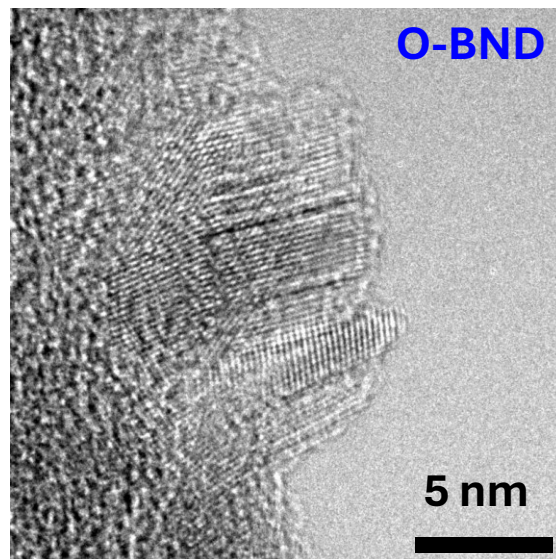


B-ND EKI seeding, layers

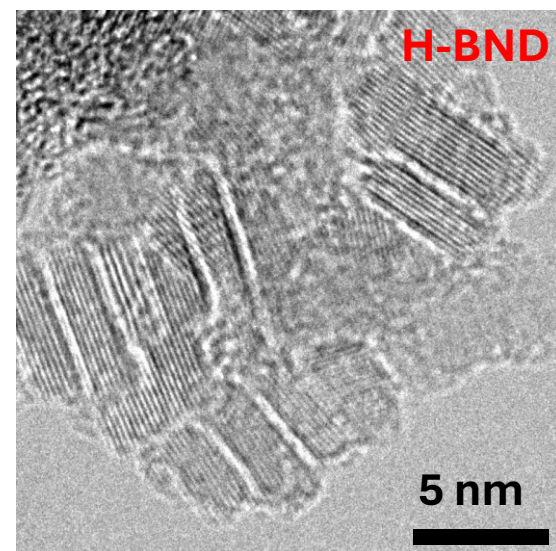
# Outline of Figures

- Figure 1\_ size\_size distribution, structure (DLS, SAXS, HRTEM)
- Figure 2\_thermal properties?
- Figure 3\_structure, surface chemistry (Raman, FTIR)
- Figure 4\_SEM of nucleation layers
- Figure 5\_SEM of B-MCD + Rs values, Raman spectra?

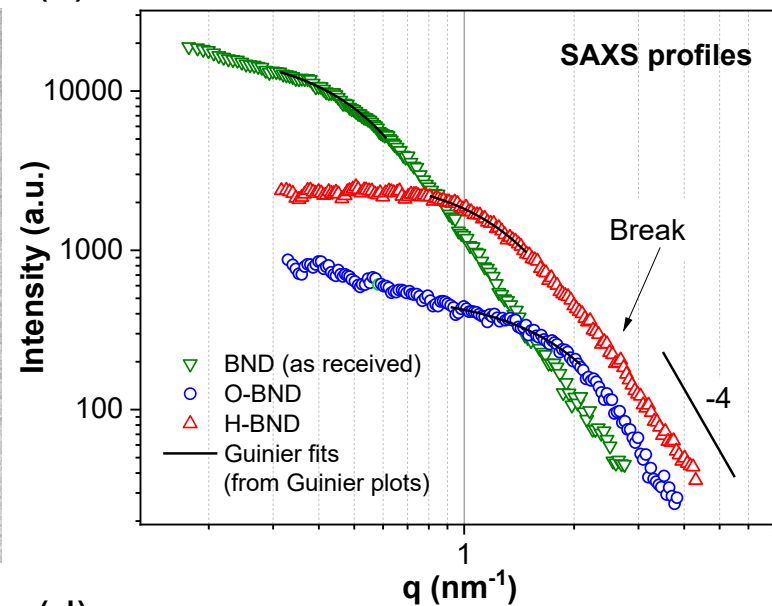
(a)



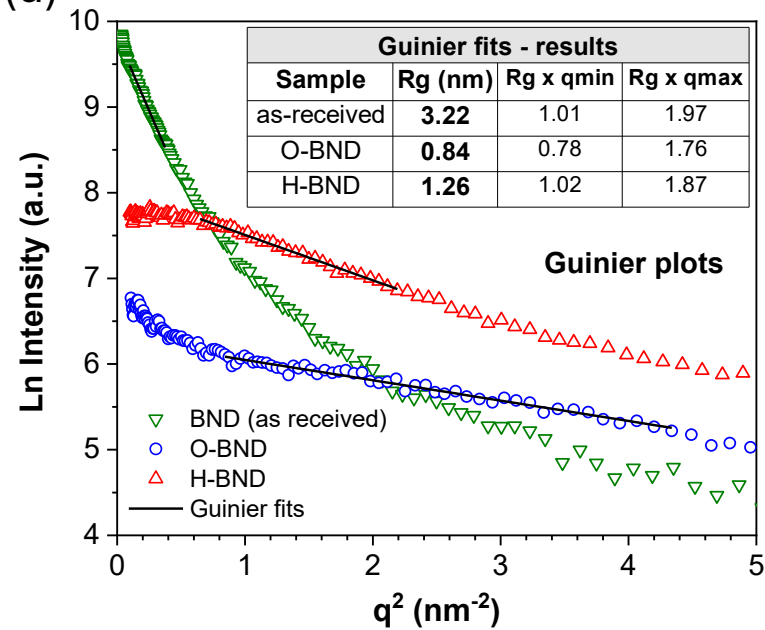
(b)



