

Supporting Information

**Boosting ultrahigh initial Coulombic efficiency of porous  
carbon anode for sodium-ion batteries via in-situ fabricating  
passivation interface**

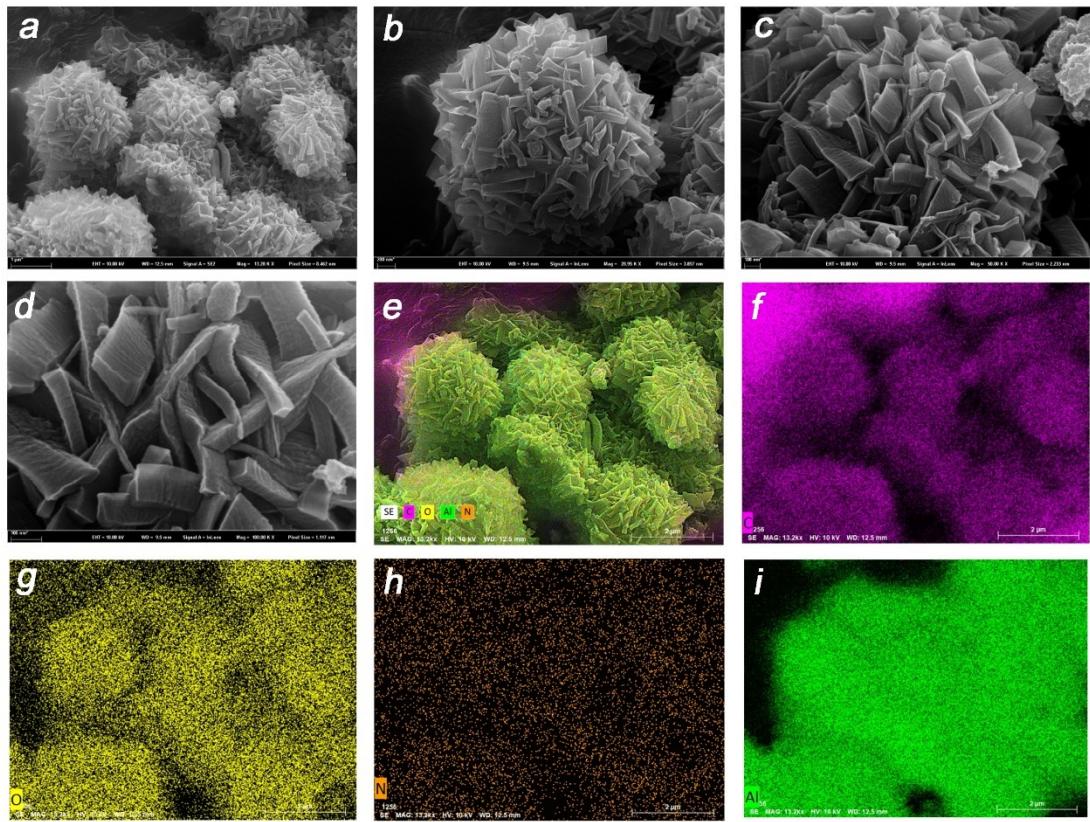
