



Contact Information

 <https://sites.google.com/view/taifalawsi/home>

 taif.alawsi@outlook.com  taif.a.faisal@uotechnology.edu.iq

 +9647714292625

 +9647801414092

Lec. Dr. Taif Alawsi

Instructor, Manager, Researcher, Author, Engineer, Supervisor, Reviewer, and Editor

Biography

He received the B.Sc. degree and the M.Sc. degree in Laser and Optoelectronics Engineering from Al Nahrain University, in 2013, and 2017, respectively. He received his Ph.D. in Laser Applications / Electronic and Communication Engineering from the University of Baghdad, in 2021. From 2019-2021 he was a Ph.D. Researcher at La Sapienza University of Rome, Dep. of Information Engineering, Electronics and Telecommunications, Rome, Italy. He served as the Head of Medical Instrumentation Technical Engineering at Technical Engineering College, AUIQ, Thi-Qar, Iraq from 2021-2023. Currently, he is a full-time lecturer, head of graduate follow up unit and head of information technology division at the Laser and Optoelectronics Engineering Dep., University of Tehnology-Iraq. His work experience is in the fields of Communication and Telecommunication Systems, Medical Instrumentation, and Laboratory Equipment. His publications include 29 Research articles, 2 Review articles, 4 Editorials, 3 Preprints and a Book. He had numerous scientific activities such as workshops, presentations, online classes, conferences, and webinars. He is a certified reviewer for WOS and Scopus indexed journals with 253 reviews for 49 Journals. He is a member in IEEE, IEEE Photonics Society, American Chemical Society (ACS), Optical Society of America (OSA), Italian Society of Optics and Photonics (SIOF). He received the Google Certified Educator: Level 1. He served as the managing editor of the Iraqi Journal of Embryos and Infertility Researches (IJEIR) and an editorial member in the American Journal of Science, Engineering and Technology (AJSET) and Journal of Applied Sciences and Nanotechnology (JASN). His research interests include Optics, Lasers, Photonics, Solar cells, Graphene, Smartphone Sensors, and Image Processing.



CURRENT & PAST POSITIONS

Current Position	Department of Laser and Optoelectronics Engineering, University of Technology-Iraq
Sep 2024 - Current	Head of Information Technology Division Head of Graduate Follow up Unit
Feb 2023- Current	Staff Member / Instructor / Laser Branch
Past Position	Al-Ayen University, Technical Engineering College
Jan 2022 – Feb 2023	Head of Medical Instrumentation Technical Engineering Department
Jan 2022- Sep 2022	Dean's assistant for administrative affairs at Technical Engineering College

EDUCATION

NOV 2019 – Jul 2021	Sapienza University of Rome, Information Engineering, Electronics and Telecommunications Ph.D. Researcher: working on my Ph.D. Thesis and Studying 1. Mobile Application and Cloud Computing 2. Smart Environments
SEP 2017 – JUL 2021	University of Baghdad, Institute of Laser for Postgraduate Studies Ph.D. in Laser Applications / Electronic and Communication Engineering Thesis: " Design and Performance Investigation of Smartphone Based Colorimetric Sensor, " 2021.
SEP 2014 – MAY 2017	Al Nahrain University, College of Engineering M.Sc. in Laser and Optoelectronics Engineering, 2017. Thesis: " Design and Performance Investigation of Graphene-Based Optical Modulator, " 2017.
SEP 2009 – JUL 2013	Al Nahrain University, College of Engineering B.Sc. in Laser and Optoelectronics Engineering, 2013. B.Sc. Project: " Infrared Laser Vibration Sensor, " 2013.

AWARDS & GRANTS

Grant	MAECI Grants- Study in Italy
Jan. 2020 – Jul. 2021	Ph.D. Researcher: Sapienza University of Rome Department of Information Engineering, Electronics, and Telecommunications
GRANT NUMBER: 1601461393	The Italian ministry of foreign affairs (Ministero degli Affari Esteri e della Cooperazione Internazionale (Rome, Lazio))

PUBLICATIONS

1. Ibraheem Shelash Al-Hawary, S., Abdu Musad Saleh, E., Althomali, R. H., Yeslam, H. E., Shahab, S., Abdulfadhil Gatea, M., **Alawsi, T.**, & Sapaev, I. (2024). **Efficient photocatalytic reduction of Cr(VI) and degradation of tetracycline by Bi₂Se₃@ZnIn₂S₄ binary heterostructures enriched with sulfur vacancies: Mechanism and mineralization analysis.** *Materials Science and Engineering: B*, 305, 117387. <https://doi.org/10.1016/j.mseb.2024.117387>
2. Saleh, R. O., Al-Hawary, S. I. S., Hammoud, A., Hjaz, A., Ayad Abdulrazzaq, S., Rajput, P., **Alawsi, T.**, Alnajar, M. J., & Alawadi, A. (2024). **The long non-coding RNAs (lncRNA) in the pathogenesis of gastric cancer cells: molecular mechanisms and involvement miRNAs.** *Molecular Biology Reports*, 51(1). <https://doi.org/10.1007/s11033-024-09546-x>
3. M. Jalalnezhad, M K Sharma, S Mansouri, S Velmurugan, S Askar, **T Alawsi**, A Alawadi, A H Abbas, "Learning model predictive controller for wheeled mobile robot with less time delay," *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, Apr. 2024. <https://doi.org/10.1177/09544062241245553>
4. Didi, Faouzi, Ebraheem Abdu Musad Saleh, Abhinav Kumar, Ahmed Alawadi, Ali Alsalamy, **Taif Alawsi**, Reza Alayi, Hasan Hosseinzadeh, and Reza Morovati. "Modeling and Optimizing the Thermodynamics of a Flat Plate Solar Collector in Transient Mode for Economic Purposes." *AIP Advances* 14, no. 1 (January 1, 2024). <https://doi.org/10.1063/5.0185818>
5. Pratiwi, Dewi Indah Noviana, Sharif Alhajlah, Ahmed Alawadi, Ahmed Hjaz, **Taif Alawsi**, Sami G. Almalki, Ali Alsalamy, and Abhinav Kumar. "Mesenchymal Stem Cells and Their Extracellular Vesicles as Emerging Therapeutic Tools in the Treatment of Ischemic Stroke." *Tissue and Cell* 87 (April 2024): 102320. <https://doi.org/10.1016/j.tice.2024.102320>.
6. Abbood, Manal Abdulwahid, Ebraheem Abdu Musad Saleh, Abhinav Kumar, Paul Rodrigues, Shavan Askar, **Taif Alawsi**, Ahmed Alawadi, and Ali Alsalamy, "Enhancing dye-sensitized solar cell performance by employing an innovative WSe₂:Zn counter electrode for improved electrocatalytic activity," *Materials Science in Semiconductor Processing*, vol. 171, p. 108015, Mar. 2024. <https://doi.org/10.1016/j.mssp.2023.108015>
7. Yang, Yongzheng; Bustani, Ghadeer Sabah; **Alawsi, Taif**; Altalbawy, Farag M.A.; Kareem, Ali Kamil; Gupta, Jitendra; Zhu, Ping; Hjaz, Ahmed; Alawadi, Ahmed Hussien; and Mustafa, Yasser Fakri, "The cardioprotective effects of cerium oxide nanoparticles against the poisoning generated by aluminum phosphide pesticide: Controlling oxidative stress and mitochondrial damage," *Pesticide Biochemistry and Physiology*, vol. 197, p. 105701, Dec. 2023. <https://doi.org/10.1016/j.pestbp.2023.105701>
8. B. S. Abdullaeva, **T. Alawsi**, A. Alawadi, and A. Alsalamy, "Optomechanically induced grating in a graphene based nanocavity," *Laser Physics*, vol. 33, no. 12, p. 125201, Oct. 2023. <https://doi.org/10.1088/1555-6611/ad04c8>



