Development of n-type, passivating nanocrystalline silicon oxide films via plasma-enhanced chemical vapor deposition

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Supplementary section

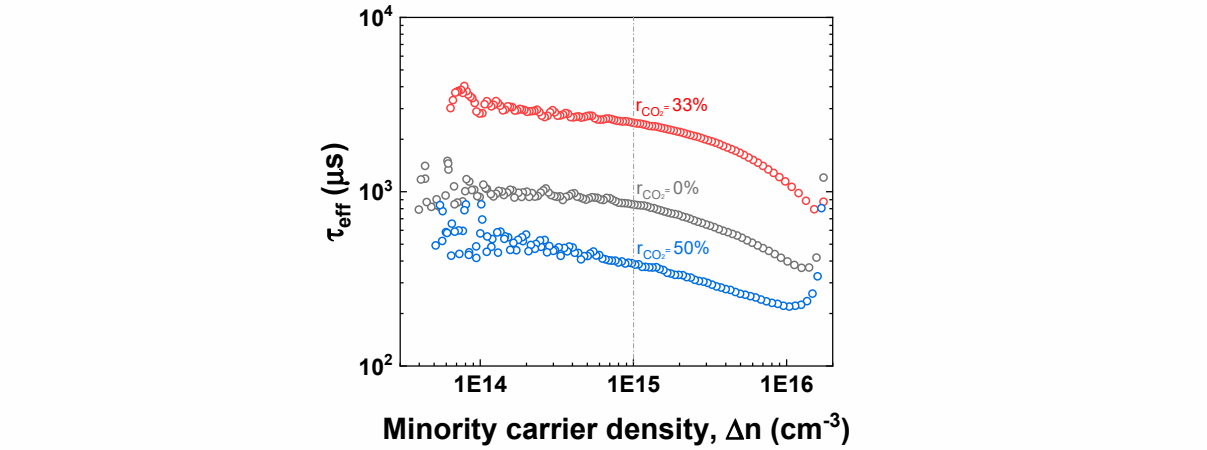

Figure S1. Variation in minority carrier lifetime (τ_{eff}) w.r.t. minority carrier density of nc-SiOx:H films deposited with changing CO_2 gas flow ratio.

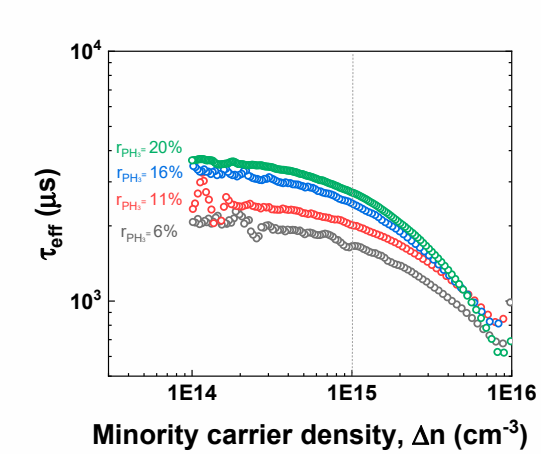

Figure S2. Variation in minority carrier lifetime (τ_{eff}) w.r.t. minority carrier density of nc-SiOx:H films deposited with changing PH_3 gas flow ratio.

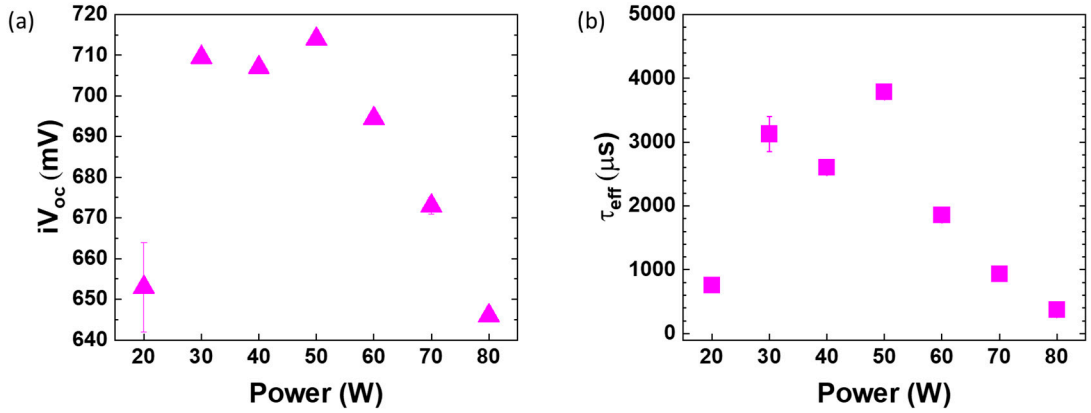

Figure S3. (a) Effective minority carrier lifetime (τ_{eff}) and (b) implied V_{oc} (iV_{oc}) of nanocrystalline silicon oxide (nc-SiOx:H) films deposited at various powers (20-80 W).