PROF. DR AZEEZ A. BARZINJY

(PhD in Materials Science at University of Leicester, Leicester, UK)

Full Professor of Nanomaterials Science at
Soran University, Kurdistan Region, Iraq



PROFILE

Having outstanding research potential and an aptitude to enthusiastically contribute to the research projects goals as well as a proven publication track record and a good standard of written English. Able to interact with all researchers in a constructive, creative and professional manner during the processing, storing and logging process. Possessing prior knowledge of teaching, theoretical and experimental research work, Azeez is always looking for appropriate Research collaboration with the researchers in Materials Science, Nanotechnology and Quantum fields.

CONTACT

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HOBBIES

Calligraphy
Reading
Travelling

WORK ADDRESS

Scientific research center, Soran university, Kurdistan Region, Iraq
Zip code: 44008

EDUCATION

B. Sc. Degree
B. Sc. (1994-1998) in Physics -Department of Physics, College of Education, University of Salahaddin-Erbil, Iraq.
M.Sc. Degree
M. Sc. (2002-2004) in Superconducting Transmission line -Department of Physics, College of Education, Salahaddin University-Erbil, Iraq.
M.Sc. (2008-2009) in Theoretical Physics, Old Dominion University, Virginia, USA.
PhD. Degree
PhD (2011-2014) in Material Science, Material center /University of Leicester -United Kingdom.

WORK EXPERIENCE

Teaching Assistance
Teaching assistance (1998-2002) in in Physics -Department of Physics, College of Education, University of Salahaddin Erbil-Iraq.
Working in Modern Physics Lab, Nuclear Physics Lab, General Physics Lab and Properties of Matter Lab.
Teaching Staff
Teaching staff (2004-2011) in in Physics -Department of Physics, College of Education, University of Salahaddin Erbil-Iraq.
Teaching Staff
Teaching staff (2014-2022) in in Physics -Department of Physics, College of Education, University of Salahaddin Erbil-Iraq. TIU and Raparin University.
Researcher at Scientific Research Center, Soran University (2022-now).
Advising about 50 projects of BSc students. Supervising 2 M. Sc. Students and Discussion committee in many PhD, MSc and BSc thesis.

SKILLS

1. Research Experience (Materials Science, Green Synthesis Nanoparticles, Electrodeposition, Thin Films, Ionic Liquids and Nanotechnology).
2. Teaching Experience (Nanotechnology, Materials Science, Quantum Mechanics, Analytical Mechanics, Thermodynamics, Modern Physics, Optics and Thin Film Preparation).
3. Computer and software proficiency (Mathcad, MATLAB, Mathematica, COMSOL Multiphysics, Spartan (molecular modeling and computational chemistry application from Wavefunction), Graph Pad Prism and Origin Pro).
4. Languages and Skills (Kurdish, Arabic and English).

