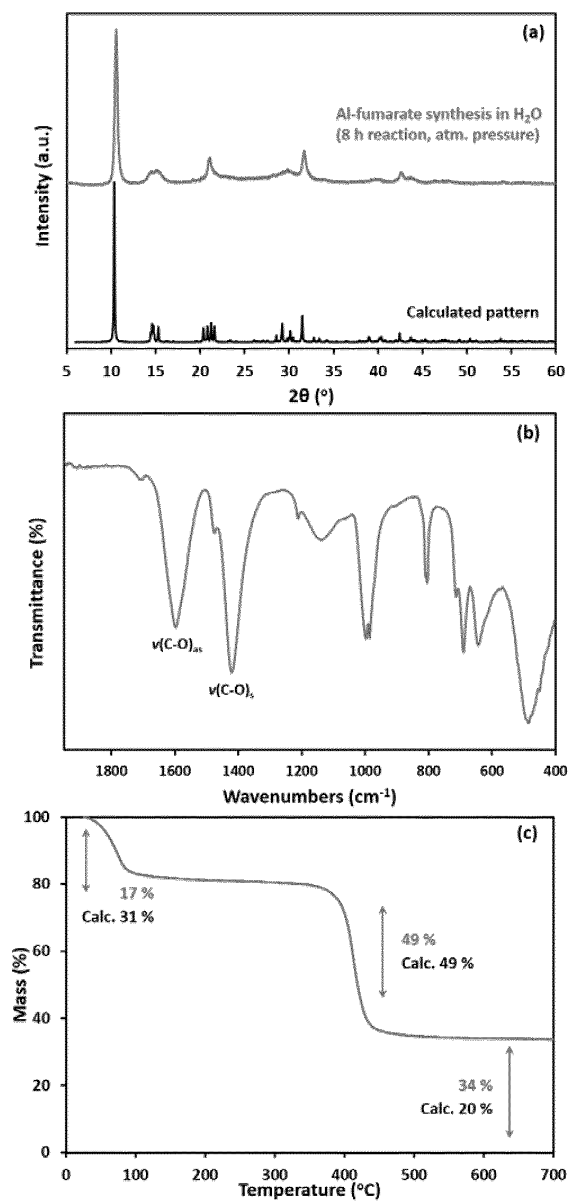
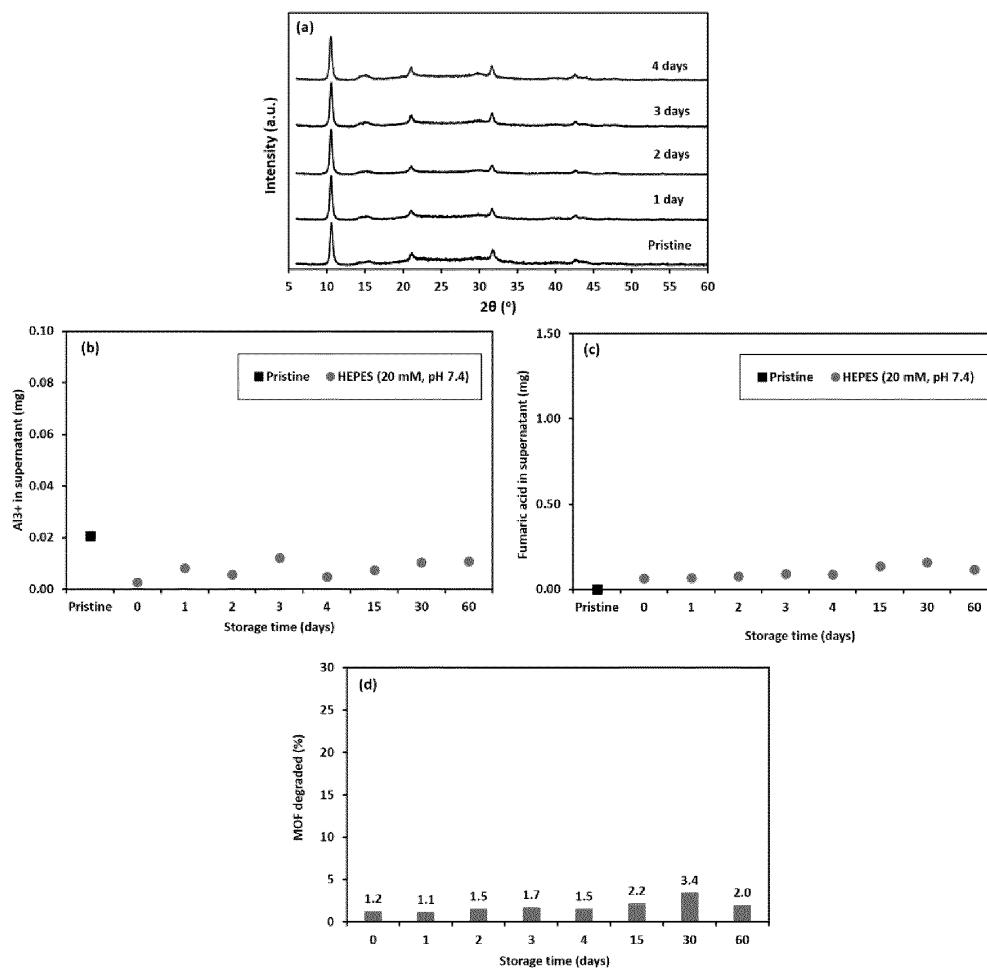
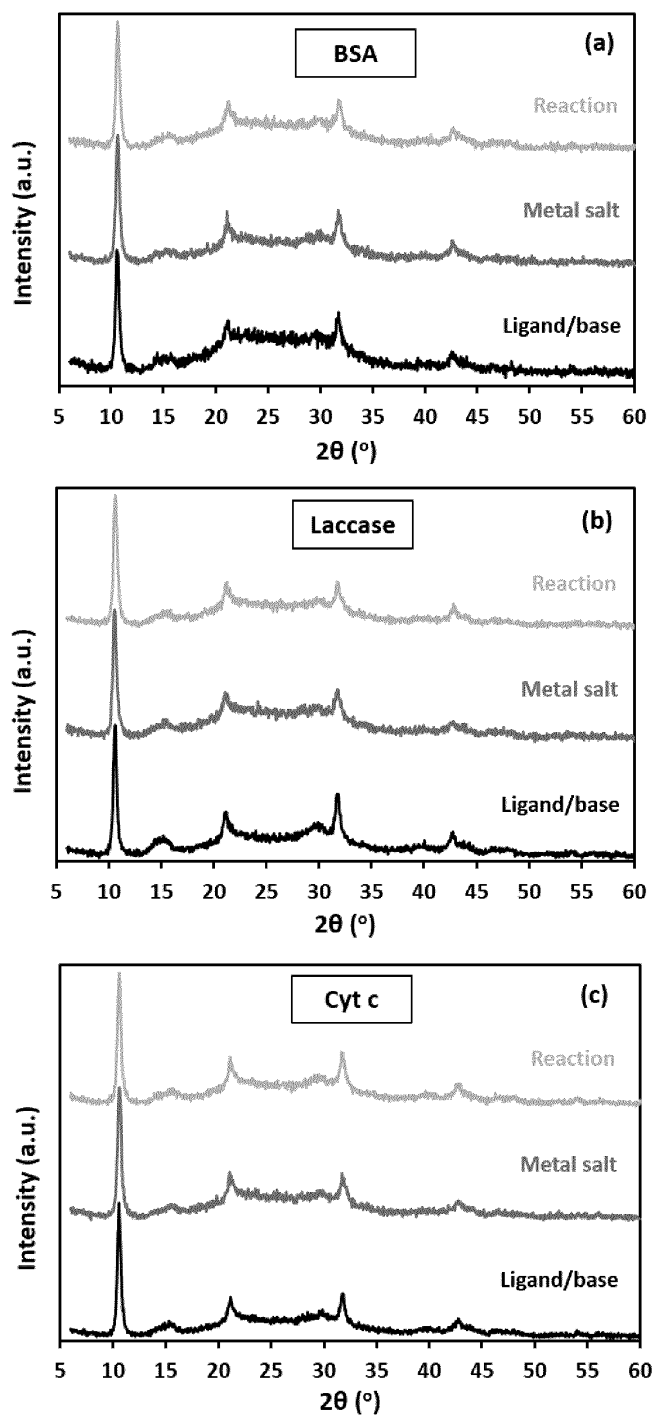


