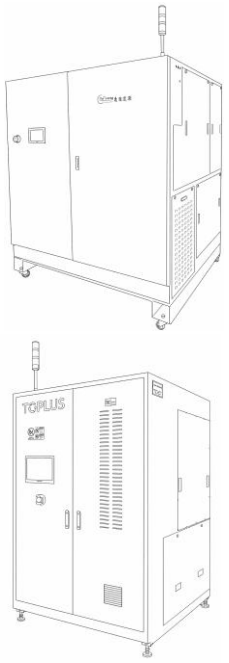
Hydrogen Purification & Recycling (HPR)



ECHP: Electrochemical Hydrogen Purifier

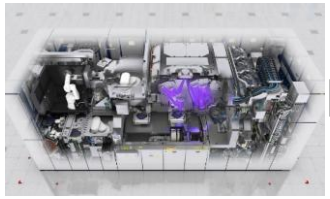
Separate N_2 (conc. 1% or higher)

PCAP: Porous Ceramics Adsorbent Purifier

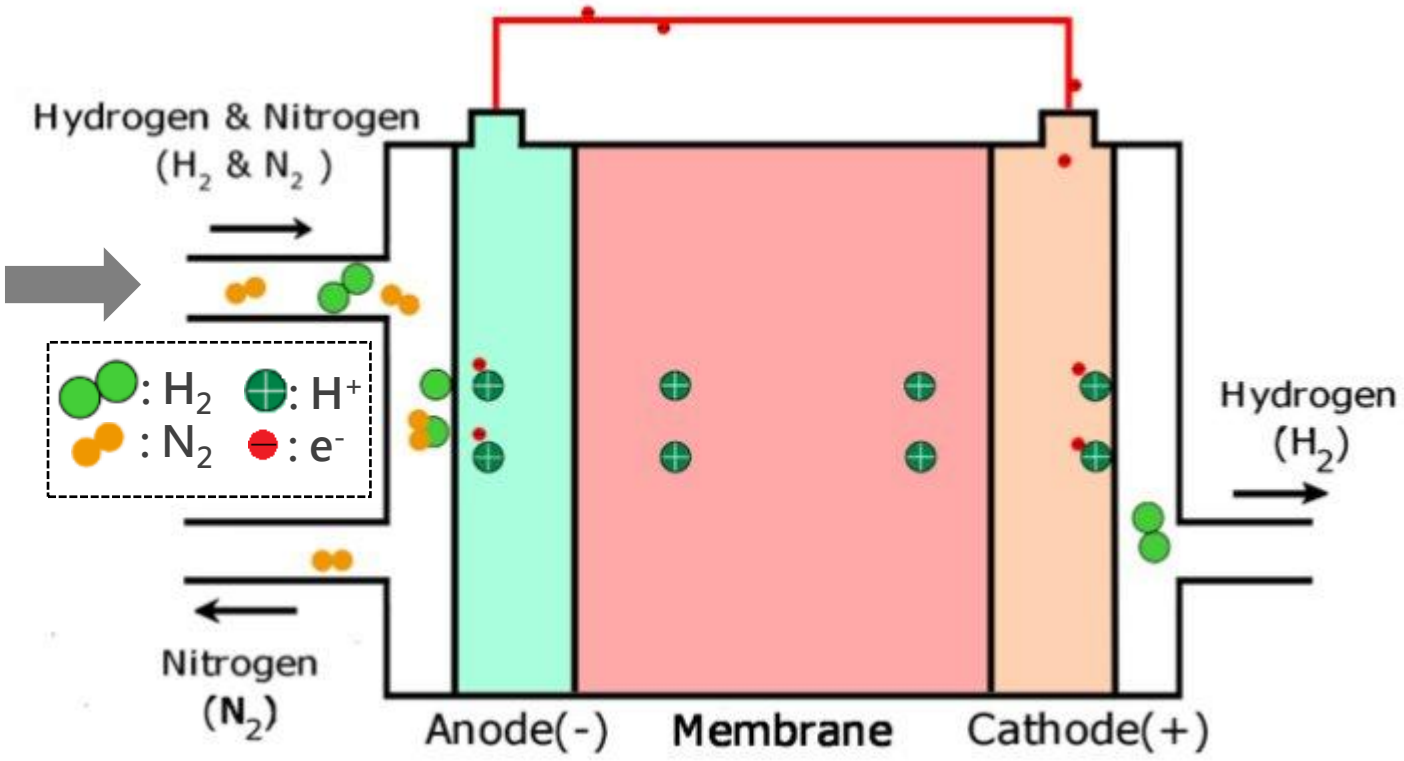
Separate impurities - N_2 (conc. lower than 1%) , H_2O, O_2, NH_3, H_2S, VOCs and other contaminants

Electrochemical H2 purifier (ECHP)

Semiconductor Fab.



$H_2 + N_2$



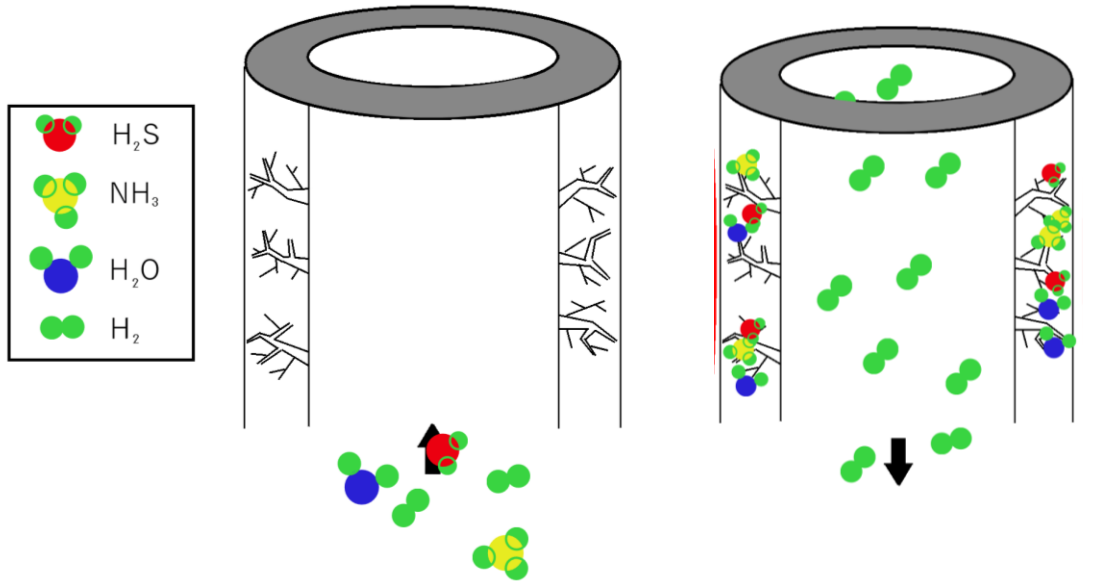
Operating principle of ECHP

- ☑ N_2 separation
- ☑ Normal operation pressure
- ☑ Low operation temp. (<100℃)

Video intro. : https://www.youtube.com/watch?v=40WlO5SE7Y0

Porous Ceramics Adsorbent Purifier (PCAP)

- Adsorb impurity gas molecules and just leave hydrogen pass through
- Simultaneous adsorption and regeneration
- Modular design for flexible configurations against various impurities, easy expansion and maintenance



Video intro. : https://www.youtube.com/watch?v=Pi5jiJ2jktc