ORGANIZATION COMMITTEES

1. EXAMINATION, SCIENTIFIC, QUALITY ASSURANCE, PROGRAMING, SEMINAR, RESEARCH PROJECT, PROMOTION, AND JURY COMMITTEE MEMBER IN SEVERAL UNIVERSITES IN KURDISTAN AND IRAQ AND WORLD.
2. EDITORIAL BORD IN LOCAL AND INTERNATIONAL JOURNALS.
3. SCIENTIFIC COMMITTEE OF 3RD INTERNATIONAL CONFERENCE ON COMPUTATIONAL AND EXPERIMENTAL SCIENCE AND ENGINEERING (ICCESEN 2016) IN KEMER-ANTALYA (TURKEY). HTTP://2016.ICCESEN.ORG/PAGE/SCIENTIFIC-COMMITTEE
4. SCIENTIFIC COMMITTEE OF 4TH INTERNATIONAL CONFERENCE ON COMPUTATIONAL AND EXPERIMENTAL SCIENCE AND ENGINEERING (ICCESEN 2017) IN KEMER-ANTALYA (TURKEY). HTTP://2017.ICCESEN.ORG/PAGE/SCIENTIFIC-COMMITTEE
5. SCIENTIFIC COMMITTEE OF 5TH INTERNATIONAL CONFERENCE ON COMPUTATIONAL AND EXPERIMENTAL SCIENCE AND ENGINEERING (ICCESEN 2018) IN KEMER-ANTALYA (TURKEY). HTTP://WWW.ICCESEN.ORG/PAGE/SCIENTIFIC-COMMITTEE
6. INTERNATIONAL ADVISORY BOARD OF THE FIRST INTERNATIONAL CONFERENCE ON CURRENT NANOTECHNOLOGY AND ITS APPLICATION (ICCNA - 2018) 10 - 12 APRIL, 2018, IRBID, JORDAN.
HTTP://WWW.JUST.EDU.JO/CONFERENCES/ICCNA2018/PAGES/COMMITTEES.ASPX
7. SCIENTIFIC COMMITTEE IN THE FOURTH INTERNATIONAL CONFERENCE ON "RESEARCH TO APPLICATIONS & MARKETS" RAM 2019, OCTOBER 21-23, 2019 - HAMMAMET - TUNISIA
HTTPS://SITES.GOOGLE.COM/A/FSS.USF.TN/RAM2019/COMMITTEES/INTERNATIONAL-SCIENTIFIC-COMMITTEE
8. SCIENTIFIC COMMITTEE IN INTERNATIONAL CONFERENCE ON NANOTECHNOLOGY AND ITS APPLICATIONS, FROM 22-23 JANUARY 2020. JOINTLY ORGANIZED BY SALAHADDIN UNIVERSITY-ERBIL, IRAQ, MINISTRY OF INDUSTRY & MINERALS, CORPORATION OF RESEARCH & INDUSTRIAL DEVELOPMENT (CRID) AND UNIVERSITY OF MALAYA (UM).
HTTPS://INFOTECHPROGRAMS.WIXSITE.COM/NANO2020/FRYQ-ALNANW
9. SCIENTIFIC COMMITTEE AND INTERNATIONAL COMMITTEE IN THE FIFTH INTERNATIONAL SYMPOSIUM ON DIELECTRIC MATERIALS AND APPLICATIONS, ISYDMA'5, 15-17 APRIL 2020. FACULTY OF SCIENCES SEMLALIA CADI AYYAD UNIVERSITY MARRAKESH, MOROCCO.
HTTPS://WWW.ISYDMA.COM/COMMITTEES/
10. SCIENTIFIC COMMITTEE IN THE 3RD INTERNATIONAL CONFERENCE ON MATERIAL STRENGTH AND APPLIED MECHANICS (MSAM 2020) AUGUST 10-13, 2020, MACAO, CHINA
HTTP://WWW.MSAMCONF.ORG/COMMITTEE.HTML
11. ORGANIZATION COMMITTEE FOR 1ST, 2ND, 3RD, 4TH, 5TH AND 6TH NANOTECHNOLOGY WORKSHOP AT TIU FROM 2017-2022 RESPECTIVELY.
HTTPS://TIU.EDU.IQ/NANOTECHNOLOGY-WORKSHOP-NW1-2017/NANOTECHNOLOGY-WORKSHOP-NW1-2017-2/
12. PRESENTING SEVERAL PRESENTATIONS ABOUT "HOW TO PUBLISH YOUR MANUSCRIPTS IN INTERNATIONAL JOURNALS" IN SEVERAL WORKSHOPS IN SALAHADDIN, ERBIL POLY TECHNIQUE, RAPARIN, TIU, ZAKHO, HAWLER MEDICAL UNIVERSITY.

Local and International Memberships

1. AMERICAN PHYSICAL SOCIETY SINCE 2008.
2. AMERICAN CHEMICAL SOCIETY SINCE 2011.
3. ROYAL SOCIETY OF CHEMISTRY SINCE 2011.
4. KURDISTAN TEACHERS UNION SINCE 1998.
5. KURDISTAN PHYSICISTS' SYNDICATE SINCE 2005.
6. KURDISTAN CALLIGRAPHERS SOCIETY SINCE 1994.
7. LEICESTER IONIC LIQUIDS GROUP SINCE 2011.
8. ZANCO CULTURAL CENTER SINCE ESTABLISHING THE CENTER.
9. SCIENCE PUBLISHING GROUP SINCE 2014.
10. REVIEWR IN JORDAN JOURNAL OF PHYSICS, ZANCO JOURNAL, ASIAN JOURNAL OF MATERIALS SCIENCE, POLYTECHNIQUE JOURNAL, ISHIK JOURNAL, ARO JOURNAL AND ZAKHO JOURNAL SINCE 2014.

