

결정질 실리콘 태양전지에 적용될 Single diffusion step으로 형성한
selective emitter 관한 연구

A study on selective emitter formed by single diffusion step for crystalline silicon
solar cells

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Abstract : Most high efficiency silicon solar cells use a passivated selective emitter. It have been an important research subject for crystalline silicon solar cells for decades. It is being used in production for high efficiency solar cells. Most of the selective emitter process require expensive extra masking, etching steps, and a double diffusion process making selective emitters not cost effective. In this paper, we study method for single diffusion step selective emitter process as an alternative to not cost effective double diffusion process. Cost effective selective emitter that the efficiency should be increased significantly (mare than 0.2%) and that the process should simple, robust and cheap.

Key Words : Selective emitter, single step, crystalline silicon solar cell,