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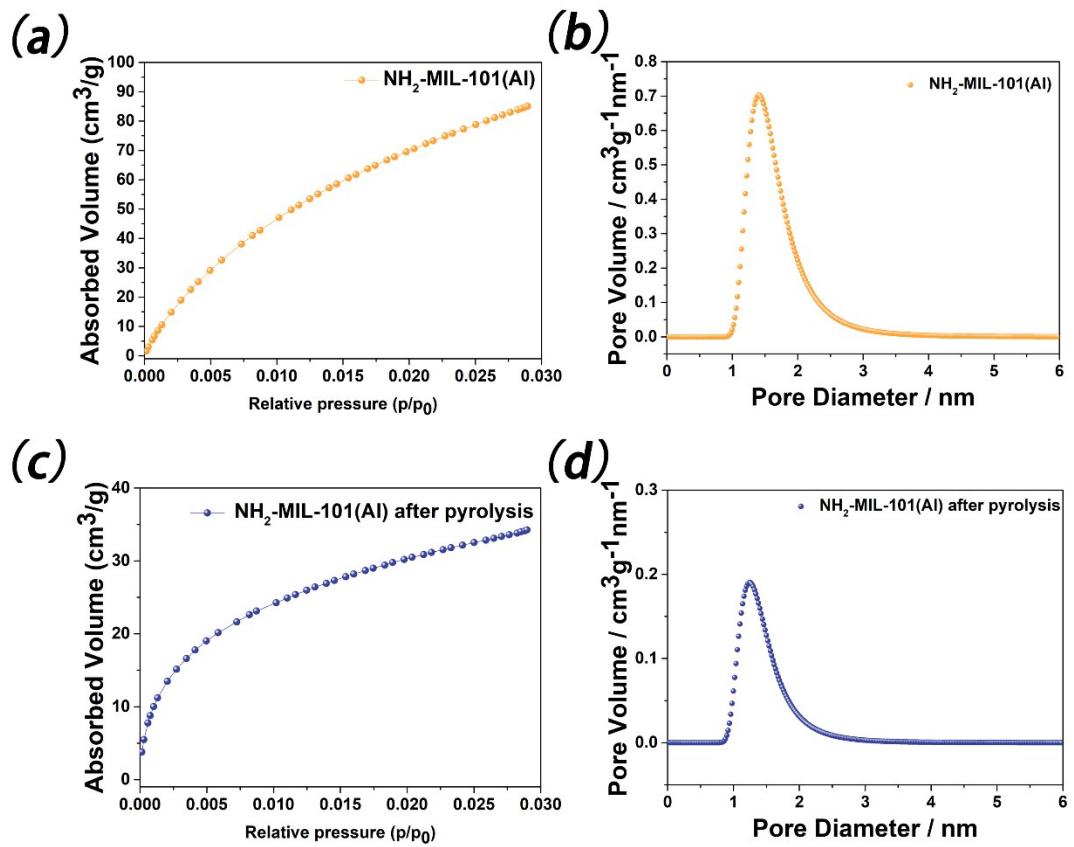
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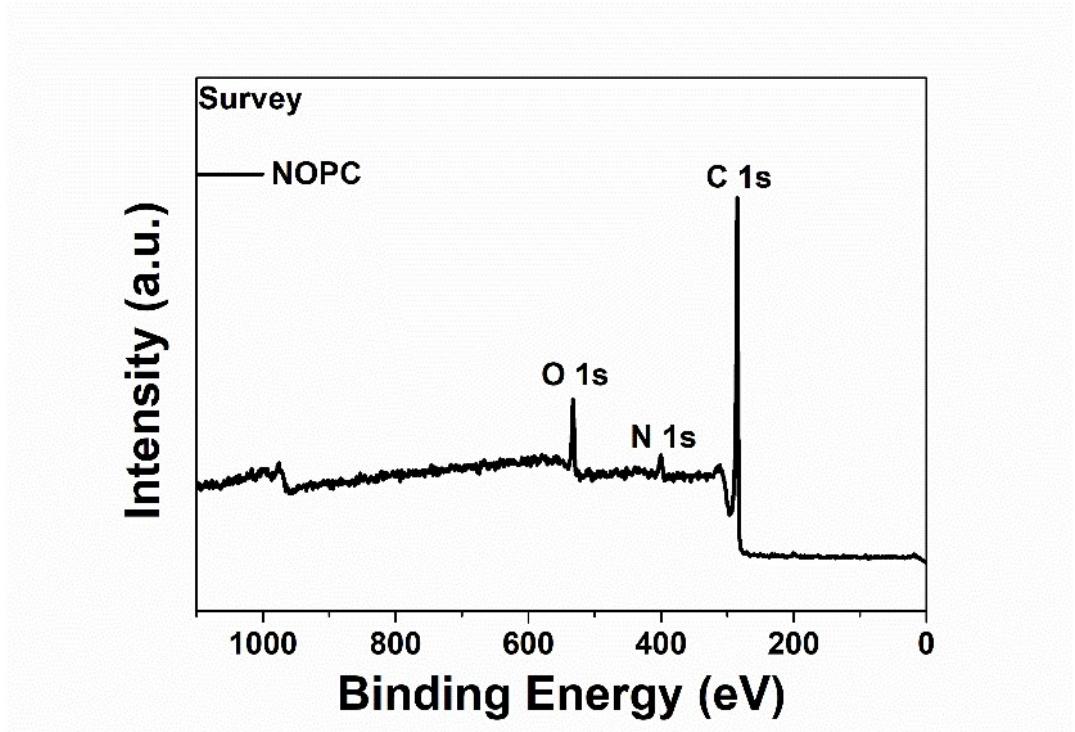
Wu)



