

Supporting Information
of
**Combined study of the deposition temperature and post-
deposition annealing on the photoluminescence of silicon
quantum dots embedded in chlorinated silicon nitride thin films**

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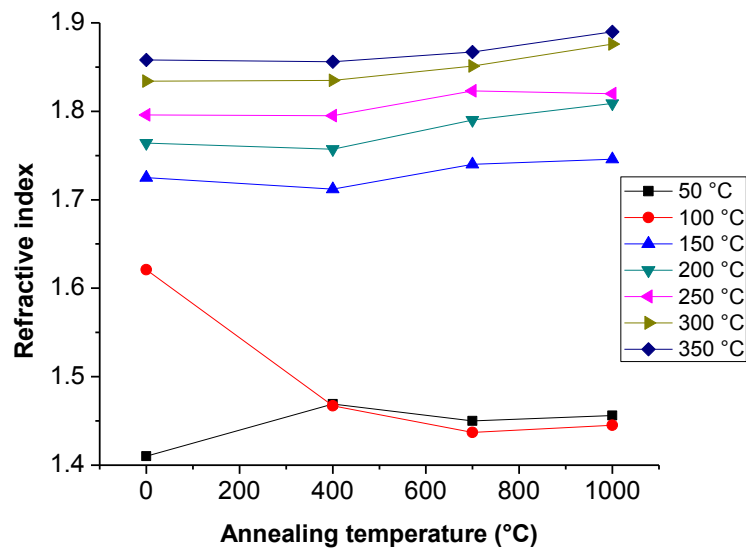


Fig S1. Refractive index of the films deposited from 50 to 350 °C before and after thermal annealing.

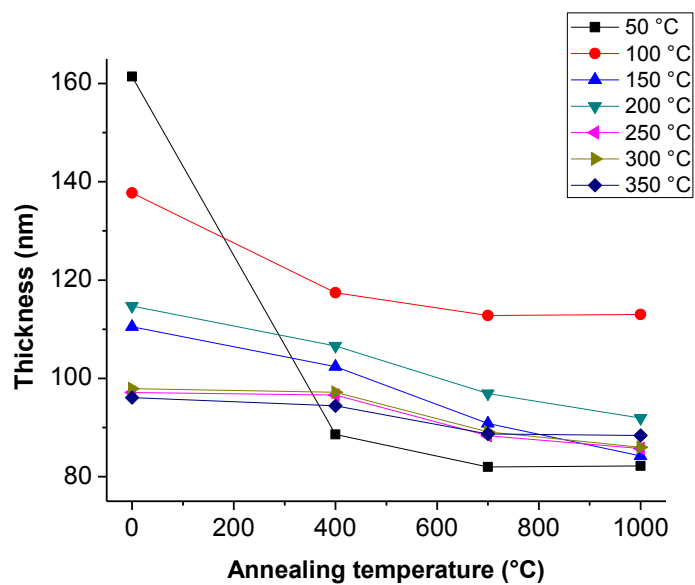


Fig S2. Thickness of the films deposited from 50 to 350 °C before and after thermal annealing.

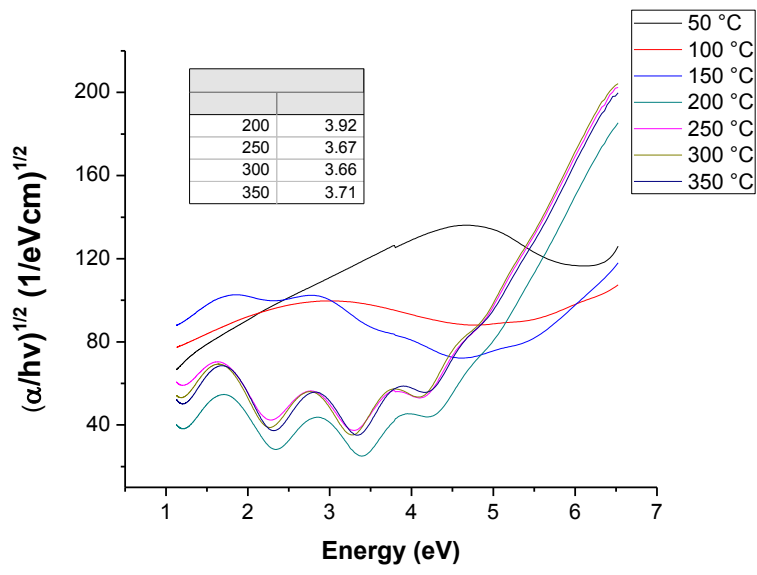


Fig S3. Cody plots of as-grown films prepared at DT from 50 to 350 °C. Inset table presents the optical band gap of films grown in the 200- 350 °C range.

