Supplementary Materials: Hierarchical PtIn/Mg(Al)O Derived from Reconstructed PtIn-hydrotalcite-like Compounds for Highly Efficient Propane Dehydrogenation

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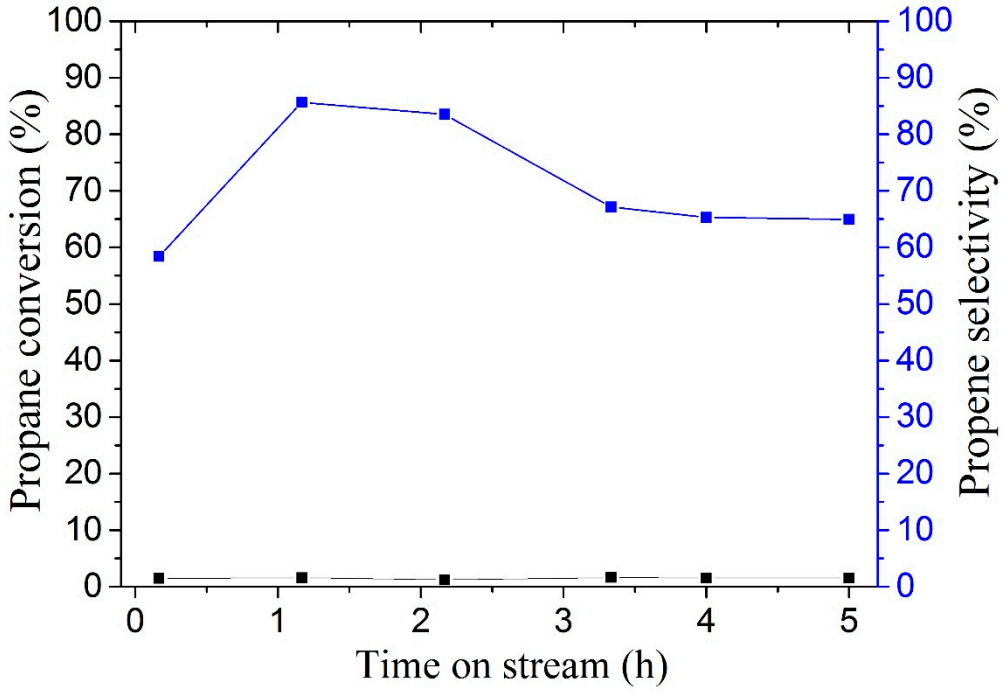
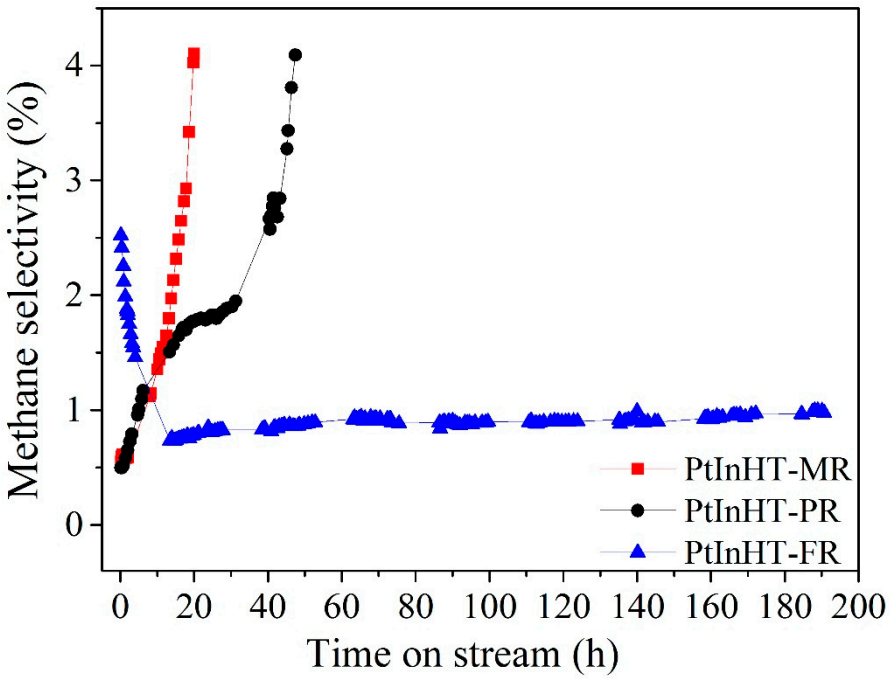
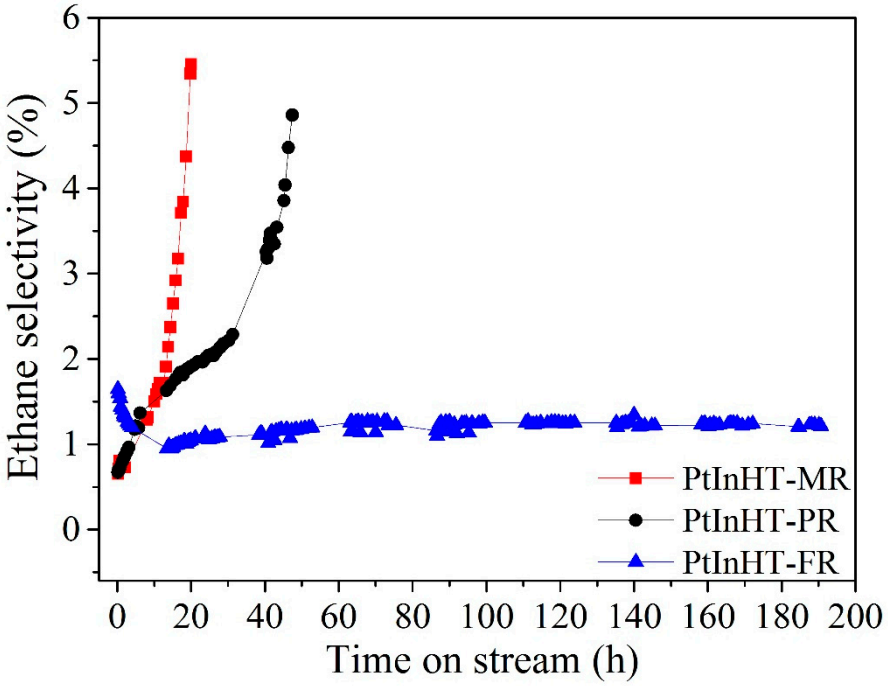


