



PolySi passivating contact for solar cells

ECN
 P.O. Box 1
 1755 ZG Petten
 The Netherlands

 Contact:
 Ingrid Romijn
 T +31 88 515 43 09
 romijn@ecn.nl

ecn.nl

Why be interested in polySi passivating contact

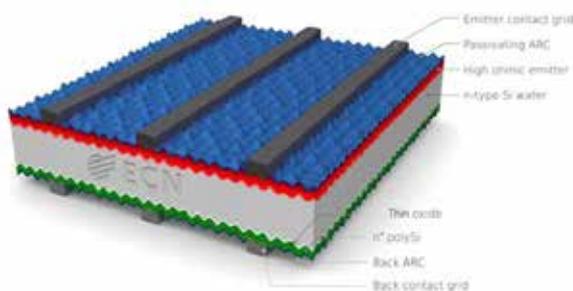
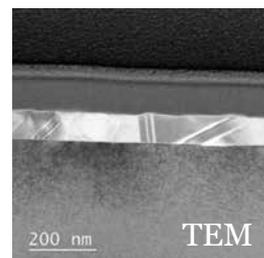
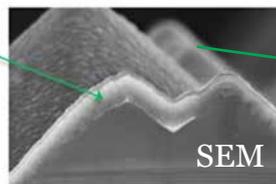
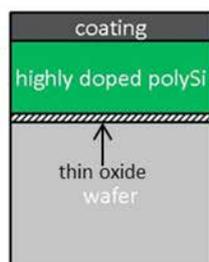
- Industrial deposition method (LPCVD)
- Excellent passivation with n-polySi
 - $iV_{oc} \sim 740/730$ mV on polished/textured surface
- Very good passivation with p-polySi
 - $iV_{oc} \sim 725/685$ mV on polished/textured surface
- Enables progress to > 22% cell efficiency
- First 6" cell efficiency 20.8%, bifaciality 85%
 - with conventional emitter, and all fire-through contacts

ECN offers

- Co-development, e.g. of PERPoly cell concepts
- Technology transfer, e.g. of PERPoly process flow

Why ECN

- The only research institute to develop a 6-inch cost effective cell process based on polysilicon passivating contact and firing through metallization
- Many years of track record on technology transfer, with excellent results



Passivated Emitter and Rear Polysilicon solar cell

