



## A redox active binder for electrochemical capacitor electrodes

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Titre A redox active binder for electrochemical capacitor electrodes  
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Résumé en anglais A promising strategy for increasing the performance of supercapacitors is proposed. Until now, a popular strategy for increasing the specific capacity of the electrode consists of grafting redox molecules onto a high surface area carbon structure to add a faradaic contribution to the charge storage. Unfortunately, the grafting of molecules to the carbon surface leads to a dramatic decrease of the electrochemical performances of the composite material. Herein, we used the organic binder as an active material in the charge/discharge process. Redox molecules were attached onto its polymeric skeleton to obtain a redox binder with the dual functionalities of both the binder and the active material. In this way, the electrochemical performance was improved without detrimentally affecting the properties of the porous carbon. Results showed that the use of a redox binder is promising for enhancing both energy and power densities.

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