

Electronic Supplementary Information (ESI)

Preparation of porous graphite felt electrode for advanced vanadium redox flow battery

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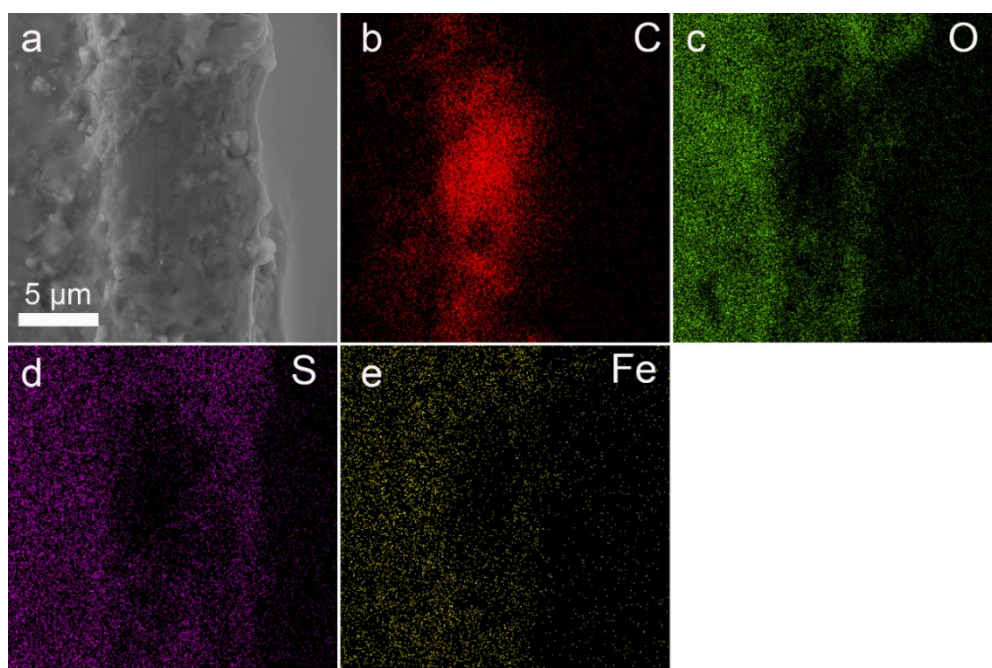


Fig. S1 SEM and corresponding mapping of GF@B.

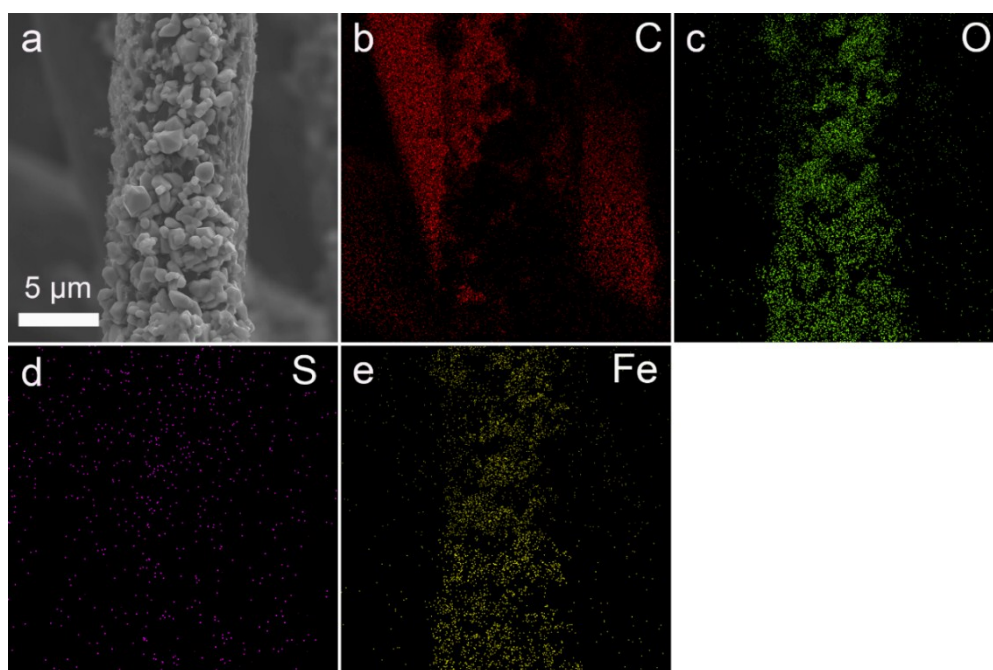


Fig. S2 SEM and corresponding mapping of GF@A.