9. Altuma, A., Khalid, R., Alanssari, A., Hussien, A., Mezaal, Y., Al-Majdi, K., **Alaws, T.** "An Application of the Genetic Algorithm Optimization to Voltage and Reactive Power Control in the Distribution Systems. *Journal of Operation and Automation in Power Engineering*", 2023; 11(Special Issue (Open))
<https://doi.org/10.22098/joape.2023.12614.1955>
10. Sherzod Shukhratovich Abdullaev, Younus Fahad Breesam, Asaad A.H. AlZubaidi, Abhishek Kumar Tripathi, A.K. Kareem, Sergey Vladimirovich Kuznetsov, **Taif Alaws, Rahman S. Zabibah,**"ZnO@ZnCo2O4 core-shell: A novel high electrocatalytic nanostructure to replace platinum as the counter electrode in dye-sensitized solar cells," *Materials Science in Semiconductor Processing*, Volume 165, 2023, 107709, <https://doi.org/10.1016/j.mssp.2023.107709>
11. Sulieman Ibraheem Shelash Al-Hawary, Azhar Kamel, Sherzod Shukhratovich Abdullaev, A.K. Kareem, Khalid A. Alkhuzai, Rosario Mireya Romero-Parra, Alireza Hossein Amini, **Taif Alaws, Munther Abosooda, Mohsen Dejaverdi** " Optimization of ultrasound-assisted removal of crystal violet dye, Cu(II), and Cd(II) ions by magnetic CoFe2O4 nanoparticles using central composite design" *Alexandria Engineering Journal*, Volume 74, 1 July 2023, Pages 737-749.
<https://doi.org/10.1016/j.aej.2023.05.066>
12. Yasir Qasim Almajidi, Raed H. Althomali, Marwah Suliman Maashi, Irfan Ahmad, Ebraheem Abdu Musad Saleh, A.K. Kareem, Rosario Mireya Romero-Parra, **Taif Alaws, Khulood Saadoon Salim** " Nanocomposite of reduced nanographene oxide with β -lactoglobulin protein (rNGO/ β -Lg) as a carrier of the anticancer drug oxaliplatin (Eloxatin)" *Diamond and Related Materials*, Volume 136, June 2023, 110015. <https://doi.org/10.1016/j.diamond.2023.110015>
13. Aisha Kamal Mahmoud, M. Abdulfadhil Gatea, **Taif Alaws, A. K. Kareem, M. Heydari Vini and S. Daneshmand** "Theoretical and experimental study of the roll bonding behavior of bilayers Al laminates" *Surface Review Letters*, Vol. 30, No. 03, 2350017 (2023).
<https://doi.org/10.1142/S0218625X23500178>
14. Saade Abdalkareem Jasim; Akram H. Shather; **Taif Alaws;** Andrés Alexis Ramírez-Coronel; Ahmed B. Mahdi; Mukhiddin Normatov; Maria Jade Catalan Oplencia; Farid Kamali, " Adsorption properties of B12N12, AlB11N12, and GaB11N12 nanostructure in gas and solvent phase for phenytoin detecting: A DFT study," *Inorganic Chemistry Communications*, Volume 146, December 2022, 110158.
<https://doi.org/10.1016/j.inoche.2022.110158>
15. Ngakan Ketut Acwin Dwijendra, Untung Rahardja, Narukullapati Bharath Kumar, Indrajit Patra, Musaddak Maher Abdul Zahra, Yulia Finogenova, John William Grimaldo Guerrero, Samar Emad Izzat and **Taif Alaws** "An Analysis of Urban Block Initiatives Influencing Energy Consumption and Solar Energy Absorption," *Sustainability* 2022, 14(21), 14273; <https://doi.org/10.3390/su142114273>
16. Mahmood, A. M., Abdul Zahra, M. M., Hamed, W., Bashar, B. S., Abdulaal, A. H., **Alaws, T., & Adhab, A. H. (2022).** Electricity Demand Prediction by a Transformer-Based Model. *Majlesi Journal of Electrical Engineering*. [Link](#)