**FIGURE 1**

**FIGURE 2**

**FIGURE 3**

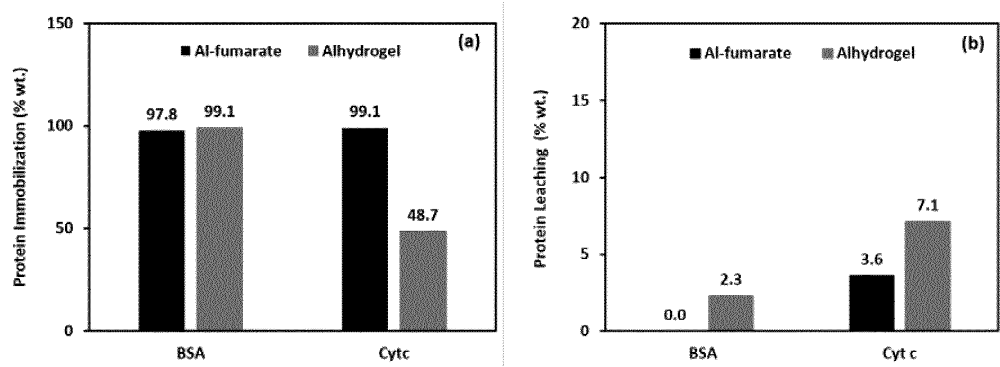


FIGURE 4

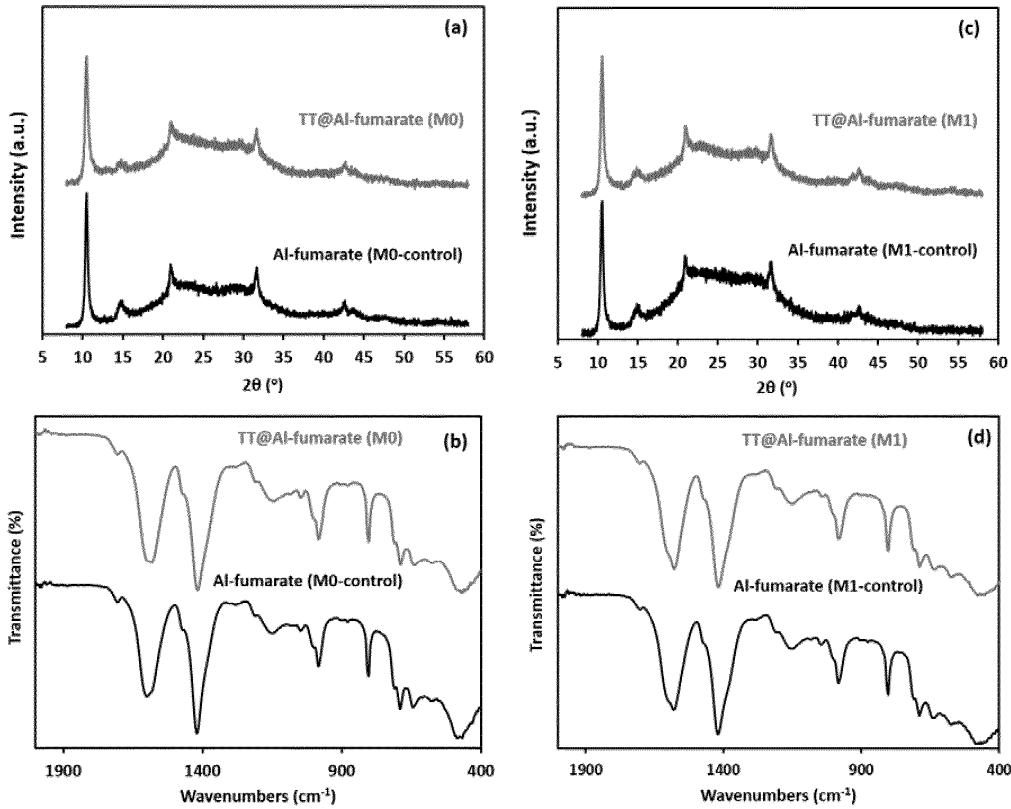


FIGURE 5

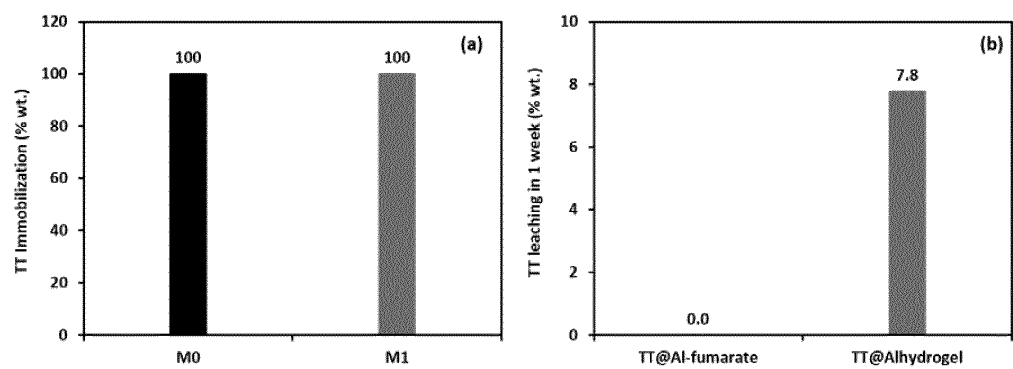


FIGURE 6

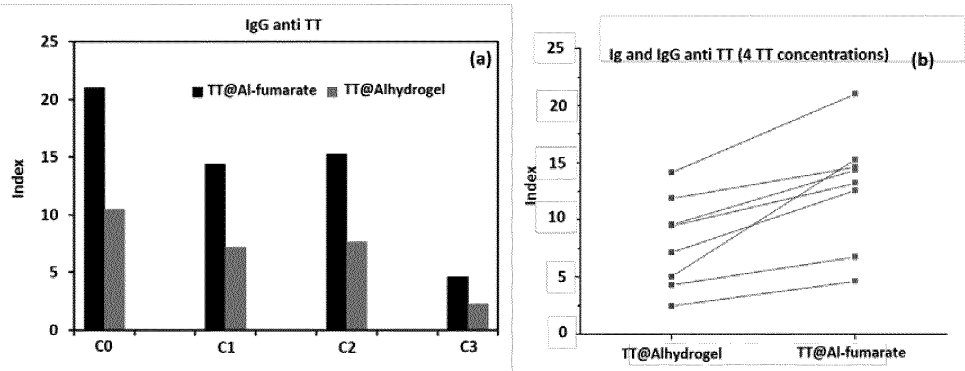


FIGURE 7

