

Fabrication of stable biofilm composed of various metalloproteins on Carbon Nanotube

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In this study, biofilm composed of myoglobin and carbon nanotubes are fabricated for stability enhancement. The stability of biofilm was compared to myoglobin mono-layer film without carbon nanotubes. Then, to overcome signal underneath by signal enhancement, myoglobin and ferritin are immobilized on carbon nanotubes. The fabrication of double-layer of myoglobin & ferritin on carbon nanotubes was confirmed and compared to double-layer of myoglobin and ferritin without carbon nanotubes. From experiment results, this biofilm showed enduring stability and signal enhancement to overcome signal underneath.

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