

# **Technological contribution analysis on hydrogen R&D technologies based on technological level, and number of patents and international journals**

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Hydrogen energy technology is environmentally friendly energy without carbon emission. It can be a crucial key player to cope with the problems caused by the greenhouse gas effect and to implement the hydrogen economy. Advanced economies, including U.S, Japan, Germany have been focusing on hydrogen R&D continuously from a long-term view point. This research employed the analytic hierarchy process to analyze the technological contribution of hydrogen R&D technologies comparing with other nations based on the technologic level, number of patents and international journals. The result of this paper shows that U.S and Japan take the highest rankings. Korea take a third or fourth place comparing with the advanced countries..

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