Supporting Information：

Facile preparation of urchin-like $NiCo_2O_4$ microspheres for efficient hydrogen peroxide detection

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Fig. S1 SEM of NiCo$_2$O$_4$ microspheres precursors at different reaction time were 2 h (a), 4 h (b), 6h (c), 8 h (d) and 10 h (e), respectively. SEM results of precursor (f) and NiCo$_2$O$_4$ solid microsphere (g) without adding ionic liquid. (h) TEM image of urchin-like NiCo$_2$O$_4$ microspheres after the fifteen successive test (inset: the HRTEM image).
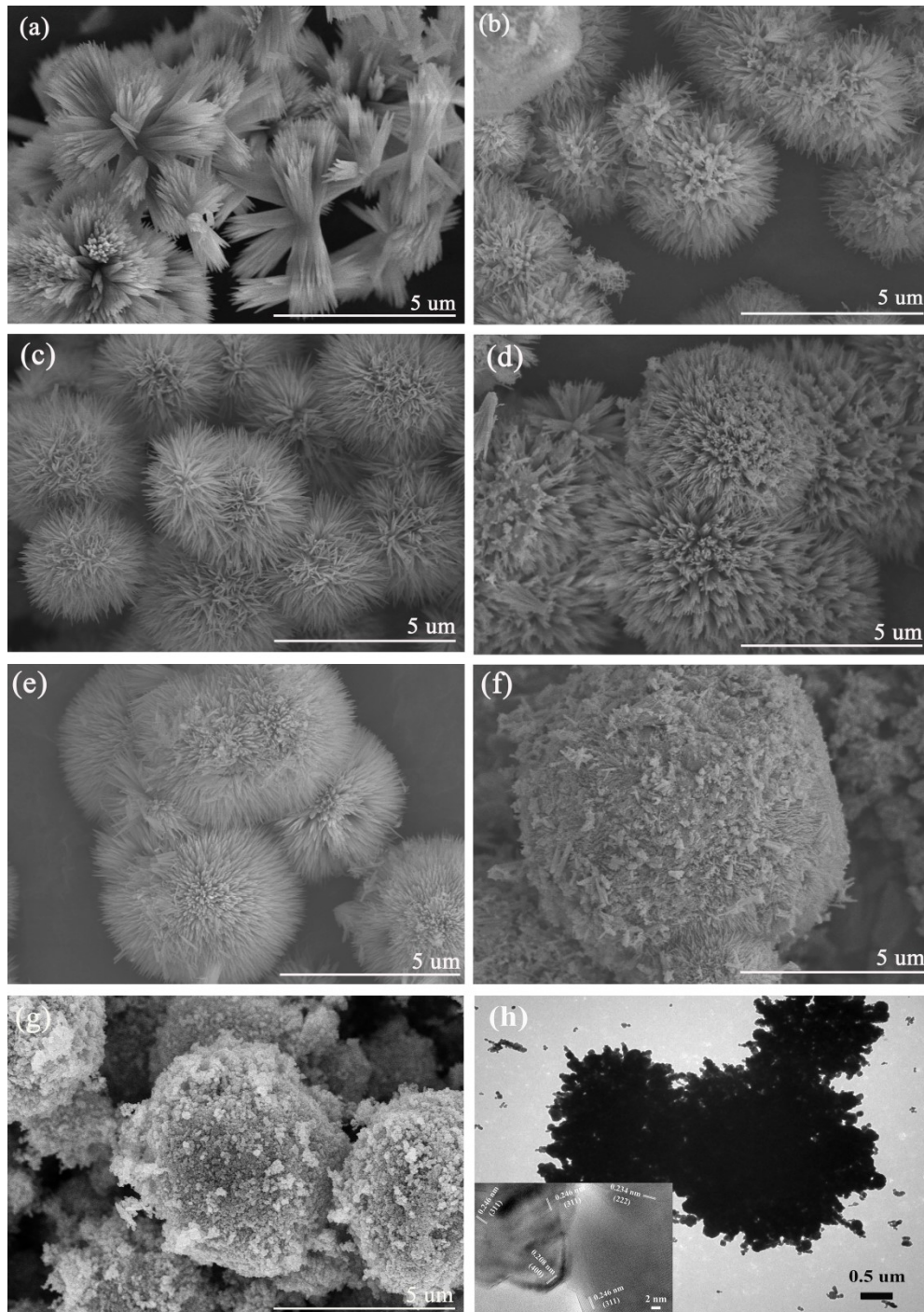
Fig.S2 (a) Amperometric responses of $NiCo_2O_4$/RDE at different applied potentials. (b) Amperometric responses of $NiCo_2O_4$/RDE with different loadings at applied potential of 0.58 V and its corresponding calibration plot (c).
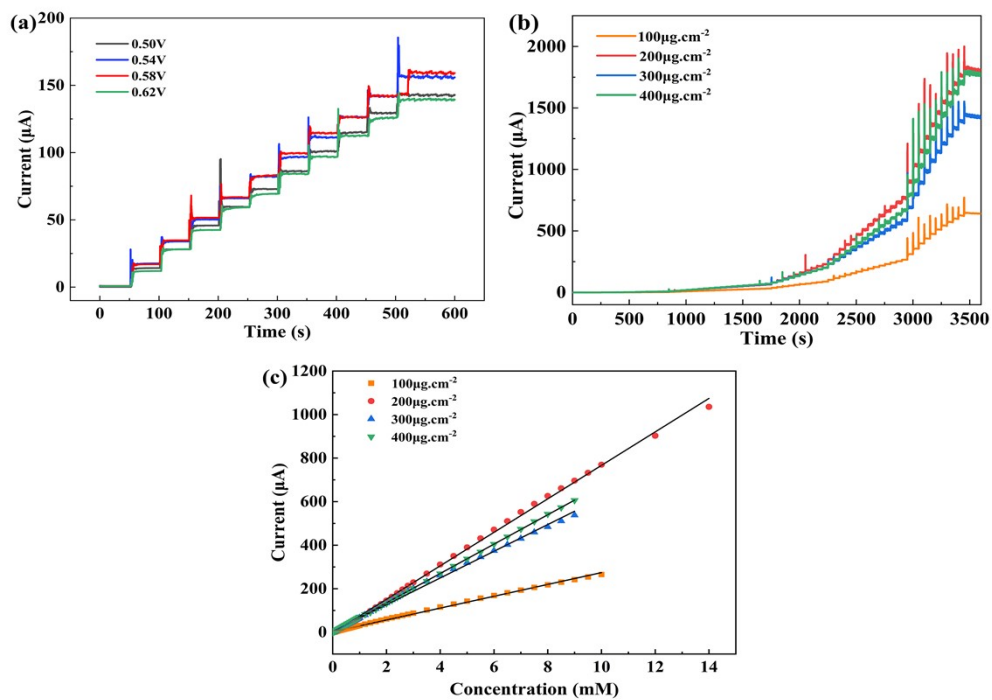
Table S1 Performances comparison with different catalyst loadings in electrochemical H_2O_2 detection.

Loading of catalyst ($\mu g \cdot cm^{-2}$)	Linear ranges (mM)	Sensitivity ($\mu A \cdot mM^{-1} cm^{-2}$)	Detection Limit (μM)
100	0.0~10.0	138.62	0.144
200	0.0~14.0	392.50	0.050
300	0.0~9.0	312.86	0.063
400	0.0~9.0	343.98	0.058