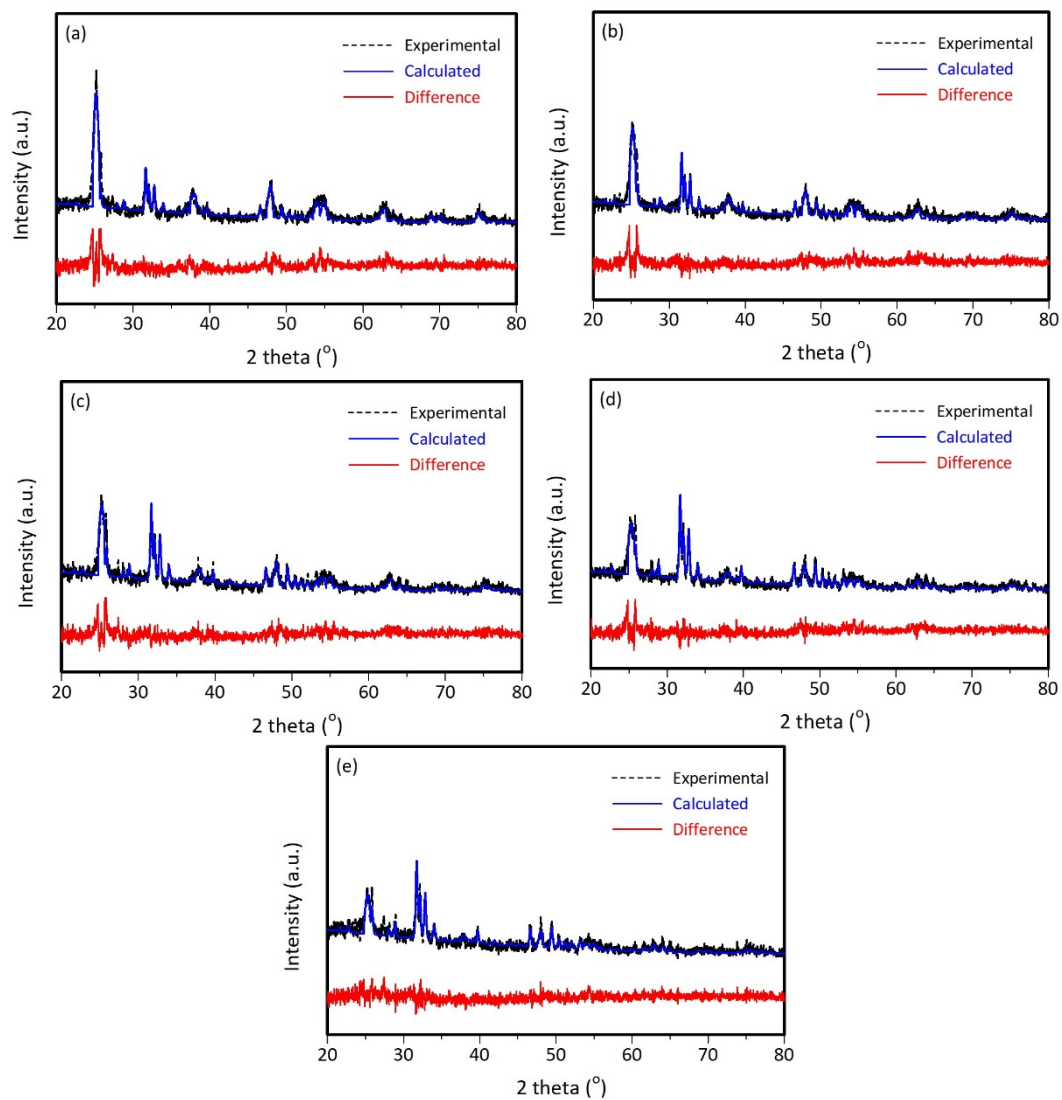


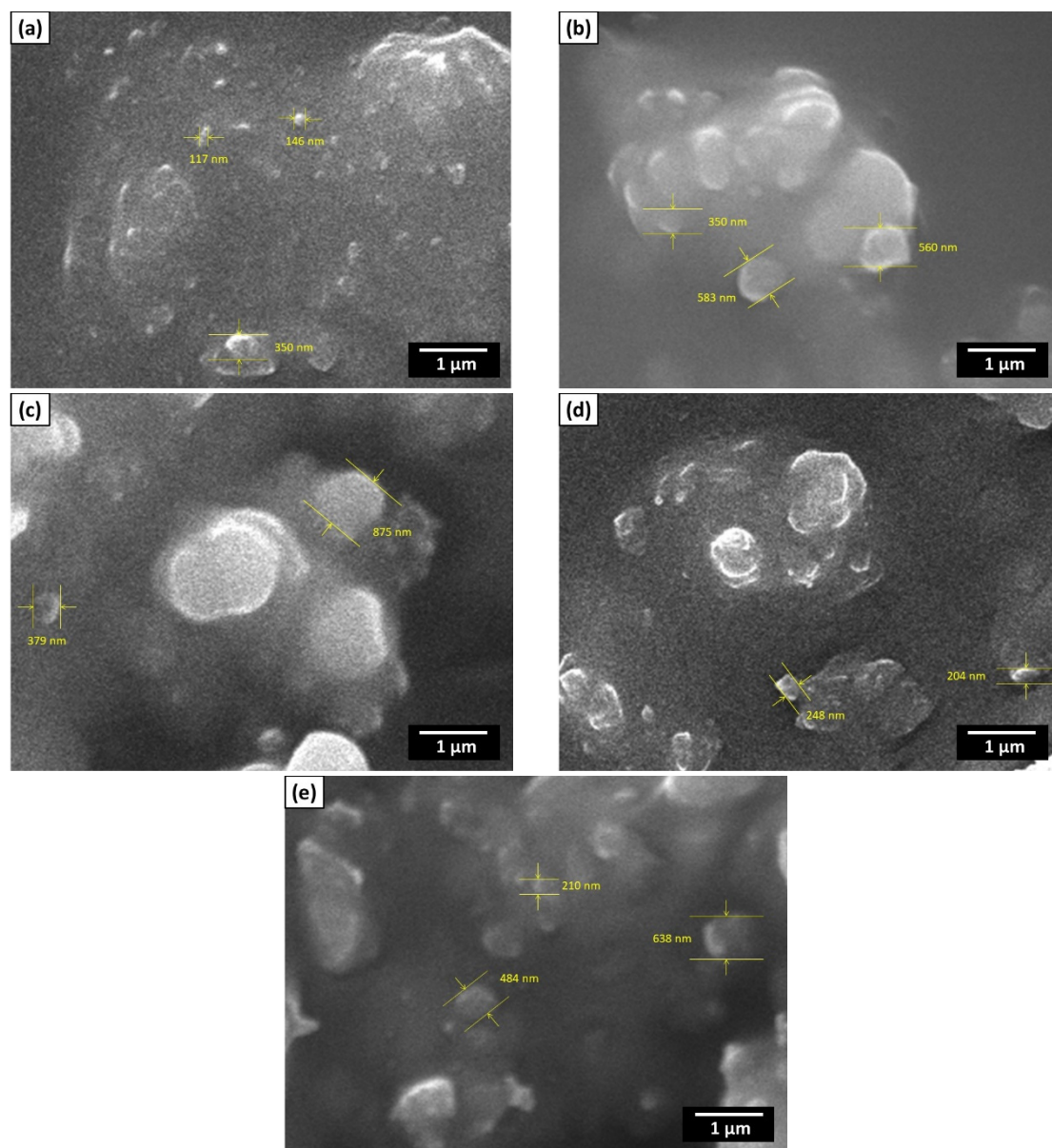
