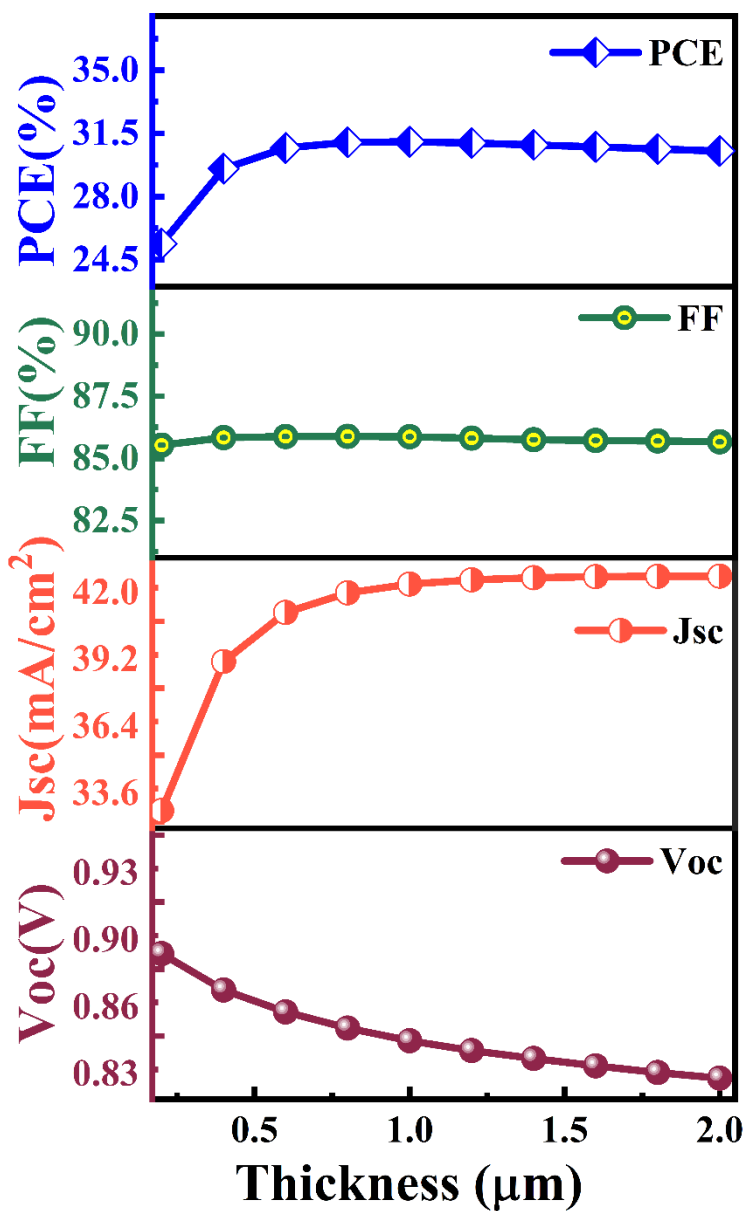
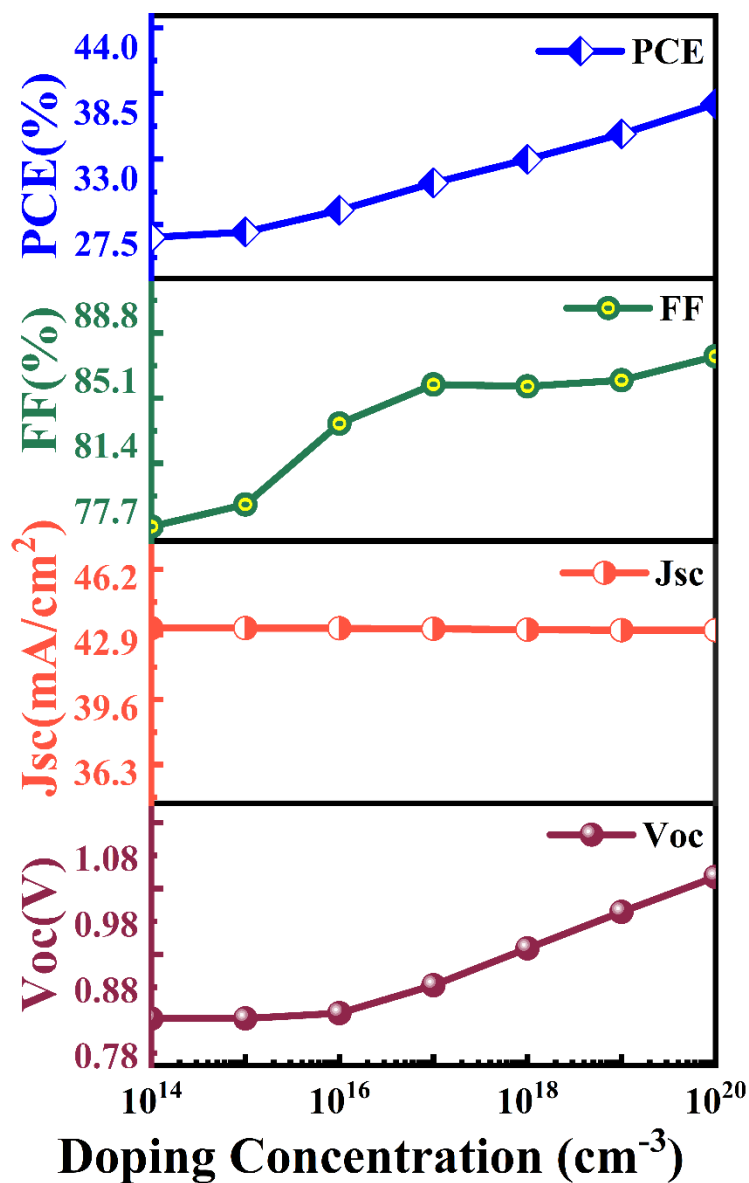