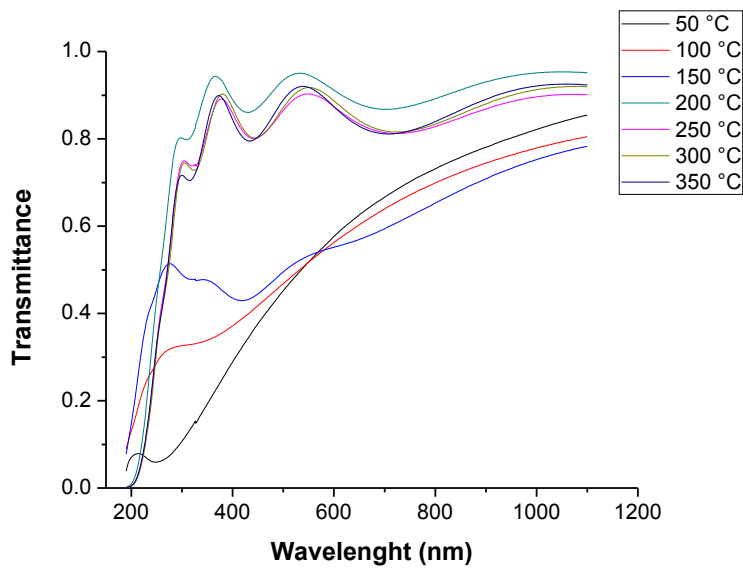


Fig S4. UV-Vis transmission spectra of as-deposited films prepared at DT in the range of 50 to 350 °C.

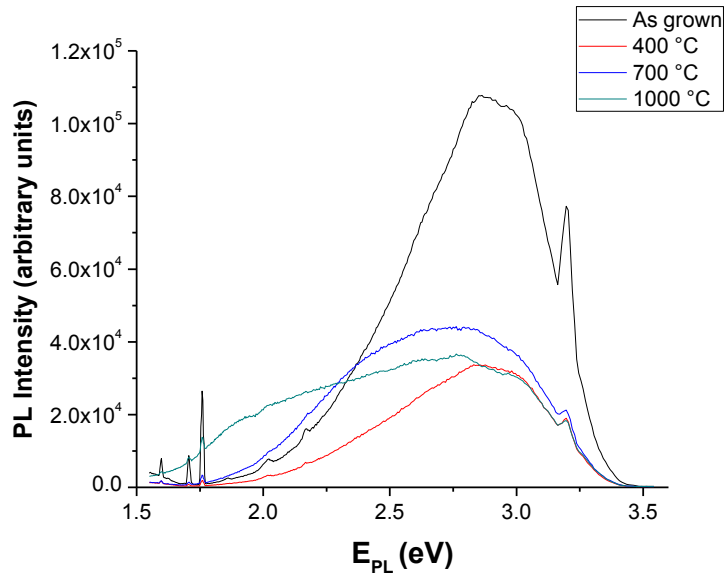


Fig S5. Room temperature PL spectra of a film deposited at DT of 50 °C, before and after thermal annealing at AT of 400, 700 and 1000 °C.