# Supplementary Information

## 1. X-Ray Diffraction



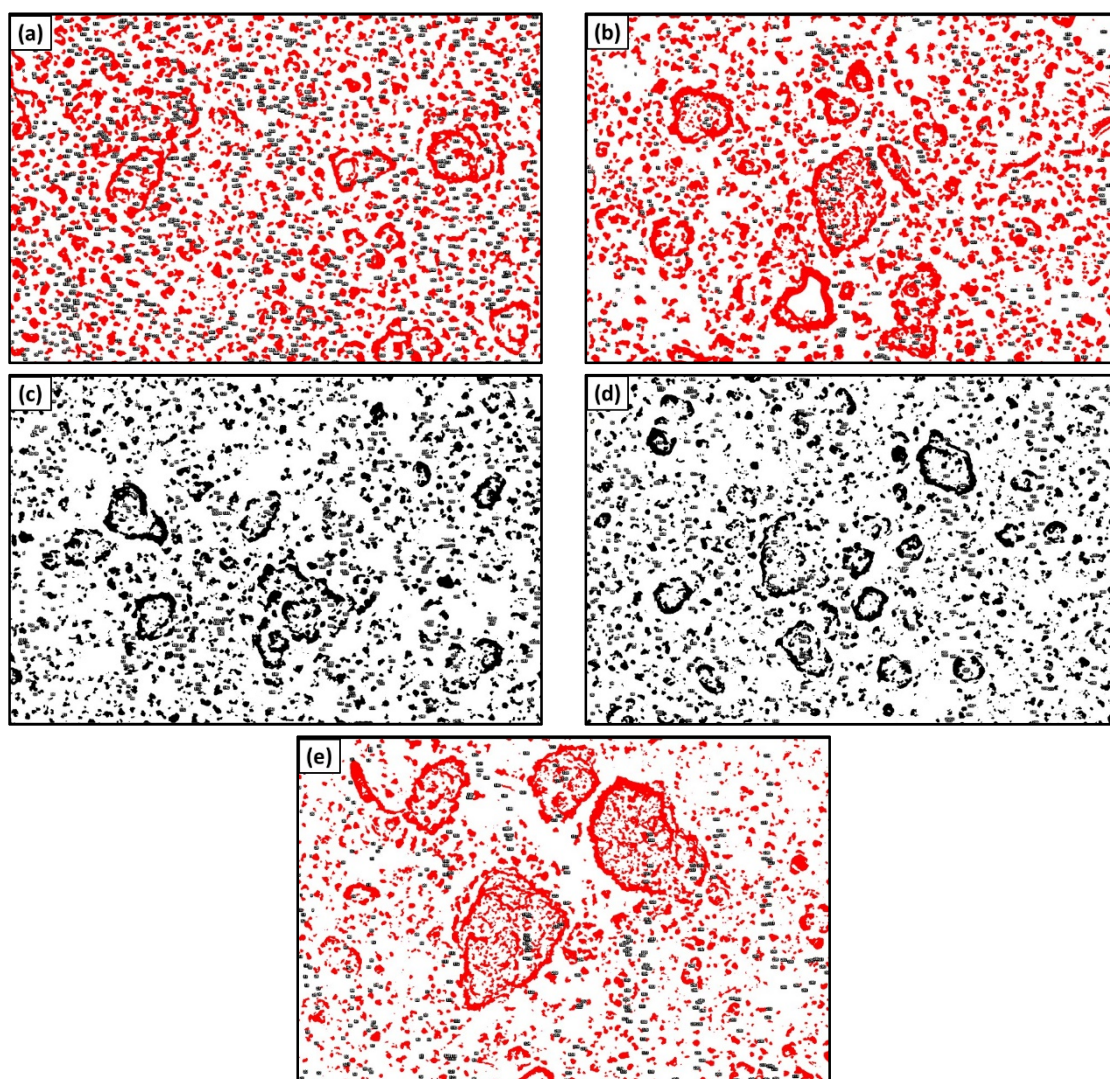
**Figure S1.** Rietveld refinement of XRD pattern of (a) H3T7; (b) H4T6; (c) H5T5; (d) H6T4; and (e) H7T3.