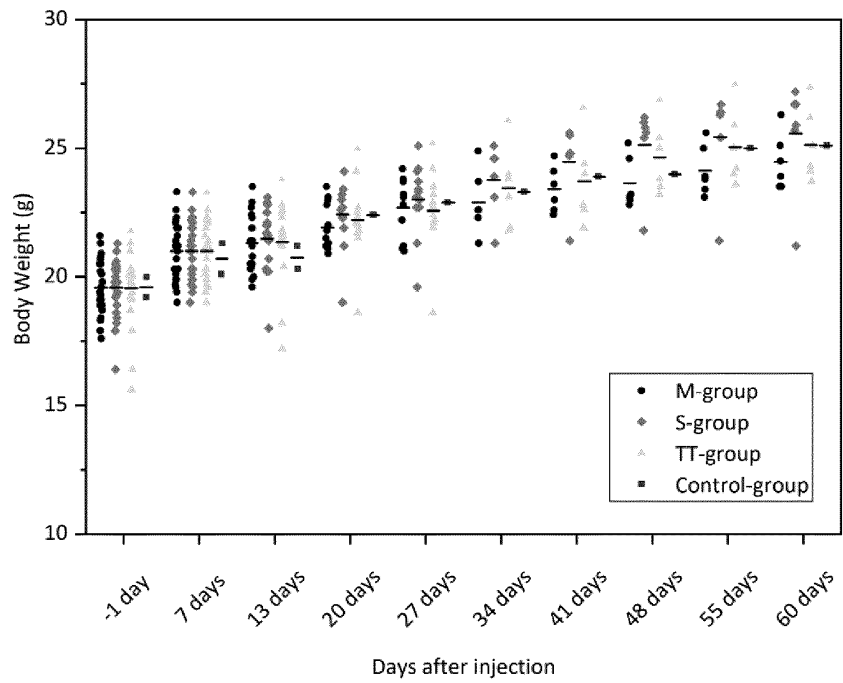


FIGURE 8

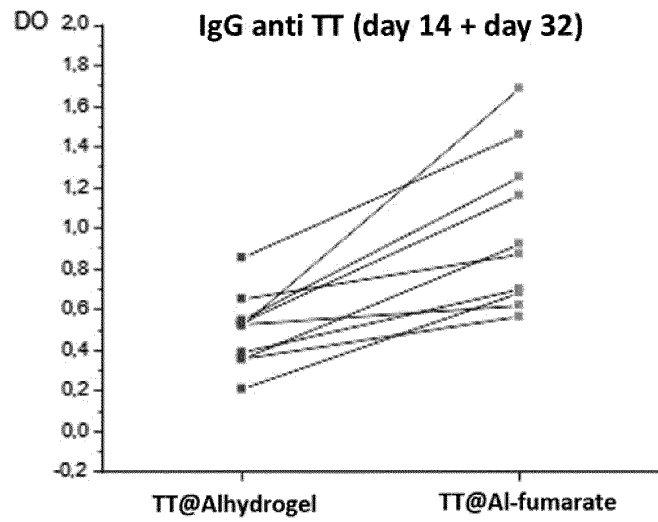


FIGURE 9

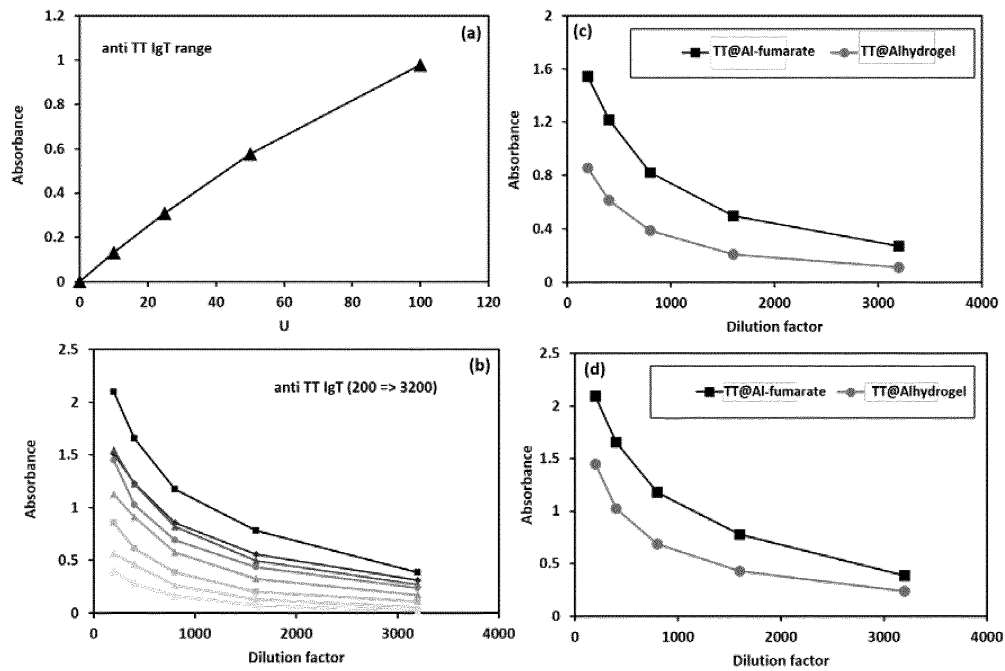


FIGURE 10

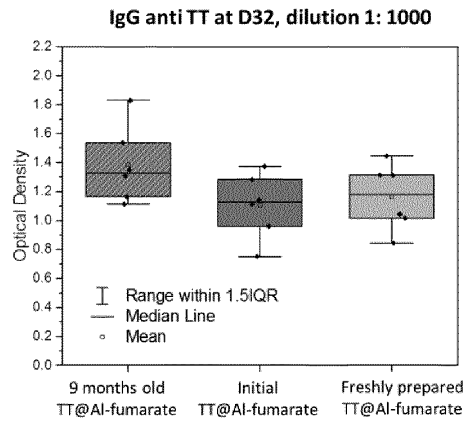
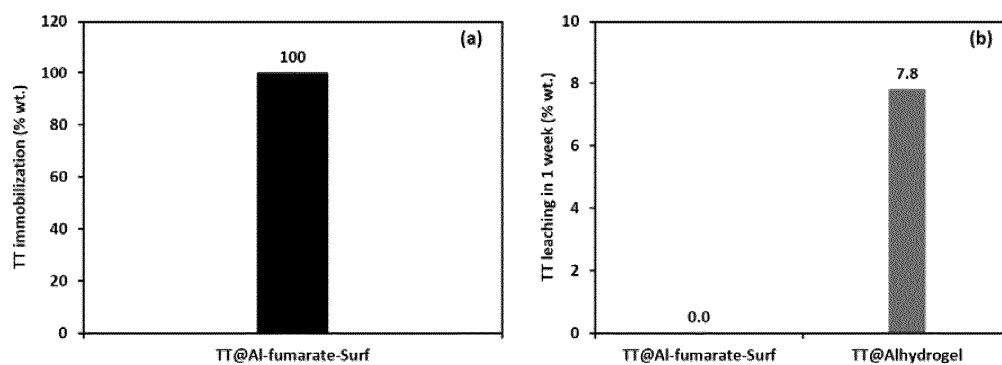