17. I. Muda, N. K. A. Dwijendra, T. Alawsi, B. S. Bashar, and M. S. Majeed, "Optimal Energy Scheduling of Appliances in Smart Buildings Based on Economic and Technical Indices," *Environmental and Climate Technologies*, vol. 26, no. 1, pp. 561–573, Jan. 2022, doi: [10.2478/rtuect-2022-0043](https://doi.org/10.2478/rtuect-2022-0043).
18. R. Sivaraman, Indrajit Patra, Zainab Mohsen Najm, Noora M. Hameed, Taif Alawsi, Seyedmasoud Hashemi, "The Effects of Minor Element Addition on the Structural Heterogeneity and Mechanical Properties of ZrCuAl Bulk Metallic Glasses", *Advances in Materials Science and Engineering*, vol. 2022, Article ID 6528470, 8 pages, 2022. <https://doi.org/10.1155/2022/6528470>
19. N K.A Dwijenra, I Patra, M J Ansari, N Saadoon, Z I. Al Mashhadani, N H. Obaid, R Sivaraman, Taif Alawsi, A H Jabbar, Y F Mustafa "Insights into the Electronic Properties of Coumarins: A Comparative Study Synthesis and Characterization of Fe₂O₃/Mn₂O₃ Magnetic Nanocomposites for the Photocatalytic Degradation of Methylene Blue" *Phys. Chem. Res.*, Vol. 11, No. 2, 437-447, June 2023, <https://doi.org/10.22036/pcr.2022.336018.2070>
20. Shather, A., Abdel Abbas, A. M., Taha Mohammed, A., Alghazali, T., Musa Jaber, M., Bashar, B. S., Abdul Zahra, M. M., Abdullah Kalaf, G., Alawsi, T. Reyad Hadi, M. (2022). Adaptive Reactive Power Control of Doubly Fed Induction Generator By Using GWO Algorithm. *Majlesi Journal of Electrical Engineering*, 16(3). 2022-07-29.
21. Assoudi, N., A. Chaabani, Mohammed Rasheed, I. Walha, E. Dhahri, Taif Alawsi, Dikra Bouras, and R. Barille. "Comparative Examination of the Physical Parameters of the Sol Gel Produced Compounds La_{0.5}Ag_{0.1}Ca_{0.4}MnO₃ and La_{0.6}Ca_{0.3}Ag_{0.1}MnO₃." *Optical and Quantum Electronics* 54, no. 9 (July 26, 2022). <https://doi.org/10.1007/s11082-022-03927-x>
22. Indrajit Patra, Ahmed M. Abdulhadi, Fatima Safaa Fahim, Bashar S. Bashar, Taif Alawsi, Mohammad Salmani, The Effects of Temperature and Impact Velocity on the Shock Wave Response of Pore-Embedded Metallic Glasses, *Advances in Materials Science and Engineering*, 2022, <https://doi.org/10.1155/2022/6111294>
23. Usama S. Altimari, Rosario Mireya Romero Parra, Ngakan Ketut Acwin, Ali Majdi, Mustafa M. Kadhim, Taif Alawsi, et al., Computational study of the effect of Fe-doping on the sensing characteristics of BC₃ nano-sheet toward sulfur trioxide, *Computational and Theoretical Chemistry*, 2022, 113805, <https://doi.org/10.1016/j.comptc.2022.113805>
24. Jasim, S.A., Patra, I., Abdulhadi, A.M. Al-Gazally, M.E. Sharma, H. Alawsi, T. et al. Magnetic CeO₂/SrFe₁₂O₁₉ Nanocomposite: Synthesis, Characterization and Photocatalytic Degradation of Methyl Orange. *Arab J Sci Eng* (2022). <https://doi.org/10.1007/s13369-022-07044-5>
25. Haider, A.J., Alawsi, T., Haider, M.J. et al. A comprehensive review on pulsed laser deposition technique to effective nanostructure production: trends and challenges. *Opt Quant Electron* 54, 488 (2022). <https://doi.org/10.1007/s11082-022-03786-6>



26. T. Alawsi, G. P. Mattia, Z. Al-Bawi, and R. Beraldi, "Smartphone-Based Colorimetric Sensor Application for Measuring Biochemical Material Concentration," *Sens. & Bio-Sens. Res.* vol. 32, no. 2, pp. 1-9. 2021. DOI: <https://doi.org/10.1016/j.sbsr.2021.100404>
27. Hasn Mahmood Khudair, Taif Alawsi, Anwaar A. Aldergazly, and A. H. Majeed, "Design and Implementation of Aerial Vehicle Remote Sensing and Surveillance System, Dehazing Technique Using Modified Dark Channel Prior," *Advances in Science Technology and Engineering Systems Journal* 5(5):1111-1117, 2020. DOI: <https://doi.org/10.25046/aj0505135>
28. T. Alawsi, and Z. Al-Bawi, "A review of smartphone point-of-care adapter design," *Engineering Reports*, vol. 1, no. 2, Sep. 2019.;e12039. DOI: <https://doi.org/10.1002/eng2.12039>
29. Taif Aied Faisal, and Raad Sami Fyath, "Design and Performance Investigation of Graphene-Based Modulators for 1550 and 1310 nm Optical Communication Wavelengths," *International Journal of Science and Engineering Investigations (IJSEI)*, Vol.6, Issue 61, Pp. '153-166', 2017. ISSN: 2251-8843.
30. Taif Aied Faisal, "Design and Performance Investigation of Graphene-Based Modulator," LAP LAMBERT Academic Publishing, Germany, 2017, ISBN: 978-620-2-01367-3.

OTHER WORKS

PREPRINTS

1. Alawsi, Taif; Albawi, Zainab; Beraldi, Roberto; Mattia, Gabriele Proietti; FARIS, RAWAA (2023). A Custom 3D Printed Design of Smartphone-Based Adapter for Colorimetric Biomarker Concentration Measurements. *Optica Open*. Preprint. <https://doi.org/10.1364/opticaopen.23636244.v1>
2. Almajidi Y.Q., Althomali R.H., Maashi M.S., Ahmad I., Saleh E.A.M., Kareem A.K., Romero-Parra R.M., Alawsi T., Salim K.S. Nanocomposite of Reduced Nanographene Oxide with B-Lactoglobulin Protein (Rngo/B-Lg) as a Carrier of the Anticancer Drug Oxaliplatin (Eloxatin) (2023) SSRN DOI: <https://doi.org/10.2139/ssrn.4372762>
3. Alawsi, T. A. F. (2019, April 26). Design and implementation of audio transceiver using infrared laser for audio signal detection. <https://doi.org/10.17605/OSF.IO/7R5YZ>

TECHNICAL REPORTS

1. Taif Alawsi: Overview of He-Ne Laser.
2. Taif Alawsi: Wave Plate.
3. Taif Alawsi: Design and Performance Investigation of Graphene-Based Optical Modulator Report #1: Conductivity of Graphene: Theory and Experiment.

