

Supporting Information

Lanthanum oxide modified Cu/Al₂O₃ catalysts for selective hydrogenolysis of glucose to propylene glycol: acid-base site requirements

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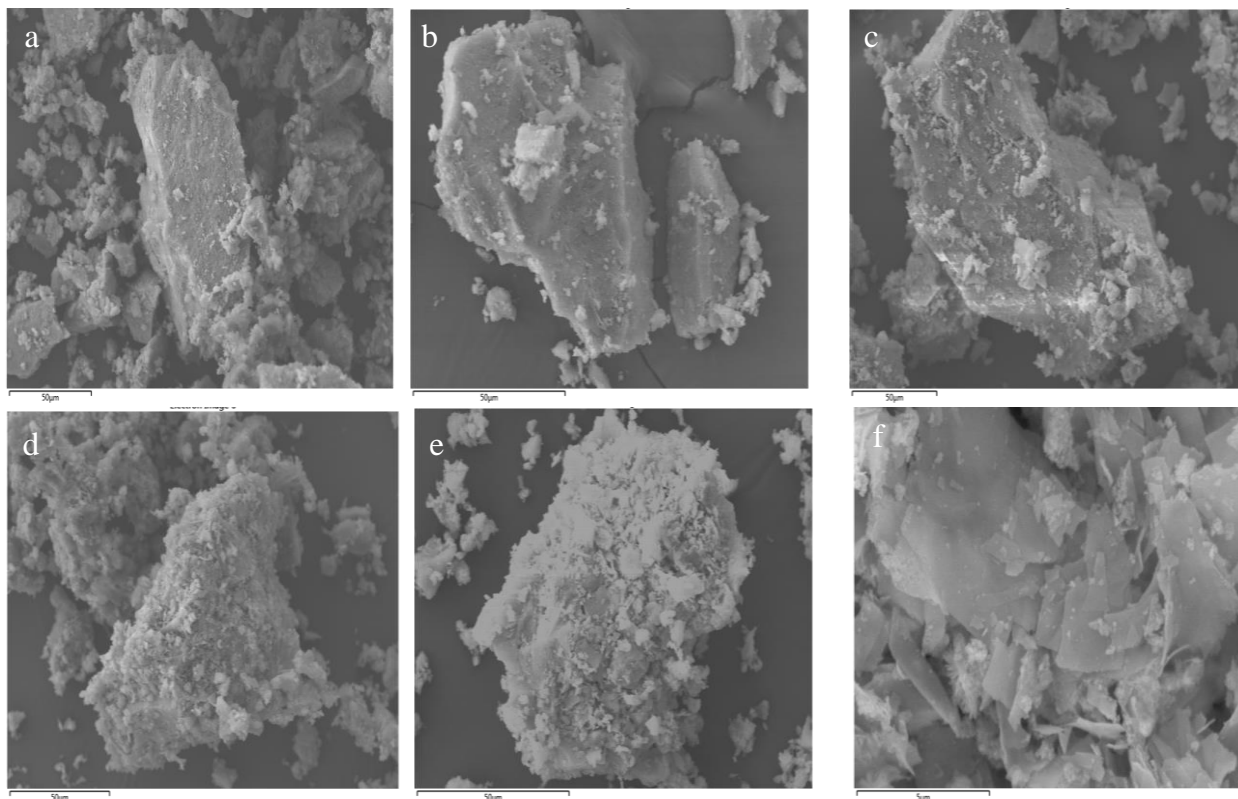


Figure S1. SEM images of a) Cu/Al₂O₃, b) Cu/La=9, c) Cu/La=6, d) Cu/La=3, e) Cu/La=1.5, f) Cu/La₂O₃

