

Supporting information

Metal-organic frameworks derived $\text{NaTi}_2(\text{PO}_4)_3$ /carbon composite for efficient hybrid capacitive deionization

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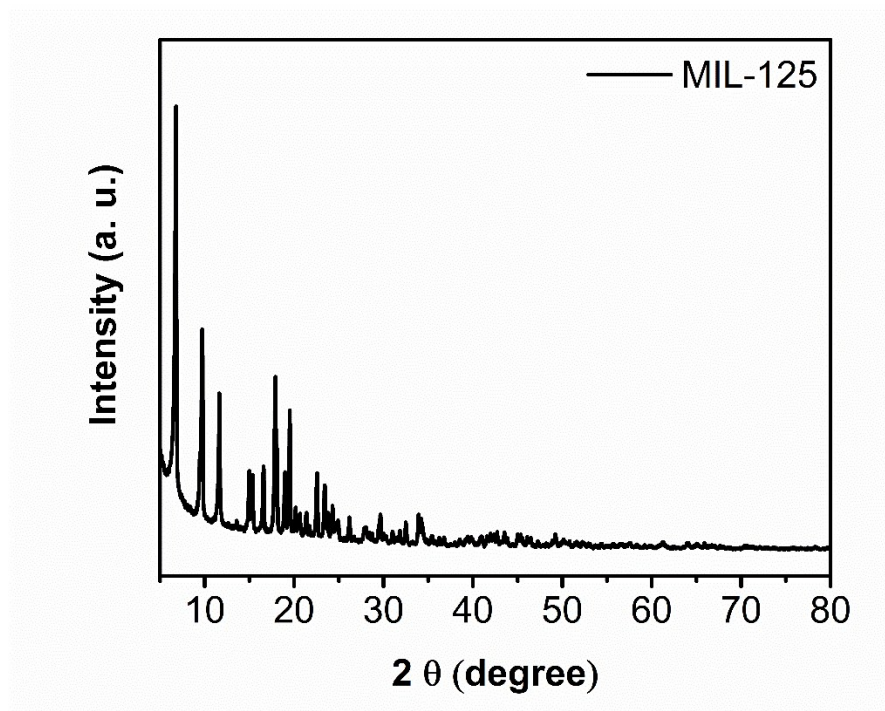


Fig. S1 XRD patterns of the as-synthesized MIL-125.

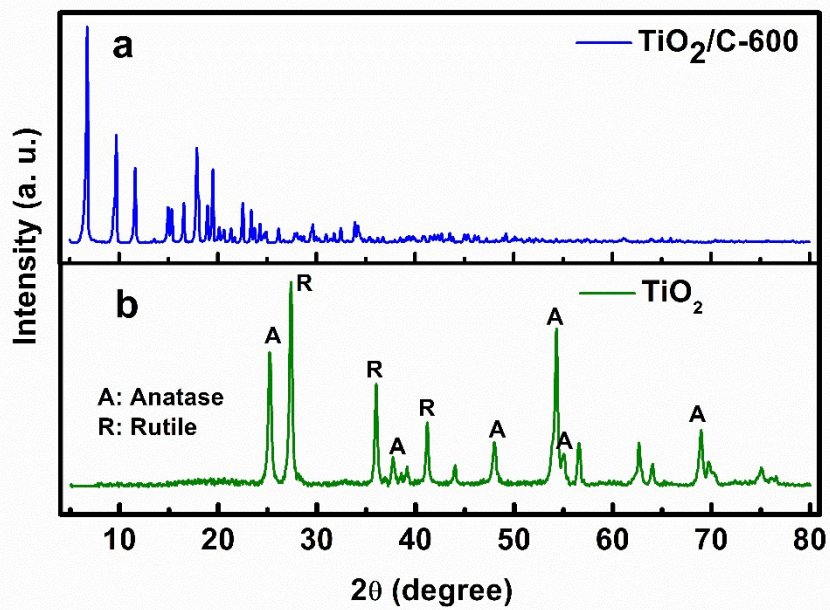


Fig. S2 XRD patterns of the as-synthesized TiO₂/C-600.

