

Supplementary Information

Structural and optical properties of phosphorous doped nanocrystalline silicon deposited using VHF PECVD process for silicon heterojunction solar cells and optimization of simple p-n junction cell using SCAP-1D tool

Vijay Kumar Gill,^a Sucheta Juneja, ^{*b} Shiv Kumar Dixit, ^{*a} Shruti Vashist,^a and Sushil kumar^b

^aDepartment of Electronics and Communication Engineering, Manav Rachna University, Aravalli Hills, Faridabad, Haryana – 121004, India.

^bCSIR Network of Institutes for Solar Energy, CSIR– National Physical Laboratory, Dr. K.S. Krishnan Marg, New Delhi 110012, India.

*Corresponding authors: shivkumardixit.7@gmail.com, suchetajuneja@gmail.com

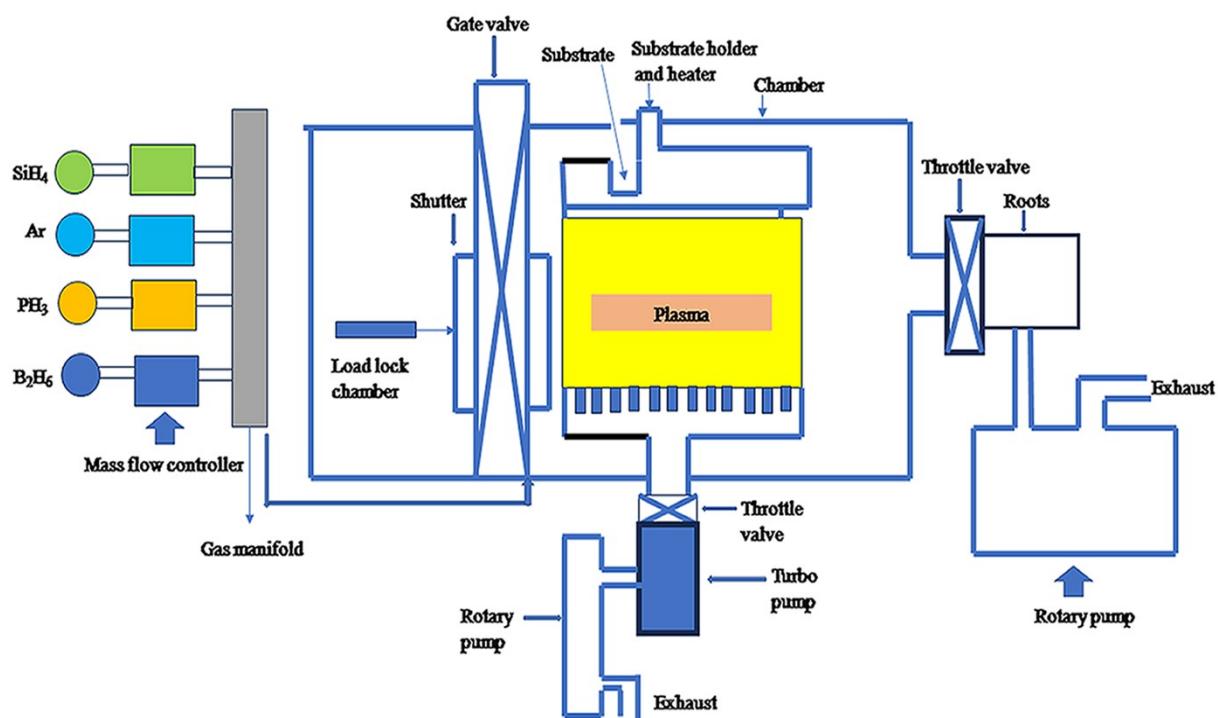


Figure S1. Schematic of PECVD system

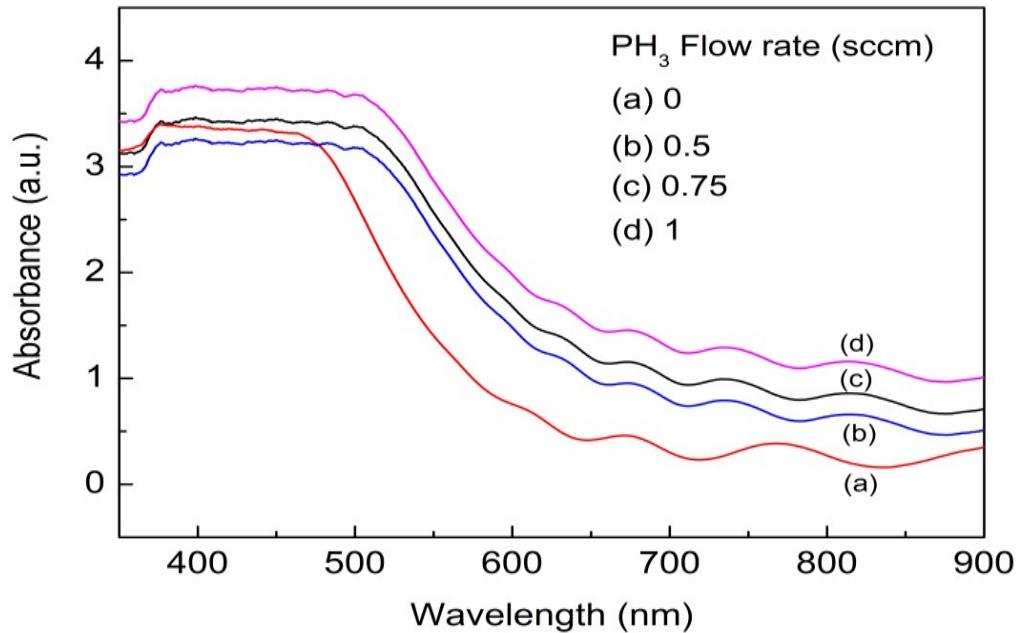


Figure S2. Absorption spectra of n type nc-Si:H films grown at different PH_3 flow rates (a) 0.0 (b) 0.5 (c) 0.75 and (d) 1 sccm