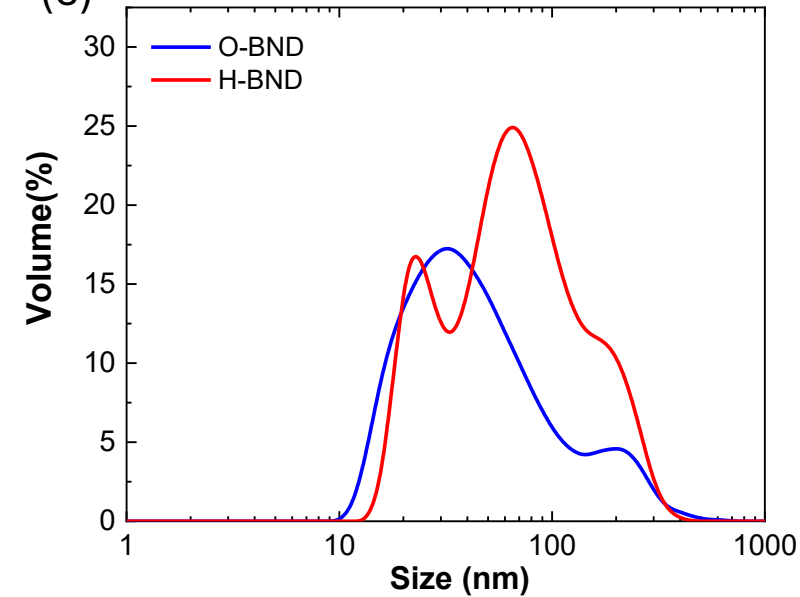
(c)



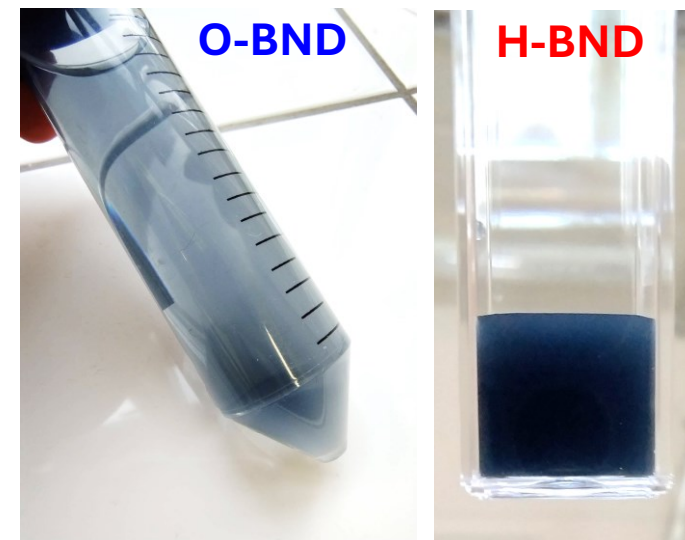
(d)

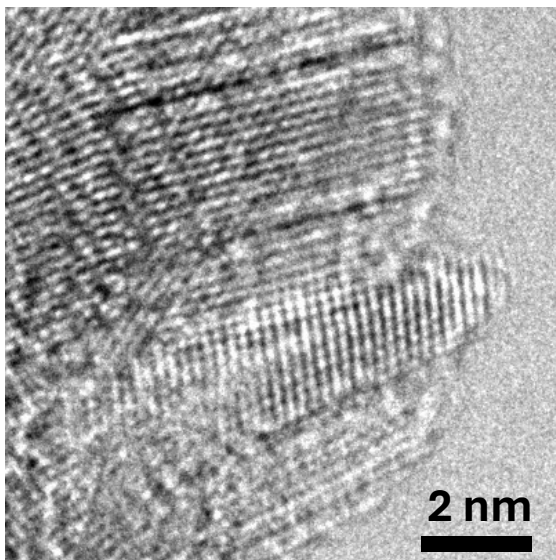


(e)