LINKS

FORMAL PAGE: https://www.webofscience.com/wos/author/record/W-6517-2019

RESEARCH GATE: https://www.researchgate.net/profile/Azeez-Barzinjy-2

GOOGLE SCHOLAR: https://scholar.google.com/citations?user=gg7a2BsAAAAJ&hl=en&authuser=1

LIVE DNA: HTTP://WWW.LIVEDNA.NET/?DNA=964.11825

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SEMANTICSCHOLAR: HTTPS://WWW.SEMANTICSCHOLAR.ORG/AUTHOR/AZEEZ-ABDULLAH-BARZINJY/72517640

Publications (Articles)

1. Abbott, Andrew P., **Azeez A. Barzinjy**, Paul D. Abbott, Gero Frisch, Robert C. Harris, Jennifer Hartley, and Karl S. Ryder. "Speciation, physical and electrolytic properties of eutectic mixtures based on $CrCl_3 \cdot 6H_2O$ and urea." Physical Chemistry Chemical Physics 16, no. 19 (**2014**): 9047-9055.
2. Nasrollahzadeh, Mahmoud, Mohaddeseh Sajjadi, Mehdi Maham, S. Mohammad Sajadi, and **Azeez A. Barzinjy**. "Biosynthesis of the palladium/sodium borosilicate nanocomposite using Euphorbia milii extract and evaluation of its catalytic activity in the reduction of chromium (VI), nitro compounds and organic dyes." Materials Research Bulletin 102 (**2018**): 24-35.
3. Tlili, Iskander, M. M. Bhatti, Samir Mustafa Hamad, **Azeez A. Barzinjy**, M. Sheikholeslami, and Ahmad Shafee. "Macroscopic modeling for convection of Hybrid nanofluid with magnetic effects." Physica A: Statistical Mechanics and its Applications 534 (**2019**): 122136.
4. Li, Yong, Farshad Shakeriaski, **Azeez A. Barzinjy**, Rebwar Nasir Dara, Ahmad Shafee, and Iskander Tlili. "Nanomaterial thermal treatment along a permeable cylinder." Journal of Thermal Analysis and Calorimetry 139, no. 5 (**2020**): 3309-3315.
5. Liu, Wi, Amin Shahsavar, **Azeez A. Barzinjy**, Abdullah AAA Al-Rashed, and Masoud Afrand. "Natural convection and entropy generation of a nanofluid in two connected inclined triangular enclosures under magnetic field effects." International Communications in Heat and Mass Transfer 108 (**2019**): 104309.
6. Alrbaey, K., David Ian Wimpenny, **Azeez A. Barzinjy**, and Adam Moroz. "Electropolishing of re-melted SLM stainless steel 316L parts using deep eutectic solvents: 3× 3 full factorial design." Journal of Materials Engineering and Performance 25, no. 7 (**2016**): 2836-2846.
7. Peng, Yeping, Majid Zarringhalam, **Azeez A. Barzinjy**, Davood Toghraie, and Masoud Afrand. "Effects of surface roughness with the spherical shape on the fluid flow of Argon atoms flowing into the microchannel, under boiling condition using molecular dynamic simulation." Journal of Molecular Liquids 297 (**2020**): 111650.
