

Electronic Supplementary Information for

Encapsulation of catalytically active core with nanoporous shell: A new strategy for the design of size-selective catalysts

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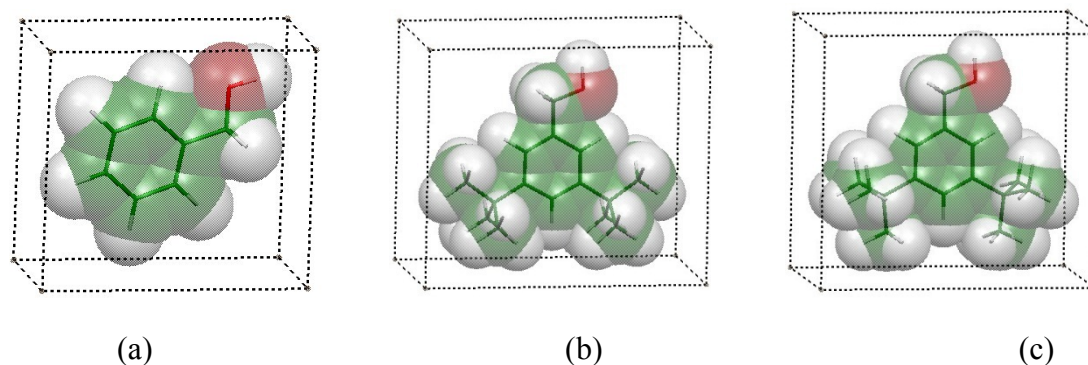


Fig. SI The molecular structure and size of reactant molecules : (a) benzyl alcohol, Vol= 8.097 Å x 9.063 Å x 4.770 Å = 350.083 Å³; (b) one conformation of 3,5-ditert-butylbenzyl alcohol Vol = 10.50 Å x 12.390 Å x 7.347 Å = 956.382 Å³; (c) the other conformation of 3,5-ditert-butylbenzyl alcohol, Vol = 10.848 Å x 11.713 Å x 7.347 Å = 933.461 Å³.

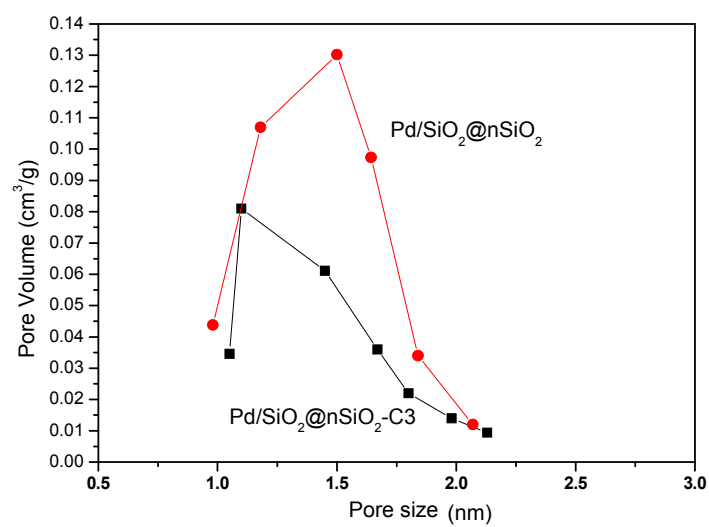


Fig S2 The pore size distribution of Pd/SiO₂@nSiO₂ and Pd/SiO₂@nSiO-C3 (Horvath-Kawazoe method).

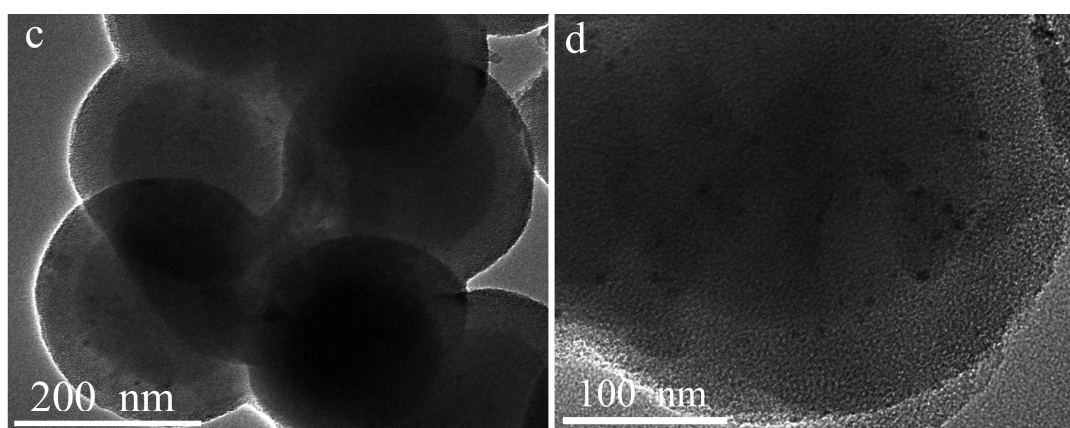


Fig S3 TEM images: (c) Pd/SiO₂@nSiO-C3; (d) Pd/SiO₂@nSiO-C3, more magnified.