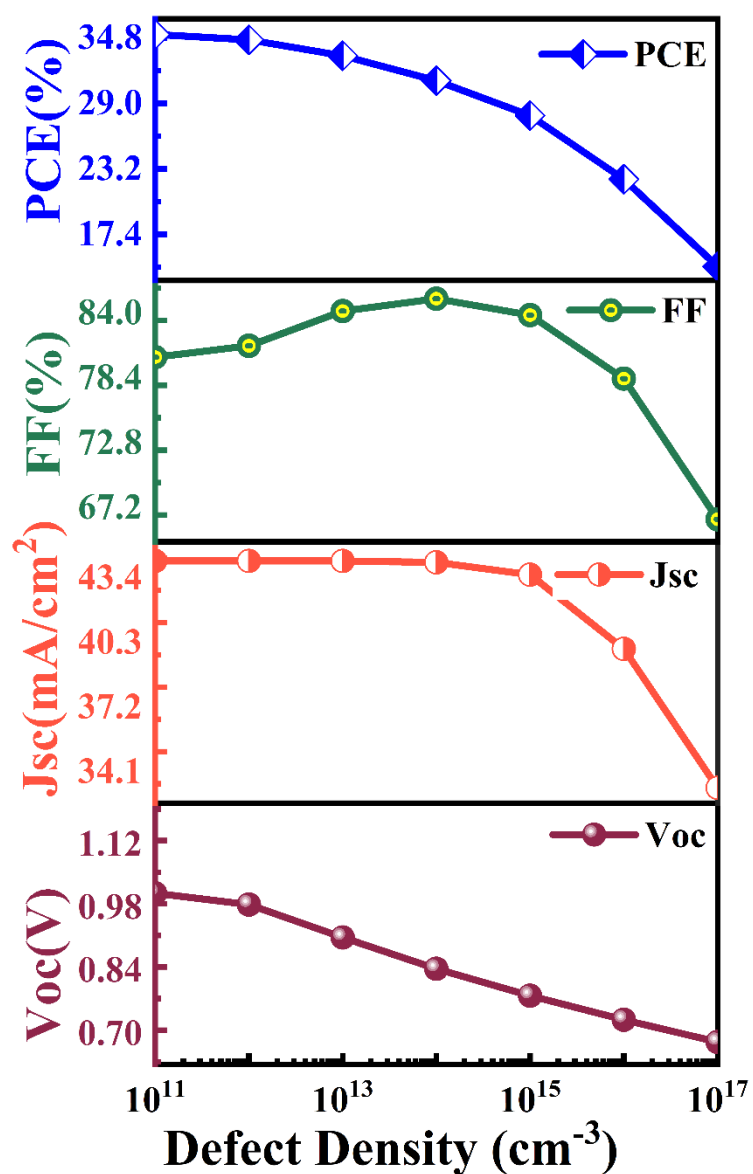
1. Thickness variation of absorber



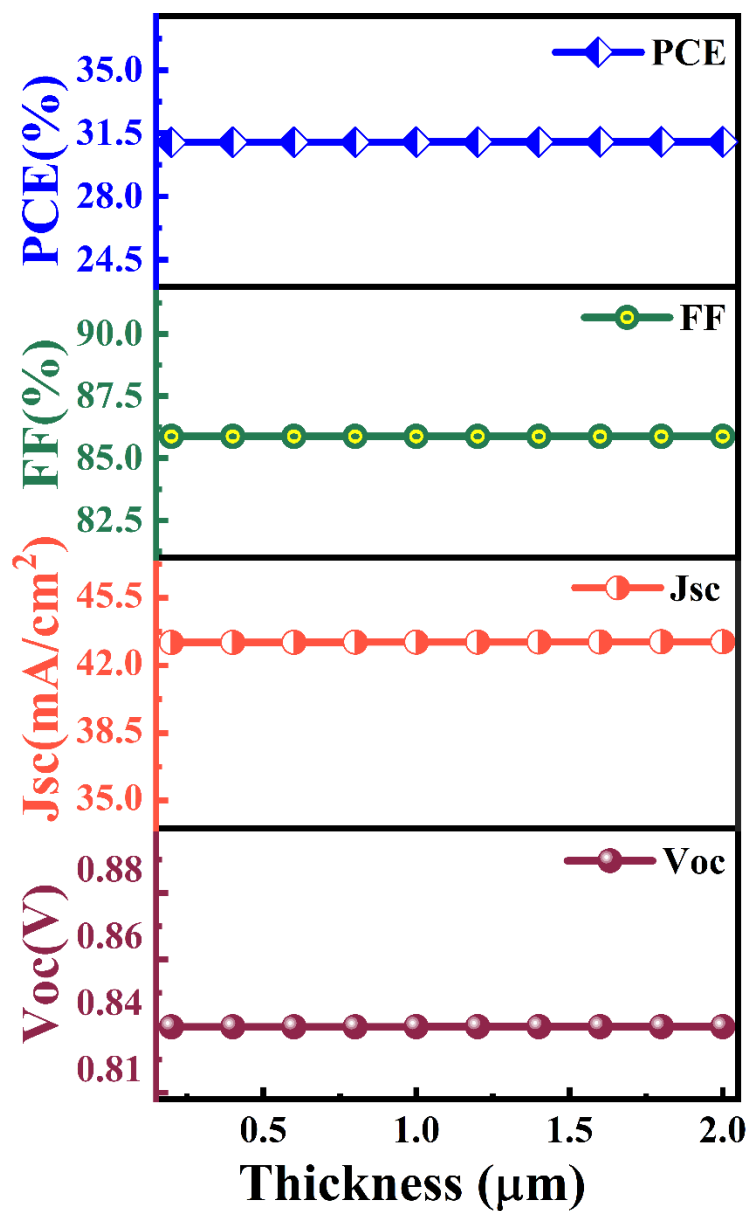
2. Doping variation of absorber



