

Supplementary Table S2 Metal contents of the fresh catalysts

	Sample	Mg (wt%)	Al (wt%)	Fe (wt%)	Ni (wt%)
S1	NiO/MgAl _{1.50} Fe _{0.50} O ₄	5.68	21.16	42.72	30.44
S2	NiO/MgAl _{1.25} Fe _{0.75} O ₄	5.17	13.71	53.39	27.73
S3	NiO/MgAl _{1.00} Fe _{1.00} O ₄	6.07	7.71	62.69	23.53
S4	NiO/MgAl _{0.75} Fe _{1.25} O ₄	10.45	6.09	63.88	19.58
S5	NiO/MgAl _{0.50} Fe _{1.50} O ₄	12.51	0.90	68.33	18.26
S6	NiO/MgAl _{0.25} Fe _{1.75} O ₄	14.81	0.81	68.53	15.85
S7	NiO/MgFe _{2.00} O ₄	16.20	0.00	69.24	14.56