8. Sajadi, S. Mohammad, Kamal Kolo, Samir M. Hamad, Sarbast A. Mahmud, **Azeez A. Barzinjy**, and Sarbast M. Hussein. "Green Synthesis of the Ag/Bentonite Nanocomposite UsingEuphorbia larica Extract: A Reusable Catalyst for Efficient Reduction of Nitro Compounds and Organic Dyes." ChemistrySelect 3, no. 43 (**2018**): 12274-12280.
9. **Azeez A. Barzinjy**, "Electrodeposition of chromium using novel deep eutectic solvents." PhD diss., University of Leicester, **2014**.
10. Wu, Huawei, Abdullah AAA Al-Rashed, **Azeez A. Barzinjy**, Amin Shahsavar, Ali Karimi, and Pouyan Talebizadehsardari. "Curve-fitting on experimental thermal conductivity of motor oil under influence of hybrid nano additives containing multi-walled carbon nanotubes and zinc oxide." Physica A: Statistical Mechanics and its Applications 535 (**2019**): 122128.
11. **Azeez A. Barzinjy**, and Masoud M. Zankana. "A novel application of the quartz crystal microbalance for determining the rheological properties of the highly viscous liquids." Acta Physica Polonica A 130, no. 1 (**2016**): 239-244.
12. Xiong, Qingang, M. Ayani, **Azeez A. Barzinjy**, Rebwar Nasir Dara, Ahmad Shafee, and Trung Nguyen-Thoi. "Modeling of heat transfer augmentation due to complex-shaped turbulator using nanofluid." Physica A: Statistical Mechanics and its Applications 540 (**2020**): 122465.
13. Tlili, Iskander, Tawfeeq Abdullah Alkanhal, **Azeez A. Barzinjy**, Rebwar Nasir Dara, Ahmad Shafee, and Zhixiong Li. "Investigation of thermal characteristics of carbon nanotubes: Measurement and dependence." Journal of Molecular Liquids 294 (**2019**): 111564.
14. Zhao, Dongming, Mohammadali Hedayat, **Azeez A. Barzinjy**, Rebwar Nasir Dara, Ahmad Shafee, and Iskander Tlili. "Numerical investigation of Fe3O4 nanoparticles transportation due to electric field in a porous cavity with lid walls." Journal of Molecular Liquids 293 (**2019**): 111537.
15. Tahmasebiboldaji, Mohammad, Masoud Afrand, **Azeez A. Barzinjy**, Samir M. Hamad, and Pouyan Talebizadehsardari. "Forced convection around horizontal tubes bundles of a heat exchanger using a two-phase mixture model: Effects of nanofluid and tubes Configuration." International Journal of Mechanical Sciences 161 (**2019**): 105056.
16. Moghadam, Iman Panahi, Masoud Afrand, Boshra Mahmoudi, **Azeez A. Barzinjy**, and Pouyan Talebizadehsardari. "Curve-fitting on experimental data for predicting the thermal-conductivity of a new generated hybrid nanofluid of graphene oxide-titanium oxide/water." Physica A: Statistical Mechanics and its Applications (**2019**): 122140.
17. **Azeez A. Barzinjy** "Surface roughness reduction of Cr-films deposited from novel deep eutectic solvent: effect of acetylacetone." Surface Review and Letters 26, no. 02 (**2019**): 1850150.

