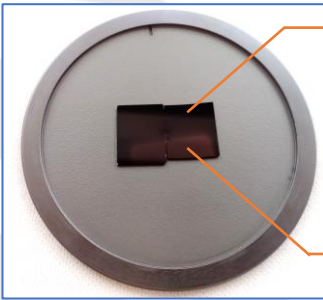


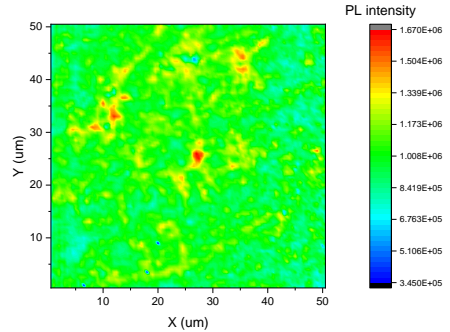
DLI  
CVD  
ALD

Molybdenum disulfide,  
**MoS<sub>2</sub>**



- MoS<sub>2</sub>**
- Uniform
  - ≈ 1 layer
  - S/Mo = 1.95
- Covered part Si/SiO<sub>2</sub>**
- Thermal
  - 90 nm

Picture of two samples after deposition (bottom lighter part was covered during deposition)

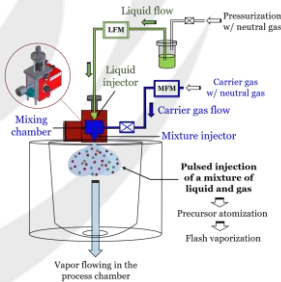


Photoluminescence intensity of a MoS<sub>2</sub> thin film on a 50x50 μm area

**Materials and methods**

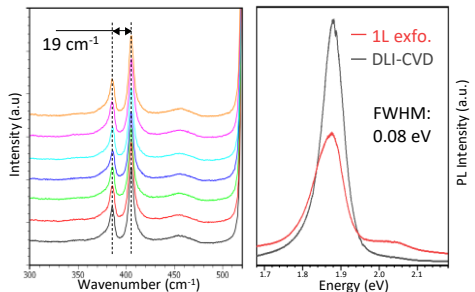


MC-050



DLI principle

- Mo(CO)<sub>6</sub>, 99.8% @0.001M
- S, 99.99% @0.002M
- Diluted in anh. toluene
- Total process time: 1-2h



(Left) Raman of back-to-back MoS<sub>2</sub> depositions and (right) PL comparison between exfoliated and DLI samples

- Reproducibility
- WS<sub>2</sub>, WSe<sub>2</sub>, MoSe<sub>2</sub> work-in-progress
- MoS<sub>2</sub>/SiO<sub>2</sub>/Si sample available on demand !