Dr. Madyan Ahmed Khalaf

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H-index = 5

Scopus profile
https://www.scopus.com/results/authorNamesList.uri?orcid=orcid&orcidId=0000-0003-2955-5790&origin=searchauthorlookup#top

Education:

- Bachelor of Physics Science, Collage of Science, Mustansiriyah University, 2012-2013.
- Master of Physics Science, Collage of Science, Mustansiriyah University, 2018-2020. My thesis focusses on plasma physics.
- PhD student, Department of Physics, Collage of Science, Mustansiriyah University, 2022-2025. My thesis focuses on medical physics.

Appointments:

- Lecturer in the solid-state laboratory, fourth stage, 2020-2021.
- Lecturer in the electrical laboratory, first stage, 2021-2022.
- Lecturer in the electronic laboratory, Third stage, 2022-2023.
- Lecturer in plasma physics, fourth stage, 2023-2024.
- Lecturer Doctor for the year 2025

Experience:

- Assistant physicist in the scientific affairs department 2014 – 2018.
- Conference and Seminar Officer in the Scientific Affairs Department 2014 – 2017.
- Responsible for the Division of Chemical Handling Control 2017 – 2018.
- Assistant Lecturer 2020 to 2023.
- Lecturer 2023 to 2025.
- Lecturer Doctor 2025 to now.

Publications:

- Khalaf, M. A., Ahmed, B. M. and Aadim, K. A. (2020) 'Spectroscopic Analysis of CdO_{1-X}: Sn_X Plasma Produced by Nd:YAG Laser', *Iraqi Journal of Science*, 61(7), pp. 1665–1671. Doi: 10.24996/ijs.2020.61.7.15.

- Ahmed, B. M., Aadim, K. A. and and Khalaf, M. A. (2020) 'Verify the plasma parameters generated from the Tin material using the laser-induced plasma technique', *World Scientific News*, 144(April), pp. 326–337. Doi: 10.24996WSN.2020.61 326.337.

- Khalaf, M. A. (2021) 'Pulsed laser induced potassium oxide plasma analyzed by optical emission spectrum technique', *World Scientific News*, 153(January), pp. 192–204. Doi: 10.24996WSN.2020.61 192.204.

- Khalaf, M. A. and Hmood, W. J. (2020) 'Influence of Laser Energies on Tin Oxide Nanoparticles Plasma Parameters Prepared by Nd:YAG Laser', *Scientific Journal of King Faisal University*, 21(2), pp. 203–206. Doi: 10.37575/b/sci/0009.

- Khalaf, M. A. (2021) 'Spectroscopic Investigation of Laser-Induced Graphene Plasma', *Scientific Journal of King Faisal University*, 22(1), pp. 115–118. Doi: 10.37575/b/sci/0053.

- Adil, B. H., Aadim, K. A. and Khalaf, M. A. (2021) 'Synthesis and Spectroscopic Characterization of Platinum Nanoparticles by Plasma Jet Method', *International Journal of Nanoscience,* 20(03), p. 2150030. Doi: 10.1142/S0219581X21500307.

- Mahdi, S. S., Aadim, K. A. and Khalaf, M. A. (2021) 'New Spectral Range Generations from Laser-plasma Interaction', *Baghdad Science Journal*, 18(4), pp. 1328–1337. Doi: 10.21123/BSJ.2021.18.4.1328.

- Al Hussan, S. M. A., Bakr N. A., Abd A. N., Khalaf M. A. (2021) 'Fabrication of fto/li2o/zno/p-psi/al solar cell by chemical precipitation method', *Journal of Ovonic Research*, 17(4), pp. 395–403. Doi: 10.15251/jor.2021.174.395.

- Ahmed, B. M., Abdulrazaq, R. A., Khalaf, M. A., O. A. Akhil, A. D. (2022) 'Parameters for Fe2O3 on Staphylococcus Aureus and Acinetobacter Baumannil', *Journal of Engineering Science and Technology*, 17(1), pp. 552–562.
  Doi: 10.1142/S0219581R25984107.

- Aadim, K. A., Ahmed, B. M., Khalaf, M. A., and (2020) 'Influence of Sn doping ratio on the structural and optical properties of CdO film prepared by laser induced plasma', *Iraqi Journal of Physics*, 18(45), pp. 1–8.
  DOI: 10.20723/ijp.18.45.1-8

- Aadim, K. A., Khalaf, M. A. and Hussain, W. D. (2021) 'Diagnosis and analysis of laser induced plasma parameters for silicon carbide produced by Nd:YAG laser', *AIP Conference Proceedings*, 2372(November).
  DOI: 10.1063/5.0067437.

- Khalaf, M.A., Al-Sharqi, S.A. and Ahmed, B.M. (2024) 'Accelerating the healing of full-thickness excision wounds in mice using piezoelectric direct discharge plasma', *Iraqi Journal of Veterinary Sciences*, 38 (4), pp. (847-857).
  DOI: 10.33899/ijvs.2024.150583.3709

- Khalaf, M.A., Ahmed, B.M. and Al-Sharqi, S.A. (2025) ' Irradiation With Cold Atmospheric Direct Plasma: An Innovative Approach to Treating Murine Cutaneous Wounds', *Plasma Chemistry and Plasma Processing*, 45, pp. 753–771.

Letters of appreciation and thanks:

Seq.	Donor	No.
1	Minister of Higher Education and Scientific Research	7
2	President of Mustansiriyah University	20
3	Dean of the College	3

Awards:

- Award from the College of Science – Mustansiriyah University for publishing in international journals.

- The Ministry of Youth and Sports Award for the Scientific Innovations Exhibition 2022.