

# Development of Ni-Based Catalysts for Steam Reforming of Tar Derived from Biomass Pyrolysis

Dalin LI 1,2, Yoshinao NAKAGAWA1, Keiichi TOMISHIGE1,\*

1Department of Applied Chemistry, School of Engineering, Tohoku University, Sendai 980-8579, Japan; 2National Engineering Research Center of Chemical Fertilizer Catalyst, Fuzhou University, Fuzhou 350002, Fujian, China

Dalin LI 1,2, Yoshinao NAKAGAWA1, Keiichi TOMISHIGE1,\*

1Department of Applied Chemistry, School of Engineering, Tohoku University, Sendai 980-8579, Japan; 2National Engineering Research Center of Chemical Fertilizer Catalyst, Fuzhou University, Fuzhou 350002, Fujian, China

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**摘要** Nickel catalysts are effective for the steam reforming of tar derived from biomass pyrolysis, but the improvement is needed in terms of activity, stability, suppression of coke deposition and aggregation, and regeneration. Our recent development of Ni-based catalysts for the steam reforming of tar is reviewed including the modification with CeO<sub>2</sub> (or MnO), trace Pt, and MgO. The role of additives such as CeO<sub>2</sub>, MnO, Pt, and MgO is also discussed.

**关键词:** [steam reforming](#) [tar](#) [biomass](#) [nickel](#) [ceria](#) [manganese oxide](#) [platinum](#) [magnesia](#)

**Abstract:** Nickel catalysts are effective for the steam reforming of tar derived from biomass pyrolysis, but the improvement is needed in terms of activity, stability, suppression of coke deposition and aggregation, and regeneration. Our recent development of Ni-based catalysts for the steam reforming of tar is reviewed including the modification with CeO<sub>2</sub> (or MnO), trace Pt, and MgO. The role of additives such as CeO<sub>2</sub>, MnO, Pt, and MgO is also discussed.

**Keywords:** [steam reforming](#), [tar](#), [biomass](#), [nickel](#), [ceria](#), [manganese oxide](#), [platinum](#), [magnesia](#)

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