

Article

Oxidative steam reforming of raw bio-oil over supported and bulk Ni catalysts for hydrogen production

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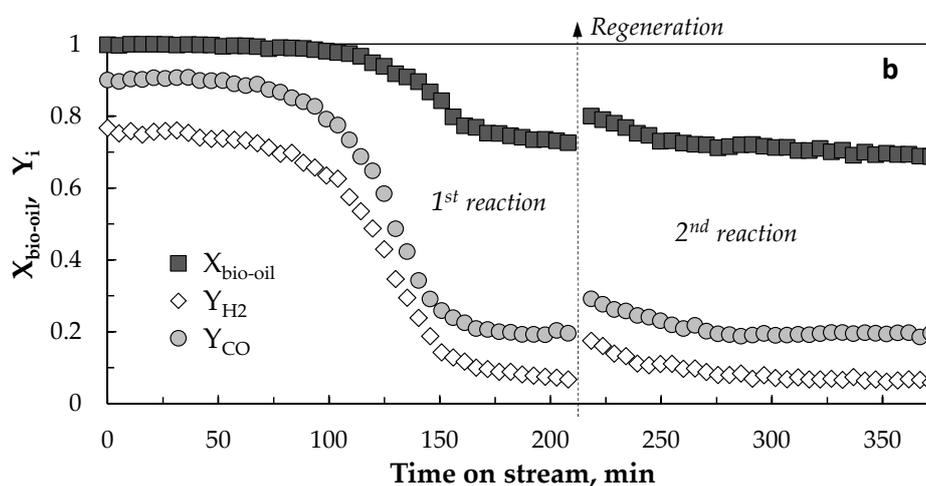
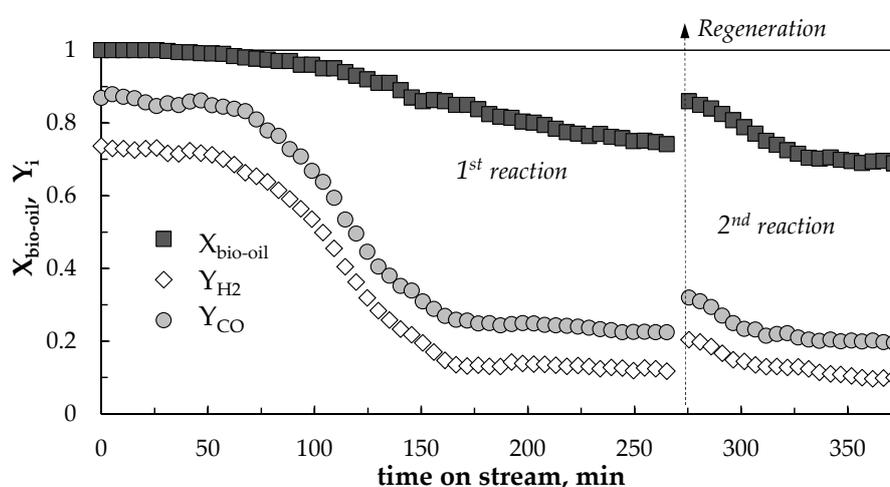
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Supplementary Material



