

Supplementary Materials: Efficient Synthesis of 2D Mica Nanosheets by Solvothermal and Microwave-Assisted Techniques for CO₂ Capture Applications

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S1. Microwave of mica in potassium organic solution

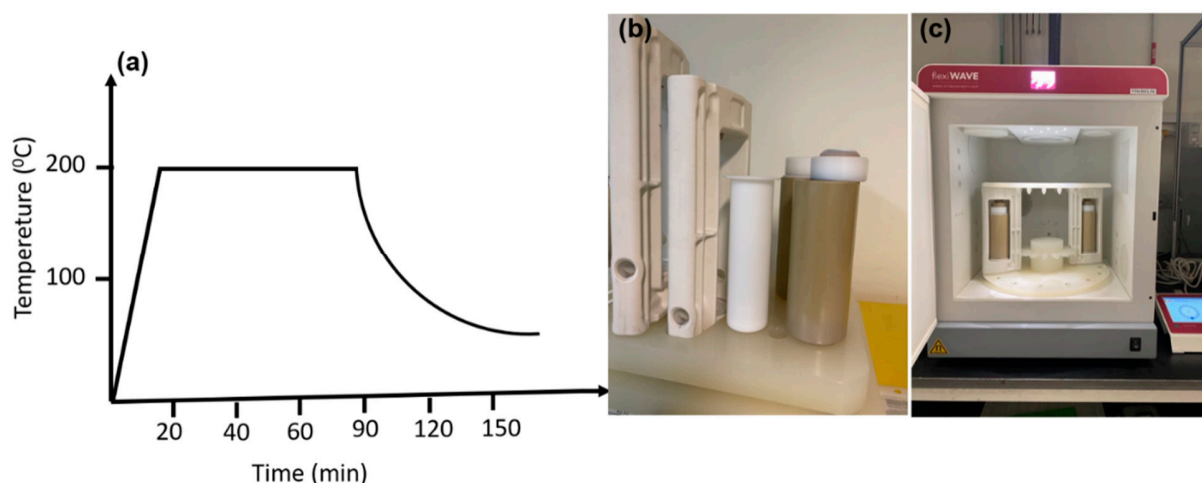


Figure S1: (a) Microwave profile of mica and potassium organic solution, (b) Teflon containers of microwave oven and (c) microwave oven

The sample was heated to 200°C over a period of 20 minutes, with a ramping rate of 10°C per minute. Subsequently, the temperature was maintained at 200°C for one hour in a microwave oven before being allowed to cool down to room temperature. This temperature profile was chosen due to the limitations of closed reaction vessels in terms of pressure and temperature control.