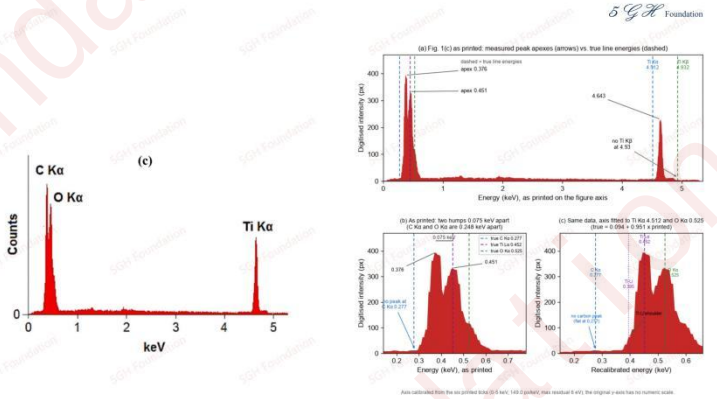
5GH Foundation

Issues in 10.1016/j.inoche.2026.116862

Several issues are found in this article [1]:



EDX peaks in Figure 1 (c) are mislabeled: The peak around 0.376 keV is assigned to C Kα; however, the expected peak for C Kα lines around 0.277 keV. The peak around 0.451 keV is assigned to O Kα; however, the expected peak for O Kα lines around 0.525 keV. The peak around 4.643 keV is assigned to Ti Kα; however, the expected peak for Ti Kα lines around 4.512 keV. And the expected Ti Kβ is missing in this spectrum.

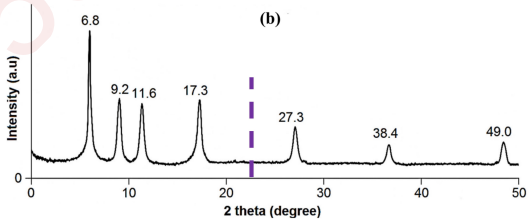


Fig. 1. (a) XPS and (b) XRD, (c) EDAX and (d) FT-IR of Titanium-MOF/Pectin-Nanofibers.

framework. These reflections correspond to large d-spacings calculated using Bragg's law and are characteristic of long-range ordered metal–organic structures [26,37,38]. Additional reflections are observed at 17.3° and 22.6°, which appear broader in comparison to the low-angle peaks [39]. A weak diffraction peak is detected at approximately 27.3°. No peaks corresponding to metallic titanium are observed within the measured range [40,41].

The manuscript states that "Additional reflections are observed at 17.3° and 22.6°"; however, no peak

around 22.6o is observed in Figure 1 (b).

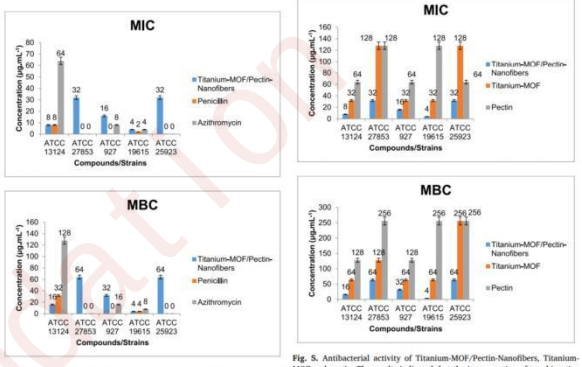


Fig. 3. Antibacterial activity of Titanium-MOF/Pectin-Nanofibers, penicillin and azithromycin.

Fig. 5. Antibacterial activity of Titanium-MOF/Pectin-Nanofibers, Titanium-MOF and pectin. The results indicated that the incorporation of two bioactive components, pectin and titanium, into the fiber structure, combined with a high specific surface area, contributed to its pronounced effectiveness.

Figure 3 and Figure 5: MIC and MBC are discrete thresholds obtained by two-fold serial dilution and can only take values such as 64, 128 or 256 μg/mL. Reporting them as mean ± SD (e.g., 128 ± 6 μg/mL) is therefore not statistically meaningful: with n = 3, any non-zero SD would be at least ~37 μg/mL (e.g., 128, 128, 64), and a mean of exactly 128 with SD 6 cannot arise from the two-fold grid. Moreover, an arithmetic mean such as 96 μg/mL (from 64 and 128) is not a tested concentration and has no MIC interpretation.

[1] 10.1016/j.inoche.2026.116862

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