18. **Azeez A. Barzinjy**, S. Mustafa, and H. H. J. Ismael. "Characterization of ZnO NPs Prepared from Green Synthesis Using Euphorbia Petiolata Leaves." EAJSE 4 (**2019**): 74-83.
19. Zhang, Rui, Ali Ghasemi, **Azeez A. Barzinjy**, Maliheh Zareei, Samir M. Hamad, and Masoud Afrand. "Simulating natural convection and entropy generation of a nanofluid in an inclined enclosure under an angled magnetic field with a circular fin and radiation effect." Journal of Thermal Analysis and Calorimetry (**2019**): 1-14.
20. **Azeez A. Barzinjy**, "Electrodeposition of Ni-Cr alloy from Ethaline Deep Eutectic Solvent." ZANCO Journal of Pure and Applied Sciences 28, no. 2 (**2016**).
21. Peng, Yeping, **Azeez A. Barzinjy**, Abdullah AAA Al-Rashed, Afshin Panjehpour, Mehdi Mehrjou, and Masoud Afrand. "Investigation the effect of pulsed laser parameters on the temperature distribution and joint interface properties in dissimilar laser joining of austenitic stainless steel 304 and Acrylonitrile Butadiene Styrene." Journal of Manufacturing Processes 48 (**2019**): 199-209.
22. Zhang, Rui, Ali Ghasemi, **Azeez A. Barzinjy**, Maliheh Zareei, Samir M. Hamad, and Masoud Afrand. "Simulating natural convection and entropy generation of a nanofluid in an inclined enclosure under an angled magnetic field with a circular fin and radiation effect." Journal of Thermal Analysis and Calorimetry (**2019**): 1-14.
23. **Azeez A. Barzinjy**, Haidar Jalal Ismael, Mohammed Abdullah Hamad, Samir Mustafa Hamad, and Mudhaffer Mustafa Ameen. "Mathematical Modeling of Mass Change in Biosensor Quartz Crystal Microbalance Using Matlab." Eurasian Journal of Science & Engineering 3, no. 2 (**2017**): 204-214.
24. Ismail, Haidar Jalal, **Azeez A. Barzinjy**, and Kadhim Qasim Jabbar. "Estimation of Nano-Pore Size Using Image Processing." UHD Journal of Science and Technology 1, no. 1 (**2017**): 38-44.
25. **Azeez A. Barzinjy** "Comparative Crystal Field Studies of Some Ligand of Cr3+ Complexes." Eurasian Journal of Science and Engineering 3, no. 1 (**2017**): 109-116.
26. **Azeez A. Barzinjy**, Dalia A. Abdul, Faiq HS Hussain, and Samir M. Hamad. "Green synthesis of the magnetite (Fe_3O_4) nanoparticle using Rhus coriaria extract: a reusable catalyst for efficient synthesis of some new 2-naphthol bis-Betti bases." Inorganic and Nano-Metal Chemistry (**2020**): 1-10.
27. Manh, Tran Dinh, M. Jafaryar, Samir Mustafa Hamad, **Azeez A. Barzinjy**, Ahmad Shafee, Elham Abohamzeh, and Iskander Tlili. "Nanoparticles hydrothermal simulation in a pipe with insertion of compound turbulator analyzing entropy generation." Physica A: Statistical Mechanics and its Applications 542 (**2020**): 123038.
28. Ma, Yulin, Majid Jafari, **Azeez A. Barzinjy**, B. Mahmoudi, Samir M. Hamad, and Masoud Afrand. "The effect of inlet temperature on the irreversibility characteristics of non-Newtonian hybrid nano-fluid flow inside a minichannel counter-current hairpin heat exchanger." Journal of Thermal Analysis and Calorimetry (**2019**): 1-13.
29. **Azeez A. Barzinjy**, Salih Hassan Salih, Zana Ali Sadraden, and Herish M. Qadir. "Nanostructured device in sensing applications: A review." Eurasian Journal of Science and Engineering 4, no. 1 (**2018**): 82-98.
30. **Azeez A. Barzinjy**, Haidar Jalal Ismail, and Kadhim Qasim Jabbar. "Spectrally Solar Selective Coatings in Absorbing Layers: Theoretical Investigation Using MATLAB." Science 9, no. 1 (**2017**): 1-9.
31. Blbas, Hazhar Talaat Abubaer, Kareem F. Aziz, Sahar H. Nejad, and **Azeez A. Barzinjy**. "Phenomenon of depression and anxiety related to precautions for prevention among population during the outbreak of COVID-19 in Kurdistan Region of Iraq: based on questionnaire survey." Journal of Public Health (**2020**): 1-5.
32. Himdad H. Azeez, **Azeez A. Barzinjy**, "Biosynthesis zinc oxide nanoparticles using Apium graveolens L. leaf extract and its use in removing the organic pollutants in water" Journal of Desalination and Water Treatment 190 (**2020**):179-192.
33. **Azeez A. Barzinjy**, Samir Mustafa Hamad, Mahera Muhsin Esmaeel, Semih Khurshid Aydın, and Faiq Hama Saeed Hussain. "Biosynthesis and characterization of zinc oxide nanoparticles from Punica granatum (pomegranate) juice extract and its application in thin films preparation by spin-coating method." Micro & Nano Letters 15, no. 6 (**2020**): 415-420.
34. **Azeez A. Barzinjy**, Azeez, H.H. Green synthesis and characterization of zinc oxide nanoparticles using Eucalyptus globulus Labill. leaf extract and zinc nitrate hexahydrate salt. SN Appl. Sci. 2, 991 (**2020**).
35. He, Wei, **Azeez A. Barzinjy**, S. Khanmohammadi, Amin Shahsavar, M. A. Moghimi, and Masoud Afrand. "Multi-objective optimization of a photovoltaic thermal-compound sensible rotary heat exchanger system using exergo-economic and enviro-economic approaches." Journal of environmental management 254 (**2020**): 109767.
36. **Azeez A. Barzinjy**, Hamad, S.M., Aydın, S. et al. Green and eco-friendly synthesis of Nickel oxide nanoparticles and its photocatalytic activity for methyl orange degradation. J Mater Sci: Mater Electron (**2020**).