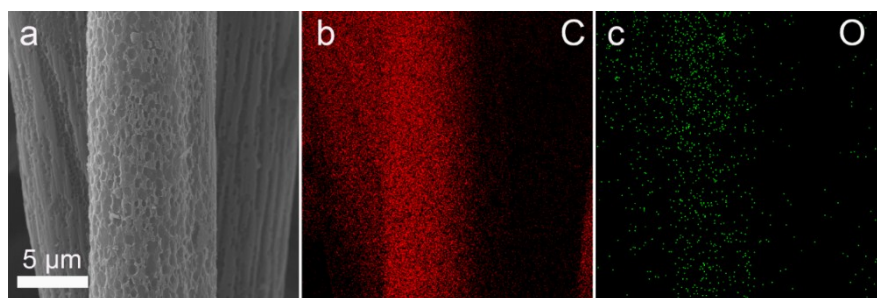


Fig. S3 SEM and corresponding mapping of GF@P.

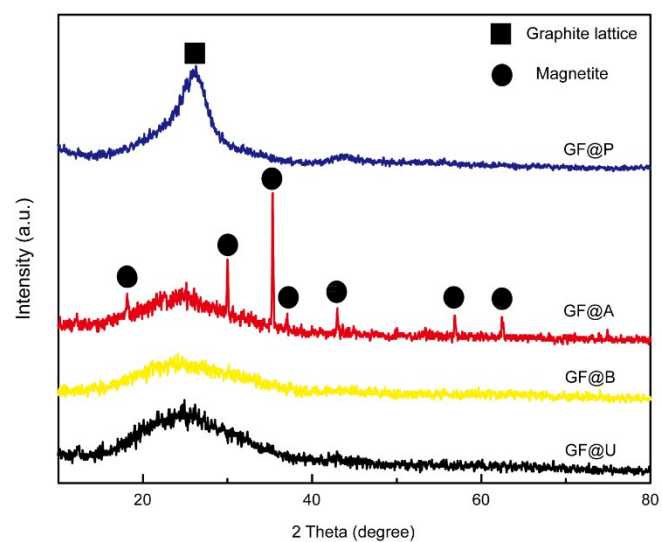


Fig. S4 XRD of GF@U, GF@B, GF@A, GF@P.