Figure S1. Propane conversion and propene selectivity as function of time for blank tube (reaction conditions: T = 600 °C, H_2 : C_3H_8 : N_2 = 7 : 8 : 35 (molar ratio),weight hourly space velocity (WHSV) = 3 h^{-1}).


Methane selectivity (%)
Time on stream (h)
PtInHT-MR
PtInHT-PR
PtInHT-FR
0
1
2
3
4
0
20
40
60
80
100
120
140
160
180
200


Ethane selectivity (%)
Time on stream (h)
PtInHT-MR
PtInHT-PR
PtInHT-FR
0
1
2
3
4
5
6
0
20
40
60
80
100
120
140
160
180
200

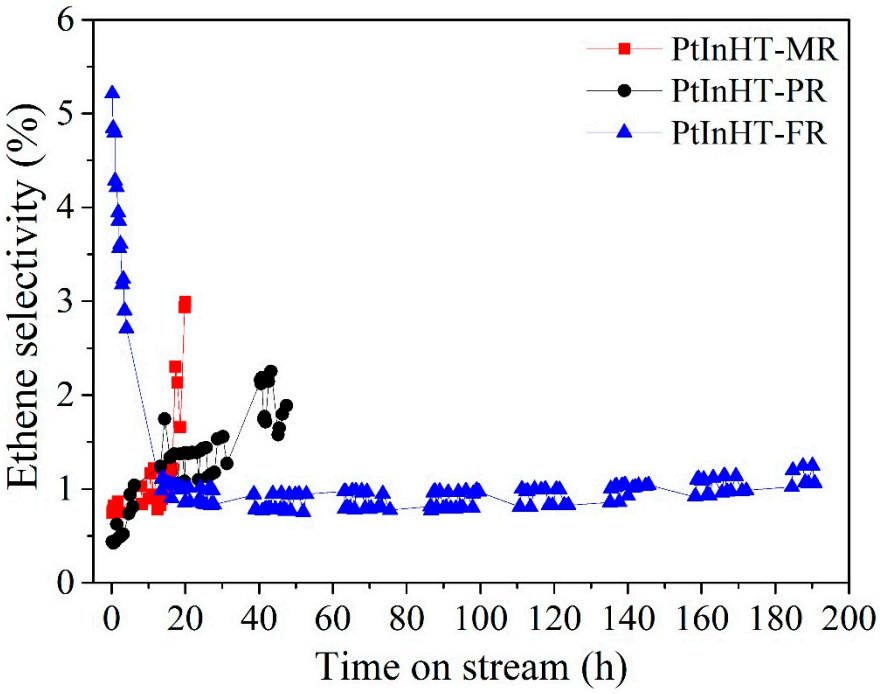


Figure S2. The selectivity of methane, ethane and ethene as function of time for different catalysts (reaction conditions: T = 600 °C, H_2 : C_3H_8 : N_2 = 7 : 8 : 35 (molar ratio), WHSV = 3 h^{-1}, m_{cat} = 0.4 g).