

Supplementary materials

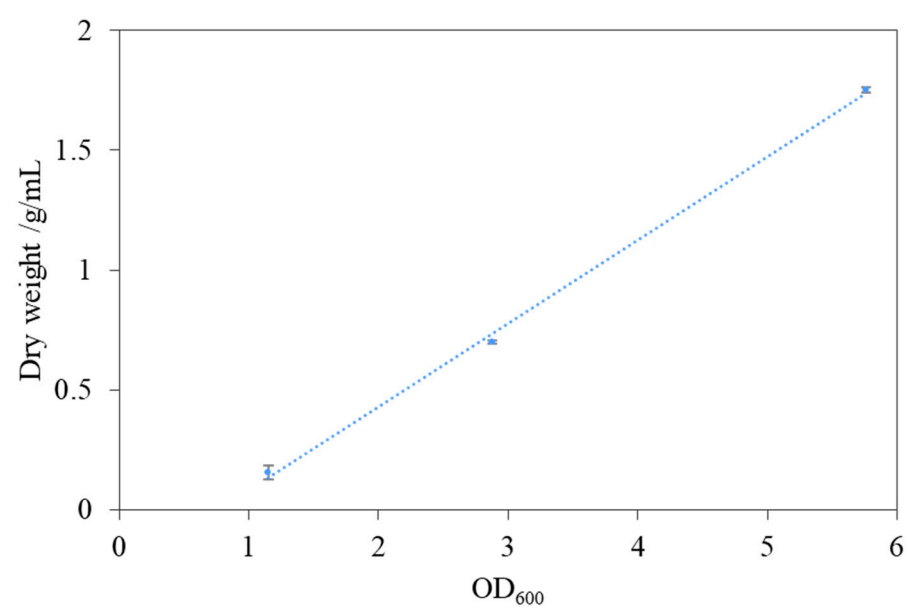


Figure S1. The correlation between dry weight of cells and OD₆₀₀.