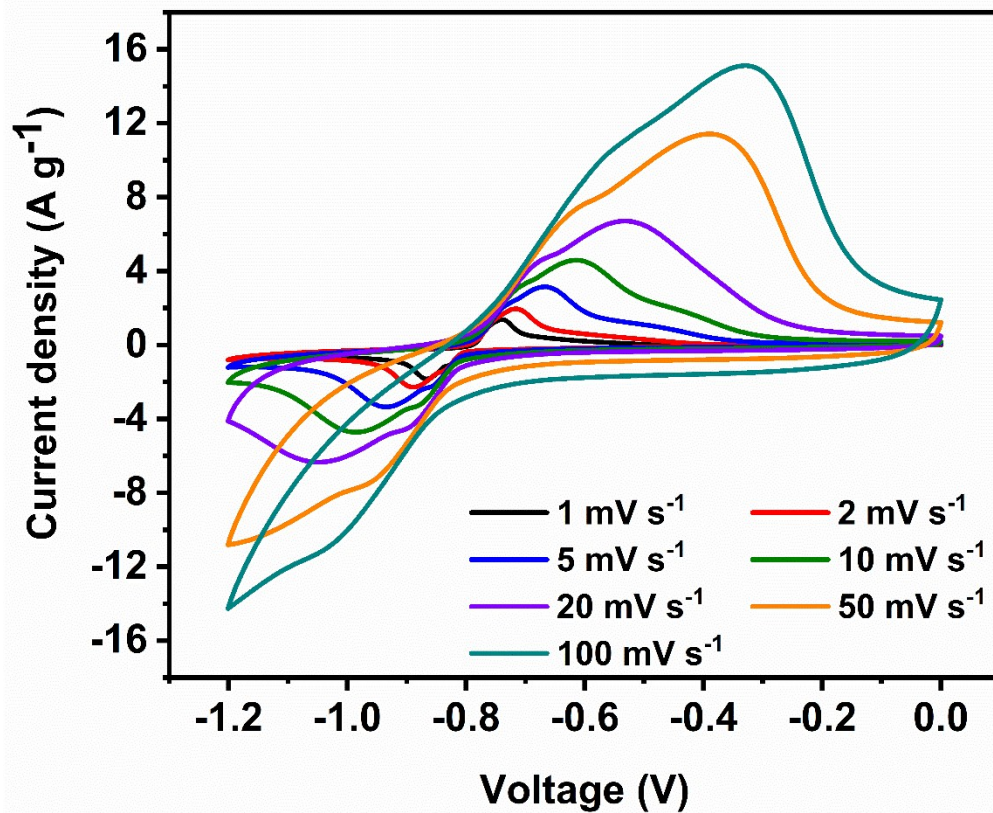


Fig. S3 CV curves of NTP/C electrode at scan rates from 1 to 100 mV s⁻¹ in a three-electrode system.

Table S1 Summary of the $\text{NaTi}_2(\text{PO}_4)_3$ (NTP) based electrode materials for CDI applications.

Cathode	Anode	m_t for calculation	Desalination capacity (mg g^{-1})	Charge efficiency	Desalination rate ($\text{mg g}^{-1} \text{min}^{-1}$)	Ref.
NTP/rGO	Ag	-	105	-	-	Ref.
	/rGO					S1
NTP/rGO	AC	-	120	-	-	Ref.
						S2
Carbon-coated NTP	AC	Cathode	146.8	-	2.47	Ref.
						S3
NTP/C	AC	Cathode	167.4*	0.83	14.6*	This work

*If m_t uses the total mass of cathode and anode, the desalination capacity and desalination rate should be calculated to be 61.5 mg g^{-1} and $3.7 \text{ mg g}^{-1} \text{min}^{-1}$.

References

- [S1] Y. Huang, F. Chen, L. Guo, J. Zhang, T. Chen and H. Y. Yang, *Desalination*, 2019, **451**, 241-247.
- [S2] Y. Huang, F. Chen, L. Guo and H. Y. Yang, *J. Mater. Chem. A.*, 2017, **5**, 18157-18165.
- [S3] Z. Guo, Y. Ma, X. Dong, M. Hou, Y. Wang and Y. Xia, *ChemSusChem*, 2018, **11**, 1741-1745.