döneminde verilen dersler de tabloya ilave edilecektir.

13. Verdiğiniz lisans ve lisansüstü düzeydeki derslerin listesini oluşturunuz.
Lisans Programı

Dönem	Ders Adı	Dili	Saat
2018-2019	Sayısal Tasarım	Türkçe	3
2018-2019	Physics-I	İngilizce	3+2
2018-2019	Physics-II	İngilizce	3+2
2017-2018	Sayısal Tasarım	Türkçe	3
2017-2018	Physics-II	İngilizce	3+2
2017-2018	Physics-II	İngilizce	3+2
2016-2017	Physics-1	İngilizce	3+2
2016-2017	Physics-II	İngilizce	3+2
2016-2017	Termodinamik	Türkçe	2
2016-2017	Sayısal Tasarım	Türkçe	3+3
2015-2016	Termodinamik	Türkçe	2
2015-2016	Sayısal Tasarım	Türkçe	3
2015-2016	Physics-I	İngilizce	3+2
2015-2016	Physics-II	İngilizce	3+2
2014-2015	Akışkanlar Mekaniği	Türkçe	2
2014-2015	Elektrik ve Elektronik Giriş	Türkçe	2+2
2014-2015	Olasılık ve İstatistik	Türkçe	3
2014-2015	İstatistik	Türkçe	2
2014-2015	Termodinamik	Türkçe	2
2013-2014	Sayısal Mantık Tasarımı	Türkçe	5
2013-2014	Fizik-II	Türkçe	3+2
2013-2014	Digital Logic Design	İngilizce	3+2
2012-2013	Katıhal Elektronik	Türkçe	3
2012-2013	Digital Logic Design	İngilizce	3+2
2012-2013	Sayısal Mantık Tasarımı	Türkçe	3+2
2012-2013	Solid State Electronics	İngilizce	3
2011-2012	Solid State Electronics	İngilizce	3
2011-2012	Digital Logic Design	İngilizce	3+2
2011-2012	Katıhal Elektronik	Türkçe	3

Dönem	Ders Adı	Dili	Saat
2011-2012	Sayısal Mantık Tasarımı	Türkçe	3+2
2010-2011	Solid State Electronics	İngilizce	3
2010-2011	Digital Logic Design	İngilizce	3+2
2010-2011	Katıhal Elektroniği	Türkçe	3
2010-2011	Sayısal Mantık Tasarımı	Türkçe	3+2
2009-2010	Katıhal Fiziği-I	Türkçe	3
2009-2010	Katıhal Fiziği-II	Türkçe	3
2009-2010	İstatistik Fizik	Türkçe	3
2009-2010	Solid State Physics-I	İngilizce	3
2009-2010	Solid State Physics-II	İngilizce	3
2009-2010	Statistical Physics-I	İngilizce	3
2008-2009	Solid State Physics-I	İngilizce	3
2008-2009	Katıhal Fiziği-I	Türkçe	3
2008-2009	Solid State Physics-II	İngilizce	3
2008-2009	Katıhal Fiziği-II	Türkçe	3
2007-2008	Fizik -I	Türkçe	3+2
2007-2008	Physics-I	İngilizce	3+2
2007-2008	Physics-II	İngilizce	3+2
2007-2008	Isı ve Termodinamik	Türkçe	3+2
2007-2008	Heat and Thermodynamics	İngilizce	3+2
2007-2008	Physics II	İngilizce	3+2

Lisansüstü Program (Yüksek Lisans + Doktora)

Dönem	Ders Adı	Dili	Saat
2022-2023	Mikroskopi Teknikleri (Dr)	Türkçe	2
2022-2023	Adli Bilimlerde İstatistik (YL)	Türkçe	2
2022-2023	Adli Bilişim (YL)	Türkçe	2
2022-2023	Adli Bilimlerde & Mühendislikte Nanoteknoloji (Dr)	Türkçe	2
2021-2022	Adli Bilimlerde İstatistik(YL)	Türkçe	2
2021-2022	Mikroskopi Teknikleri (Dr)	Türkçe	2
2021-2022	Adli Bilimlerde & Mühendislikte Nanoteknoloji (Dr)	Türkçe	2
2020-2021	Adli Bilimlerde ve Mühendislikte Nanoteknoloji (Dr)	Türkçe	2
2020-2021	Adli Mikrokopi Teknikleri (Master)	Türkçe	2
2013-2014	Nanoscience and Nanotechnology	İngilizce	3
2012-2013	Optoelectronic Devices	İngilizce	3
2012-2013	Semiconductor Quantum Devices	İngilizce	3
2010-2011	Optoelectronic Devices	İngilizce	3
2010-2011	Nanostructures and Nanotechnology I	İngilizce	3
2006-2007	Advanced Solid State Physics	İngilizce	3