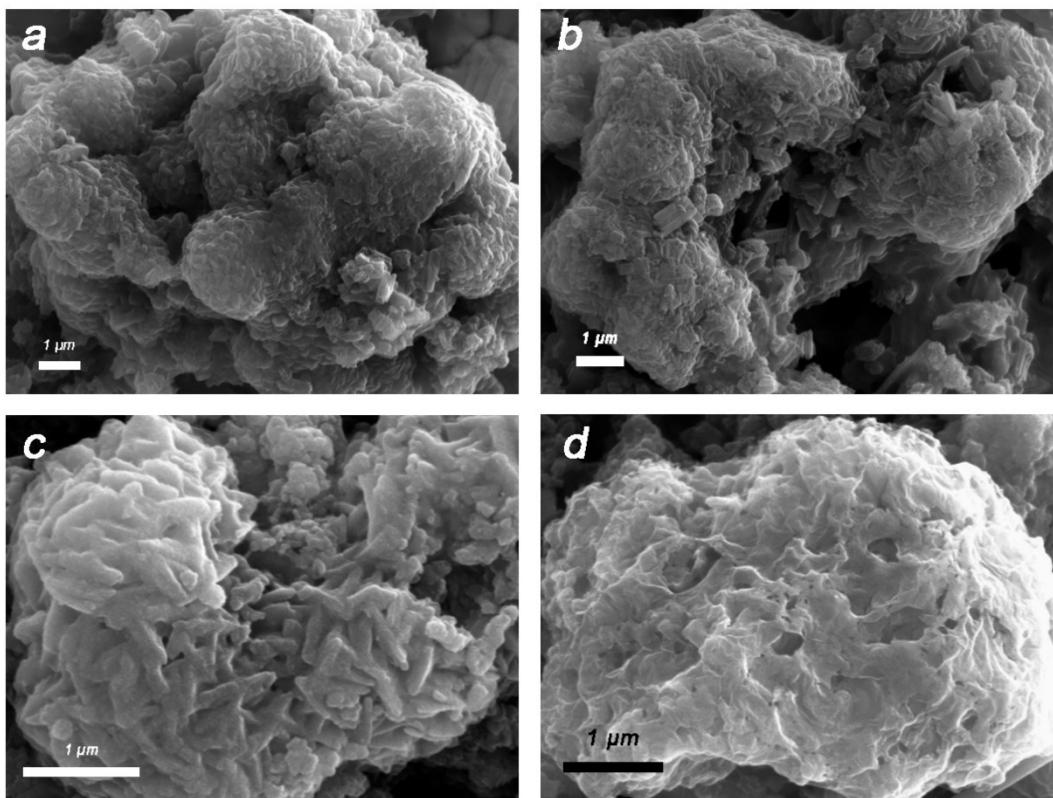
**Figure S1** the SEM image of the NH<sub>2</sub>-MIL-101(Al)



