Supporting Information

**CoMoO$_4$ and Ni$_{1/3}$Co$_{2/3}$MoO$_4$ nanosheets with high performance supercapacitor and nonenzymatic glucose detection**

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Surface analysis and chemical composition of the Ni$_{1/3}$Co$_{2/3}$MoO$_4$ nanosheets was performed by X-ray photoelectron spectroscopy using a VG ESCALAB 200R spectrometer using monochromatic Al Kα radiation and an inductively coupled plasma atomic emission spectrometer (ICP-AES, IRIS Intrepid II XSP, ThermoFisher).

**Fig.S1** X-ray photoelectron (XPS) spectra of the Ni$_{1/3}$Co$_{2/3}$MoO$_4$ nanosheets: (a) survey spectrum, (b) C 1s, (c) Co 2p, (d) Ni 2p, (e) Mo 3d, and (f) O 1s.
Table S1. Quantitative analysis of Co and V contents by ICP-AES.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Co %</th>
<th>Ni %</th>
<th>Co/Ni mole ratio</th>
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<tbody>
<tr>
<td>Ni\textsubscript{1/3}Co\textsubscript{2/3}MoO\textsubscript{4}</td>
<td>26.61</td>
<td>13.73</td>
<td>1.93:1</td>
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</table>

The electrochemical impedance spectra were further studied in the revised manuscript. Electrochemical impedance spectroscopies were measured at open circuit potential with amplitude of 5 mV in a frequency range from 0.01 to 100 kHz. The Nyquist plots of CoMoO\textsubscript{4} and Ni\textsubscript{1/3}Co\textsubscript{2/3}MoO\textsubscript{4} nanosheets electrodes were shown in Fig.S2. In the low frequency region, the slope indicated the diffusion resistance for the two samples is almost the same. Furthermore, a small semicircle in the high frequency region indicated the nickel ions-doping endow the Ni\textsubscript{1/3}Co\textsubscript{2/3}MoO\textsubscript{4} sample with a lower charge transfer resistance than the pure CoMoO\textsubscript{4} sample, which was ascribed to the high electronic conductivity of the doped sample.

Fig.S2 Electrochemical impedance spectra (EIS) of CoMoO\textsubscript{4} and Ni\textsubscript{1/3}Co\textsubscript{2/3}MoO\textsubscript{4} nanosheets electrodes.
Fig. S3 CV curves of CoMoO$_4$-CPE (dotted and solid lines) and Ni$_{1/3}$Co$_{2/3}$MoO$_4$-CPE (dashed and dash dotted lines) in the absence (dotted and dashed line) and presence (solid and dash dotted lines) of 5 mM glucose in 0.1 M NaOH.
Fig. S4  Amperometric sensing of glucose by successive addition of glucose for Ni$_{1/3}$Co$_{2/3}$MoO$_4$-CPE at 0.4 V in 0.1 M NaOH. Inset: (A) Log-log plot of amperometric response versus the concentration of glucose; (B) Amperometric curve at low concentration of glucose.