Performance of $LaCoO_3$ perovskite catalysts in autothermal reforming of n-hexadecane

양세일, 정연규, 장성철, 남석우, 김성현[1], 최대기*
한국과학기술연구원; [1]고려대학교
(dkchoi@kist.re.kr*)

Fuel cell requires hydrogen as its fuel source for generating power. Hydrogen for use in auxiliary power units is produced in a fuel processor by the catalytic reforming of hydrocarbons. Diesel, gasoline, as well as natural gas, are potential fuels that all have existing infrastructure of manufacture and distribution, for hydrogen production for fuel cell applications. In this study, autothermal reforming of n-hexadecane, a main constituent of diesel, over noble metal-$LaCoO_3$ perovskite catalyst was carried out in a temperature range of 600-900℃, at an atmospheric pressure.