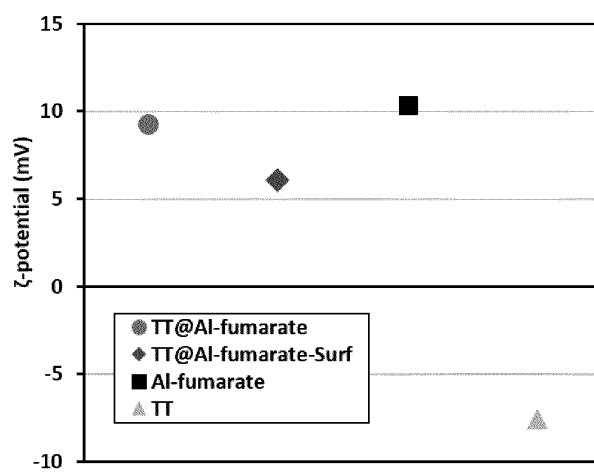


FIGURE 11

**FIGURE 12****FIGURE 13**

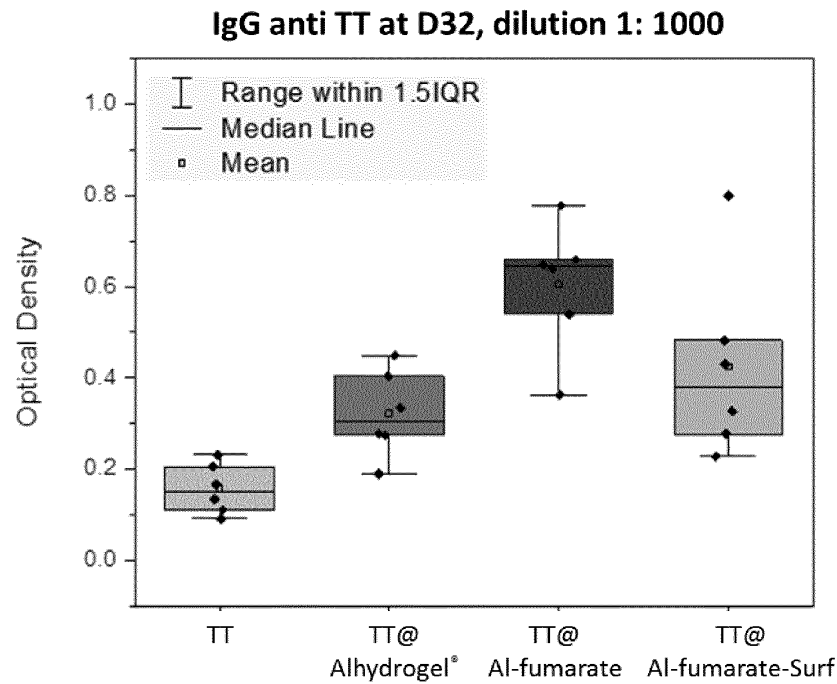


FIGURE 14

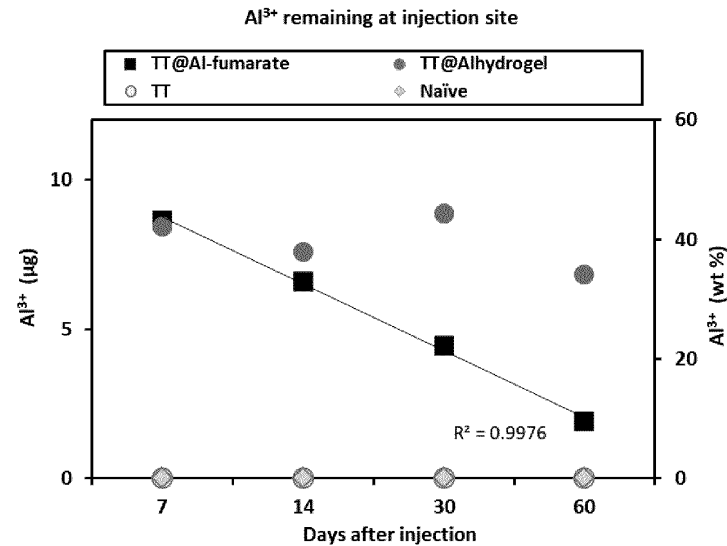
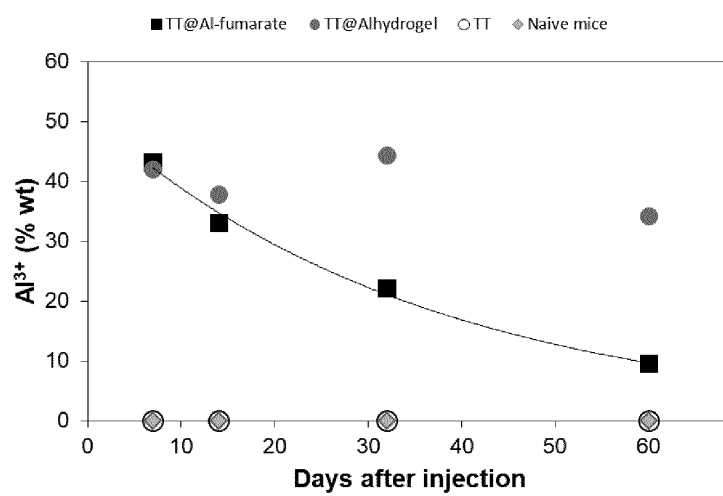
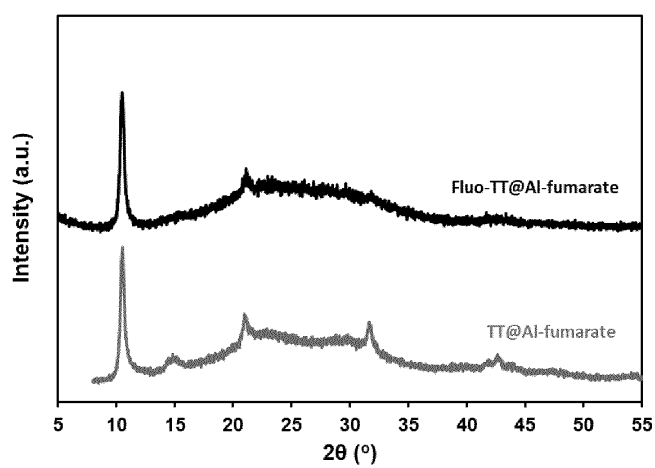


