

고온태양열을 이용하는 에너지 활용기술의 현황

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Production of energy carriers by using the high-temperature solar thermal energy has taken intensive interests as one of main challenges in the are of energy research. In this paper, a brief review on relevant R&D activities is summarized. 21th century energy system needs to be more efficient and more environment-friendly with increasing demand on the renewable energy. Among various renewable energy sources we have, the solar energy is known to be the most abundant. Even though future energy system is expected to have rather a complex configuration with multiple energy sources and various different technologies, it is strongly believed that applications of high-temperature solar thermal energy such as solar reforming of natural gas and solar production of hydrogen, would be promising alternatives for enhancing the portion of renewable energy utilization and finally replacing the current fossil energy system.