37. DaqiqShirazi, Mohammadreza, **Azeez A. Barzinjy**, Samir M. Hamad, Rezvan Alamian, and Mostafa Safdari Shadloo. "A transient study on two phase adiabatic flow over micro circular pin heat sinks." *Computers & Mathematics with Applications* 81 (**2021**): 811-822.
38. **Azeez A. Barzinjy**, SM Hamad, AF Arkawazie, "Ionic Liquids: Sustainable Media for Nanoparticles" Jordan Journal of Physics 12 (**2019**): 45-62.
39. HJ Ismail, **Azeez A. Barzinjy**, SM Hamad "Analysis of Nanopore Structure Images Using MATLAB Software" Eurasian Journal of Science and Engineering 4 (3) (**2019**): 84-93.
40. **Azeez A. Barzinjy**, HJ Ismael, SM Hamad "A Theoretical Analysis of Transport Characteristics of Nanoparticles in Porous Medium" Eurasian Journal of Science and Engineering 4 (3) (**2019**): 3-18
41. **Azeez A. Barzinjy**, N Hama-Amin, A Othman "Mathematical Modeling of the Impact of Cell Phone Radiation on the Human Brain" Eurasian Journal of Science & Engineering 3 (3) (**2018**): 52-65.
42. Ismail, Haidar J., and **Azeez A. Barzinjy**. "Efficient Enhancement of ultrasound images of abnormal kidney 3." Ultrasound (**2018**): 44-45.
43. **Azeez A. Barzinjy**, MA Hamad, HJ Ismael, SM Hamad "Enhancement of emission and directionality of Light Emitting Diode using Surface Plasmon Resonance" ZANCO Journal of Pure and Applied Sciences 29 (4) (**2017**): 201-209.
44. **Azeez A. Barzinjy**, Kadhim Q. Jabbar, Haidar J. Ismael, Mohammed A. Hamad, and Samir M. Hamad. "Mathematical Modeling of Charge and Discharge Process in Lithium Ion Batteries Using COMSOL Multiphysics." Polytechnic Journal 7 (4) (**2017**).
45. **Azeez A. Barzinjy**, Masoud M. Zankana "Electrodeposition of metals and their alloys using different deep eutectic solvents based on choline chloride" Journal of Garmian University 2 (1) (**2017**): 474-484.
46. **Azeez A. Barzinjy**, Haidar Jalal Ismail, and Mudhaffer Mustafa Ameen. "Mathematical Modeling of Sampling, Quantization, and Coding in Sigma Delta Converter using MATLAB." UHD Journal of Science and Technology 1, no. 1 (**2017**): 17-22.
47. **Azeez A. Barzinjy** "Theoretical analysis of normal and superconducting strip-line parameters" Atti della Fondazione Giorgio Ronchi, (**2012**):576-591.
48. Nasier, N. M., **Azeez A. Barzinjy**, and H. J. Ismail. "Theoretical investigation on traps effect on solar cell characteristics." Atti della Fondazione Giorgio Ronchi 66, no. 5 (**2011**): 715-722.
49. **Azeez A. Barzinjy** "Theoretical study of the electromagnetic wave behavior in Josephson transmission line using MATLAB model." Tikrit Journal of Pure Science 17, no. 4 (**2012**): 156-164.
50. **Azeez A. Barzinjy**, Saeed O. Ibrahim "Some parametric study for low and HTS strip-line" Zanko journal of pure and applied sciences 18 (3) (**2006**): 90-108.
51. Mustafa Hamad, Samir, **Azeez A. Barzinjy**, Haidar Jalal Ismael, and Mohammed A. Hamad. "The Effect of RF-Plasma Power on the Growth of III-Nitride Materials." Eurasian Journal of Science and Engineering 4, no. 3 (**2019**): 66-73.
52. **Azeez A. Barzinjy**, SM Hamad, HH Azeez, "Structure, Synthesis and Applications of ZnO Nanoparticles: A Review" Jordan Journal of Physics 13 (**2020**): 123-135.
53. **Azeez A. Barzinjy**, SM Hamad, AF Arkawazie, "Physical, thermal and structural properties of 1ChCl: 2 Urea based ionic liquids" Moroccan Journal of Chemistry 9 (**2021**): 45-62.
54. Taher, Shivan Jawhar, **Azeez A. Barzinjy**, and Samir Mustafa Hamad. "The Effect of Deposition Time on the Properties of Cu 2 O Nanocubes Using an Electrochemical Deposition Method." Journal of Electronic Materials 49, no. 12 (**2020**): 7532-7540.
55. Abdulrahman, Ahmed Fattah, Sabah Mohammed Ahmed, Samir Mustafa Hamad, and **Azeez A. Barzinjy**. "Effect of Growth Temperature on Morphological, Structural, and Optical Properties of ZnO Nanorods Using Modified Chemical Bath Deposition Method." Journal of Electronic Materials 3(**2021**): 1-14.
56. **Azeez A. Barzinjy**, Samir Mustafa Hamad, Ahmed Fattah Abdulrahman, Safiya Jameel Biro, and AbdulBasit Ali Ghafor. "Biosynthesis, characterization and mechanism of formation of ZnO nanoparticles using Petroselinum crispum leaf extract." Current Organic Synthesis 17, no. 7 (**2020**): 558-566.
57. Mustafa Hamad, Samir, **Azeez A Barzinjy**, Haidar Jalal Ismael, and Mohammed A Hamad. "The Effect of RF-Plasma Power on the Growth of III-Nitride Materials." Eurasian Journal of Science and Engineering 4, no. 3 (**2019**): 66-73.
58. Abdulrahman, A.F., Ahmed, S.M., **Azeez A Barzinjy**, Hamad, S.M., Ahmed, N.M., Almessiere, M.A. Fabrication and Characterization of High-Quality UV Photodetectors Based ZnO Nanorods Using Traditional and Modified Chemical Bath Deposition Methods. Nanomaterials 2021, 11, 677.Nanomaterials (**2021**), 11(3), 677.
59. **Azeez A Barzinjy**, Kareem F. Aziz, Bashdar M. Hussen, Saleem S. Qader, Samir M. Hamad, Arez S. Qader, and Abdullah L. Jamal. "Fear of COVID-19 as a precautionary measure to prevent the epidemic among the population of the Kurdistan Region/Iraq: based on a questionnaire survey." Journal of Public Health (**2021**): 1-8.