## 2. Scanning Electron Microscope (SEM) Images and Particles Size Analysis



**Figure S2.** SEM image with  $\times 10,000$  magnification of (a) H3T7; (b) H4T6; (c) H5T5; (d) H6T4; and (e) H7T3.

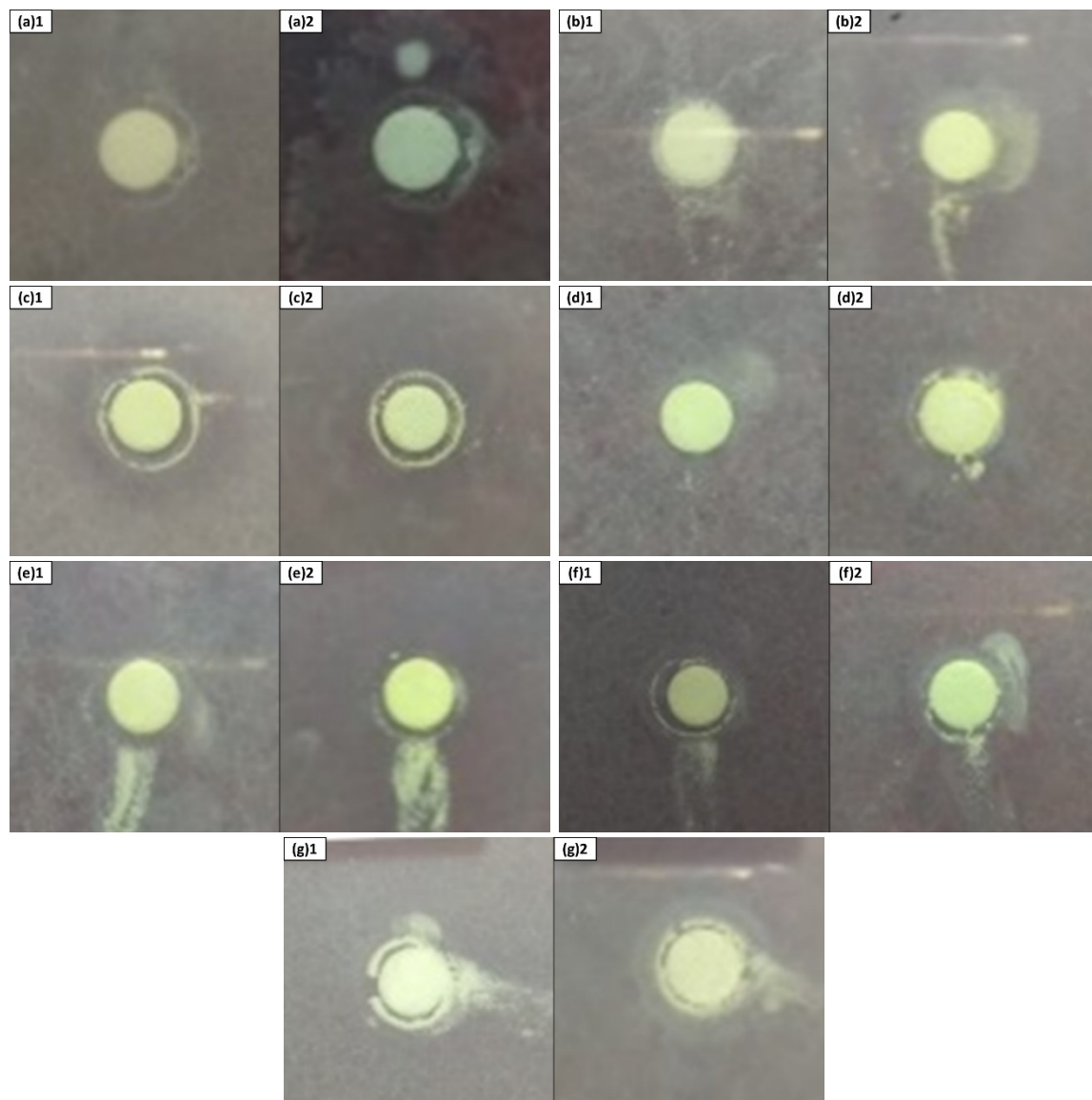
Particle size analysis is performed using ImageJ 1.52a software from SEM image [1]. A total of approximately 300 particles were analyzed for diameter and size distribution was made for each sample (Figure S3).



**Figure S3.** SEM Image after processing in ImageJ 1.52a software for particle distribution analysis of (a) H3T7; (b) H4T6; (c) H5T5; (d) H6T4; and (e) H7T3.



### 3. Antibacterial Activity



**Figure S4.** Antibacterial test results against *Escherichia coli* (1) and *Staphylococcus aureus* (2) bacteria using disc diffusion method of (a) HA; (b) TiO<sub>2</sub>; (c) H3T7; (d) H4T6; (e) H5T5; (f) H6T4; and (g) H7T3.

### Reference

1. Harwijayanti, W.; Ubaidillah, U.; Triyono, J. Physicochemical Characterization and Antibacterial Activity of Titanium/Shellac-Coated Hydroxyapatite Composites. *Coatings* **2022**, *12*, 680.