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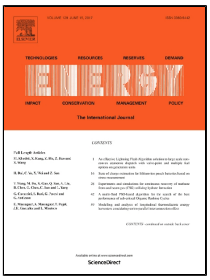

Power spectral shaping for hydrogen production from silicon based hybrid thermo-photovoltaic water electrolysis

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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.