

Supplementary Information for:



Enhanced electrochemical performance of highly porous supercapacitor electrodes based on solution-processed polyaniline thin films

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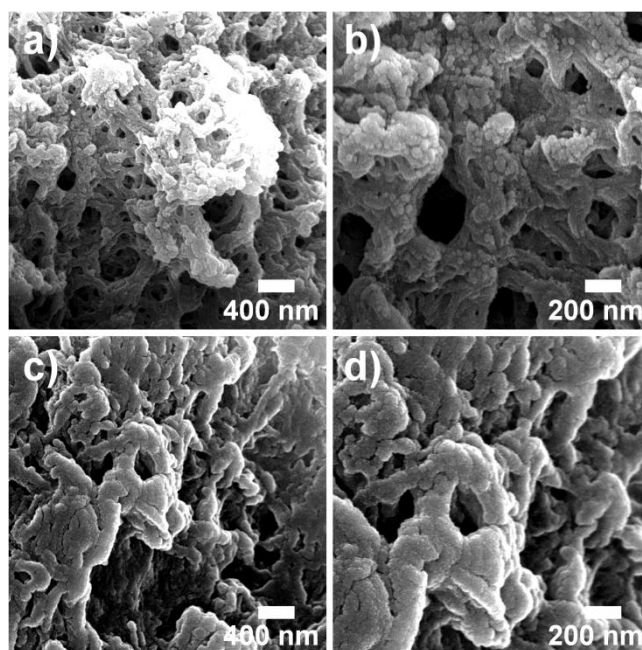


Figure S1. FE-SEM images of PANI powders: PANI ES before secondary-doping (a, b), PANI-CSA after secondary doping (c, d). Magnifications: $\times 45$ (a, c) and $\times 90$ (b, d).

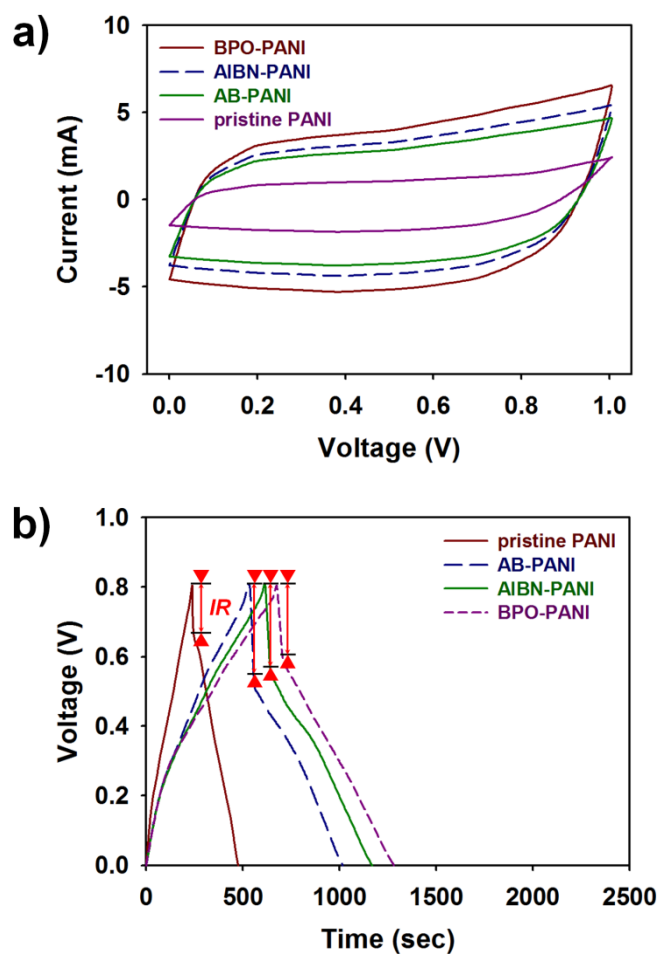


Figure S2. (a) Cyclic voltammograms of PANI thin-film electrodes scanned at 20 mV s^{-1} and (b) Galvanostatic charge/discharge plots of PANI thin-film electrodes at current density of 0.25 A g^{-1} . The values were measured using a two-electrode system.

Table S1. Specific capacitances, internal resistance drops, and discharging times of PANI thin-film electrodes prepared by different porogens at a current density of 0.25 A g⁻¹.

The values were measured using a two-electrode system.

porogen	specific capacitance (F g ⁻¹) ^e	initial resistance (Ω) ^e	discharging time (sec) ^e
pristine	79	0.50	239
BPO	213	0.72	678
AIBN	194	0.84	618
AB	169	1.00	537

^e0.025 mL of PANI solutions were used for forming thin films, resulting in a thickness of about 10 μm.

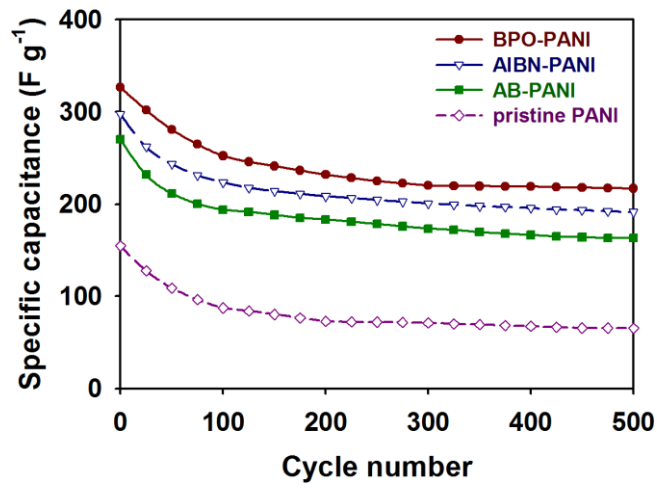


Figure S3. Cycling stability of PANI thin-film electrodes upon charge/discharge at a current density of 0.25 A g^{-1} (three-electrode cells). 0.25 mL of PANI solutions were used for forming thin films, resulting in a thickness of about $50 \mu\text{m}$.