Supplementary Materials

Green Synthesis of Free Standing Cellulose/Graphene Oxide/Polyaniline Aerogel Electrode for High-Performance Flexible All-Solid-State Supercapacitors

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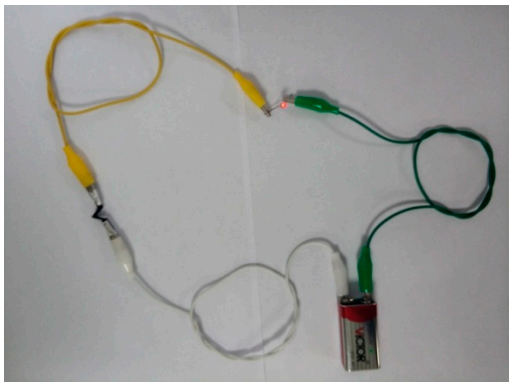
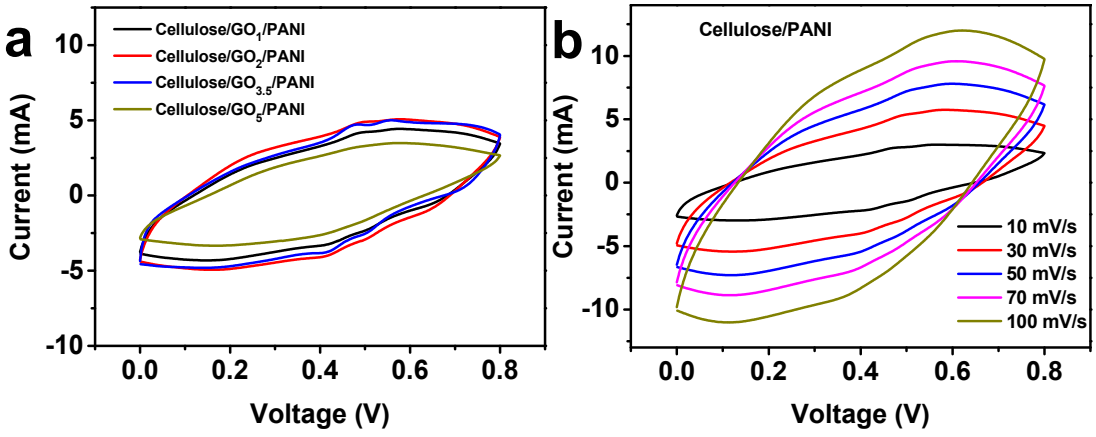


Figure S1. The cellulose/$GO_{3.5}$/PANI film was folded and used as a wire to light up a red LED.



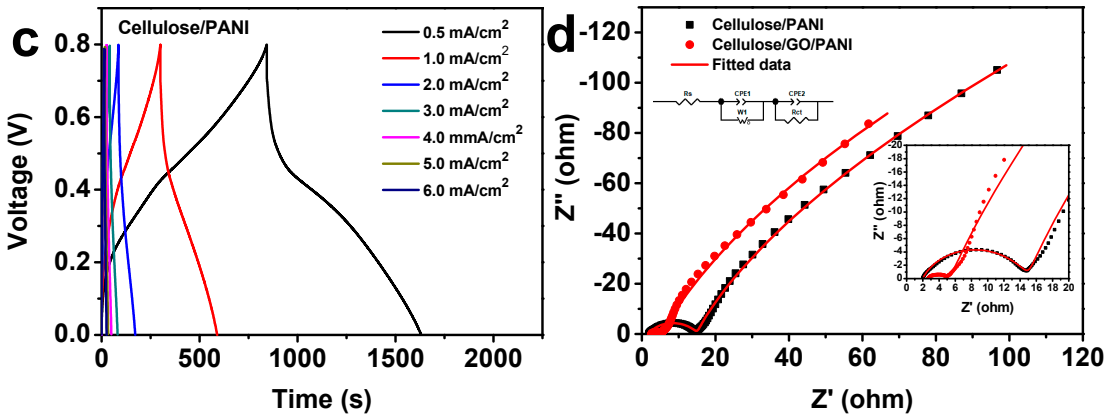


Figure S2. (**a**) CV curves of the cellulose/$GO_{1.0}$/PANI, cellulose/$GO_{2.0}$/PANI, cellulose/$GO_{3.5}$/PANI and cellulose/$GO_{5.0}$/PANI samples at 10 mV/s. (**b**) CV curves of cellulose/PANI sample. (**c**) GCD curves of cellulose/PANI sample. (**d**) Nyquist plot of the cellulose/PANI and cellulose/GO/PANI with an equivalent circuit in the inset.