FIGURE 15

**FIGURE 16****FIGURE 17**

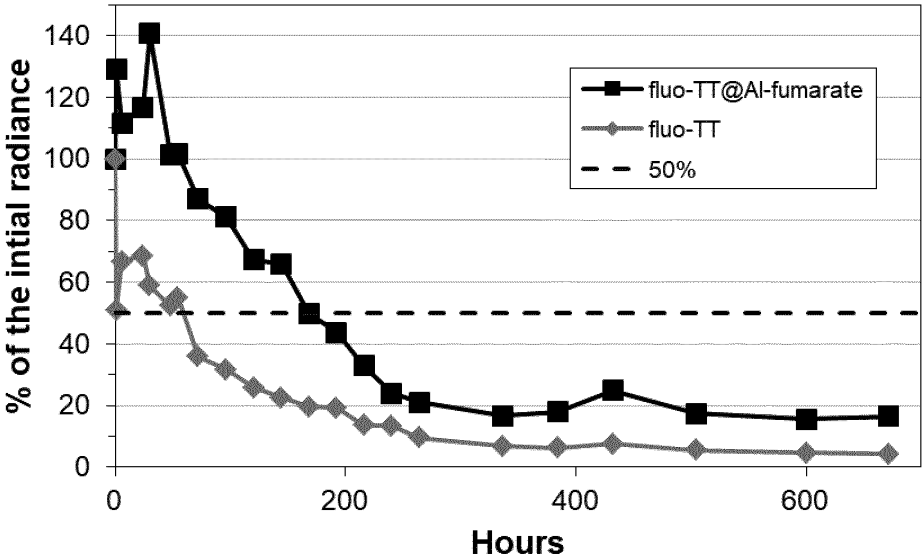


FIGURE 18

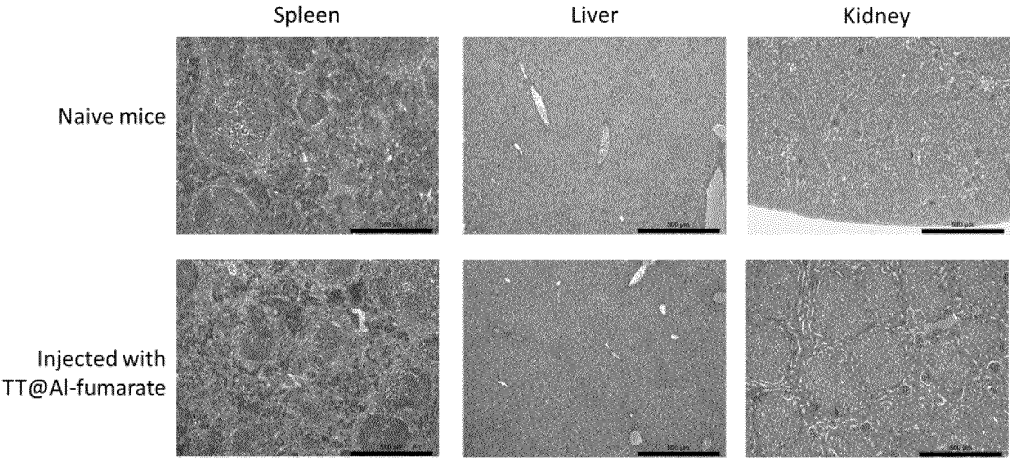
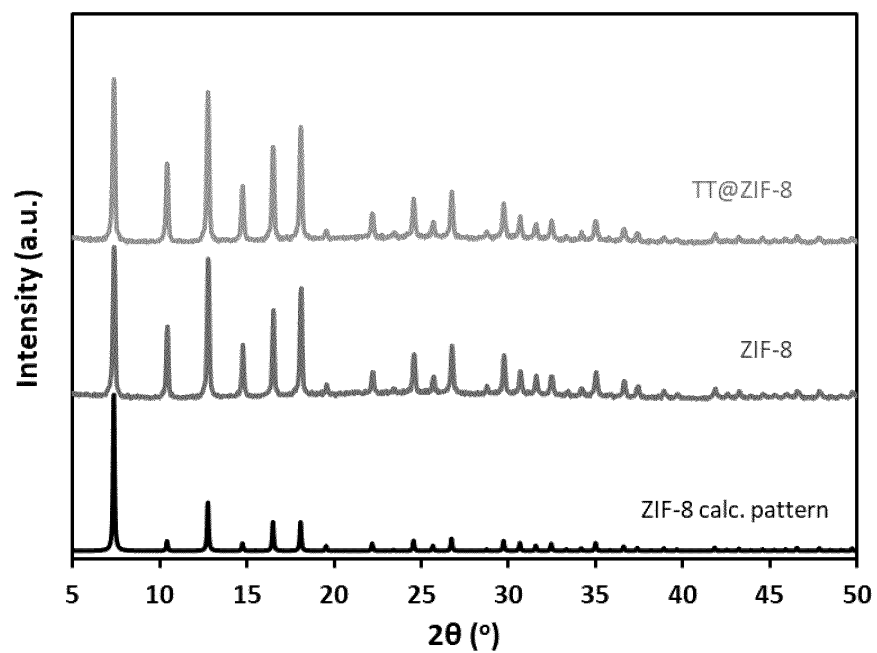
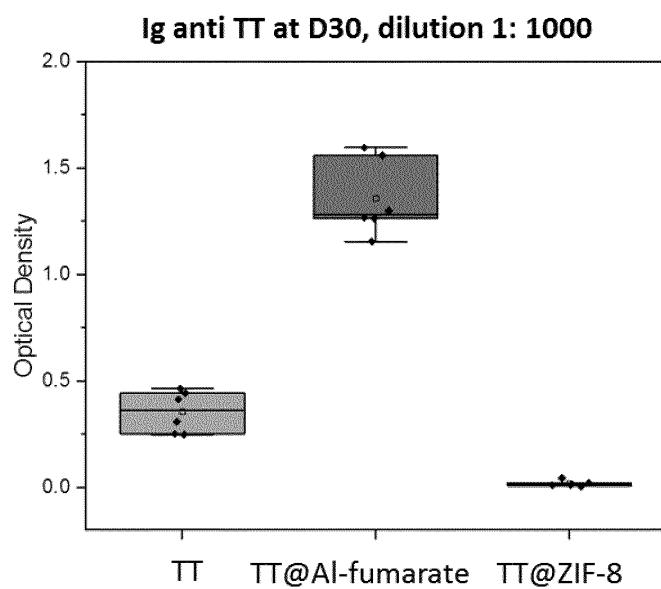
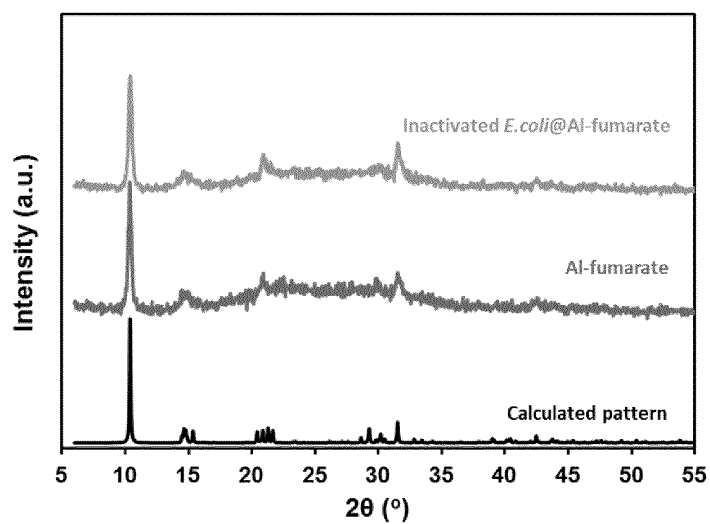
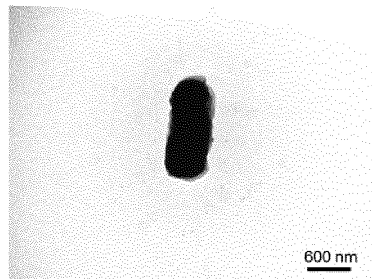
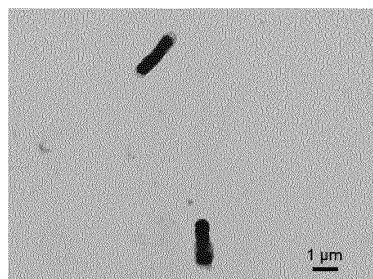
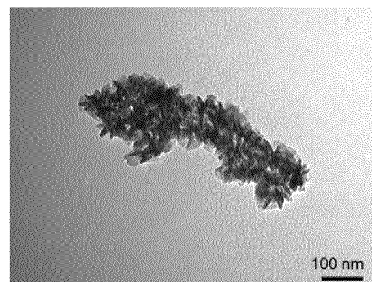
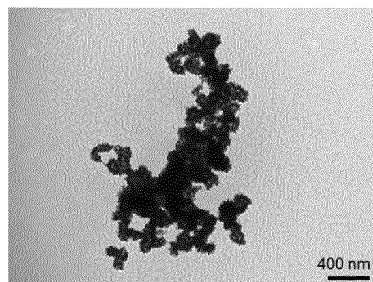


