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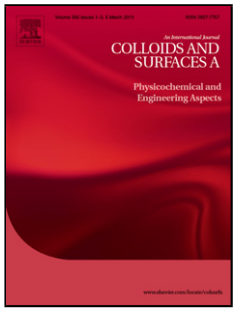

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Template-free synthesis of porous V_2O_5 flakes as a battery-type electrode material with high capacity for supercapacitors

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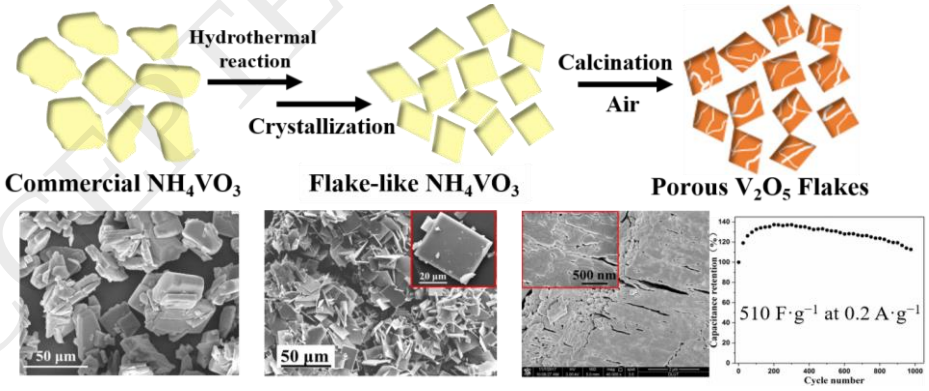
Graphical Abstract

A facile template-free route was successfully developed to prepare porous V_2O_5 flakes using NH_4VO_3 by the crystallization of ammonium metavanadate (NH_4VO_3) aqueous solution and subsequent calcination in air. The porous V_2O_5 flakes displayed a high capacity up to 510 $F \cdot g^{-1}$ at 0.2 $A \cdot g^{-1}$, and over 110% of the initial capacitance was still remained after 1000 cycles.



Abstract.