



Lecturer . Madyan Ahmed Khalaf

Presidency of Mustansiriyah University, Scientific Affairs Department,
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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 to now.

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.

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 2024.
- ❖ Lecturer 2024 to now.

Publications:

- ❖ Khalaf, M. A., Ahmed, B. M. and Aadim, K. A. (2020) ‘Spectroscopic Analysis of CdO1-X: SnX Plasma Produced by Nd:YAG Laser’, *Iraqi Journal of Science*, 61(7), pp. 1665–1671.
[Doi: 10.24996/ij.s.2020.61.7.15](https://doi.org/10.24996/ij.s.2020.61.7.15).
- ❖ Ahmed, B. M., Aadim, K. A. 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.](https://doi.org/10.24996WSN.2020.61.326.337)
- ❖ Khalaf, M. A. (2021) 'Pulsed laser induced potassium oxide plasma analyzed by optical emission spectrum technique', 153(January), pp. 192–204.
[Doi: 10.24996WSN.2020.61 192.204.](https://doi.org/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*. King Faisal University, 21(2), pp. 203–206.
[Doi: 10.37575/b/sci/0009.](https://doi.org/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.](https://doi.org/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.](https://doi.org/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.](https://doi.org/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.](https://doi.org/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.](https://doi.org/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](https://doi.org/10.20723/ijp.18.45.1-8)

- ❖ Aadim, K. A., Khalafand, 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.](https://doi.org/10.1063/5.0067437)

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.