POSTERS

AUIQ-2022

1. Positron Emission Tomography (PET)
2. Dental Laser Device



3. Gas Chromatograph (GC)
4. Nuclear Magnetic Resonance Spectroscopy (NMR)
5. Digital X-Ray System
6. Optical Coherence Tomography (OCT)
7. functional Magnetic Resonance Imaging (fMRI)
8. Spectrophotometer
9. Magnetic Resonance Imaging (MRI)
10. Laser-Assisted in Situ Keratomileusis (LASIK)
11. Ventilator
12. Algorithms
13. Compilers
14. Operating System (OS)

PROJECTS

AUIQ-2022

1. Design and Implementation of Car Parking Alarm System
2. Design and Implementation of Smart Stick for Visually Impaired People
3. Design and Implementation of Alarm System for Security and Surveillance Applications
4. Design and Implementation of Radar Control with Arduino Circuit
5. Design and Implementation of an LED Memory Game
6. Design and Implementation of Real-Time Temperature and Humidity Sensor
7. Design and Experimental Verification of Oximeter Sensor for Real-Time Heart-Rate Monitoring
8. Design and Implementation of Portable Electrocardiograph

PROJECTS

AUIQ-2023

9. Design and Implementation of 3D Scanner
10. Design and Implementation of 3D Printer with PLA Filament
11. Design and Implementation of Drone Surveillance
12. Design and Implementation of Smart Centrifuge
13. Design and Implementation of Smart ECG
14. Design and Implementation of Portable Water Pollution Detection
15. Modelling of X-Ray Room

PROJECTS

UOT-2023

16. Treatment of Various Diseases using Q-Switched Nd:YAG Laser
17. Laser Material Interaction Using COMSOL Multiphysics Software

PROJECTS

UOT-2024

18. Design and Implementation of a 3D Laser Printer
19. Study The Effects of Temperature on Laser Cladding Process with Two Different Geometries Using COMSOL Multiphysics
20. Study The Effects of Stress on Laser Cladding Process with Two Different Geometries Using COMSOL Multiphysics

TEACHING EXPERIENCE

University of Technology-Iraq	Laser and Optoelectronics Engineering Dep
Sep 2024 – Jan 2025	Signal Processing, LE415, Optoelectronics Branch, 4 th Stage Digital Electronics, LE414, Laser Branch, 4 th Stage Digital Electronics Lab, LEL414, Laser Branch, 4 th Stage
Feb 2024 – Jun 2024	Probability and Engineering Statistics, LOPC224, Laser Branch. 2 nd Stage Probability and Engineering Statistics, LOPC224, Optoelectronics Branch. 2 nd Stage
Sep 2023 – Jan 2024	Signal Processing, LE415, Optoelectronics Branch, 4 th Stage Digital Electronics, LE414, Laser Branch, 4 th Stage Digital Electronics Lab, LEL414, Laser Branch, 4 th Stage
Feb 2023- Jun 2023	Probability and Engineering Statistics, LOPC224, Laser Branch. 2 nd Stage
AUIQ University	Technical Engineering College
Oct 2022- Jun 2023	1. Electronics Devices & Circuits (Medical Instrumentation Technical Engineering Department) 2 nd Stage 2. Electronics Devices & Circuits Lab (Medical Instrumentation Technical Engineering Department) 2 nd Stage
Jan. 2022 – Jul. 2022	3. Electrical Engineering Principles (Medical Instrumentation Technical Engineering Department) 1 st Stage 4. Electrical Engineering Fundamentals (Computer Technical Engineering Department) 1 st Stage
Al Nahrain University	College of Engineering, Laser and Optoelectronics Engineering Department
2016-2017	1. Modern Control Engineering, 3 rd stage 2. Optical Signal Processing, 4 th Stage

WORK EXPERIENCE

ALARABIYA ISLAMIC BANK Programs Developer and Graphic Designer.

AL MOUYASSER COMPANY Maintenance Engineer.

FAYDH AL NAB'E A CO. FOR TRADING SCIENTIFIC INSTRUMENTS Engineer – sales manager.

EARTHLINK TELECOMMUNICATION COMPANY Telecommunications Engineer.

DUHA-BAGHDAD MEDICAL DEVICES COMPANY Maintenance Engineer.

AUTHOR ACKNOWLEDGEMENT

1. Relative humidity sensor based on no-core multimode interferometer coated with Al₂O₃-PVA composite films, Journal Article published Jan 2020 in Optical Fiber Technology volume 54 on page 102110, Authors: Hiba Y. Zebian, Hanan J. Taher.
<https://doi.org/10.1016/j.yofte.2019.102110>
2. Characterization of Multimode Interference Based Optical Fiber, Journal Article published 1 Feb 2021 in IOP Conference Series: Materials Science and Engineering volume 1076 issue 1 on page 012060, Authors: Shahad I Younus, Anwaar A Al-Dergazly, A K Abass.
<https://doi.org/10.1088/1757-899x/1076/1/012060>

REVIEW EXPERIENCE

◆ A reviewer in:

