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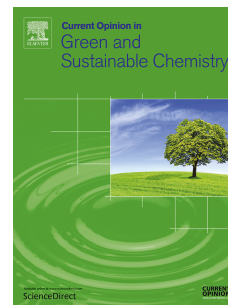
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Biomass-derived electrodes for flexible supercapacitors

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Abstract

At present, supercapacitors constitute, along with batteries, one of the most promising electrochemical energy storage technology. The recent emerging generation of bendable portable electronic devices has boosted the research of new materials, new processing techniques and new designs that can meet the demands in terms of mechanical stability upon bending or stretching, without compromising their electrochemical performance, at an acceptable cost. Among all the electrode materials currently explored, biomass-derived carbons hold a great potential, due to their low-cost, easy processing techniques, stability and versatility. Here we introduce the range of renewable precursors available and current state-of-the-art performances, and explore the challenges regarding flexibility and sustainability.

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