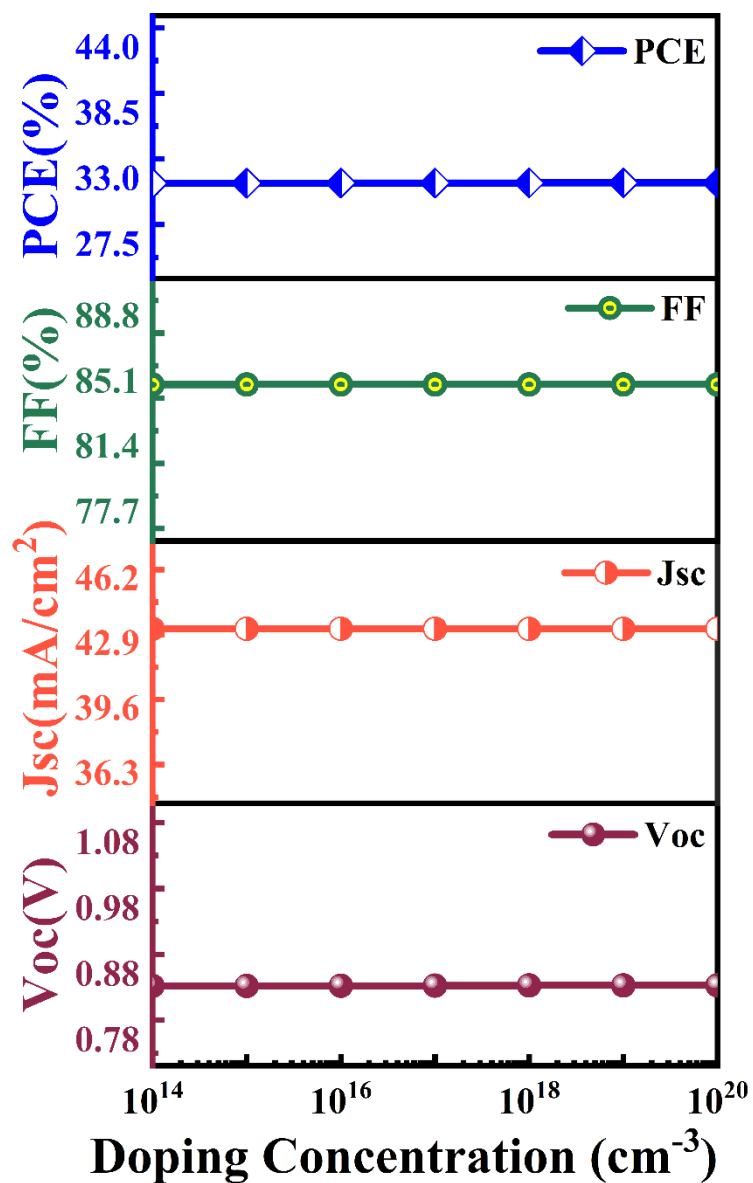
3. Defect variation of absorber



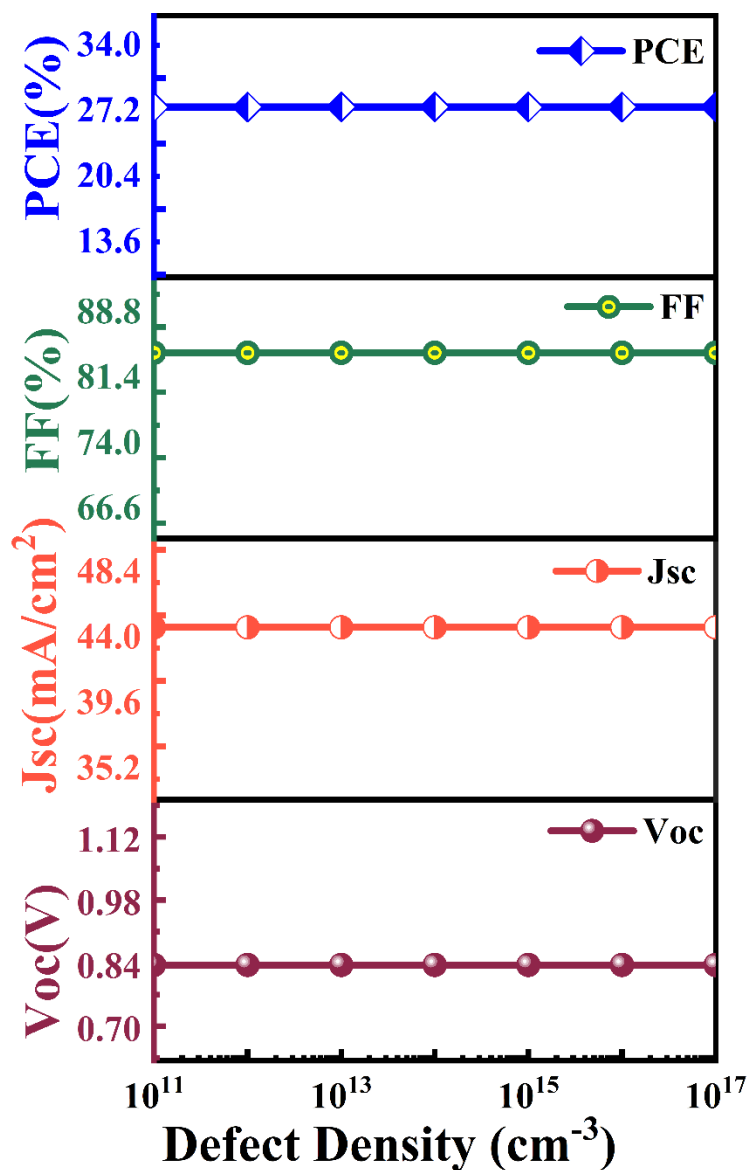
