

Review of: "Synthesis of 1, 2-Disubstituted Benzimidazoles at Ambient Temperature Catalyzed by 1-Methylimidazolium Tetrafluoroborate ([Hmim] BF₄) and Investigating Their Anti-ovarian Cancer Properties Through Molecular Docking Studies and Calculations"

Waleed Al Abdulmonem¹

¹ Qassim University

Potential competing interests: No potential competing interests to declare.

1. "This article presents an innovative approach to synthesizing 1,2-disubstituted benzimidazoles using [Hmim] BF₄ catalyst at ambient temperature, which is both environmentally friendly and efficient."
2. "The inclusion of molecular docking studies to investigate the anti-ovarian cancer properties of the synthesized compounds adds significant value to the research, shedding light on their potential pharmacological applications."
3. "The use of 1-methylimidazolium tetrafluoroborate ([Hmim] BF₄) as a catalyst showcases its effectiveness in promoting the synthesis of benzimidazoles, providing insights into green chemistry practices."
4. "The article provides comprehensive experimental details and characterization techniques, ensuring the reproducibility and reliability of the results, which is crucial for advancing scientific knowledge in the field."
5. "The molecular docking studies offer valuable predictions on the interactions between the synthesized benzimidazoles and their target proteins, laying the groundwork for future experimental validations and drug development endeavors."
6. "Overall, this article represents a significant contribution to both synthetic organic chemistry and computational drug discovery, demonstrating the potential of benzimidazole derivatives as promising candidates for ovarian cancer treatment."