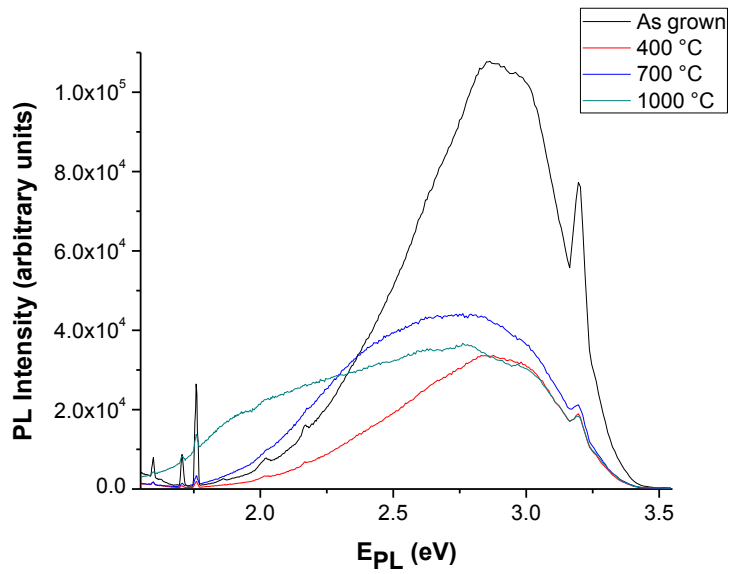


Fig S6. Room temperature PL spectra of a film deposited at DT of 100 °C, before and after thermal annealing at AT of 400, 700 and 1000 °C.

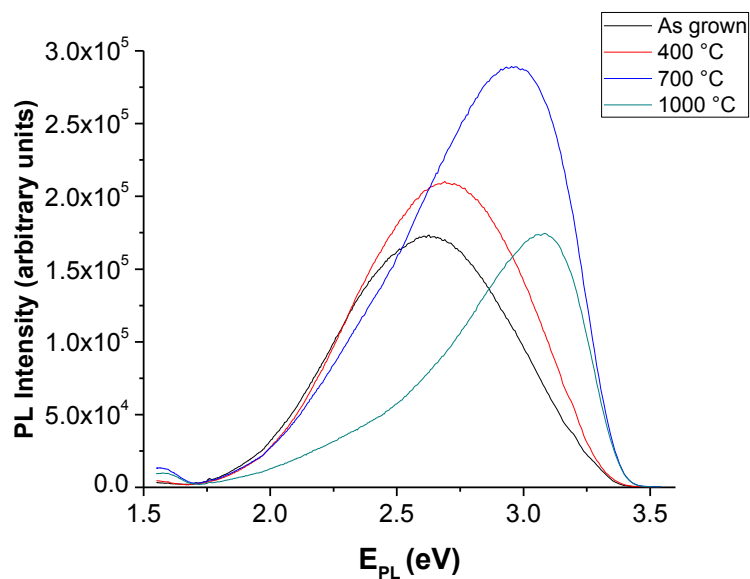


Fig S7. Room temperature PL spectra of a film deposited at DT of 150 °C, before and after thermal annealing at AT of 400, 700 and 1000 °C.

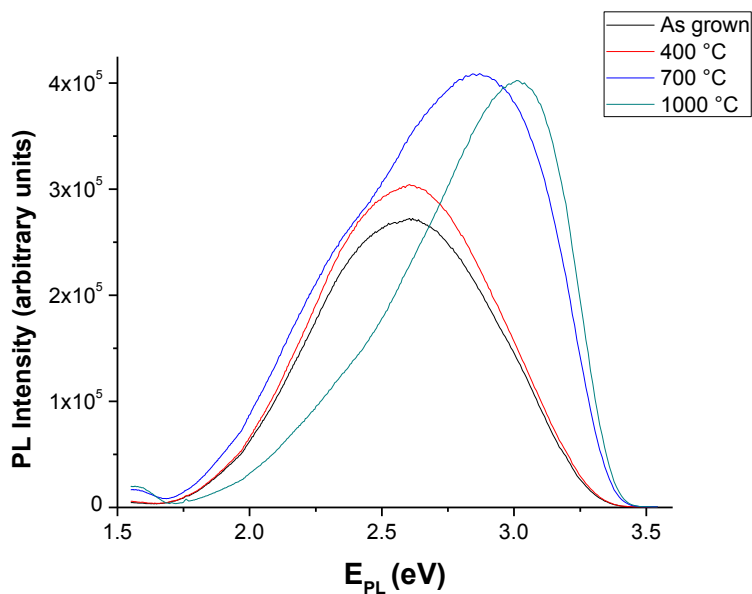


Fig S8. Room temperature PL spectra of a film deposited at DT of 200 °C, before and after thermal annealing at AT of 400, 700 and 1000 °C.

