**Molecular Photoconversion Devices Division (hv** 🡪 **H2, electricity)**

http://i2cner.kyushu-u.ac.jp/upload\_file/editor\_files/Division-Road-Map-2017/Molecular\_Photoconversion\_Devices\_June\_2017\_Final\_version\_role\_edit3.pdf

1. **Org-inorg hybrid perovskite solar cell – 2021-2025:** >25% efficiency, “50% lifetime > 50000h”. 2025-2050 - > 30% efficiency, “50% lifetime > 90000h”.
2. **Hybrid catalyst for photo water splitting –** doesseem promising or relevant
3. **Solar fuel (H2, HCOOH, CH3OH, CH4) –** 2025-2050 : application in solar energy conversion and storage => not relevant?
4. **High pressure cpds for photocatalysis –** 2021-2025: convert co2 to fuels, 10% efficiency, 2025-2050 – 20% efficiency (needs more research)
5. **OLEDs/hybrid perovskite LEDs –** not relevant
6. **Low friction bearings/surface molecular brush –** not relevant