1. [IEEE Photonics Journal \(IEEE\)](#) Sep. 2017
2. [IET Microwaves, Antennas & Propagation \(Wiley, IET, IEEE\)](#) Apr. 2019
3. [Advances in Science, Technology and Engineering Systems Journal \(ASTESJ\)](#) Jun. 2019
4. [Micro & Nano Letters \(Wiley, IET, IEEE\)](#) Jul. 2019
5. [Electronics Letters \(Wiley, IET, IEEE\)](#) Aug. 2019
6. [Optical Engineering \(SPIE\)](#) Nov. 2019
7. [Applied Optics \(OSA\)](#) Dec. 2019
8. [Optics Letters \(OSA\)](#) May 2020
9. [ACS Applied Electronic Materials \(ACS\)](#) Nov. 2020
10. [Nanotechnology \(IOP\)](#) Nov. 2020
11. [Journal of Physics: D Applied Physics \(IOP\)](#) Dec. 2020
12. [Optics Express \(OSA\)](#) Dec. 2020
13. [Machine Learning: Science and Technology \(IOP\)](#) Feb 2021
14. [ACS Applied Materials and Interfaces \(ACS\)](#) Apr. 2021
15. [Journal of Physics Communications \(IOP\)](#) Apr. 2021
16. [ACS Omega \(ACS\)](#) Apr. 2021
17. [Journal of the European Optical Society-Rapid Publications \(Springer\)](#) May 2021
18. [Photonics and Nanostructures - Fundamentals and Applications \(Elsevier\)](#) Jun. 2021
19. [Journal of Optics \(IOP\)](#) Aug. 2021
20. [Biosensors and Bioelectronics \(Elsevier\)](#) Sep. 2021
21. [Photonics Research \(OSA\)](#) Sep. 2021
22. [Engineering Research Express \(IOP\)](#) Oct. 2021
23. [Analytical Chemistry \(ACS\)](#) Oct. 2021
24. [Academia Letters \(Academia\)](#) Nov. 2021
25. [Journal of Nanophotonics \(SPIE\)](#) Dec. 2021
26. [Nano Express \(IOP\)](#) Jan. 2022
27. [IET Image Processing \(IET\)](#) Feb 2022
28. [Journal of Applied Sciences and Nanotechnology \(JASN\)](#) Mar 2022
29. [Applied Physics Letters \(AIP\)](#) May 2022
30. [Majlesi Journal of Electrical Engineering \(MJEE\)](#) Feb 2023
31. [Analytical Methods \(RCS\)](#) Feb 2023
32. [Sensing and Bio-Sensing Research \(Elsevier\)](#) Jul 2023
33. [Physica Scripta \(IOP\)](#) Aug 2023
34. [Royal Society Open Science \(The Royal Society\)](#) Aug 2023
35. [Chinese Optics Letters \(OSA\)](#) Nov 2023
36. [Measurement Science and Technology \(IOP\)](#) Dec 2023
37. [Computational and Theoretical Chemistry \(Elsevier\)](#) Mar 2024
38. [Heliyon \(Elsevier\)](#) Mar 2024
39. [AEJ - Alexandria Engineering Journal \(Elsevier\)](#) Apr 2024
40. [Quantum Science and Technology \(IOP\)](#) Jun 2024



41. [AIP Advances \(AIP\)](#) Jun 2024
42. [Sensors and Actuators A: Physical \(Elsevier\)](#) Jun 2024
43. [Optical Materials \(Elsevier\)](#) Jul 2024
44. [Ain Shams Engineering Journal \(Elsevier\)](#) Aug 2024
45. [Measurement: Sensors \(Elsevier\)](#) Aug 2024
46. [The Journal of Engineering \(Wiley\)](#) Sep 2024
47. [Reviews of Scientific Instruments \(AIP\)](#) Sep 2024
48. [IET Optoelectronics \(Wiley\)](#) Sep 2024
49. [IET Computer Vision \(Wiley\)](#) Sep 2024

- ◆ Publons Excellent Reviewer Badge
- ◆ Publons Academy Graduate Oct. 2018



EDITORIAL BOARD MEMBERSHIPS

1. Iraqi Journal of Embryos and Infertility Researches (IJEIR) Mar. 2019
2. American Journal of Science, Engineering and Technology (AJSET) May 2020
3. Journal of Applied Sciences and Nanotechnology (JASN) Mar 2022

Editorial Records: [Iraqi Journal of Embryos and Infertility Researches \(38\)](#)

Editorials: [Iraqi Journal of Embryos and Infertility Researches \(IJEIR\)](#)

[Volume 10, Issue 2, Formation](#)

[Volume 10, Issue 1, Formation](#)

[Volume 9, Issue 2, Formation](#)

[Volume 9, Issue 1, Formation](#)

Grant Review (2)

ACADEMIC WORK EXPERIENCE: UNIVERSITY OF TECHNOLOGY

- 1- Teaching undergraduates
- 2- Supervising undergraduates
- 3- Head of Graduate Follow-up Unit
- 4- Head of Information Technology Division
- 5- Supervisor of Department Electronic Website
- 6- A Member of the Scientific Affairs Division
- 7- Staff Responsibilities

ACADEMIC WORK EXPERIENCE: AL-AYEN UNIVERSITY

- 1- Teaching undergraduates
- 2- Handling Staff and Student Administrative Issues
- 3- Head of Dept. Position Responsibilities
- 4- Projects for University Rapid Growth
- 5- Research Center Head of (Optical sensors Simulation and its applications in electronics and communications engineering)
- 6- Al-Ayen Platform Manager
- 7- Student Activities Committee Head
- 8- Online Education Committee Member
- 9- College Council Member
- 10- IRU Member
- 11- AIR-R Member
- 12- Consultant
- 13- University Council (Invited Member)
- 14- College Scientific Committee Member
- 15- College Head of Medical Instrumentation Technical Engineering Department
- 16- College Examination Committee Member
- 17- ISCUA:ISA23 Member
- 18- Equipping Laboratories



SKILLS & ACTIVITIES

KEYWORDS AND RESEARCH INTERESTS

Photonics; Lasers; Optics; Optoelectronics; Image Processing; Simulation; Smartphone Sensors; Colorimetric Analysis; Android Application; Smart Sensors; Solar Cells; Graphene Electronics; Quantum Optics; Dark Channel Prior Algorithm; Dehazing; UAV Surveillance; 3D printing; Microscopy; Point-of-Care Diagnostics; FDTD; FEM; Fluorescence; Biomedical Imaging; Remote Sensing; Fiber Optics; Fiber Laser; Machine learning; Antenna Design; Plasmonics; Colorimetry; Photometry; Spectrometry; Nanotechnology; Internet of things; ESP32; Audio Sensors; Temperature and Humidity Sensors; Image Recognition; Guided Wave Optics; Waveguides; Optical Modulators; Lab-on-Chip; Hardware Design.

LANGUAGES RESEARCH SKILLS ACADEMIC FIELDS

Arabic, English

Academic, Research Paper, and Projects Writing.

Multidisciplinary Research; Computer Engineering; Laser Engineering; Optics Engineering; Optoelectronics Engineering; Photonics; Electronics Engineering; Communication Engineering; Biomedical Engineering; Electrical Engineering

SOFTWARE

Microsoft Visual Studio; Visual Basic; Comsol Multiphysics; Lumerical FDTD; MATLAB; Winbox; Multisim; Microsoft Office; G-Suite for Education; SolidWorks; Android Studio; CST; OptiWave; Cura; Arduino IDE.