FIGURE 19

**FIGURE 20****FIGURE 21**

**FIGURE 22**Inactivated *E. coli*Inactivated
E. coli@Al-fumarate**FIGURE 23**

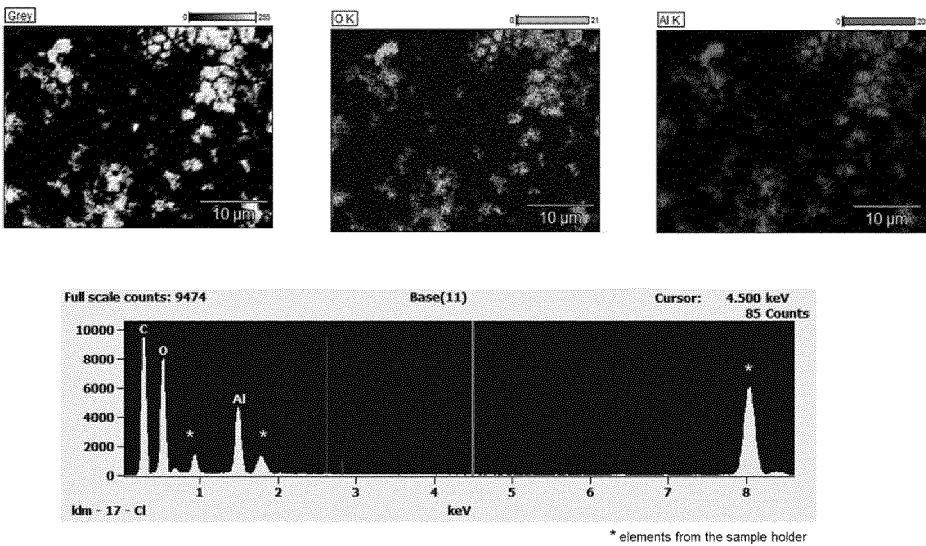


FIGURE 24

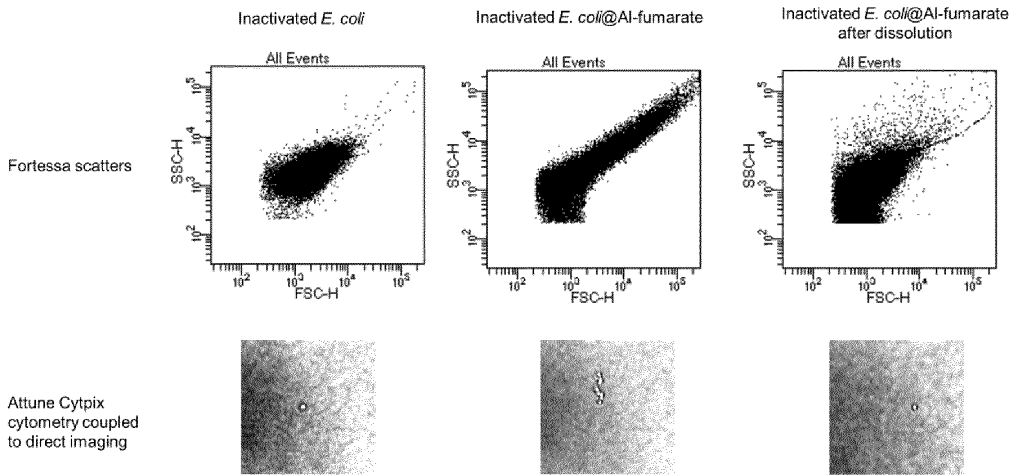
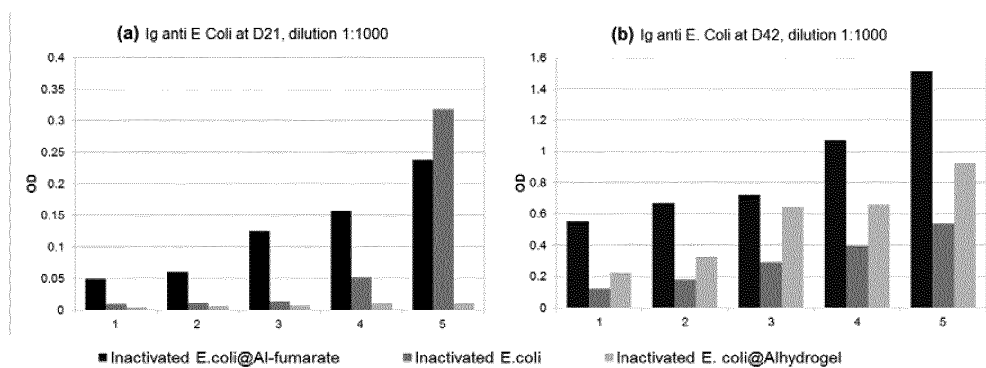
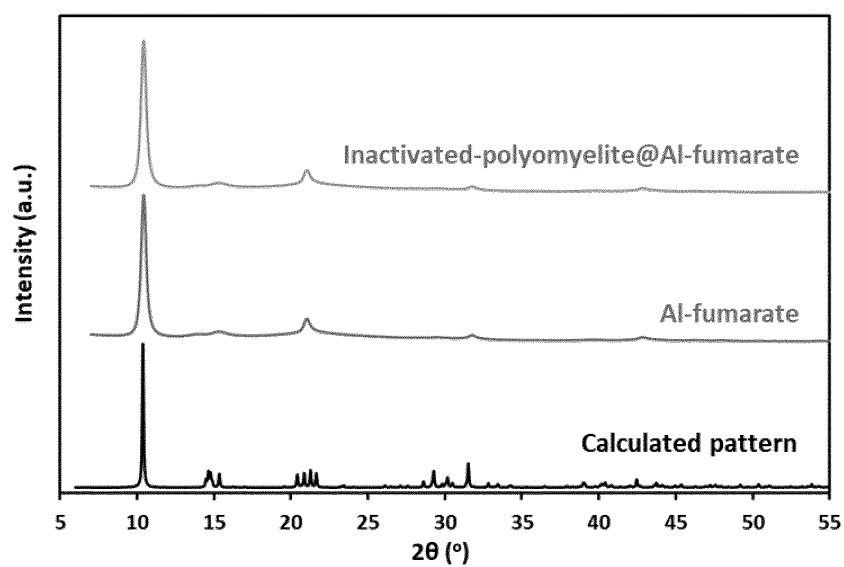


