Dr. Zakaryaa Zarhri

Formación académica

Licenciatura en ciencias de la materia física, Faculté des Sciences, Universite Mohamed V, Rabat, Marruecos, 2010.
Maestria en Fisica Informatica, Faculté des Sciences, Universite Mohamed V, Rabat, Marruecos, 2012
Doctorado en ciencias, Especialidad, Física computacional aplicada a las ciencias de los materiales, Faculté des Sciences, Universite Mohamed V, Rabat, Marruecos, 2016

Distinciones

Nivel 1 del Sistema Nacional de Investigadores e Investigadoras (SNII)

Participación en proyectos de investigación

B. Colaboración en proyectos sin financiamiento

Nombre del proyecto

- CF19-Enzima acoplada a óxido de perovskita en un fotorreactor microfluídico: un sistema de fotosíntesis artificial para la reducción de CO2

Responsables del proyecto

- Dr. Zakaryaa Zarhri

Publicaciones de los últimos tres años

Artículos

1. Gutierrez-Reyna, B. D., Zarhri, Z., Gaggero-Sager, L. M., & Oubram, O. (2025). Transport and thermoelectric properties of periodic and aperiodic germanene gated superlattices. *Materials Science in Semiconductor Processing*, *200*, 109900.
2. Martinez-Gonzalez, J. J., Tello-Salgado, I., Larios-Galvez, A. K., Lopez-Sesenes, R., Zarhri, Z., Ramirez-Arteaga, A. M., & Gonzalez-Rodriguez, J. G. (2025). Electrochemical, thermodynamic and DFT studies of Fomitopsis pinicola as green corrosion inhibitor for carbon steel in sulfuric acid. *Journal of Molecular Structure*, *1321*, 140014.
3. Ziat, Y., Belkhanchi, H., & Zarhri, Z. (2025). DFT analysis of structural, electrical, and optical properties of S, Si, and F-Doped GeO2 Rutile: implications for UV-transparent conductors and photodetection. *Solar Energy and Sustainable Development Journal*, *14*(1), 74-89.
4. Koufi, A., Ziat, Y., Belkhanchi, H., & Zarhri, Z. (2025). Effect of (V, Cr, Mn, Ni, and Cu) doping on the electronic structure and magnetic properties of perovskite RbZnF3 alloy: a DFT study. *The European Physical Journal Applied Physics*, *100*, 24.
5. Ziat, Y., Belkhanchi, H., Zarhri, Z., & Laghlimi, C. (2025). Theoretical Study of the Optical, Structural and Electronic Properties of Germanium Dioxide (GeO2) Doped with Ti and Nb by the DFT Method with mBJ Correction. In *NanoRevolution* (pp. 195-211). CRC Press.
6. Ziat, Y., Zarhri, Z., & Belkhanchi, H. (2024). Crystal field, electronegativity and magnetic behavior of Mn-, Fe-, Co-and Ni-doped LiMgN half-Heusler: KKR-CPA approximation. *International Journal of Modern Physics B*, *38*(28), 2450388.
7. Murillo, V. N., Rajput, D., Manríquez, J., Bustos, E., Bueno, J. D. J. P., Singh, D., ... & Oza, G. (2024). Modulating temperature for Cu2ZnSnS4 (CZTS) synthesis via hot injection method and studying the photocatalytic efficiencies for the degradation of rhodamine 6G and methylene blue pollutants. *Environmental Research*, *258*, 119371.
8. Zarhri, Z., Ziat, Y., Belkhanchi, H., & del Carmen Torres-Salazar, M. (2024). (Ti, V, Fe and Ni)-doped LiMgP half Heusler-induced Ferromagnetism stability: DFT approach. *International Journal of Modern Physics B*, *38*(17), 2450225.
9. Miri, M., Ziat, Y., Belkhanchi, H., Zarhri, Z., & Ait El Kadi, Y. (2023). Structural and optoelectronic properties of LiYP (Y= Ca, Mg, and Zn) half-

Heusler alloy under pressure: A DFT study. *Physica B: Condensed Matter*, *667*, 415216.

10. Ziat, Y., Zarhri, Z., Lakhal, Y., & Baghli, F. Z. (2023). Electronegativity and magnetic correlation in Cr-, Mn-, Co-and Ni-doped LiMgP half-Heusler as promised ferromagnetism material: A DFT study. *International Journal of Modern Physics B*, *37*(23), 2350226.
11. Zarhri, Z., Oubram, O., Cisneros Villalobos, L., & Leon Hernández, V. A. (2023). Spin moment cancelation of high Curie temperature Ir doped ZrO2 gradual atomic change. *Revista mexicana de física*, *69*(4).
12. Ziat, Y., Zarhri, Z., Belkhanchi, H., & Cisneros-Villalobos, L. (2023). Ferromagnetism properties of Carbon co-doped LiMg (Fe, Ni) P half Heusler using DFT method. *Functional Materials Letters*, *16*(05), 2350017.
13. Zarhri, Z., Oubram, O., Cisneros, V., & Leon, H. (2023). Spin moment cancellation of high Curie temperature Ir doped ZrO2 gradual atomic change.