

Highlight of the 2nd Sin-Japan PV Forum

1. Silicon-based thin film solar cells:

(1) Novel substrates

AIST studied periodic BR and got 10.1% for $\mu\text{c-Si}$ solar cells. Nankai U. obtained multi-size ZnO and 10.2% for $\mu\text{c-Si}$ solar cells.

(2) Panasonic got stable efficiencies 12.2% and 10.7% for a-Si/ $\mu\text{c-Si}$ tandem solar cells and G5 modules.

Nankai U. got 9.59% for a-Si/a-SiGe/ $\mu\text{c-Si}$ triple-junction modules with size 4ft*2ft.

2. Crystalline Si solar cells

(1) HIT is a very hot topic of this forum.

- Panasonic got 23.9% with 98 μ m wafer.
- Kaneka got copper HIT cell with 23.5%
- SIMIT of CAS also got 19.3%

(2) IEE of CAS got >19% for c-Si cell using laser doping selective emitter.

3. Compound solar cells

- Sichuan U. got 8.94% for CdTe solar cell modules for 1.2mx0.6m . Advanced Solar Power @ Hangzhou achieved 11% for 1.2mx0.6m CdTe modules
- Sharp obtained 37.5% and 43.5% efficiencies for III- V compound 3-Junction solar cells.
- TIT achieved 12.4% and 9.95% for CIGS and AIGS solar cells at high temperature.
- CUHK got 18.84% for CIGS on glass, Nankai U.12.1% on SS and 10.6% on PI for CIGS by co-evaporation.
- Frontier got 17.8 for CIGS on glass with the area of 817cm².
- Non-vacuum processing CIGS is 16.6% by Shanghai Institute of Ceramics
- AIST demonstrated a 15.9% monolithically-integrated CIGS submodule on 75.7cm² flexible ceramics substrate.

4. DSC solar cells

Chinese DSC Groups have got good result, efficiency more than 9.5% by using organic Dye. IPP group have finished the first pilot DSC production line, and the efficiency is about 7.35%.

- Thank you very much for your attention to our 2nd Sino-Japan Photovoltaic Forum.
- Hope to take part in the 3rd Sino-Japan Photovoltaic Forum in the near future.
- Sincerely hope our Japanese and Chinese friends to be happy and healthy in the following week in Hangzhou.