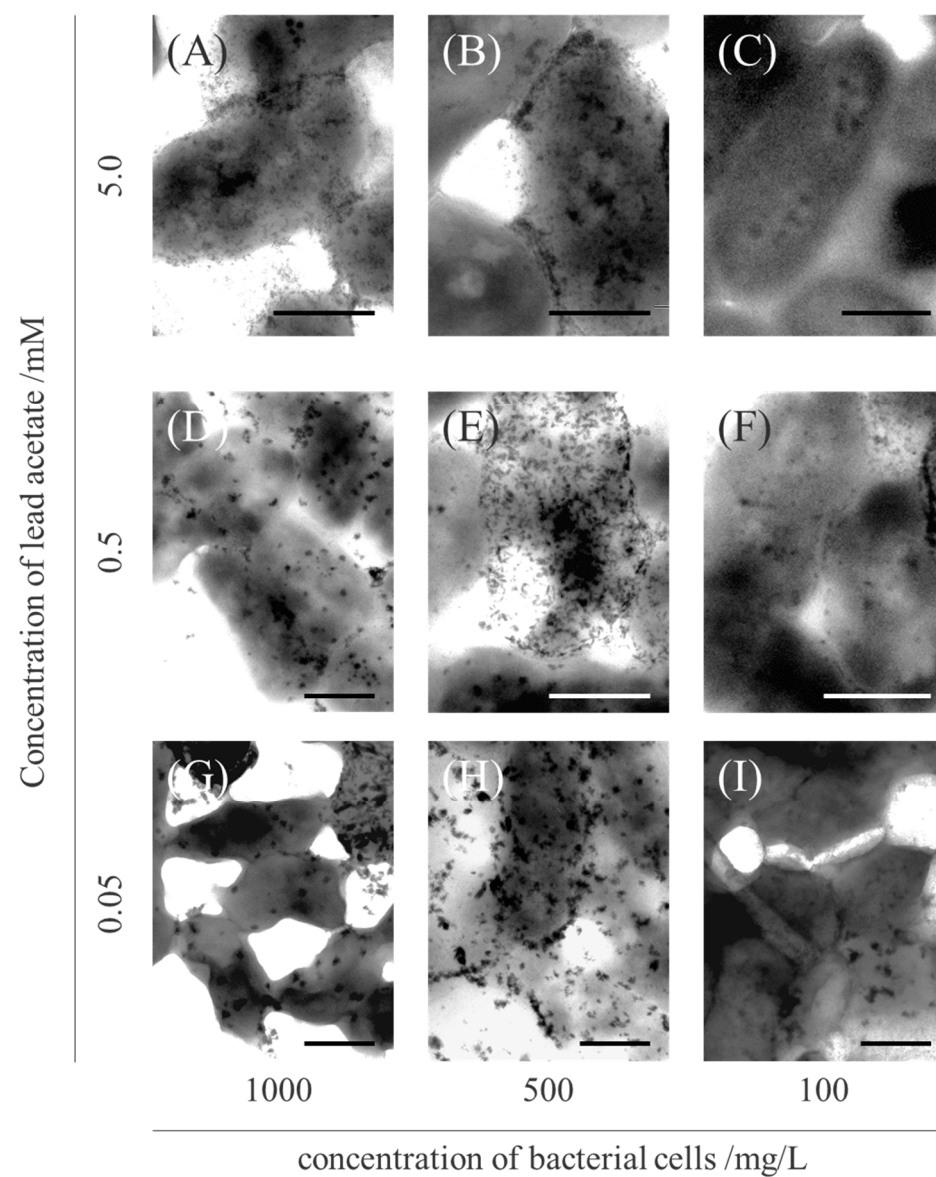


Figure S2. TEM images of KKY-29 incubated in various concentration of lead acetate solution. Scale bar is 500 nm.

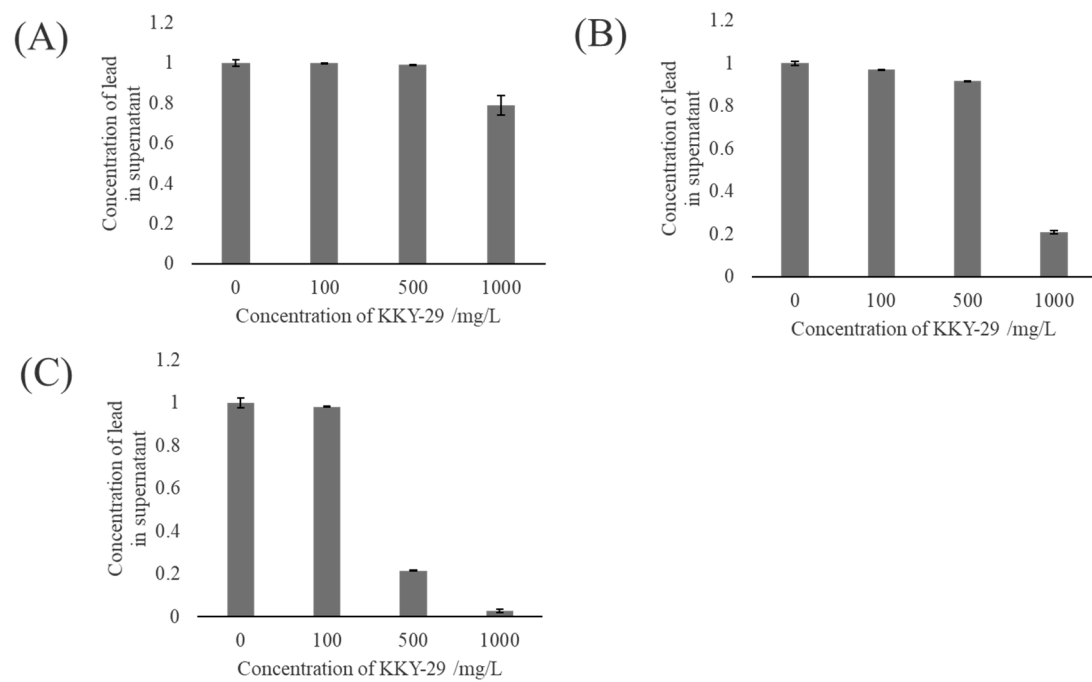


Figure S3. The lead concentrations of the KKY-29 treated with lead acetate solution ((A) 5.0 mM, (B) 0.5 mM, (C) 0.05 mM). The relative values are shown when the condition of no metal solution is set to 1 ($n = 3$, mean SD).