MEMBERSHIPS

IEEE Member 96121414



IEEE Photonics Society Member



American Chemical Society Member 31814260



Optical Society of America Member 1325052



Italian Society of Optics and Photonics Student Member



Iraqi Engineers Union Member 167368



SDG

G17;G3;G7;G7-G11-G17;G9;G9

ACKNOWLEDGMENTS

High Institute of Fertility Diagnosis and ART's, Dean's Office.

APPRECIATION LETTERS

Head of Laser and Optoelectronics Engineering, UOT, 1 May 2024

University of Technology President, 16 Jan 2024.

Head of Laser and Optoelectronics Engineering, UOT 12 Mar 2024

University Vice Chancellor for Scientific Affairs and Higher Education, University of Technology 21 Jun 2023

University of Technology President, 25 Jun 2023.

Deputy Minister for Scientific Research Affairs, 28-May-2023

Technical Engineering College Dean, Al-Ayen University, 08-May-2022

Technical Engineering College Dean, Al-Ayen University, 20-Jul-2022

Technical Engineering College Dean, Al-Ayen University, 23-Jul-2022

Technical Engineering College Dean, Al-Ayen University, 17-Dec-2022

Al-Ayen University President, 06-Mar-2022

Dean's Office, High Institute of Fertility Diagnosis and ART's, Al Nahrain University, 4 Mar. 2019.

Al Nahrain University President Scientific Affair Associate Office, 23 Dec. 2018.

English Qualification, University of Technology, 2023

Arabic Qualification, University of Technology, 2023

Teaching Validity Test, Al Nahrain University, 14 Oct. 2021

Teaching Methods, Al Nahrain University, 6 Oct. 2021

REFERENCES

Raad Sami Fyath	M.Sc. Thesis Supervisor	Al Nahrain University, Department of Computer Engineering.		rsfyath@yahoo.com
Ula Al-Kawaz	Dean of the Institute	The High Institute for Infertility Diagnosis and Assisted Reproductive Techniques.		ulamhm@googlemail.com
Anwaar Al-Dergazely	Head of Department	Al Nahrain University, Department of Laser and Optoelectronics Engineering.		aldergazly@gmail.com
Fatema Hamid Rajab	First secretary of Department	Al Nahrain University, Department of Laser and Optoelectronics Engineering.		fatema.rajab@eng.nahrainuniv.edu.iq
Zainab Fadhil Mahdi	Ph.D. Thesis Supervisor, Courses Instructor	University of Baghdad / Institute of Laser for Postgraduate Studies		Zainab@ilps.uobaghdad.edu.iq
Mohamed T. Ghoneim	Intel Corporation	Media Lab, Massachusetts Institute of Technology		mohamed.t.ghoneim@gmail.com
Dror Fixler	Associate Editor	IEEE Photonics Journal		dror.fixler@biu.ac.il
Francesco P. Andriulli	Associate Editor	IET Microwaves, Antennas & Propagation		francesco.andriulli@imt-atlantique.fr
Wang Xiu Ying	Associate Editor	Advances in Science, Technology and Engineering Systems Journal.		wangxiuying@ieee.org
Roberto Beraldi	Ph.D. Courses Instructor/supervisor	Information Engineering, "La Sapienza" University of Rome.		beraldi@diag.uniroma1.it
Francesca Cuomo	Ph.D. Courses Instructor/supervisor	Electronics and Communication Engineering, "La Sapienza" University of Rome.		francesca.cuomo@uniroma1.it
Rafid Sagban	Dean of Technical Engineering College	Al-Ayen University		rsagban@alayen.edu.iq
Jasim Kadhim Hmood	Dean's Assistant for Management Affairs	University of technology, Laser & Optoelectronics Eng		jassim.k.hmood@uotechnology.edu.iq

WORKSHOPS (LECTURER)

Email Communication Skills 2024/4/18
Teamwork Skills 2024/4/25
How to Write an Expert Email? 2024/4/16
Self Planning/ Self-Development Skills 2024/4/23
English Skills 2024/4/22
Personal Marketing 2024/4/21
X-Ray Fundamentals, Al-Ayen University, 2022-Jul-19-28
Submission of an article to the Journal: Practical Approach, Al-Ayen University, 2022-Apr-27
Everything you need to know about Publons: Practical Workshop, Al-Ayen University, 2022-Apr-21
Everything you need to know about Researchgate: Practical Workshop, Al-Ayen University, 2022-Apr-13
Academic Researcher training course, University of Technology, 2022-Apr-7
Everything you need to know about Google Scholar: Practical Workshop, Al-Ayen University, 2022-Apr-6
How to Manage Scientific Websites Related to Academic Research, Al-Ayen University, 2022-Mar-30
The Journal System, Al Nahrain University, 4 Mar. 2021.
Research Gate Workshop, Al Nahrain University, 23 Dec. 2018.
Peer Review and Publons, Al Nahrain University, 4 Mar. 2019.

WORKSHOPS (ATTENDEE)

1. How to select the right journal?
2. SSNTDs طريقة جديدة لقياس تراكيز اليورانيوم والثوريوم في العينات البيئية باستخدام كواشف تعقب الاثر النووي
3. كيفية معرفة نوع المجلة وسرعة نشرها
4. OPTICAL FIBER
5. الأجهزة التنفسية
6. كيفية تنقيح البحث وتنظيمه قبل التقديم الى المجلة لزيادة فرص القبول
7. Scopus as researcher tool
8. Optical communication fundamentals and optical fiber maintenance
9. صيانة منظومات الكيبل الضوئي
10. كيفية كتابة البحث الرصين ومنهجيته ومتطلبات وكيفية إرسال البحث الى المجلة العالمية
11. Superiority of Spoken Language over Written Language
12. Remark Office OMR Software
13. Web of Science Essentials
14. Good Citation Behavior
15. Reviewing in the sciences
16. 2021 FiO + LS Conference 17. 2020 FiO + LS Conference
18. 2020 OSA Biophotonics Congress Biomedical Optics
19. ACS CONVERGE: CONVERSATIONS ON REAL- WORLD APPLICATION OF SCIENCE
20. Advances in Polymer Nanocomposites
21. How to Get Published in Academic Journals
22. Design and Fabrication of Inline Fiber System For Covid-19
23. خطوات تقييم البحوث 25. حساب معايير تصنيف المجلات 24. البحث العلمي و اثره على الاعتماد المؤسسي
26. An approach to Pharma Method Validation for Direct Mass Spectrometry
27. Monitoring electronic excitations in organic semiconductors with ultrafast optical pump probe spectroscopy
28. 2020 Conference on Lasers and Electro-Optics ("CLEO")
29. Advances in Multifunctional Nanomaterials