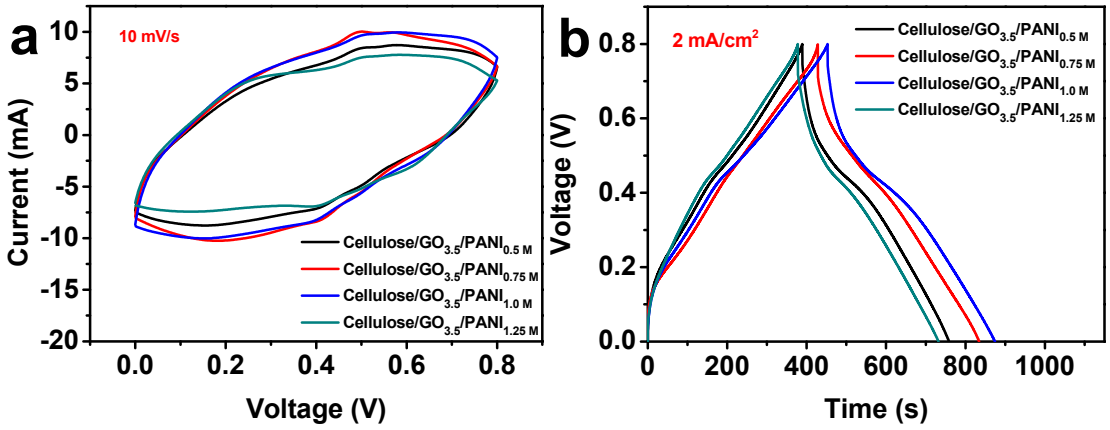


Figure S3. (**a**) CV curves of the cellulose/$GO_{3.5}$/$PANI_{0.5M}$, cellulose/$GO_{3.5}$/$PANI_{0.75M}$, cellulose/$GO_{3.5}$/$PANI_{1.0M}$ (namely cellulose/$GO_{3.5}$/PANI sample in the manuscript) and cellulose/$GO_{3.5}$/$PANI_{1.25M}$ samples at 10 mV/s. (**b**) GCD curves of the cellulose/$GO_{3.5}$/$PANI_{0.5M}$, cellulose/$GO_{3.5}$/$PANI_{0.75M}$, cellulose/$GO_{3.5}$/ $PANI_{1.0M}$ and cellulose/$GO_{3.5}$/$PANI_{1.25M}$ samples.

Table S1. Comparison of electrochemical performance of various electrodes based on conducting fillers/cellulose composites.

Materials	Maximum Cs (mF/cm²)	Cyclic stability	Reference
Graphene/cellulose paper	81 (1 mV/s)	99.1% (5000)	[1]
SWCNT/PANI/cellulose	330 (0.2 mA/cm²)	79% (1000)	[2]
Graphite /PANI/paper	355.6 (0.5 mA/cm²)	-	[3]
GO/PPy	387.6 (0.2 mA/cm²)	84.8% (5000)	[4]
CNT/PANI hydrogel	680 (1 mA/cm²)		[5]
PANI/Graphite paper	176 (0.2 mA/cm²)	-	[6]
PANI/RGO film	718 (0.45 A/g)	74% (500)	[7]
Graphene/PANI/Graphene	190.6 (0.5 mA/cm²)	96% (1000)	[8]
RGO/PPy CCFs paper	363 (0.5 mA/cm²)	-	[9]
Carbon cloth-PANI-rGO	471 (0.5 mA/cm²)	75.5% (10000)	[10]
PANI/CNT/Graphene	465 (1 mA/cm²)	84% (1000)	[11]
PANI/GO/CNT	510.5 (1 A/g)	-	[12]
CNFs-RGO/PPy	334 (0.1 mA/cm²)	100% (2000)	[13]
Cellulose/$GO_{3.5}$/PANI	1218 (1.0 mA/cm²)	83.5% (1000)	This work

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