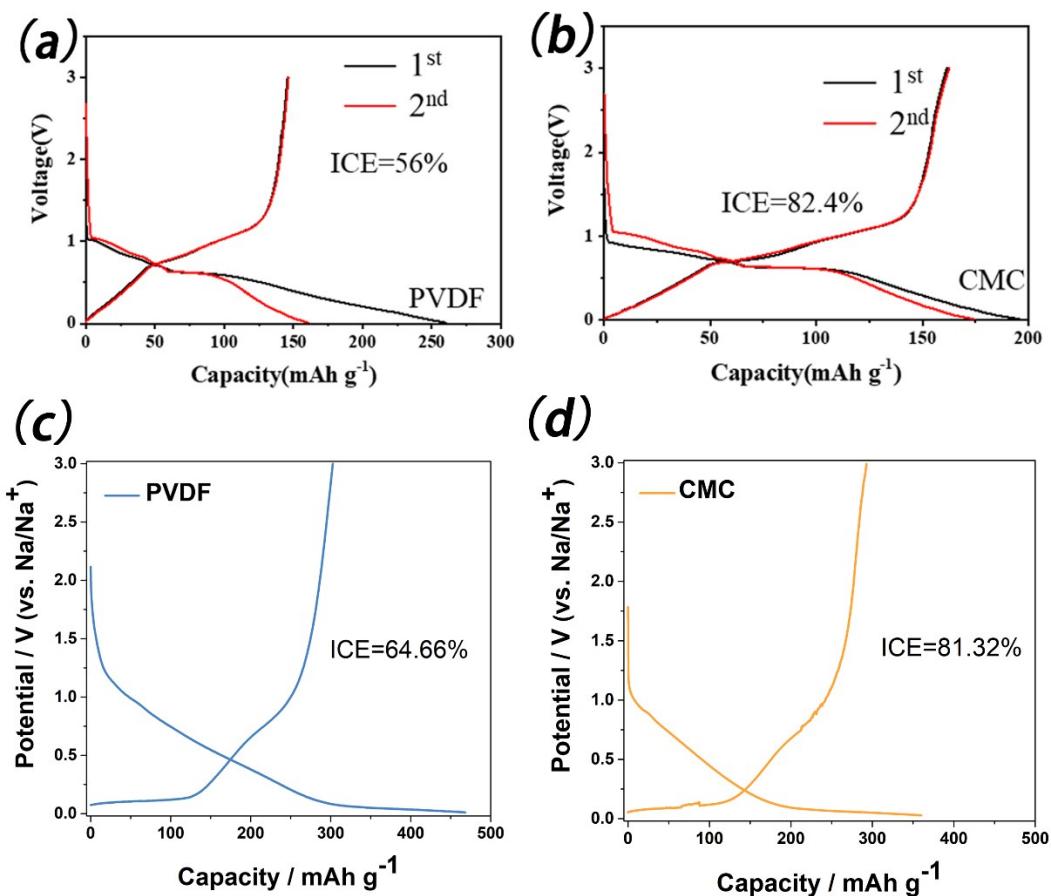
**Figure S2** the carbon dioxide adsorption isotherms and the pore size distribution of (a)(b)  $\text{NH}_2\text{-MIL-101(Al)}$  and (c)(d)  $\text{NH}_2\text{-MIL-101(Al)}$  after pyrolysis



**Figure S3** the survey spectrum of NOPC



**Figure S4** (a) the SEM images of NOPC-CMC before 1000 cycles (b) the SEM images of NOPC-PVDF before 1000 cycles (c) the SEM images of NOPC-CMC after 1000 cycles (d) the SEM images of NOPC-PVDF after 1000 cycles



**Figure S5** (a) Galvanostatic charge/discharge profiles of graphite-PVDF electrode at 50 mA g<sup>-1</sup> (b) Galvanostatic charge/discharge profiles of graphite-CMC electrode at 50 mA g<sup>-1</sup> (c) Galvanostatic charge/discharge profiles of hard carbon-PVDF electrode at 50 mA g<sup>-1</sup> (d) Galvanostatic charge/discharge profiles of hard carbon-CMC electrode at 50 mA g<sup>-1</sup>

Table S1 Comparison of NOPC versus Other Porous Carbons

Samples	ICE (%)	Electr olyte	Initial capacity (mAh g <sup>-1</sup> )	Current density (A g <sup>-1</sup> )	capacity retention ratio
NOPC-CMC (this work)	90%	Ether	213.9	10	90% after 1000 cycles
SNMHCSS <sup>1</sup>	29%	ESter	144	20	125% after 7000 cycles
SPC <sup>2</sup>	27%	ESter	142	10	89.1% after 10000 cycles
MAC-600 <sup>3</sup>	~25%	ESter	~180	10	~116% after 7000 cycles
SPC <sup>4</sup>	22.40%	ESter	215.7	0.2	80.5% after 500 cycles
NEGO <sup>5</sup>	72.08%	Ether	215	10	~65% after 5000 cycles
rGO <sup>6</sup>	74.6%	Ether	332.2	1	75.2% after 1000 cycles
HC <sup>7</sup>	85.9%	Ether	218	1	90% after 2000 cycles

## References

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