4. Thickness variation of BSF



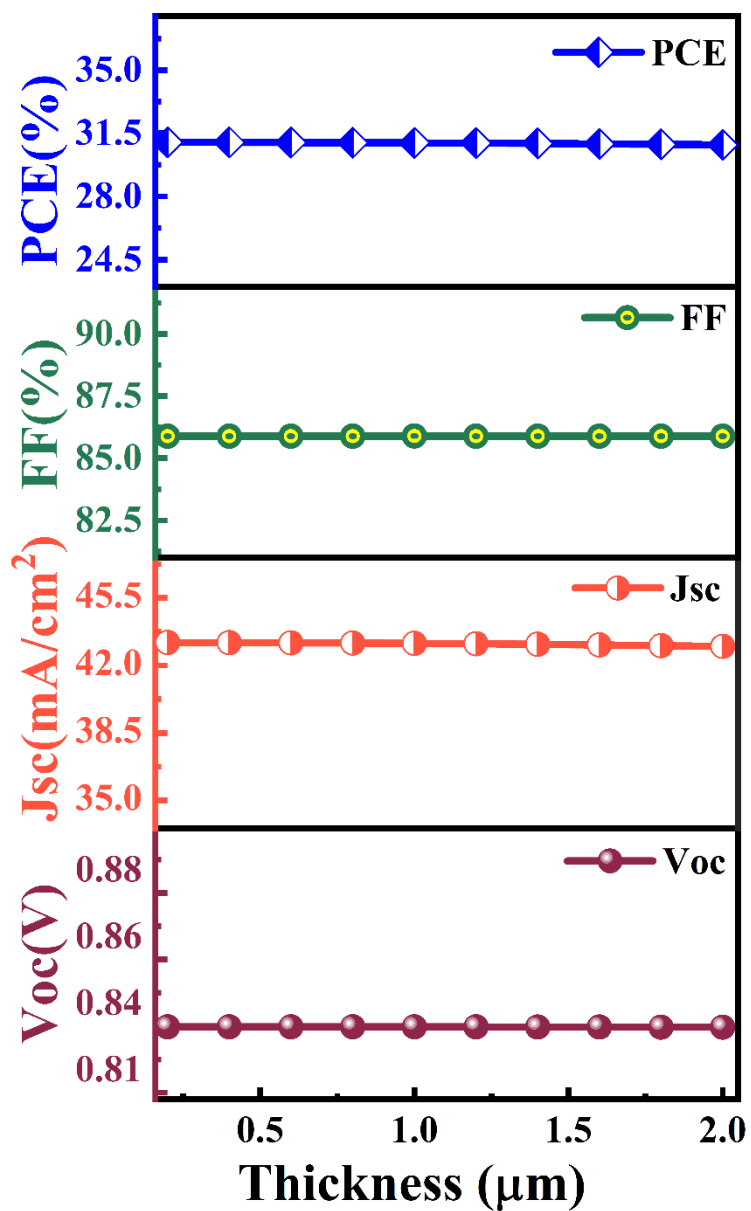
5. Doping variation of BSF



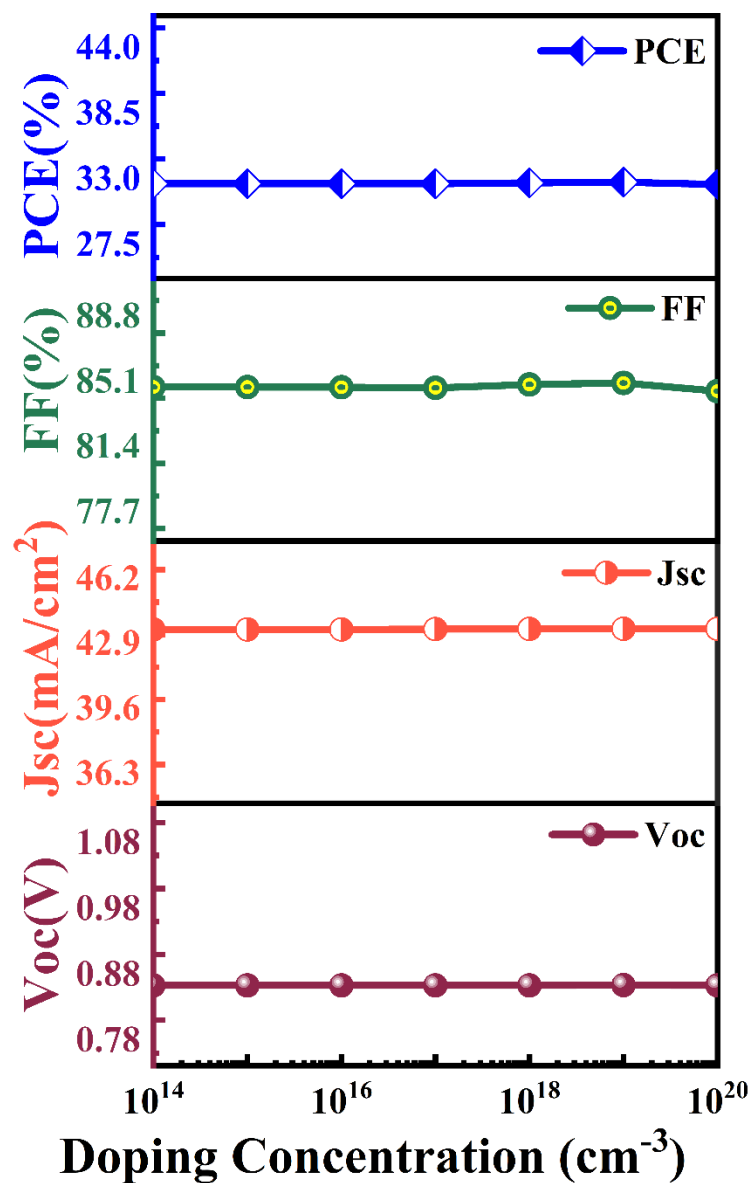
