## Research and Publications

- 1. Almawgani, Abdulkarem HM, Hussein A. Elsayed, Ahmed Mehaney, Arvind Sharma, Ashour M. Ahmed, Ghassan Ahmed Ali, and Walied Sabra. "Total reflectivity for infrared radiation based on one-dimensional gyroidal metallic photonic crystals." *International Journal of Modern Physics B* (2023): 2450186.
- 2. Zaky, Zaky A., M. Al-Dossari, Arvind Sharma, Ahmed S. Hendy, and Arafa H. Aly. "Theoretical optimisation of a novel gas sensor using periodically closed resonators." *Scientific Reports* 14, no. 1 (2024): 2462.
- 3. Baraket, Z., Sharma, A., Soltani, O. *et al.* The role of the chirping process in optimizing the tunability of pressure sensing performance. *J Opt* (2024). https://doi.org/10.1007/s12596-024-01918-7
- 4. Baraket, Z., Soltani, O., Sharma, A. *et al.* Design of a pressure sensor based on the 1D ternary Octonacci photonic crystal configurations. *J Opt* (2024). <a href="https://doi.org/10.1007/s12596-024-01788-z">https://doi.org/10.1007/s12596-024-01788-z</a>