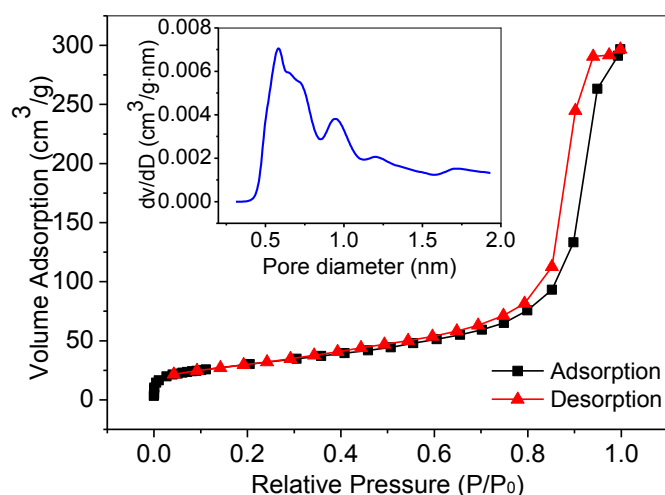


# Supporting Information for “Facile synthesis of ultrasmall monodisperse ‘raisin bun’-type MoO<sub>3</sub>/SiO<sub>2</sub> nanocomposites with enhanced catalytic properties”

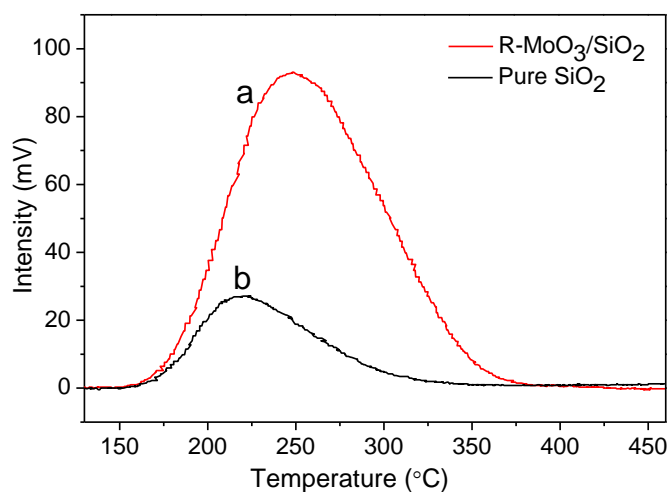
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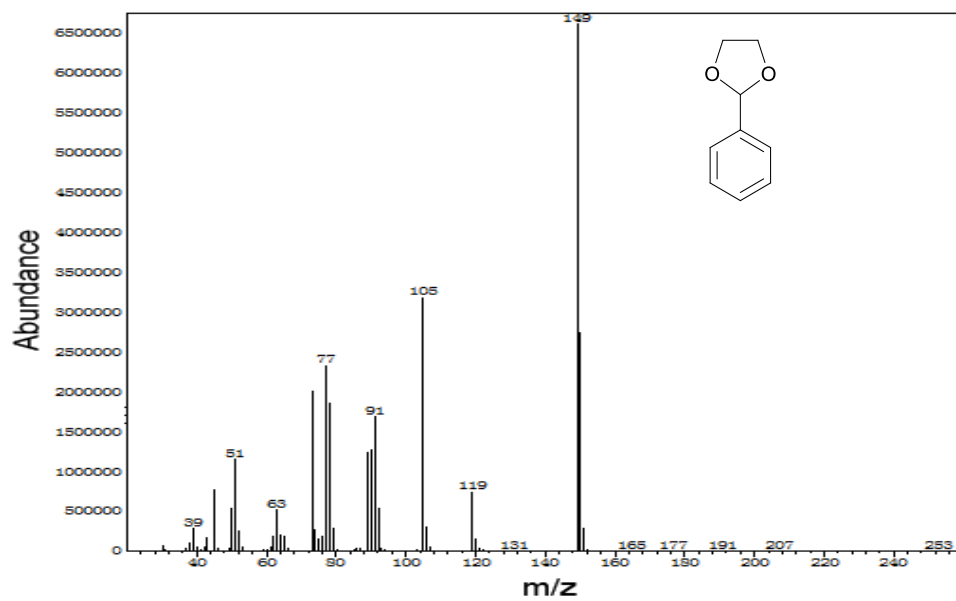
Corresponding author. Tel. +86-411-84986270; Fax: +86-411-84986292; E-mail: [lurw@dlut.edu.cn](mailto:lurw@dlut.edu.cn)



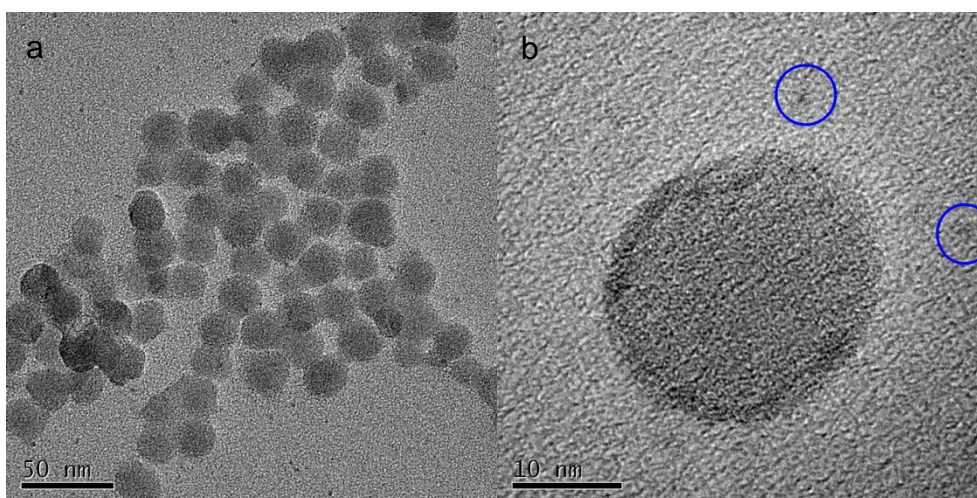
**Fig. S1** N<sub>2</sub> sorption isotherm of R-MoO<sub>3</sub>/SiO<sub>2</sub>. The inset figure shows the micropore size distribution calculated by Horvath–Kawazoe (HK) model. A sharp capillary condensation step at P/P<sub>0</sub> of 0.8–0.9 seems to be the feature of mesoporous. However, combined with the TEM results (Fig. 1a), we can conclude that the mesopores are stemmed from the interparticle voids, *i.e.*, piled pores.



**Fig. S2** NH<sub>3</sub>-TPD curve of (a) R-MoO<sub>3</sub>/SiO<sub>2</sub> and (b) pure SiO<sub>2</sub>.



**Fig. S3** Mass spectrometry of the acetalization product, 2-phenyl-1,3-dioxolane.



**Fig. S4** (a) TEM and (b) HRTEM image of I-MoO<sub>3</sub>/SiO<sub>2</sub>.