60. Esgandari, M., **Azeez A Barzinjy**, Rostami, A., Rostami, G. and Dolatyari, M., Solar cells efficiency enhancement using multilevel selective energy contacts (SECs). Optical and Quantum Electronics, (**2022**) 54(2), pp.1-9.
61. Mustafa, Shelan Muhammed, **Azeez A Barzinjy**, Abubaker Hassan Hamad, and Samir Mustafa Hamad. "Biosynthesis of quantum dots and their usage in solar cells: insight from the novel researches." *International Nano Letters* 12, no. 2 (**2022**): 139-151.
62. Shnawa, Bushra H., Samir M. Hamad, **Azeez A. Barzinjy**, Payman A. Kareem, and Mukhtar H. Ahmed. "Scolicidal activity of biosynthesized zinc oxide nanoparticles by Mentha longifolia L. leaves against Echinococcus granulosus protoscolices." Emergent Materials (**2021**): 1-11.
63. Rahimzadeh, Chiya Y., Ahmed Salih, and **Azeez A. Barzinjy**. "Systematic Multiscale Models to Predict the Compressive Strength of Cement Paste as a Function of Microsilica and Nanosilica Contents, Water/Cement Ratio, and Curing Ages." Sustainability 14, no. 3 (**2022**): 1723.
64. Aspoukeh, Peyman K., **Azeez A. Barzinjy**, and Samir M. Hamad. "Synthesis, properties and uses of ZnO nanorods: a mini review." *International Nano Letters* 12, no. 2 (**2022**): 153-168.
65. Esgandari, M., **Azeez A. Barzinjy**, A. Rostami, G. Rostami, and M. Dolatyari. "Solar cells efficiency enhancement using multilevel selective energy contacts (SECs)." *Optical and Quantum Electronics* 54, no. 2 (**2022**): 102.
66. Abdulrahman, Ahmed F., **Azeez A. Barzinjy**, Samir M. Hamad, and Munirah Abdullah Almessiere. "Impact of Radio Frequency Plasma Power on the Structure, Crystallinity, Dislocation Density, and the Energy Band Gap of ZnO Nanostructure." ACS omega 6, no. 47 (**2021**): 31605-31614.
67. Kumar, MR Anil, Hendry Izaac Elim, Mohd Sobri Idris, Akhmad Herman Yuwono, Brian Yuliarto, P. T. D. Rompas, **Azeez A. Barzinjy** et al. "Hydro thermal synthesis and electrochemical characterization of (V1/2Sb1/2Sn) O4and (Fe1/2Sb1/2Sn) O4as energy storage materials." In 6th International Conference on Basic Sciences 2020, ICBS 2020, p. 050001. American Institute of Physics Inc., (**2021**).
68. Maghoul, Amir, Ali Rostami, **Azeez A. Barzinjy**, and Peyman Mirtaheri. "Electrically Tunable Perfect Terahertz Absorber Using Embedded Combline Graphene Layer." Applied Sciences 11, no. 22 (**2021**): 10961.
69. Talabani, Rebwar Faiq, Samir Mustafa Hamad, **Azeez A. Barzinjy**, and Usame Demir. "Biosynthesis of Silver Nanoparticles and Their Applications in Harvesting Sunlight for Solar Thermal Generation." Nanomaterials 11, no. 9 (**2021**): 2421.
70. **Azeez A. Barzinjy**, Kadhim Qasim Jabbar, and Haidar Jalal Ismael. "MODELLING OF MILD STEEL CORROSION USING COMSOL MULTIPHYSICS." In ICEEE 2015 CONFERENCE, p. 1. (**2015**).
71. NASIER, NM, **Azeez A. Barzinjy**, and HJ ISMAIL. " Theoretical investigation on traps effect on solar cell characteristics" Atti della Fondazione Giorgio Ronchi, (**2011**) 715.
72. **Azeez A. Barzinjy**, Theoretical study of the electromagnetic wave behavior in Josephson transmission line using MATLAB model. Tikrit Journal of Pure Science, (**2012**), 17(4).
73. Rostami, Ali, Isun Tofigi, **Azeez A. Barzinjy**, and Hamit Mirtagioglu. "Theoretical modelling of high-efficiency perovskite solar cells and reduction of internal heat generation using hot-electron extraction." *Optical and Quantum Electronics* 54, no. 4 (**2022**): 234.
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Publications (Books)

