

Support Effect for The Low-Temperature Water-Gas Shift Catalysis over Oxide Supported Cu Catalysts

정대운, 심재오, 장원준, 한원비, 노현석*, 정운호¹, 윤왕래¹
연세대학교; ¹한국에너지기술연구원
(hsroh@yonsei.ac.kr*)

Oxide supported Cu catalysts show significant activity for water-gas shift reaction but their performance is not fully understood and is highly dependent on the nature of the oxide support. In this study, low-temperature water-gas shift (WGS) reaction has been carried out at a very high gas hourly space velocity (GHSV) of 36,201 h⁻¹ over supported Cu catalysts prepared by an incipient wetness impregnation method. CeO₂, ZrO₂, MgO, MgO-Al₂O₃ and Al₂O₃ were employed as supports for the target reaction in this study.