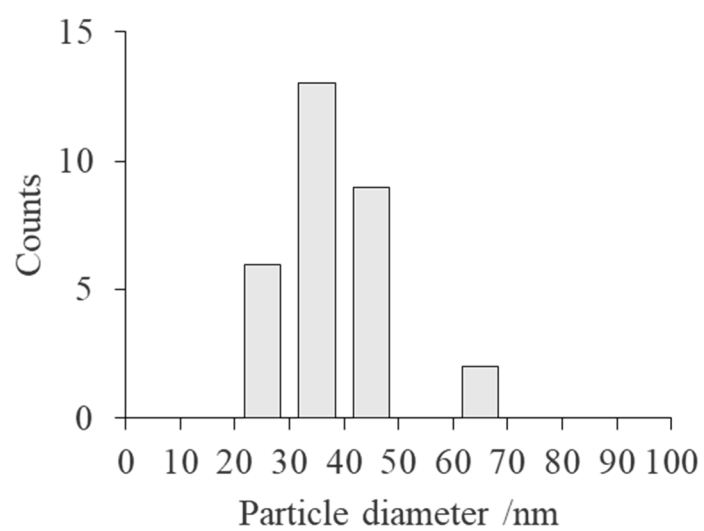


Figure S4. The size distribution of nanoparticles.

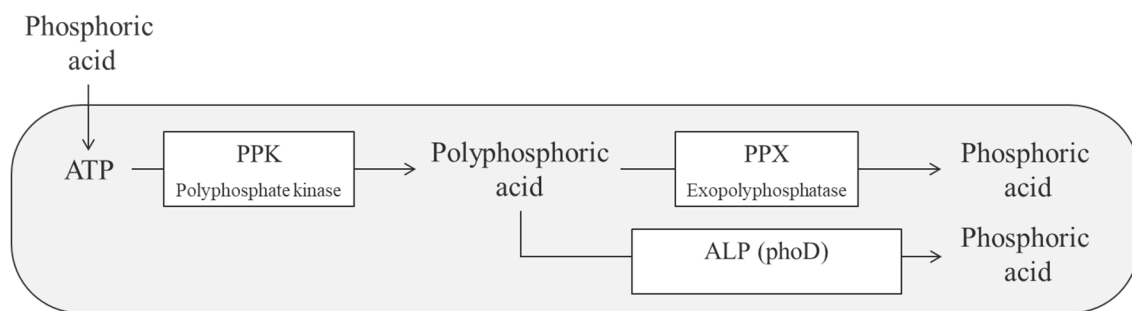


Figure S5. Schematic model of polyphosphoric acid decomposition pathway.

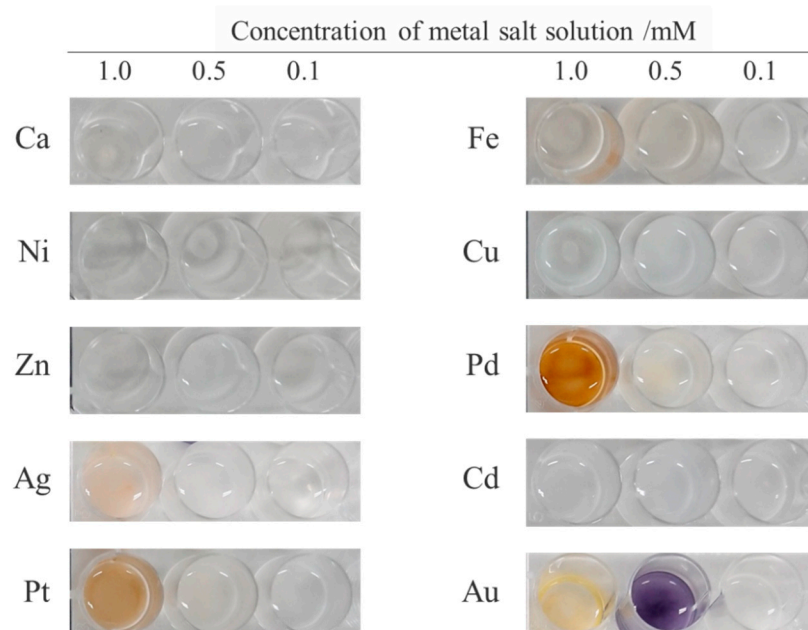


Figure S6. The color results of the KKY-29 suspension after incubating with various metal salt solution.

