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ACCEPTED MANUSCRIPT

Catalytic Reduction of 4-Nitrophenol by Palladium-Resin Composites

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GRAPHICAL ABSTRACT

Adsorption
$$pKa = 7.15$$
 Reduction OH Desorption $pK_a = 5.48$, 10.46 $NaPdCl_4$ $NaBH_4$ $Pd/Resin$

Highlights

- Reactivity of Pd/resin catalysts largely affected by pH and adsorption affinity
- Good fitting of reaction kinetics by the Langmuir-Hinshelwood model
- Stable performance of the Pd/resin catalysts over many cycles

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