ONLINE EDUCATION CERTIFICATES

ITMO UNIVERSITY / DEPARTMENT OF PHYSICS		
School on High-Q Nanophotonics Structures for Biosensing	Andrey Bogdanov	Nov. 22 – 23, 2021
LA SAPIENZA UNIVERSITY OF ROME		
Smart Environments	Francesca Cuomo	Jul. 21, 2020
ITMO UNIVERSITY / DEPARTMENT OF PHYSICS		
MetaNano Summer School	Daria K. Kozlova	Jul. 10, 2020
GOOGLE FOR EDUCATION		
Google Certified Educator: Level 1	Google	Aug. 30, 2019
OSA REVIEWER CERTIFICATION COURSE		
Optical Society of America	Joseph N. Mait Elizabeth Nolan, Kelly Cohen	Aug. 3, 2019
BECOMING A PEER-REVIEWER		
Researcher Academy Elsevier	Suzanne DeBell Philippe Terheggen	May 1, 2019
SOCIAL IMPACT / CERTIFICATE OF EXCELLENCE		
FUNDAMENTALS OF PUBLISHING / CERTIFICATE OF EXCELLENCE		
FUNDAMENTALS OF PEER-REVIEW / CERTIFICATE OF EXCELLENCE		
Researcher Academy Elsevier	Suzanne DeBell Philippe Terheggen	Apr. 13, 2019
BECOME AN ANDROID DEVELOPER FROM SCRATCH		
Udemy	Adam Lupu, Adam Schwem	Jan. 22, 2019
ACS REVIEWER LAB		
American Chemical Society	Sarah Tegen	Dec. 28, 2018
FOCUS ON PEER REVIEW		
Nature MasterClasses	Nick Campbell	Dec. 26, 2018
QUANTUM MECHANICS FOR SCIENTISTS AND ENGINEERS		
Stanford Online	David Miller	Dec. 15, 2017
CERTIFICATE 30640014X CONVERSATIONAL ENGLISH SKILLS		
Tsinghua University	Wenxia Zhang et al.	Jul. 23, 2015
CERTIFICATE COLWRI2.2X ENGLISH GRAMMAR AND ESSAY WRITING		
CERTIFICATE COLWRI2.3X ACADEMIC AND BUSINESS WRITING		
The University of California, Berkeley	Maggie Sokolik	Mar. 16, 11 2015
CERTIFICATE EE40LX ELECTRONIC INTERFACES BRIDGING THE PHYSICAL AND DIGITAL WORLDS		
The University of California, Berkeley	Michel Maharbiz	May 08, 2015
CERTIFICATE ET.3034TU SOLAR ENERGY		
Delft University of Technology	Arno H.M. Smets	Dec. 11, 2014
CERTIFICATE ISSCCX ISSCC PREVIEWS - CIRCUIT AND SYSTEM INSIGHTS		
IEEE	Anantha P. Chandrakasan	Mar. 17, 2015
CERTIFICATE LAFF LINEAR ALGEBRA - FOUNDATIONS TO FRONTIERS		
The University of Texas	Steven Mintz	May 27, 2015
CERTIFICATE OF COMPLETION: .7 CONTINUING EDUCATION UNITS; 7 PROFESSIONAL DEVELOPMENT HOURS		
IEEE		Feb. 28, 2015

RESEARCH & REVIEW: STATISTICS & IMPACT

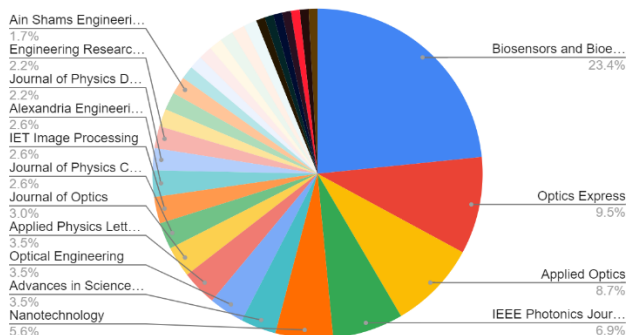
RANKED IN THE TOP 14% BASED ON GOOGLE SCHOLAR UOT (166-1183)

RANKED IN THE TOP 3% BASED ON SCOPUS UOT (109-4311)

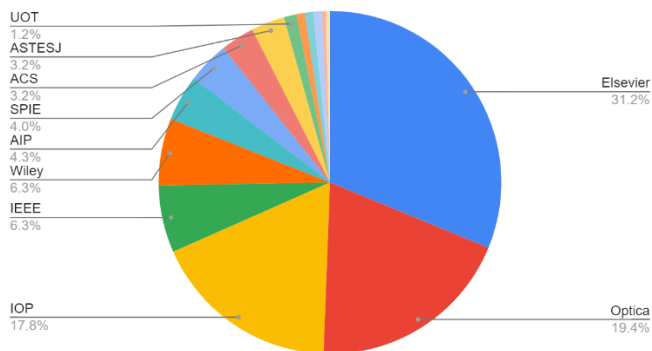
	<p>Total documents (35) ; Web of Science Core Collection publications (26) ; Verified peer reviews (253) ; Verified editor records (38) ; H-Index (6) ; Sum of Times Cited (177) ; Citing Articles (172)</p>
	<p>Citations (229) ; Citing Documents (222) ; H-index (7) ; Documents (30)</p>
	<p>Citations (294) H-index (9) iH-index (8) Documents (35)</p>
	<p>Citations (268) H-index (8) Research Interest (1050) Research (103)</p>
	<p>Citations (206) Publications (30)</p>
	<p>Citations (192) H-index (6) Publications (28) Highly Influential Citations (4)</p>

