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Electronic Supplementary Information (ESI) for

Platinum-Decorated Carbon Nanoparticle/Polyaniline Hybrid Paste for Flexible Wideband Dipole Tag-Antenna Application

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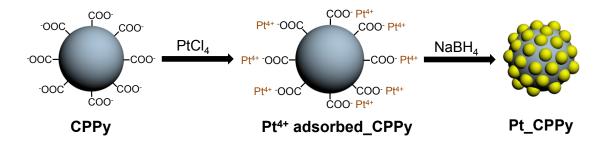
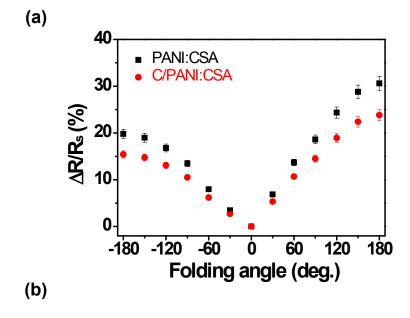


Figure S1. Schematic illustration of the formation of Pt particles on the CPPy surface.



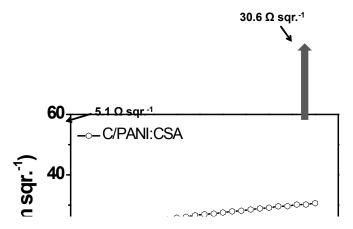


Figure S2. (a) Surface resistance changes of PANI:CSA (black) and C/PANI:CSA (red) micro-patterns as a function of folding angle. (b) Surface resistance changes of C/PANI:CSA micro-pattern with enhancing of bending cycle.

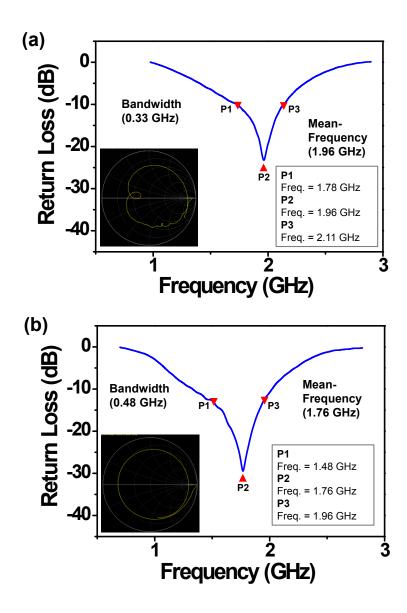


Figure S3. Return loss curves and Smith chart impedance diagrams (inset) of dipole tag-antenna using (a) PANI:CSA and (b) C/PANI:CSA-based electrodes.