Electronic Supplementary Information (ESI)

Nickel nanoparticles supported on nitrogen-doped honeycomblike carbon frameworks for effective methanol oxidation

Juan Wang^a, Qi Zhao^a, Hongshuai Hou^b, Yifei Wua, Weizhen Yua, Xiaobo Ji^b*, Lidong shao^a*

^a Shanghai Key Laboratory of Materials Protection and Advanced Materials in Electric Power, Shanghai University of Electric Power, Shanghai 200090, PR China,

E-mail address: lidong.shao@shiep.edu.cn

^b College of Chemistry and Chemical Engineering Central South University Changsha,410083, PR China, E-mail address: xji@csu.edu.cn

Figure S1



XRD patterns of CNFs-Ni and CFs-Ni.

Figure S2



Nyquist plots obtained for CFs-Ni and CNFs-Ni in 1.0 M KOH/0.5 M CH₃OH. And inset is the equivalent electrical circuit used to fit the EIS data.

Table S1. The parameters of CFs-Ni and CNFs-Ni catalysts for EIS fitting.

Sample	R _s	R _{ct}	R _{SEI}	C _{dl}	Q _{SEI}
	(ohm)	(ohm)	(ohm)	(F)	F s^(a-1)
CF-Ni	8.886	334.4	894.6	43.05 e ⁻⁶	0.2246 e ⁻³
CNF-Ni	17.18	310	352.7	47.94 e ⁻⁶	0.3379 e ⁻³