Supplementary Materials: The Chemical Deposition Method for the Decoration of Palladium Particles on Carbon Nanofibers with Rapid Conductivity Changes

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Figure S1. Morphologies of (**a**) PAN; (**b**) ST-NFs; (**c**) CNFs. (**d**) Their schematic illustration via electrospinning, stabilization, and carbonization.



Figure S2. Simple illustration of hydrogen sensing devices.



Figure S3. Digital photograph of (a) the PAN NF and (b) the ST-NF under mechanical stress.



Figure S4. Digital photograph of the Pd deposition process with different pH conditions. (**left**) The initial state of the PdCl₂ solution with the CNF, and (**right**) the PdCl₂ solution after deposition.



Figure S5. SEM images (**left**) and corresponding to EDX image (**right**) of (**a**) 1 h Pd/CNF; (**b**) 6 h Pd/CNF; and (**c**) 12 h Pd/CNF.



Figure S6. SEM images of (a) 1 h; (b) 6 h; and (c) 12h Pd/CNF after hydrogen absorption.



Figure S7. Resistance change before (**blue**) and after (**red**) hydrogen absorption of CNF, 1 h Pd/CNF, 6 h Pd/CNF, 12 h Pd/CNF.



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