6. Defect variation of BSF



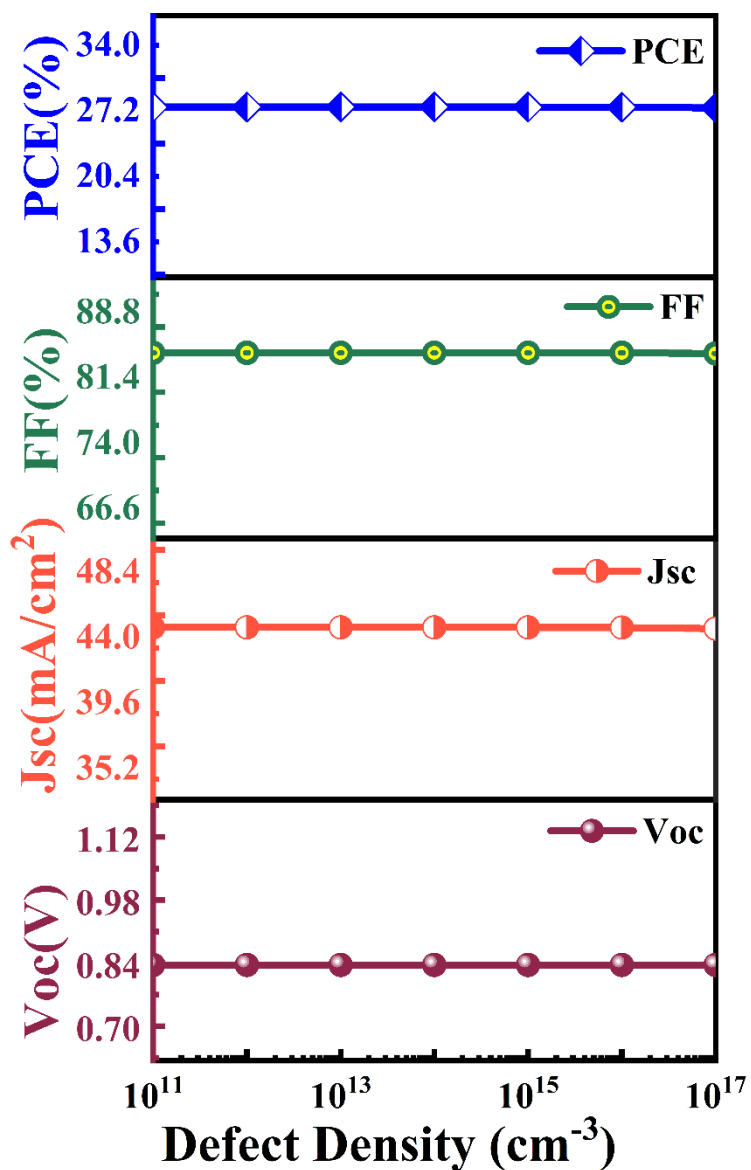
7. Thickness variation of window



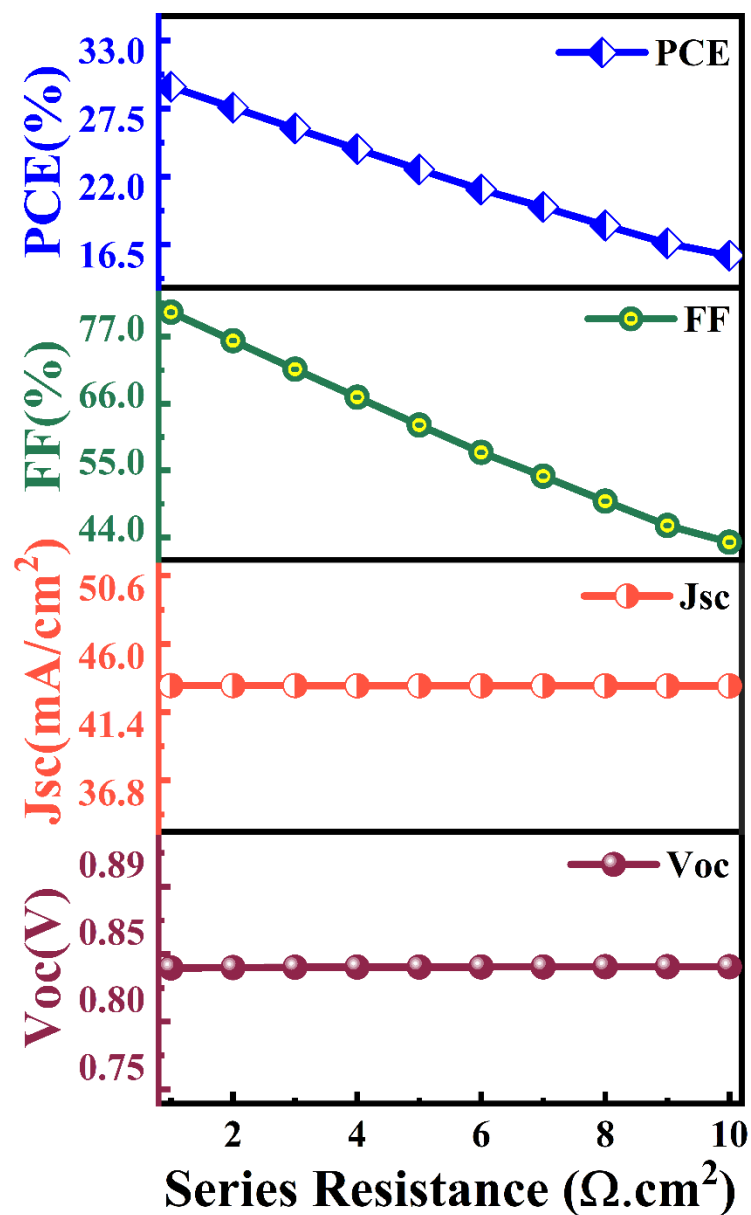
