

Highlighting a study on the high capacity of a sodium-ion battery with ${\rm Ti_3C_2T_x}$ MXene as an anode by the Hong Yan group from Taiyuan University of Technology, P. R. China.

Few-layer large ${\rm Ti_3C_2T_x}$ sheets exfoliated by NaHF₂ and applied to the sodium-ion battery

 $\rm NaHF_2$ solution was first used as an etching agent to obtain $\rm Ti_3C_2T_x$ MXene intercalated by Na+, which has a high conductivity. Applied to the sodium-ion battery, it exhibits excellent cycling stability. A reversible capacity was kept at 70 mA h g^-1 at 1 A g^-1 for 900 cycles, after which the capacity rose up to 130 mA h g^-1. The Columbic efficiency was always close to 100%.



