

Supplementary Information

# Pt<sub>1-x</sub>Ni<sub>x</sub> Alloy Nanoparticles Embedded in Self-Grown Carbon Nanofibers: Synthesis, Properties and Catalytic Activity in HER

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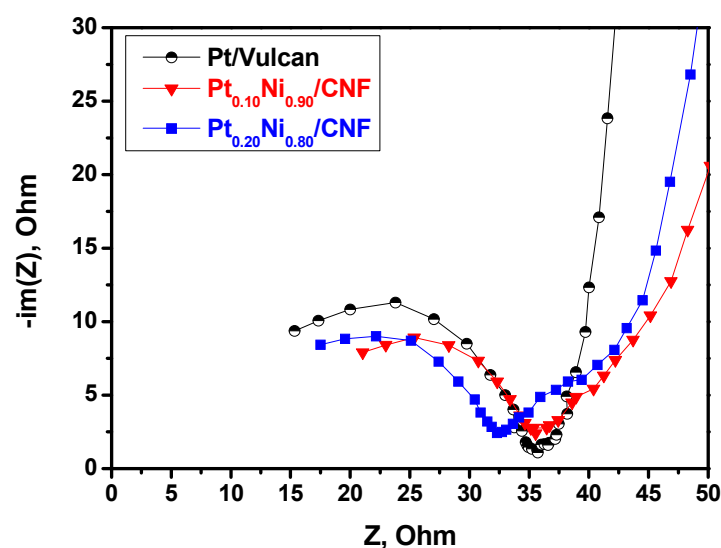
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**Table S1.** Carbon-based Pt-Ni composites used for electrochemical applications.

#	Catalyst	Preparation method	Reference
1	Ni@Pt+C	Ni@Pt core-shell nanoparticles mixed with carbon black powder	[1]
2	Ni-Pt/C	Ni-Pt truncated octahedrons, Ni-Pt nanomultipods, and Ni-Pt nanoflowers were grown on the glassy carbon substrate	[2]
3	Ni@Pt/MWCNTs	Ni@Pt core-shell nanoparticles deposited on the surface of functionalized multi-walled carbon nanotubes	[3]
4	Pt-Ni/MWCNTs	Pt-Ni nanoparticles supported on multi-walled carbon nanotubes	[4]
5	Ni/Pt/CNFs	Pt nanoparticles deposited onto the porous Ni/CNF nanofibers using a chemical reduction method	[5]
6	Pt <sub>1-x</sub> Ni <sub>x</sub> /CNF	Pt <sub>1-x</sub> Ni <sub>x</sub> alloy nanoparticles embedded in self-grown carbon nanofibers	This work



**Figure S1.** Electrochemical impedance spectroscopy analysis data (Nyquist plots) for the samples of Pt<sub>1-x</sub>Ni<sub>x</sub>/CNF composites.

## References

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