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The synthesis of hierarchical porous Al_2O_3/acrylic resin composites as durable, efficient and recyclable absorbents for oil/water separation

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Abstract:

In this work, we report a facile and inexpensive approach which was demonstrated for the creation of hierarchical porous Al_2O_3/acrylic resin composites as durable, highly-efficient and recyclable absorbents for oil/water separation. Using hexadecyl trimethyl ammonium bromide (CTAB) as a structure-directing agent, the lamellar γ-AlOOH with porous architectures was successfully prepared via a hydrothermal route. The hierarchical Al_2O_3 clusters, as the inorganic phase of resin

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