Peer Review (253)

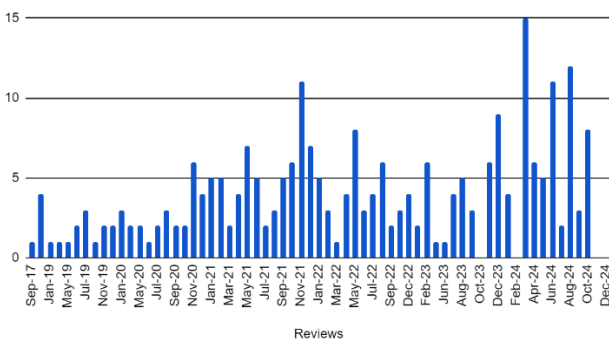
Reviews By Journal



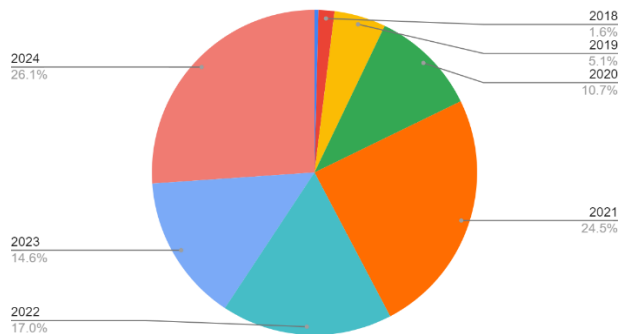
Reviews By Publisher



Reviews Per Month

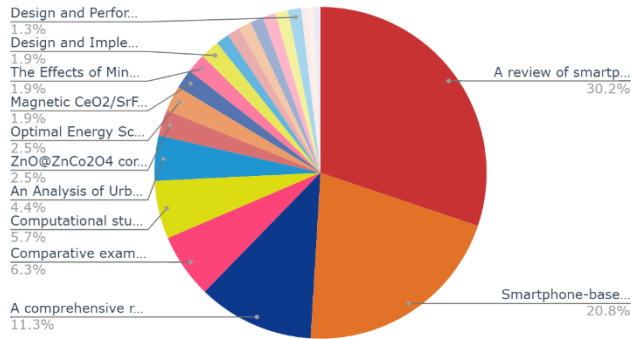


Reviews Per Year

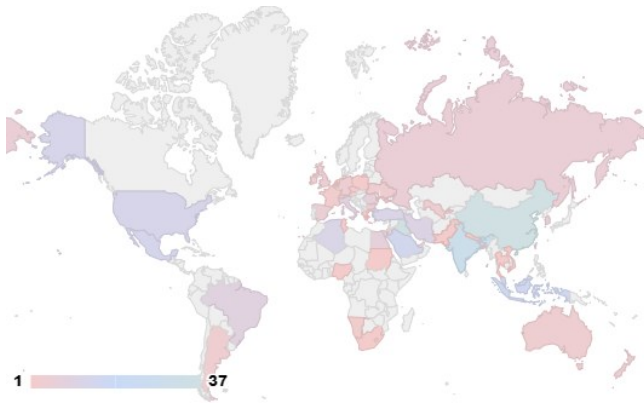
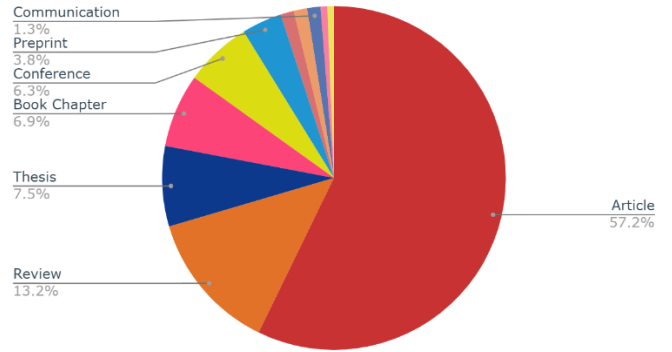


Total Citations: (218)

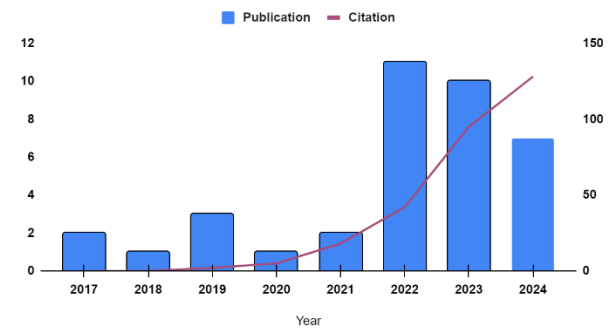
Times Cited



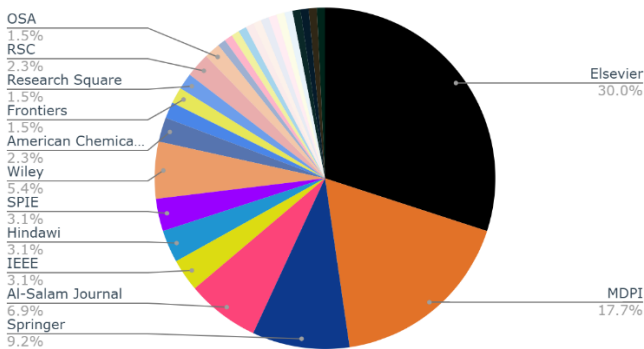
Citation Types



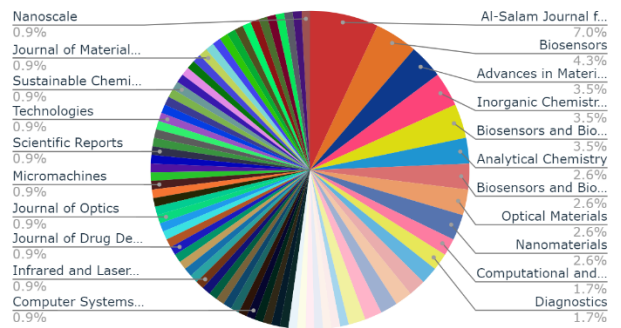
Publication and Citation



Citations by Publisher



Citations by Journal



Taif Alawsai
14- Jun - 2024.