

A Theoretical Result on Stabilizability of Oxygen Excess Ratio for PEM Fuel Cell

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Abstract— This paper is a contribution to the problem of the control of PEM Fuel Cell. More precisely, a theoretical result is proposed to prove that the oxygen excess ratio value can be controlled by using a continuous state feedback. The result is established without any linearization.

Keywords—Fuel Cell, Nonlinear System, State Feedback, Backstepping

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