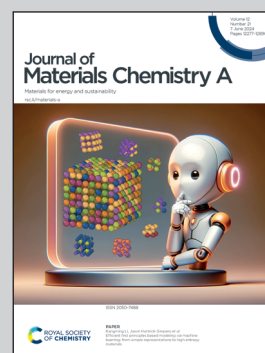


Showcasing research from laboratory of Prof. Yaozu Liao, State Key Laboratory for Modification of Chemical Fibers and Polymer Materials, Donghua University, Shanghai, China.

A conjugated microporous polymer-graphene composite porous sandwich-like film for highly efficient flexible supercapacitors

The porous sandwich-like composite film electrodes of PTPAH and rGO (PTPAH@rGO) are successfully obtained, which show a high specific gravimetric capacitance (545 F g^{-1}) and good rate performance (83%). Subsequently, PTPAH@rGO FSSCs demonstrate an excellent capacitance (220 F g^{-1}) and a high power density (3345 W kg^{-1}). We also offer a novel strategy to improve the dispersibility and processing performance of CMPs and provide a pathway to prepare CMP-based composite films as high-performance flexible electrodes, showing promising potential application as the next-generation power source.

As featured in:



See Wei Lyu, Yaozu Liao *et al.*,
J. Mater. Chem. A, 2024, **12**, 12423.