Supplementary Information

Selective hydrogenation of halogenated arenes using porous manganese oxide (OMS-2) and platinum supported OMS-2 catalysts.

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Table S1. Textural Characteristics of OMS-2	2, Pt/OMS-2 and Pd/OMS-2 and Pt/Al ₂ O ₃ .
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Sample	BET surface area $(m^2 g^{-1})$	Metal loading (wt%)
OMS-2	59.0	-
Pt/OMS-2	43.2	4.6
Pd/OMS-2	43.9	2.6
Pt/Al ₂ O ₃	144.4	3.8



Figure S1. XRD analysis of (a) OMS-2, (b) Pt/OMS-2 and (c) Pd/OMS-2.



Figure S2. HR-TEM image (left) and particle size distribution (right) of 5 wt% Pt/OMS-2 catalyst



Figure S3: Hydrogenation of chlorobenzaldehyde (\blacklozenge) at 100 °C and 10 bar H₂ over (a) OMS-2, (b) Pt/OMS-2, (c) Pd/OMS-2 and (d) Pt/Al₂O₃ to products chlorobenzyl alcohol (\blacklozenge), benzaldehyde (\blacktriangle), benzyl alcohol (\triangledown), toluene (\blacksquare), ether (\blacksquare) and acetal (\blacktriangle).



Figure S4: Hydrogenation of nitrosobenzene over (a) Pt/OMS-2 and (b) Pd/OMS-2.



Figure S5: hydrogenation of hydrazobenzene over (a) Pt/OMS-2 and (b) Pd/OMS-2.



Figure S6: Concentration of azoxybenzene with time for hydrogenation of nitrobenzene over Pt/OMS-2 at 2 bar H_2 and varied reaction temperatures of 25 °C (\blacksquare), 40 °C (\blacktriangle) and 50 °C (\blacksquare).