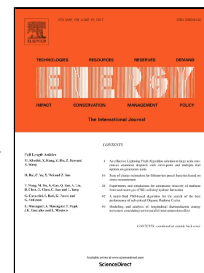


# Accepted Manuscript

Power spectral shaping for hydrogen production from silicon based hybrid thermo-photovoltaic water electrolysis

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**Highlights:**

- 1) Optimal spectral shaping of sun light was found promising for solar hydrogen.
- 2) Managing sunlight controls the photovoltaic losses with high temperature electrolysis.
- 3) The proposed scheme predicts higher efficiency than the wavelength selectivity scheme.
- 4) About 27 percent of sunlight could be stored as hydrogen fuel by realistic system.

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