

TECHNOLOGIES AND MATERIALS FOR METAL CONTACTS OF SOLAR CELLS

Innovations and Benefits - Development of innovative products to reduce the costs of serigraphic pastes. Innovative types of low-cost metal contact to reduce the solar cells cost.

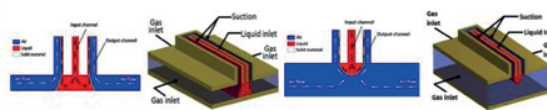
Uses - Ag serigraphic pastes at low synthesizing temperature and metallization techniques via localized plating for solar cells.

Past and Present Activities - Development of ad hoc serigraphic pastes for particular types of solar cells with an Italian precious metal recovery company (CHIMET SpA). Development of localized plating technologies for metal contacts of solar cells with and Italian SME (Rise Technology Srl).



Screen printing system for metal contacts

Low temperature sintering Ag serigraphic paste

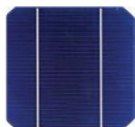


Principles of localized plating system



Industrial system for localized plating

Screen printed front side contact of solar cell



plated Ni/Cu on Al rear side contact of solar cell



Cross section of Ni/Cu Metallic contact on silicon

