

We have added the XRD pattern of CN-480 raw material which is collected immediately after reaction without washed by distilled water. Fig.S1(a) shows the XRD pattern of the CN-480 raw material, and the standard XRD patterns of NaCl (reference code is 01-077-2064) and NaCl (reference code is 01-089-3615) are shown in Fig.S1 (b, c). The main diffraction pattern of CN-480 raw material matches good with two patterns of standard NaCl, indicating the sodium is eventually in the form of NaCl. This is in consistent with our proposed reaction scheme.

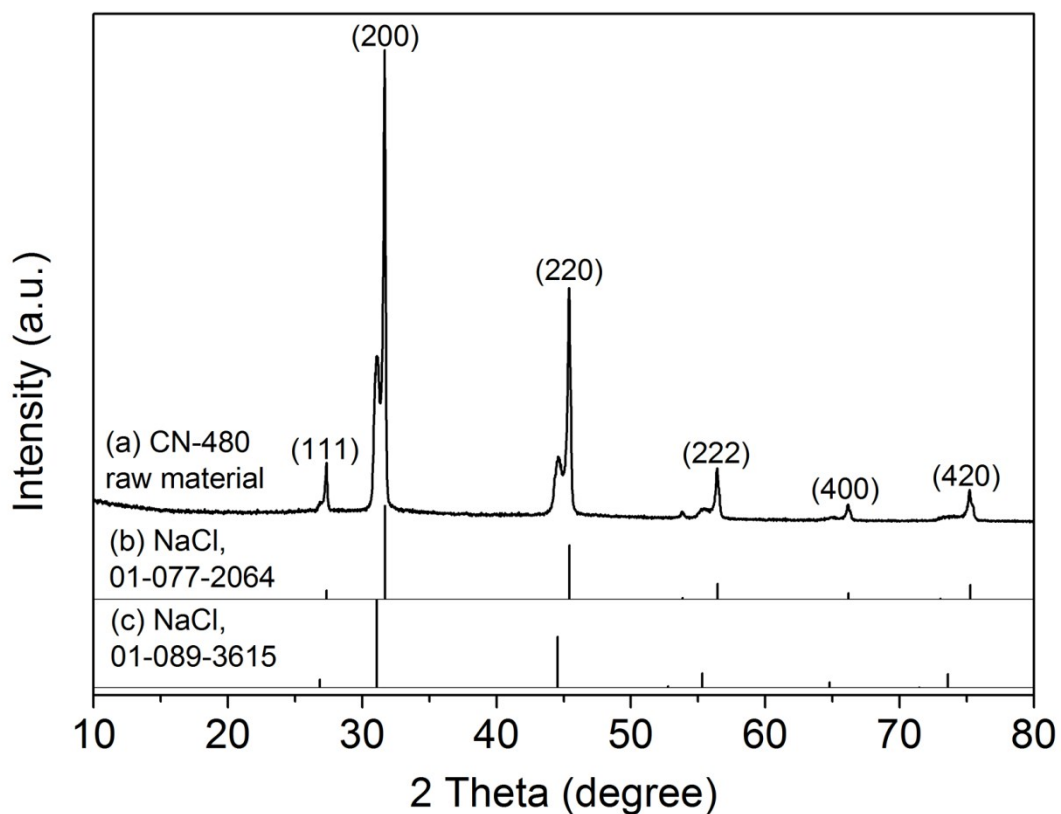


Fig. S1 (a) XRD pattern of CN-480 raw material; (b, c) the standard XRD pattern of NaCl (ICDD PDF No.01-077-2064) and NaCl (ICDD PDF No.01-089-3615)