

CURRICULUM VITAE



Asst. Prof. Dr. Khaldoon Naji Abbas (Khaldoon N. Abbas)

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Academic Qualification

1. **PhD. degree in Laser and Nanotechnology / Department of Physics, College of Science, University of Technology, Malaysia (UTM) (2017)**
2. **M.Sc. degree in Laser Physics / Department of Physics, College of Applied Science, University of Technology, Iraq (2002)**
3. **B.Sc. degree in General Physics, Department of Physics, College of Science, University of Baghdad, Iraq (1997).**

Fields of Research Interest

Laser, Nanomaterial, Nanotechnology, and Renewable Energy

Teaching & Work Experiences

1. **Lecturer in Dept. of Physics / College of Science / Mustansiriyah University/ Iraq, from (2005-2013).**
2. **2013-2016: PhD scholarship holder, (2013-2017).**
3. **Lecturer in Dept. of Physics / College of Science / Mustansiriyah University/ Baghdad - Iraq (from 2017 to present).**
4. **Director of Scientific Affairs Dep. / Mustansiriyah University/ Baghdad –Iraq (from 2020 to Present).**

Reviewer of Journals

Journal of (Materials Chemistry and Physics); Publisher (Elsevier)
Journal of (Emerging Materials Research); Publisher (ICE Publishing Company)

List of Publications

1. Abbas, Khaldoon N., Raad S. Sabry, Roonak A. Alkareem, Emad H. Hussein, Shumaila Islam, Noriah Bidin, and Asaad M. Abbas. "Hydrophobic effect evolution dependent manipulation of ZnO nanostructures morphology." *Journal of the Australian Ceramic Society* 56 (2020): 1377-1384.
2. Mohammed, Nadheer J., Emad H. Hussein, Jasim S. Alikhan, Khaldoon N. Abbas, Anwar H. Ali Al-Fouadi, Ksenia Maksimova, Uliana Koneva et al. "Bandgap engineering of low-temperature CdS nanocrystalline prepared on Si(111) without post-thermal annealing." *Materials Today Communications* 25 (2020): 101297.
3. Saeed, Asrar. Farah Jawad Kadhum, Khaldoon N. Abbas, Mahasin F. Hadi Al-Kadhemy "Effects of Anthracene Doping Ratio and UV Irradiation Time on Photo-Fries Rearrangement of Polycarbonate." *Baghdad Science Journal* 17, no. 2 (SI) (2020): 0652-0652.
4. Abbas, Khaldoon N., Nedal A. Hussain, Asmaa D. Nusseif, Emad H. Hussein, Wisam J. Aziz, and Ali A. Salim. "Fabrication and photocatalytic characterization of SnO₂ and SnO₂/TiO₂ nanostructure films." In *Journal of Physics: Conference Series*, vol. 1484, no. 1, p. 012002. IOP Publishing, 2020.
5. Hussein, Emad H., Nadheer J. Mohammed, Anwar H. Ali Al-Fouadi, Khaldoon N. Abbas, Jasim S. Alikhan, Ksenia Maksimova, and Alexander Yu Goikhman. "Impact of deposition temperature on the structural properties of CdS/Si nanoparticles for nanoelectronics." *Materials Letters* 254 (2019): 282-285.
6. Islam, Shumaila, Hazri Bakhtiar, Khaldoon N. Abbas, Saira Riaz, Shahzad Naseem, and Abdul Rahman Bin Johari. "Grown of highly porous ZnO-nanoparticles by pulsed laser ablation in liquid technique for sensing applications." *Journal of the Australian Ceramic Society* 55, no. 3 (2019): 765-771.
7. Al-Asedy, Hayder J., Noriah Bidin, Khaldoon N. Abbas, and Mohammed A. Al-Azawi. "Structure, morphology and photoluminescence attributes of Al/Ga co-doped ZnO nanofilms: Role of annealing time." *Materials Research Bulletin* 97 (2018): 71-80.
8. Islam, Shumaila, Hazri Bakhtiar, Noriah Bidin, Ali Aqeel Salim, Saira Riaz, Khaldoon N. Abbas, Lau Pik Suan, and Shahzad Naseem. "Influence of ZnO doping on structural, optical and pH-stimulus characteristics of silica-titania nanocomposite