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- Nanoscience and Nanotechnology (PhD and M. Sc. Student) Scientific Research center, Soran University, Iraq,
- Advising more than 60 projects of BSc students.
- Supervising several M. Sc. And PhD Students. Discussion committee in many PhD and MSc thesis.

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18. Jordan (German-Jordanian University Madaba) June 9 - 11, 2022
https://sites.google.com/view/humboldt-kolleg-jordan-hcws22/invited-speakers?authuser=0
19. Munich, Germany (UNITE SCIENTIFIC CHEMISTRY CONFERENCE) Jul 18- 19, 2024.
https://chemistry.uniteexplores.com/speakers
20. MALATYA - TÜRKİYE (7th International Conference on Physical Chemistry & Functional Materials)
16-17 May 2024 Malatya Turgut Özal University
https://2024.pcfm-conference.com/speakers.html

Workshops
1. Erbil, 6th International Workshop on Nanotechnology, December 22nd, 2022
https://tiu.edu.iq/6th-international-workshop-on-nanotechnology/
2. Erbil, 5th International Nanotechnology Workshop, January 15th, 2022
https://tiu.edu.iq/5th-international-nanotechnology-workshop-2/
3. Soran, 1st International Workshop on Nanotechnology Prospects & Development, 13th March 2023
https://www.facebook.com/media/set/?vanity=SoranUniversity&set=a.706554127928035

Awards
Top 2% scientists in the world in "Materials Science" field by Stanford University 2023.
https://topscinet.com/scientist_profile/Barzinjy,%20Azeez%20Abdullah/2014/?stype=single_year
Top 2% scientists in the world in "Materials Science" field by Stanford University 2024.
https://topscinet.com/scientist_profile/Barzinjy,%20Azeez%20Abdullah/2014/?stype=single_year
Top 2% scientists in the world in "Materials Science" field by Stanford University 2025.
https://topscinet.com/scientist_profile/Barzinjy,%20Azeez%20Abdullah/2014/?stype=single_year
Top 2% scientists in the world in "Materials Science" field by Stanford University 2026.
https://topscinet.com/scientist_profile/Barzinjy,%20Azeez%20Abdullah/2014/?stype=single_year