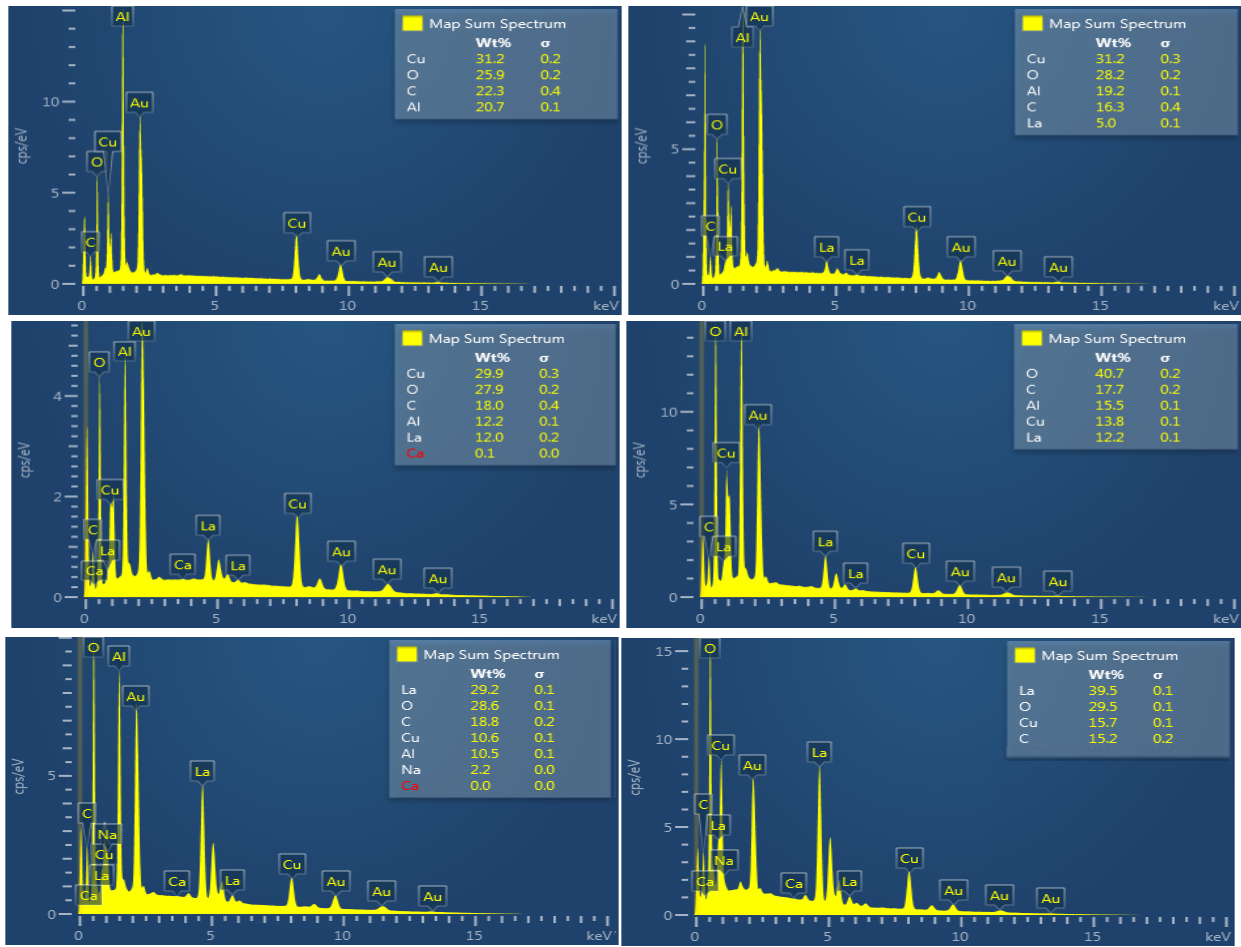


Figure S2. Elemental composition in selected areas of various catalysts: a) Cu/Al₂O₃, b) Cu/La=9, c) Cu/La=6, d) Cu/La=3, e) Cu/La=1.5, f) Cu/La₂O₃ catalysts

Table S1. EXAFS curve fitting results for Cu-La₂O₃/Al₂O₃ catalysts at Cu K edge

Catalyst	Shell	CN ^a	R (Å)	Sigma ²
Cu/Al ₂ O ₃	Cu-Cu	9.5 +/- 1.0	2.50 +/- 0.01	0.0177 +/- 0.0015
Cu/La=9	Cu-Cu	10.0 +/- 1.0	2.51 +/- 0.01	0.0180 +/- 0.0010
Cu/La=6	Cu-Cu	10.4 +/- 1.0	2.51 +/- 0.01	0.0183 +/- 0.0010
Cu/La=3	Cu-Cu	10.1 +/- 1.0	2.51 +/- 0.01	0.0181 +/- 0.0012
Cu/La=1.5	Cu-Cu	10.1 +/- 1.0	2.51 +/- 0.01	0.0180 +/- 0.0010
Cu/La ₂ O ₃	Cu-Cu	9.7 +/- 1.0	2.51 +/- 0.01	0.0168 +/- 0.0018
Cu foil STD	Cu-Cu	12 +/- 1.0	2.54 +/- 0.01	0.0080 +/- 0.0005

^a Coordination number