- matrix." *Journal of Saudi Chemical Society* 22, no. 7 (2018): 826-837.
- 9. **Khaldoon N. Abbas** and Noriah Bidin. **Morphological Driven Photocatalytic Activity of ZnO Nanostructures.** *Applied Surface Science*, 2017. 394: 498-508.
 - 10. **Khaldoon N. Abbas, Noriah Bidin and Raad S. Sabry.** **Controllable ZnO Nanostructures Evolution via Synergistic Pulsed Laser Ablation and Hydrothermal Methods.** *Ceramics International*, 2016. 42: 13535–13546.
 - 11. **Khaldoon N. Abbas, Noriah Bidin, Raad S. Sabry, Hayder J. Al-Asedy, Mohammed A. Al-Azawi and Shumaila Islam b.** **Structures and Emission Features of High-Density ZnO Micro/Nanostructure Grown by an Easy Hydrothermal Method.** *Materials Chemistry and Physics*, 2016. 182: 298-307.
 - 12. **Khaldoon N. Abbas, Noriah Bidinb, Mohammed A. Al-Azawia and Hayder J. Al-Asedy.** **Nanostructural and Optical Properties of Hierarchical ZnO Grown via Hydrothermal Method.** *Jurnal Teknologi*, 2016. 78(3): 1-5.
 - 13. **Khaldoon N. Abbas, Noriah Bidinb, Mohammed A. Al-Azawia and Hayder J. Al-Asedy.** **Facile Hydrothermal Synthesis of Flower-like ZnO Nanorods without Catalysts.** *Jurnal Teknologi*, 2015. 74(8): 15-18.
 - 14. **Mohammed A Al-Azawi, Noriah Bidin, Khaldoon N. Abbas, Mohamed Bououdina and Shrook A Azzez.** **Broadband Optical Absorption Enhancement of N719 Dye in Ethanol by Gold-Silver Alloy Nanoparticles Fabricated under Laser Ablation Technique.** *Journal of Nanophotonics*, 2016. 10(2). doi: 10.1117/1.JNP.10.026009.
 - 15. **Hayder J. Al-Asedy, Noriah Bidin, Khaldoon N. Abbas and Mohammed A. Al-Azawi.** **ZnO QDs Deposited on Si by Sol-Gel Method: Role of Annealing Temperature on Structural and Optical Properties.** *Modern Applied Science*, 2016. 10(4): 12.
 - 16. **Shumaila Islam, Noriah Bidin, M. Alam Saeed, Saira Riaz, M. Aizat A. Bakar, Shahzad Naseem, Khaldoon N. Abbas and Mohd Marsin Sanagi.** **Synthesis and Characterization of Room Temperature Sol-Gel Assisted Transparent Tin-Doped Magnesium Oxide Nanoparticles' Protective Coating.** *J Sol-Gel Sci Technol*, 2016. doi:10.1007/s10971-016-4207-9.
 - 17. **Mohammed A Al-Azawi, Noriah Bidin, M Bououdina, Khaldoon N. Abbas, Hayder J Al-Asedy, Omar H Ahmed and Asad A Thahe.** **The Effect of the Ambient Liquid Medium on the Ablation Efficiency, Size and Stability of Silver Nanoparticles Prepared by Pulse Laser Ablation in Liquid Technique.** *Jurnal Teknologi*, 2016. 78(3): 7-11.
 - 18. **Mohammed A. Al-Azawi, Noriah Bidin, M Abdullah, Abdulrahman K. Ali, Khaleel I. Hassoon, Khaldoon N. Abbas and Hayder J Al-Asedy.** **Surface Plasmon Resonance Effects of Gold Colloids on Optical Properties of N719 Dye in Ethanol.** *J. Optoelectron*.

- Adv. Mater, 2015. 17(3-4): 264-269.**
19. **Mohammed A. Al-Azawi, Noriah Bidin, M Abdullah and Khaldoon N. Abbas. Optimization of Gold and Silver Nanoparticles Production by Laser Ablation in Deionized Water. Jurnal Teknologi, 2015. 74(8): 75-80.**

Books

N. Bidin, Khaldoon N. Abbas, *et. al.* “**LASER AND NANOTECHNOLOGY**”, Penerbit UTM, www.penerbit.utm.my, 2017.

Conferences

1. Shumaila Islam, Noriah Bidin, **Khaldoon N. Abbas**, Saira Riaz, Shahzad Naseem and Ganesan Krishnan. **Synthesis and Characterization of Optically Active Zn-doped Silicatitania Nano-composites for Sensing Applications.** *Advances in Civil, Environmental and Materials Research (ACEM16)*, Jeju Island, Korea, August 28-Spebtember 1, 2016.
2. Al-Kadhemy, Mahasin F. Hadi, **Khaldoon N. Abbas**, and Walaa B. Abdalmuhdi. "Physical Properties of Rhodamine 6G Laser Dye Combined in Polyvinyl Alcohol films as Heat Sensor." In IOP Conference Series: Materials Science and Engineering, vol. 928, no. 7, p. 072126. IOP Publishing, 2020.
3. **Abbas, Khaldoon N.**, Nedal A. Hussain, Asmaa D. Nusseif, Emad H. Hussein, Wisam J. Aziz, and Ali A. Salim. "Fabrication and photocatalytic characterization of SnO₂ and SnO₂/TiO₂ nanostructure films." In Journal of Physics: Conference Series, vol. 1484, no. 1, p. 012002. IOP Publishing, 2020.
4. Abbas, Asaad M., M. A. Abid, **Khaldoon N. Abbas**, Wisam J. Aziz, and A. A. Salim. "Photocatalytic Activity of Ag-ZnO Nanocomposites Integrated Essential Ginger Oil Fabricated by Green Synthesis Method." In Journal of Physics: Conference Series, vol. 1892, no. 1, p. 012005. IOP Publishing, 2021.