

Supporting Information (SI)

for

**An ultra-low level detection of hepatocellular carcinoma global
methylation using AuNPs modified carbon fiber microelectrode**

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Table.S1: Sequences of DNA oligonucleotides and primes.

Oligos	5'-3'
Methylated Sequence	AATACCTCGCCTACTTCGACTCGTACACGATAC G CGCACCCACTAACCTACGCCAC
4 site Methylated Sequence	AATACCTCACCTACTTCGACTCATACACGATACG CGCACCCACTAACCTACACCCAC
1 site Methylated Sequence	AATACCTCACCTACTTCAACTCATACACGATAC A CACACCCACTAACCTACACCCAC
Unmethylated Sequence	AATACCTCACCTACTTCAACTCATACACAATAC A CACACCCACTAACCTACACCCAC
LINE-1-M forward	GTAAGGGGTTAGGGAGTTTTTTTT
LINE-1-M reward	TCTCAAACACTATACTAACAATCAAC
LINE-1-U forward	GCAAGGGGTCAGGGAGTTCCTTT
LINE-1-U reward	TCAAAC TGCAAGGCCGAGCAAGGCTG
201bp LINE-1- F	AGGCATTGTCTCACTTGGA
201bp LINE-1- R	CCACGGAGTCTCGCTGATT

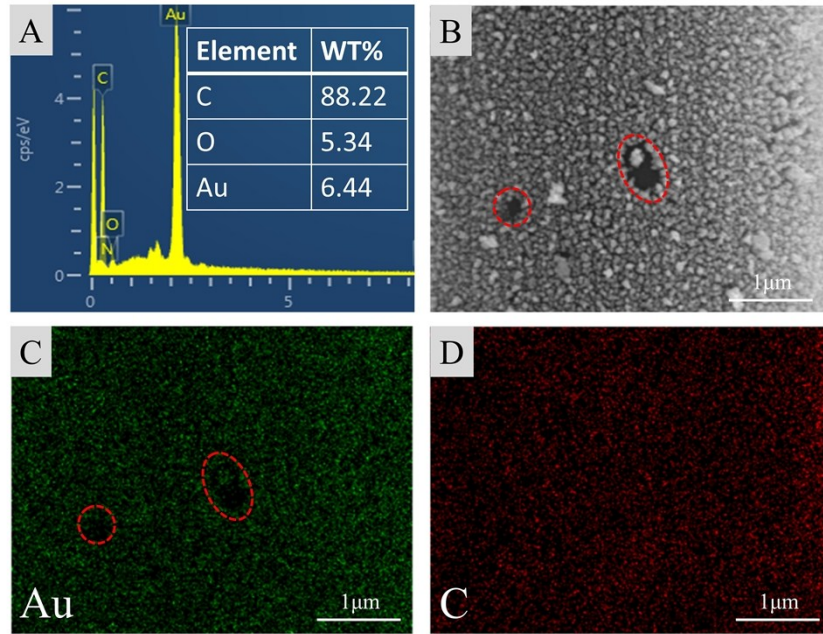


Fig.S1 The elemental distribution of AuNPs-CFME. (A) The EDS spectrum. The inset: the weight ratio of elements. (B) The SEM image. (C) The elemental mapping image of Au. (D) The elemental mapping image of C.

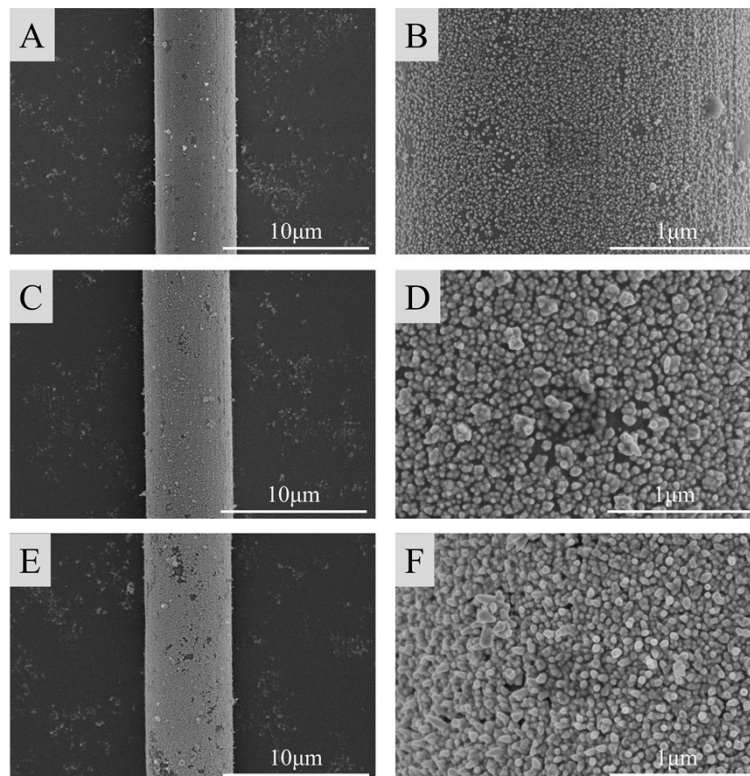


Fig.S2 The SEM images of AuNPs-CFME. (A) (B) 25 s electrodeposition. (C) (D) 100 s electrodeposition. (E) (F) 200 s electrodeposition.