Supplementary information

Chemical simulation of high-performance CaO/La_2O_3 catalysts on its anti-leaching property during biodiesel production

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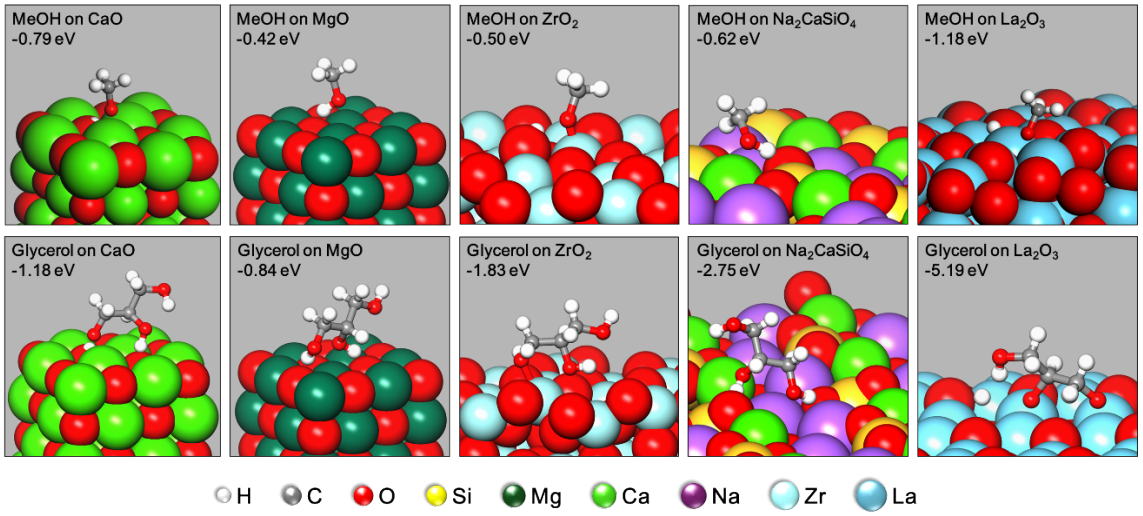

Figure S1. Adsorption behaviour of methanol and glycerol on CaO, MgO, *m*-ZrO_2, Na_2CaSiO_4, and *h*-La_2O_3.

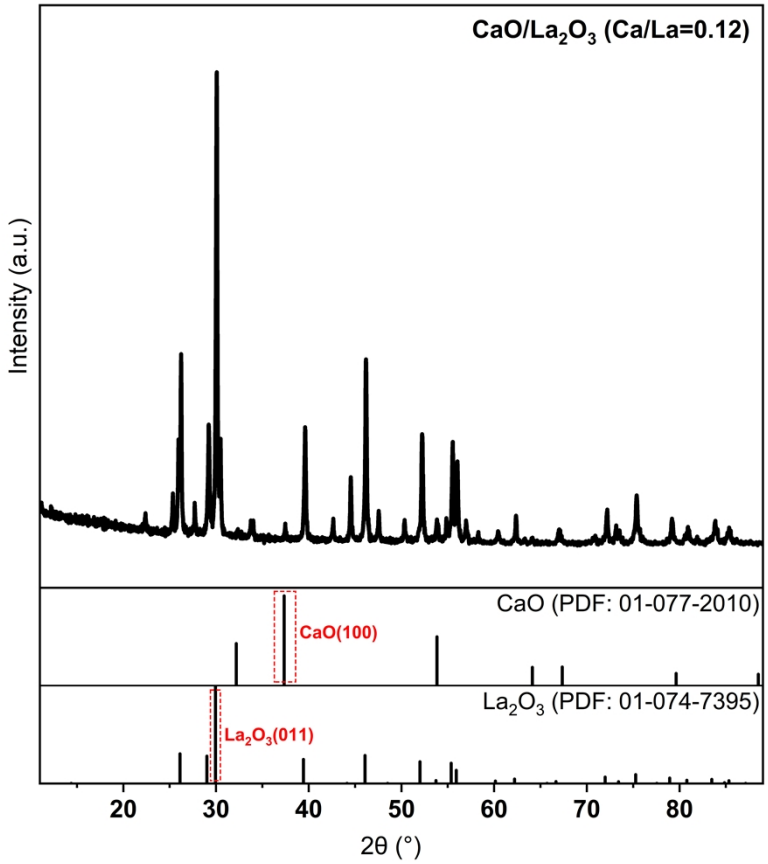

Figure S2. XRD spectrum of CaO/La_2O_3 (Ca/La=0.12) catalyst

The crystalline phases of the catalyst samples were analysed by X-ray diffraction (XRD, X'Pert Pro MPD, PANalytical, Netherlands) with Cu Kα radiation at 40 kV and 40 mA. Diffraction patterns were recorded over a 2θ range of 10°–90° with a step size of 0.0167°. As the spectrum shows, the catalyst is mainly composed of CaO and La_2O_3 phases, dominated by CaO(100) and La_2O_3(011), respectively.