**Asking myself…**

Just realized I did not read anything in the past 3 months, because I put too much emotion into things that are not related to research, and this make me hardly focus on science itself. Now I realized this problem, and hopefully could really gain some good habit and have speed of research.

Why we study this material/platform? Is it promising? What is its advantage compared to other platforms?

What is our boost to investigate this platform?

Narrow linewidth, 70 excitation frequency peaks observed. Coherence time of ~ 7.5 us measured.

What are our next steps? Why we do these steps?

Figure out the energy level structure (relative to band structure), identify relative sites. (Why we should do so? To extract the spin-dependent optical transitions?)

Why we need a PhC?

Enhance the emission rate of Er.

What is the difference between crystal host and semiconductor host?