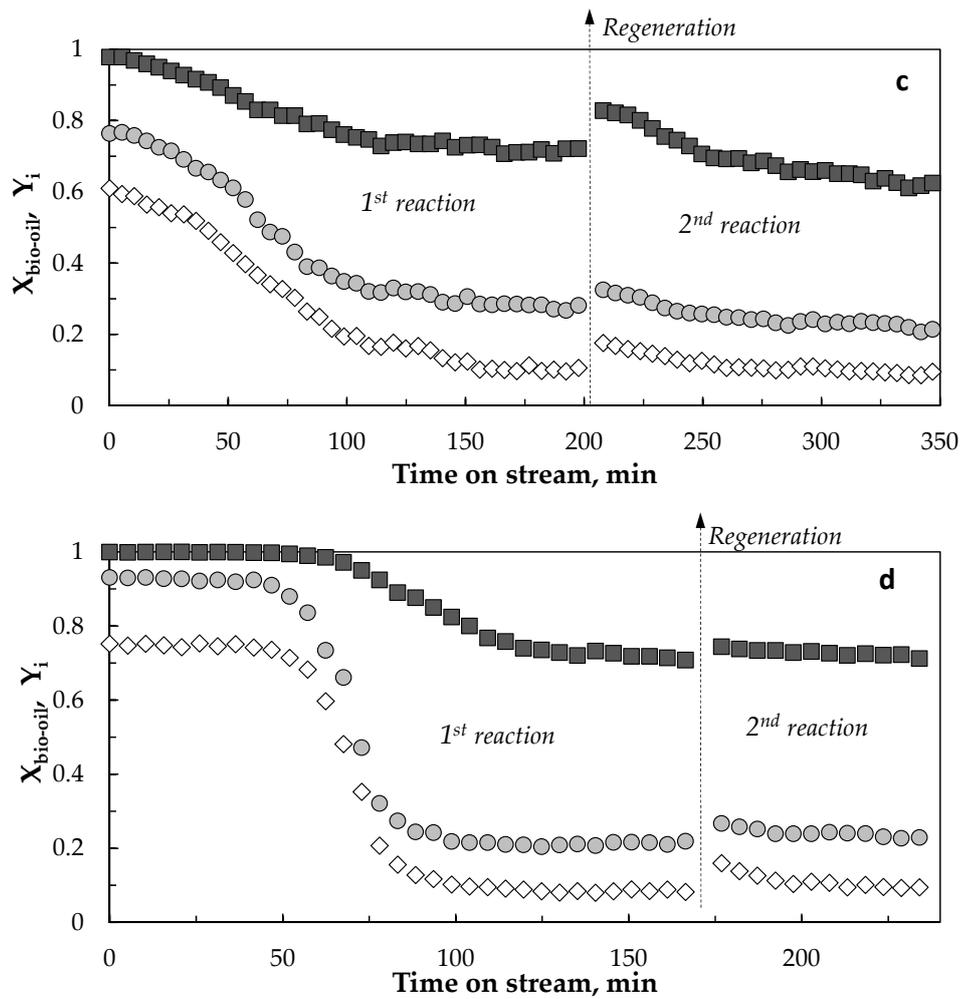
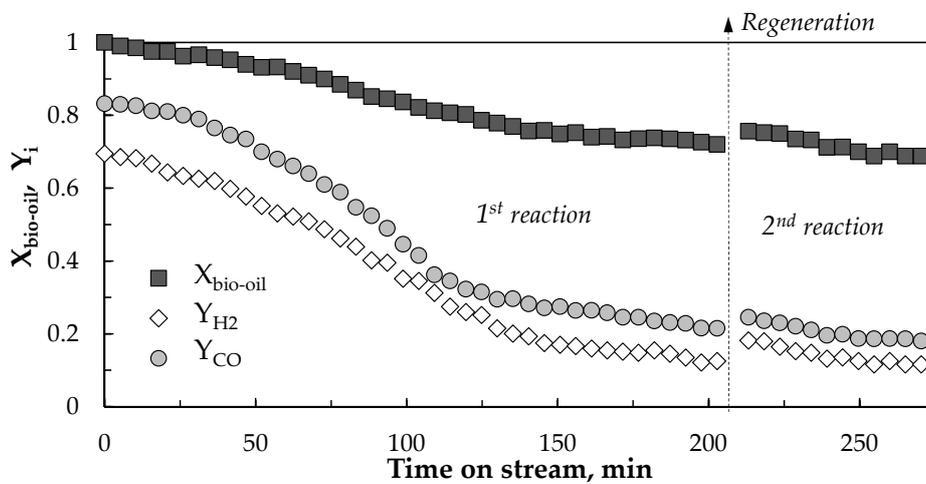


Figure S1. Evolution with time on stream of oxygenates bio-oil conversion and H_2 and CO_2 yields in two reaction steps (with intermediate regeneration by coke combustion with air at 650°C in the fluidized bed) for the supported catalysts. Graph a: Ni/LaAl; Graph b; Ni/Ce; Graph c: 5Ni/CeZr; Graph d: G90.



