

Performance of the diesel autothermal reforming with monolith structured catalyst

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Fuel cell is one of the most promising energy related technology for the future. It will be widely used in the new environmental era as so called 'zero-carbon' society, because it does not emit any carbon particles but pure water only. However, the main hurdle to use the fuel cell is its fuel, which is hydrogen excess gas mixture. Recently, many researchers developed the small size reforming reactor to extract hydrogen from the commercial hydrocarbon fuels like gasoline and diesel. In this study, we have conducted the autothermal reforming with monolith structured catalyst and got an available performance for mobile fuel cell applications, especially for folk-rift. We have studied the coating recipe for autothermal reforming catalyst on ceramic monolith structure and the role of each material which are used for coating.