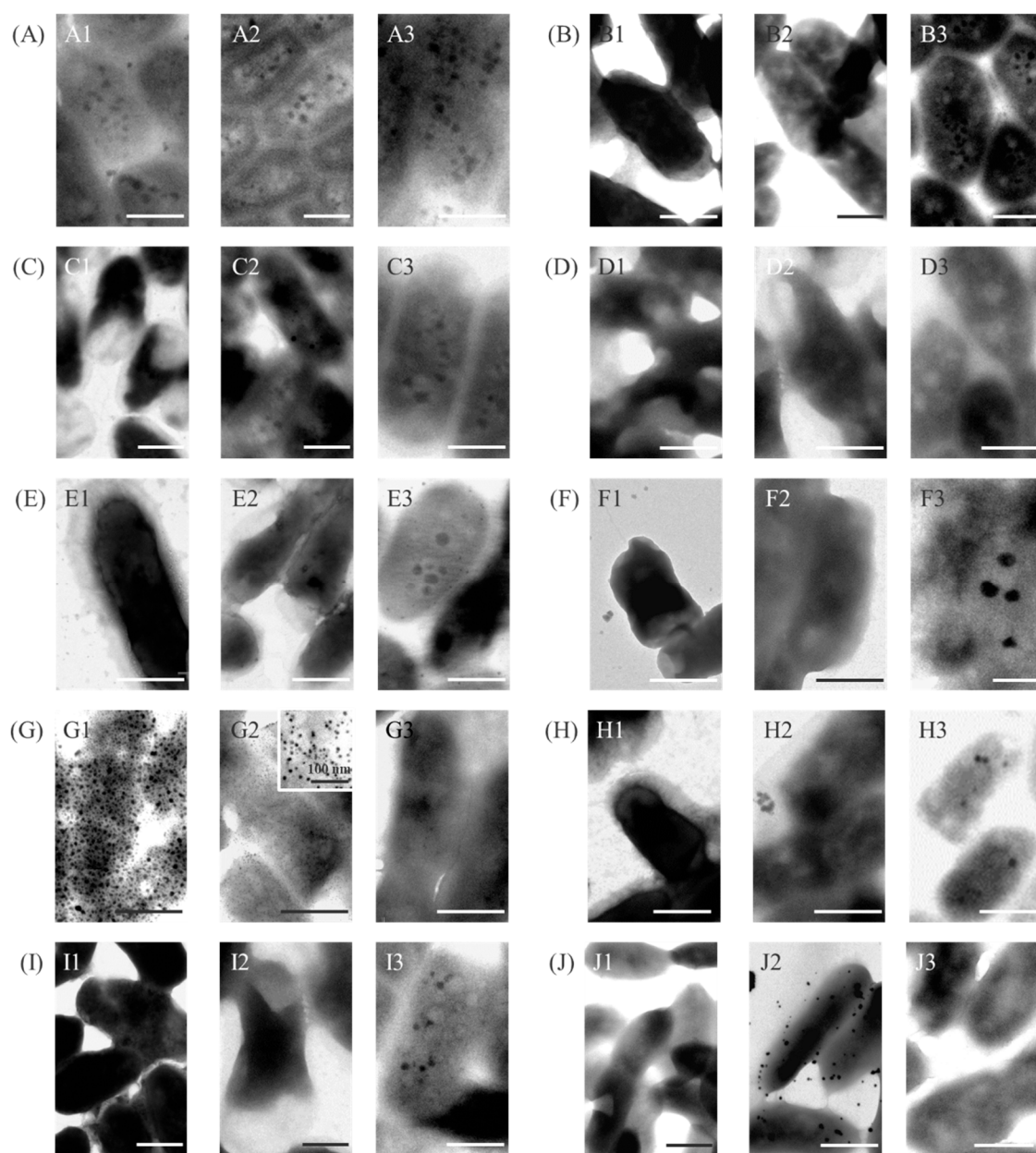


Figure S7. TEM images of the KKY-29 after incubating with various metal salt solution. Scale bar is 500 nm.

