

Figure S1. TEM image of unmodified Ni/MgAl₂O₄.

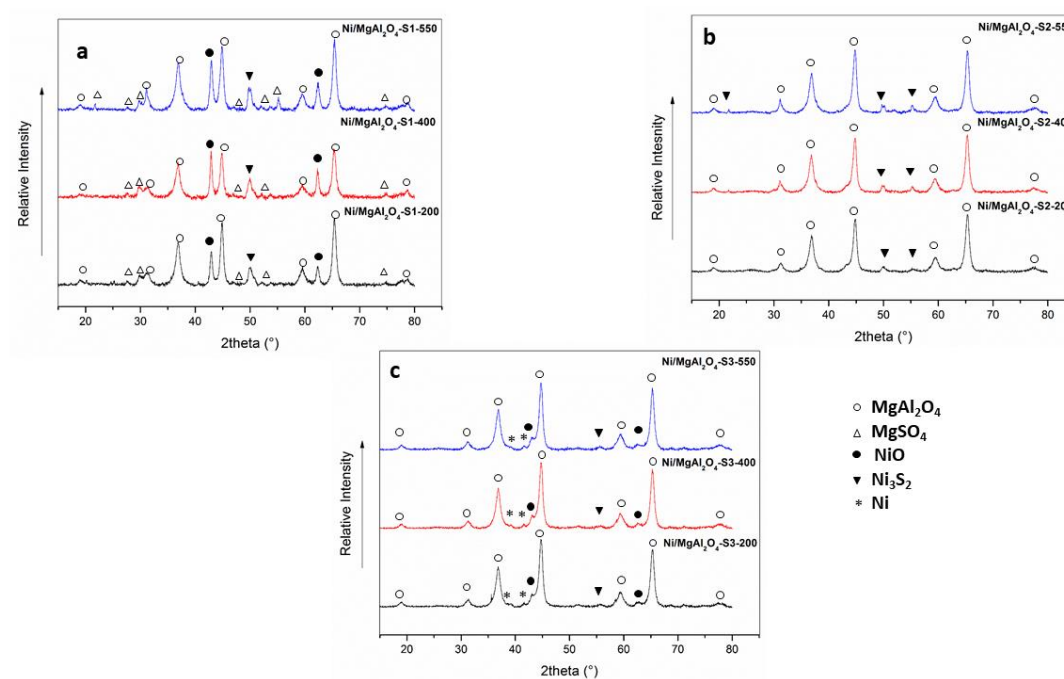


Figure S2. XRD analysis of spent catalysts.

Table S1. Crystallite size of spent catalysts.

Catalyst	Crystallite size Ni₃S₂ (nm)
Ni/MgAl ₂ O ₄ -S1-200	14
Ni/MgAl ₂ O ₄ -S1-400	19
Ni/MgAl ₂ O ₄ -S1-550	20
Ni/MgAl ₂ O ₄ -S2-200	11
Ni/MgAl ₂ O ₄ -S2-400	18
Ni/MgAl ₂ O ₄ -S2-550	15
Ni/MgAl ₂ O ₄ -S3-200	11
Ni/MgAl ₂ O ₄ -S3-400	14
Ni/MgAl ₂ O ₄ -S3-550	20