8. Doping variation of window



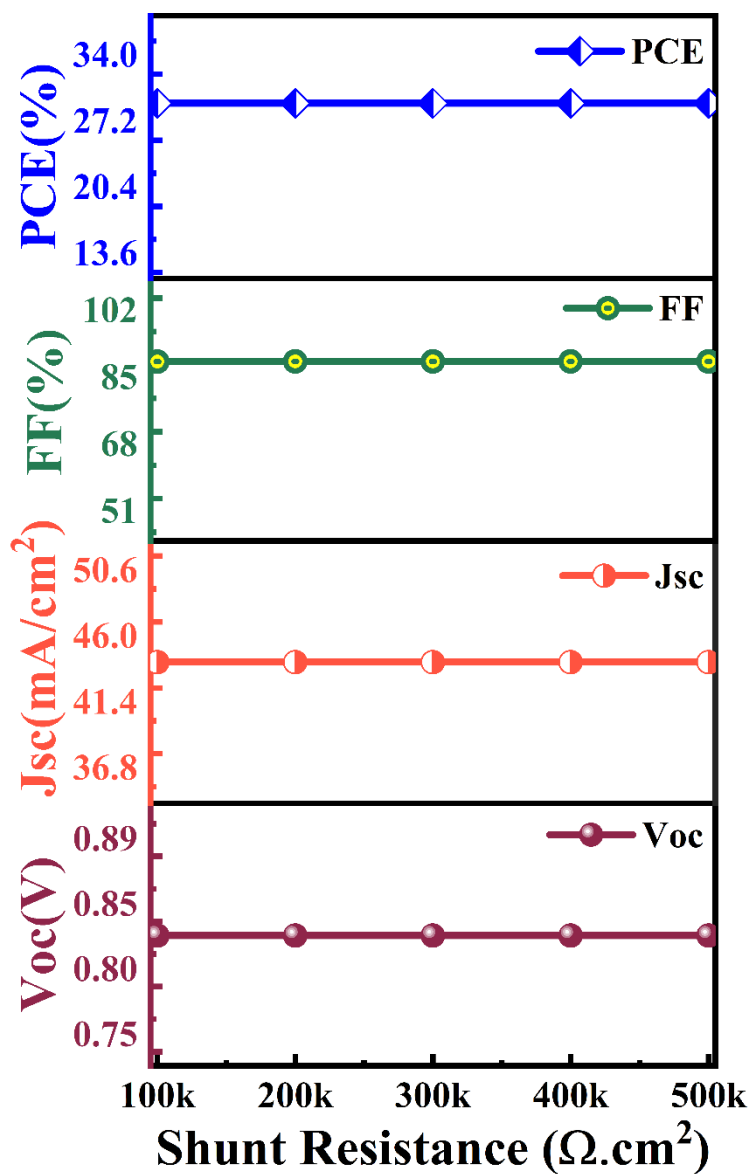
9. Defect variation of window



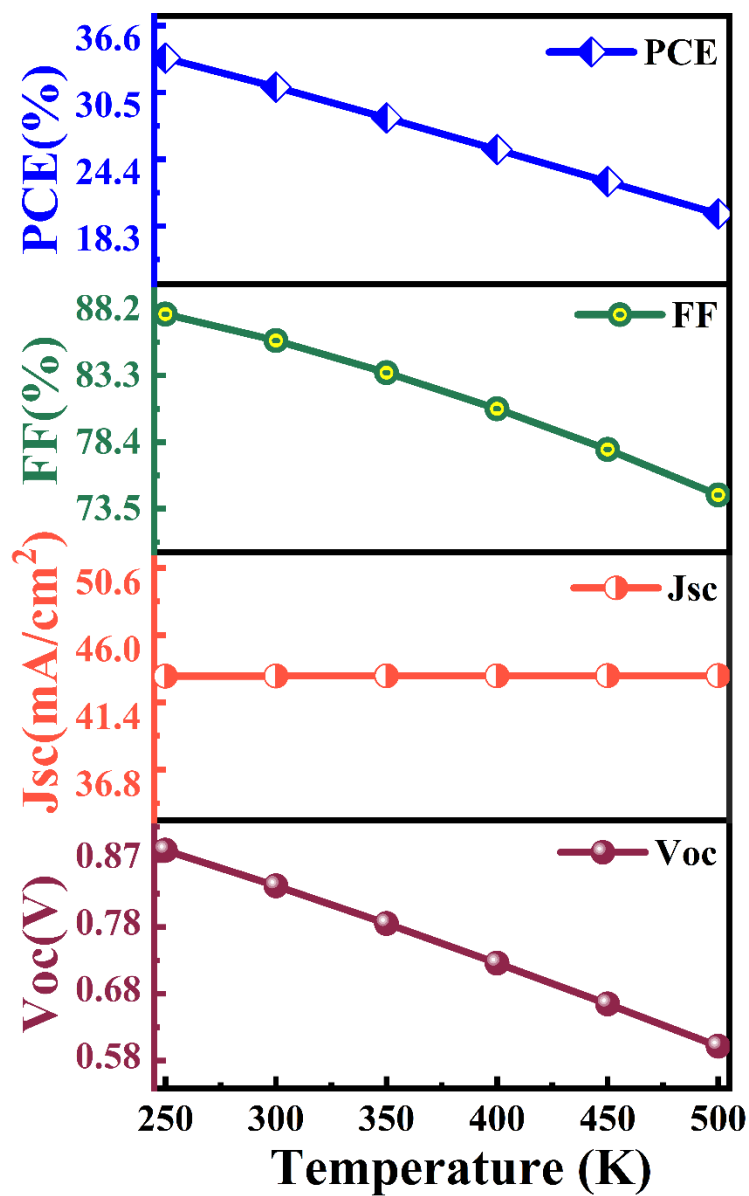