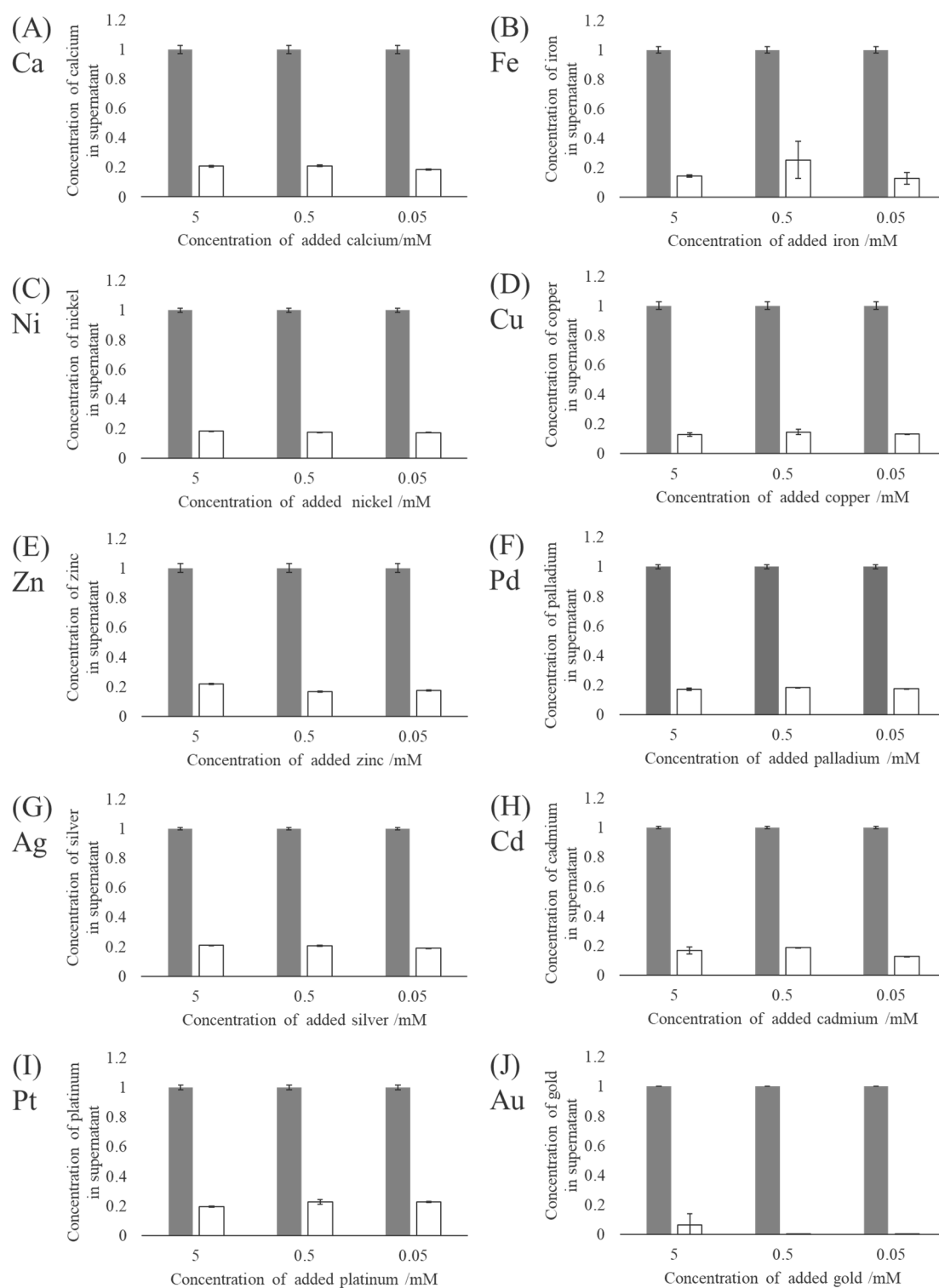


Figure S8. The metal concentrations of the KKY-29 treated with various metal solution ($n = 3$, mean SD). Closed bar means as negative control and open bar means samples with KKY-29.