FIGURE 25

**FIGURE 26****FIGURE 27**

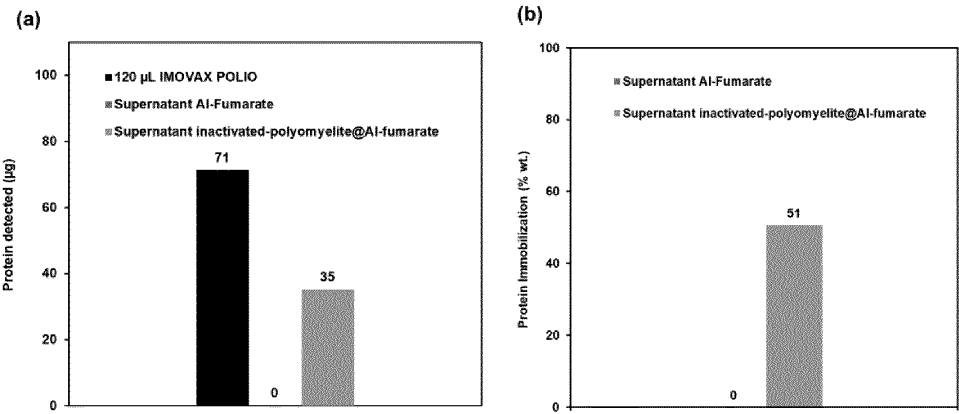


FIGURE 28

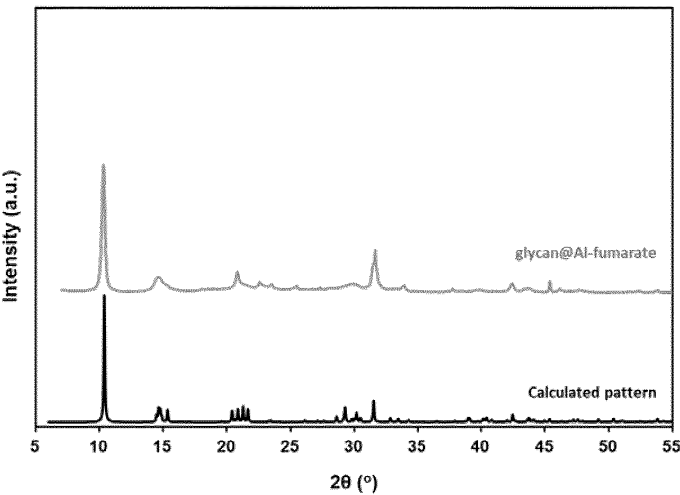
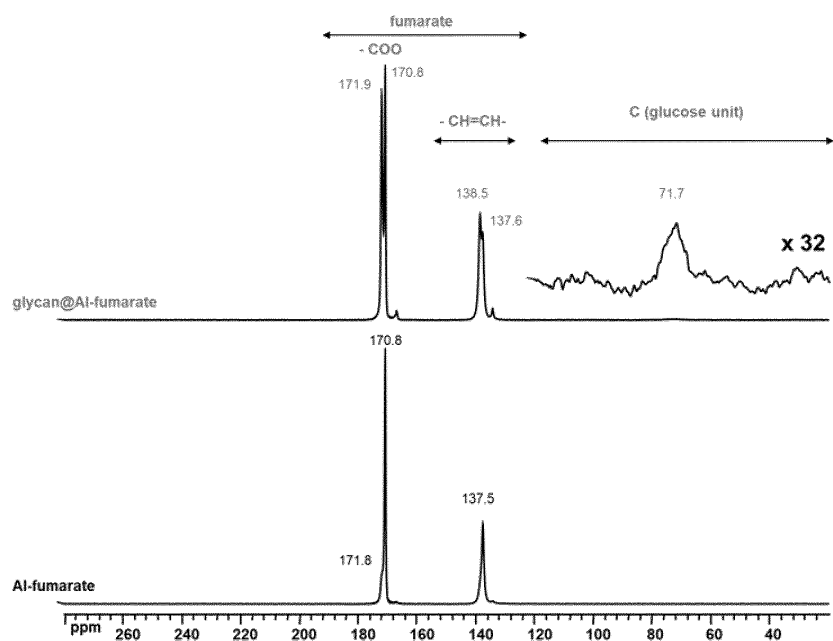
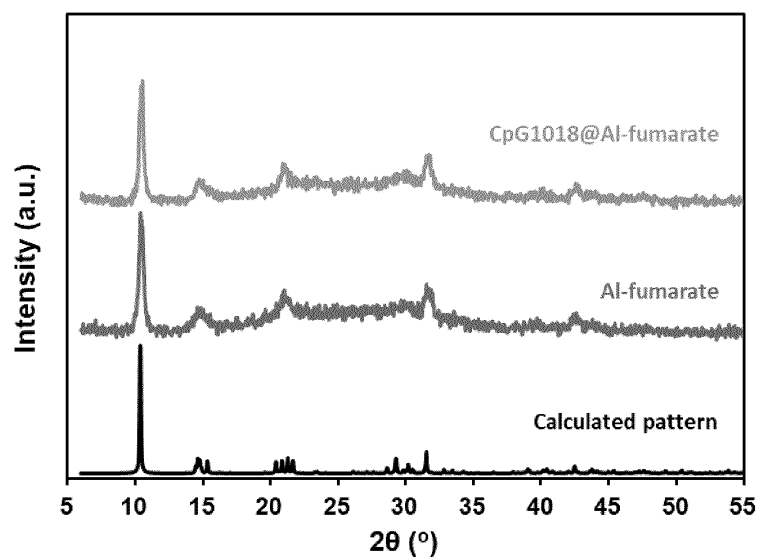
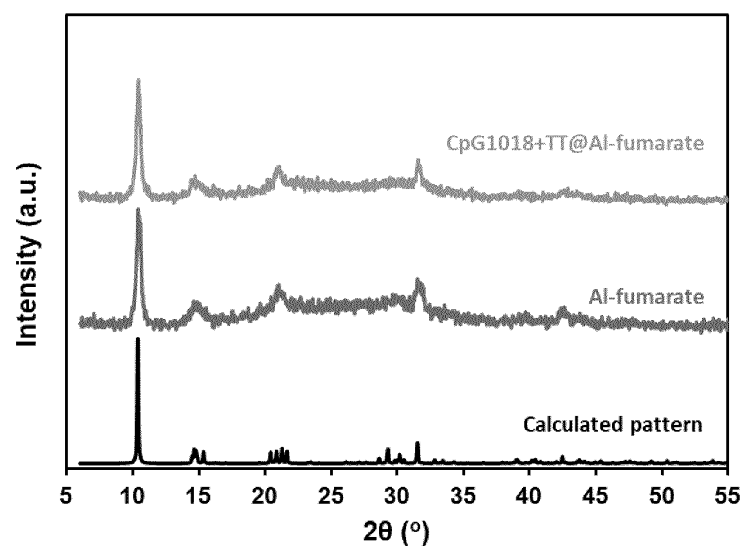