10. Series resistance variation



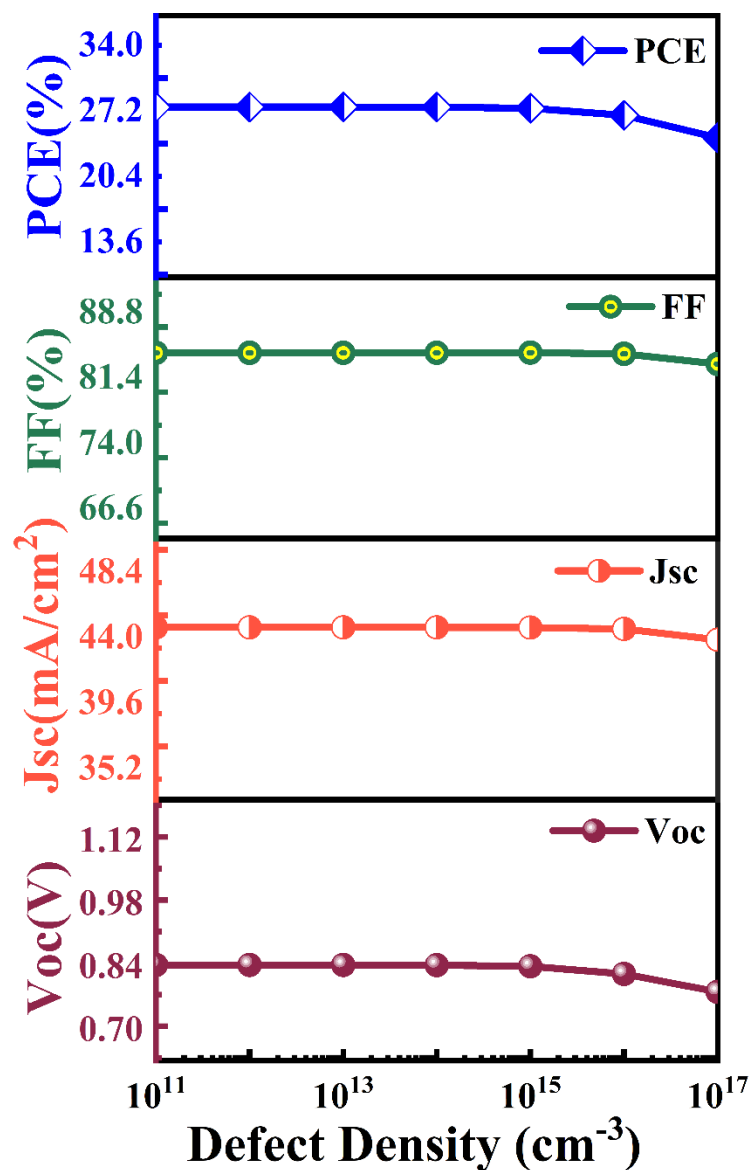
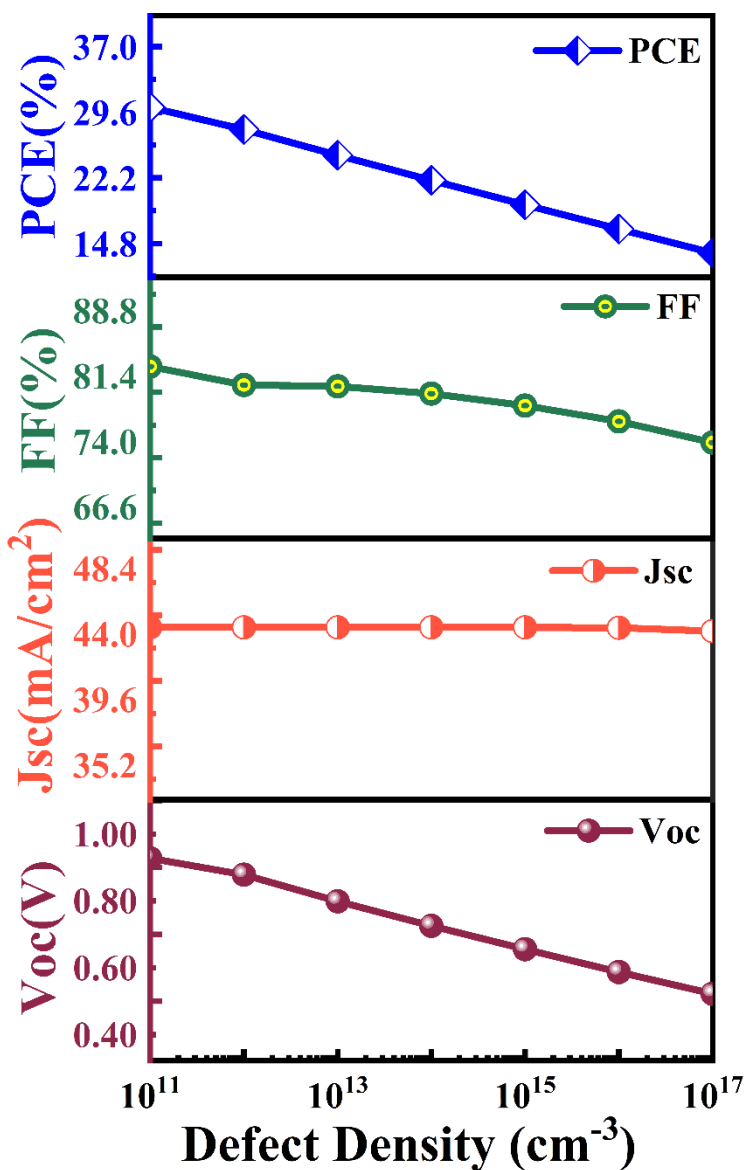
11.Shunt resistance variation