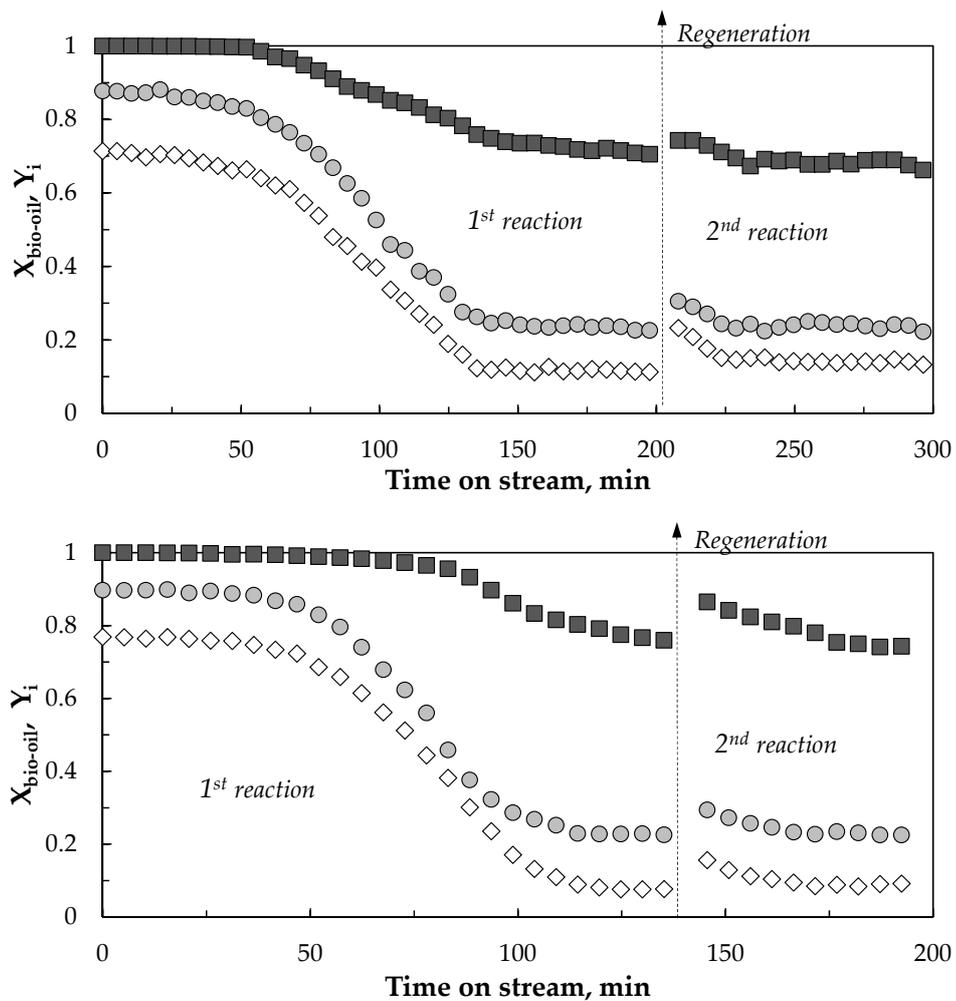


Figure S2. Evolution with time on stream of oxygenates bio-oil conversion and H₂ and CO₂ yields in two reaction steps (with intermediate regeneration by coke combustion with air at 650 °C in the fluidized bed) for bulk catalysts. Graph a: LaNiO₃ perovskite; Graph b: La₂NiO₄ perovskite; Graph c: NiAl₂O₄ spinel.