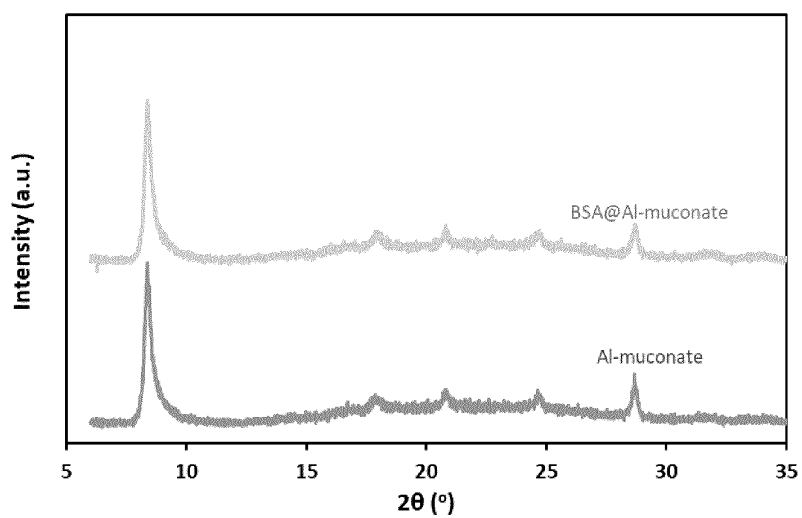
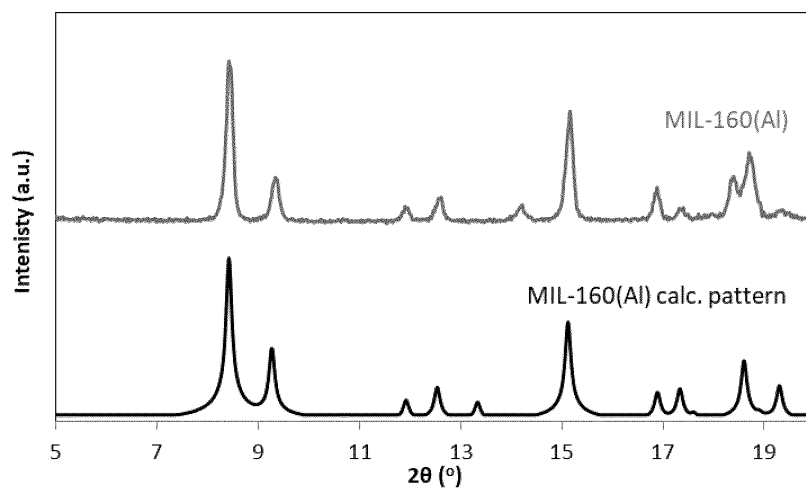
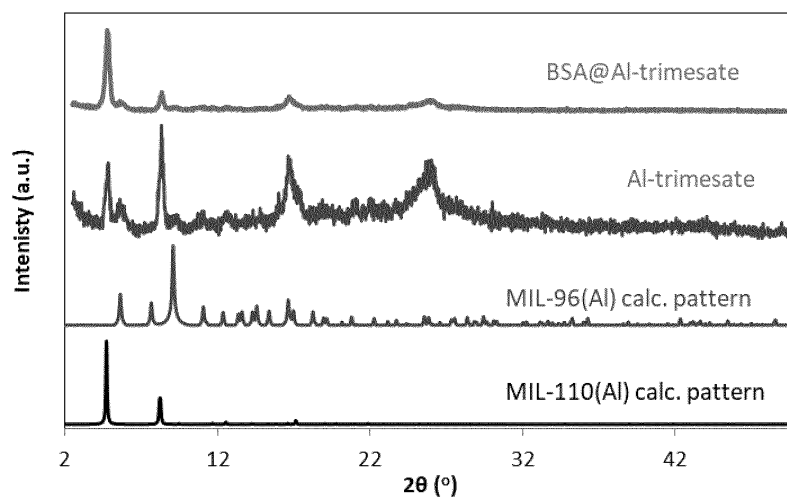
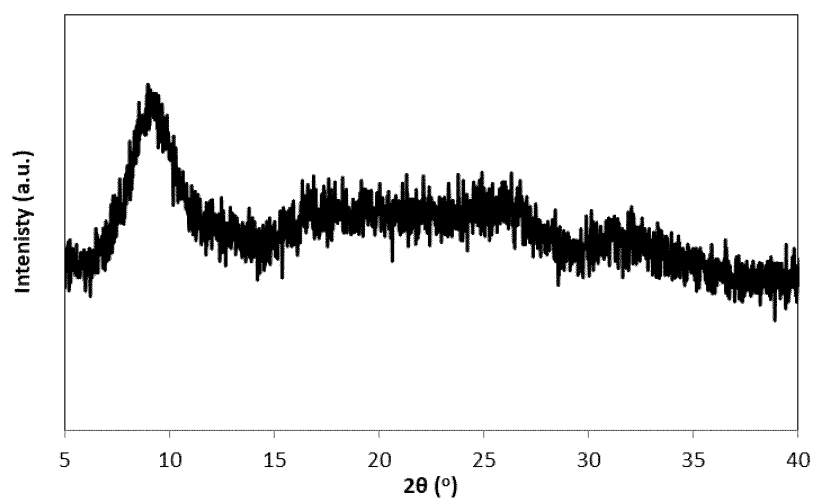


FIGURE 29

**FIGURE 30****FIGURE 31**

**FIGURE 32****FIGURE 33**

**FIGURE 34****FIGURE 35**

**FIGURE 36**