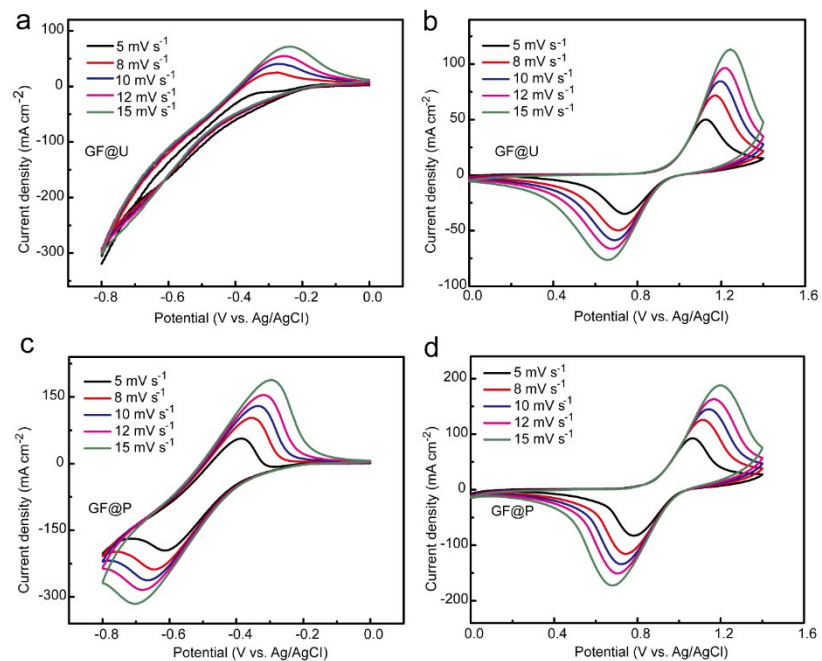


Fig. S5 (a, b, c, d) Cyclic voltammety profiles for the GF@U and GF@P at different scanning rates.

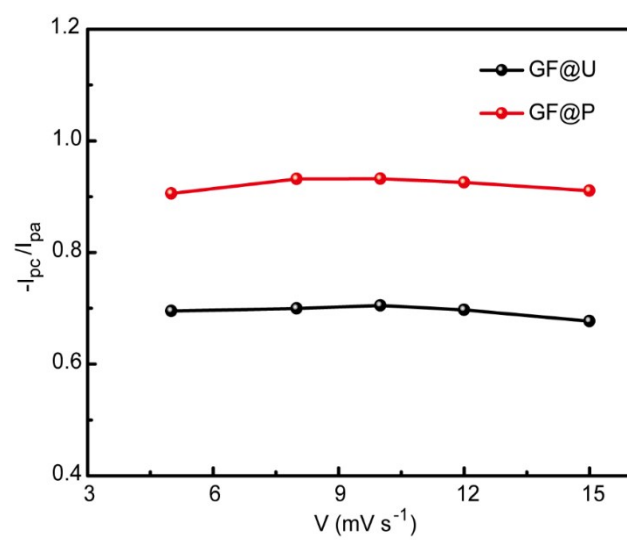


Fig. S6 (a) The $-I_{pc}/I_{pa}$ of GF@U and GF@P in $\text{VO}^{2+}/\text{VO}_2^{+}$ at different scanning.

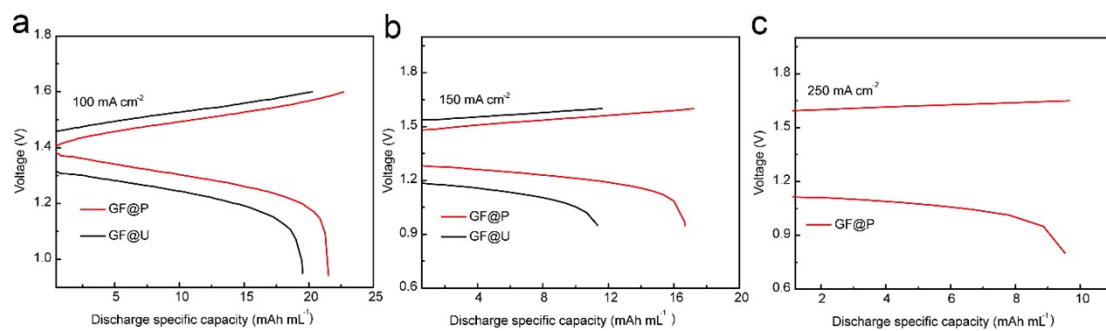


Fig. S7 (a) The charge-discharge curves of GF@U and GF@P at different current density.

Table S1. The CV data of pristine and modified GF.

negative half cell						
Electrode	I_{pc}	I_{pa}	V_{pa}	V_{pc}	$-I_{pc}/I_{pa}$	ΔE
	(mA cm ⁻²)	(V)	(V)	(V)		(mV)
GF@U	-265	29	0.245	0.775	9.13	530
GF@P	-316	136	0.358	0.637	2.32	279

Positive half cell						
Electrode	I_{pc}	I_{pa}	V_{pa}	V_{pc}	$-I_{pc}/I_{pa}$	ΔE
	(mA cm ⁻²)	(V)	(V)	(V)		(mV)
GF@U	-92	162	1.237	0.620	0.57	617
GF@P	-193	200	1.090	0.760	0.965	330

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