

Realization of low carbon society through game changing technologies

Development of novel CO₂ adsorptive separation technology with controlled pressure responses

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Summary :

Technoroly for production of low-cost CO₂ free hydrogen (H₂) is indispensable to realize the carbon-recycling societies. In this study high-performance CO₂ adsorbents are developed.

Based on chemical science of materials design of the adsorbents, the adsorption and desorption steps of CO₂ molecules are controlled and the characteristics of the materials are optimized to the separation processes.

