

Highlighting a study on amorphous P_4SSe_2 anode for sodium-ion batteries in ether-based electrolyte by a group of researchers led by Prof. Haiyan Zhang from Guangdong University of Technology and Dr Qiong Cai from University of Surrey.

A novel amorphous P₄SSe₂ compound as an advanced anode for sodium-ion batteries in ether-based electrolytes

A novel amorphous P_4SSe_2 anode delivers excellent electrochemical performance for sodium-ion batteries, owing to its amorphous feature and unique reaction mechanism. Besides, the favorable solvent effect in ether-based electrolyte is beneficial to forming hierarchical SEI films, which is highly impermeable to solvents, while the Na^+ can easily pass through it. Hence, the amorphous P_4SSe_2 anode can work securely in ether-based electrolyte as protected by the stable SEI films.