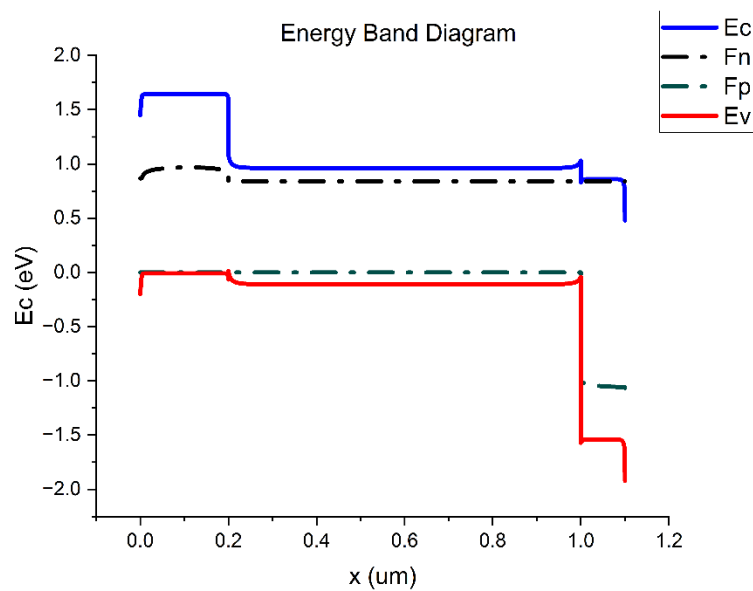
12.Temperature variation



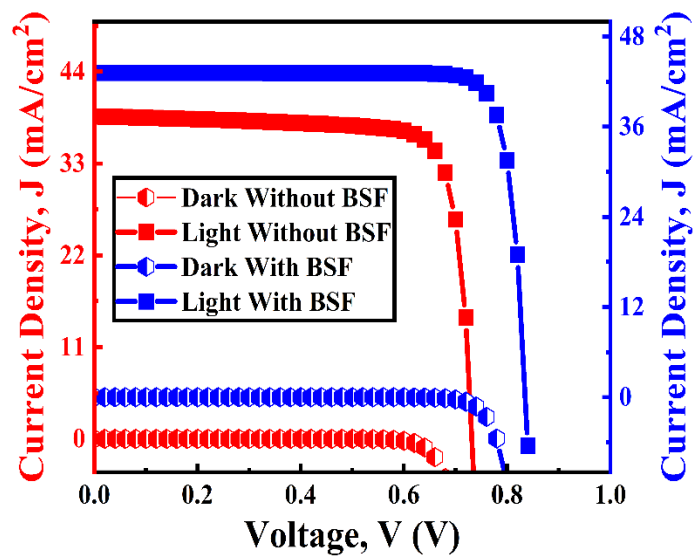
13.Window absorber interfaces 14.BSF absorber interfaces vs defect



15. Energy band diagram



16. J-V curve under dark and light



17. QE-wavelength curve