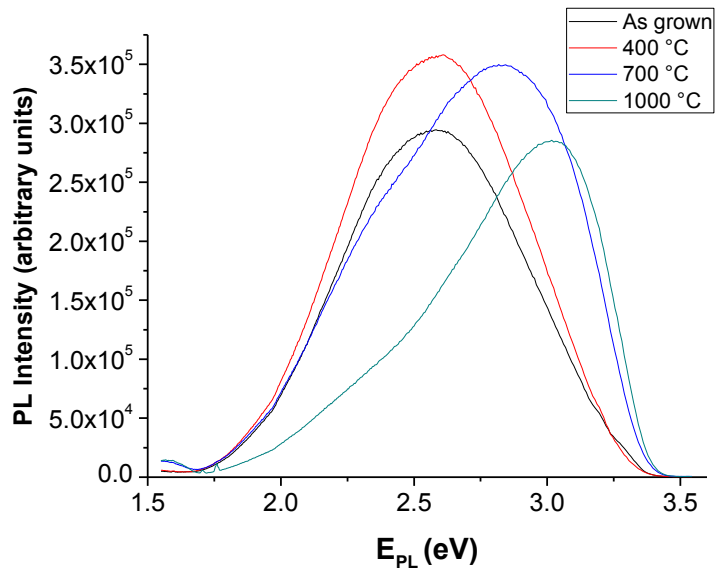


Fig S9. Room temperature PL spectra of a film deposited at DT of 300 °C, before and after thermal annealing at AT of 400, 700 and 1000 °C.

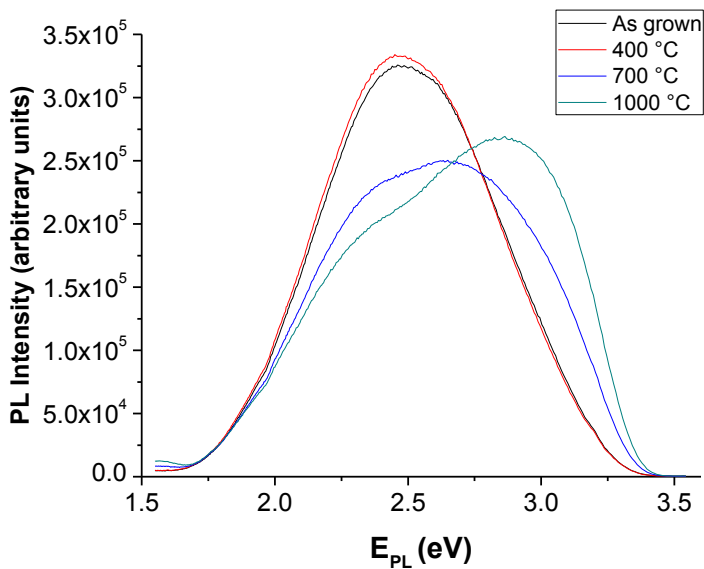


Fig S10. Room temperature PL spectra of a film deposited at DT of 300 °C, before and after thermal annealing at AT of 400, 700 and 1000 °C.

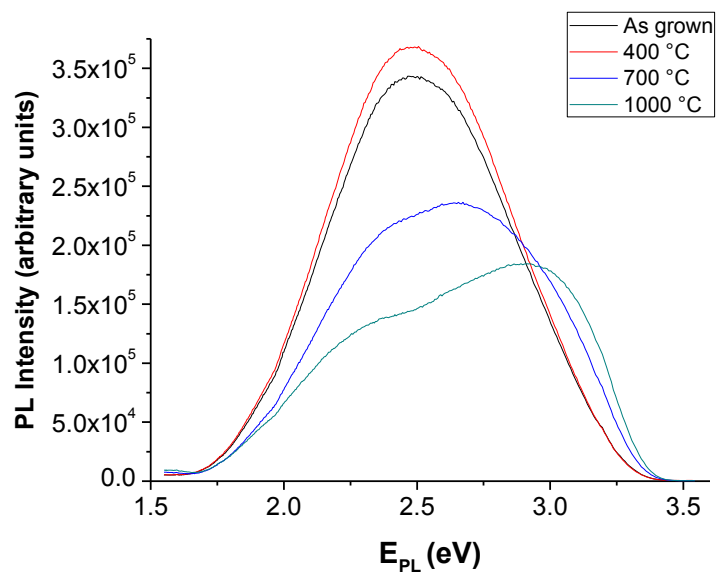


Fig S11. Room temperature PL spectra of a film deposited at DT of 350 °C, before and after thermal annealing at AT of 400, 700 and 1000 °C.