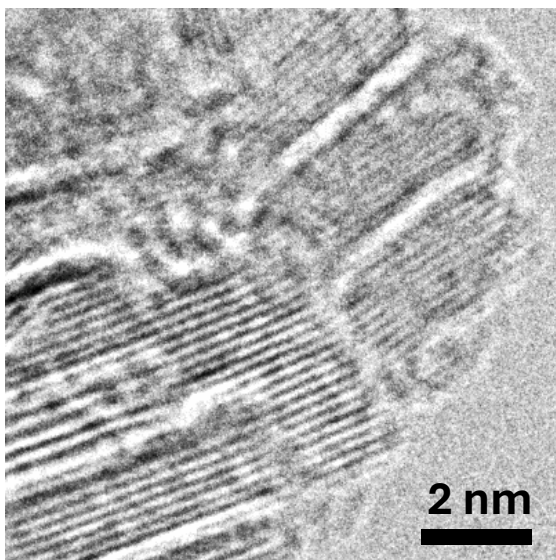


(f)

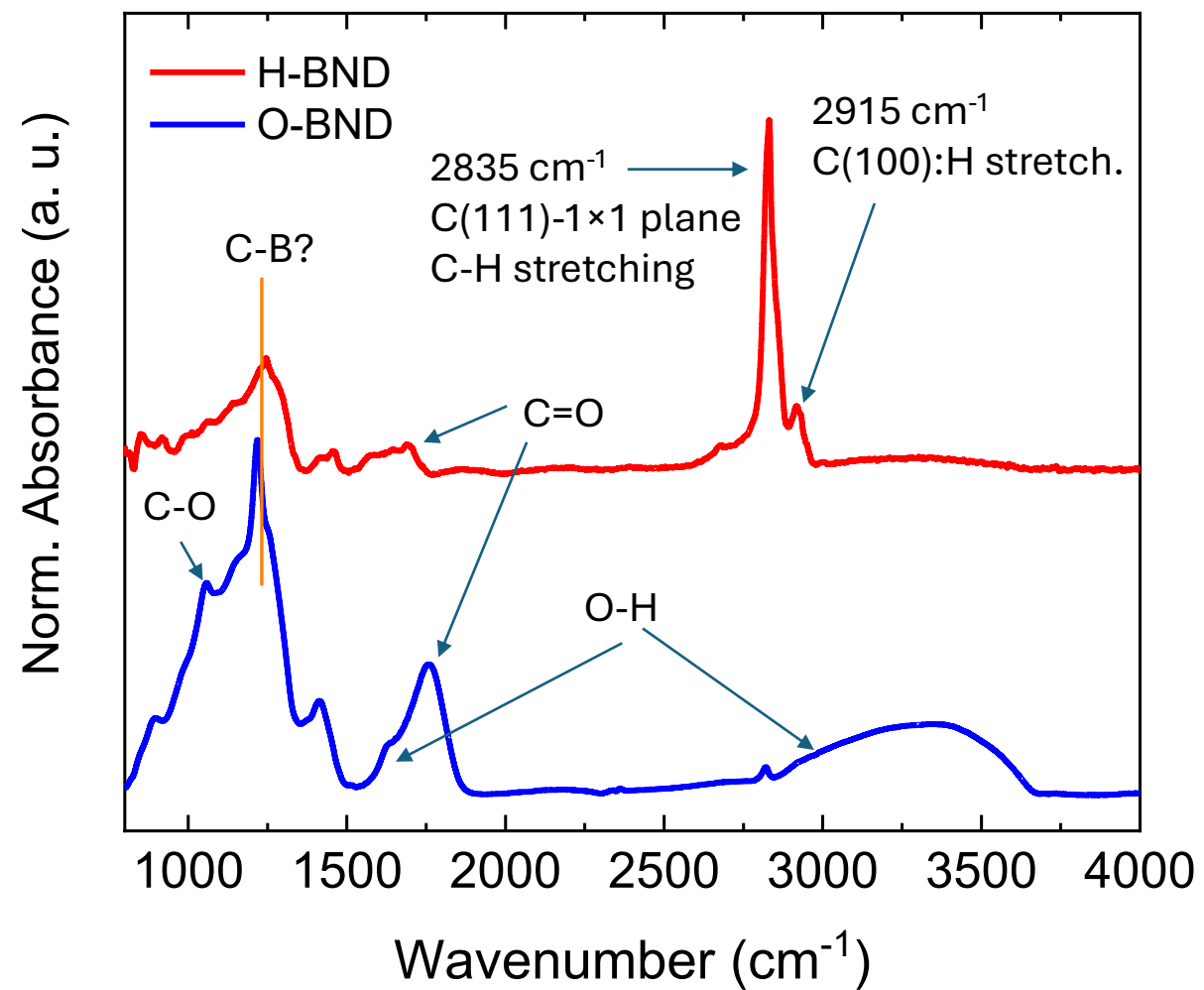




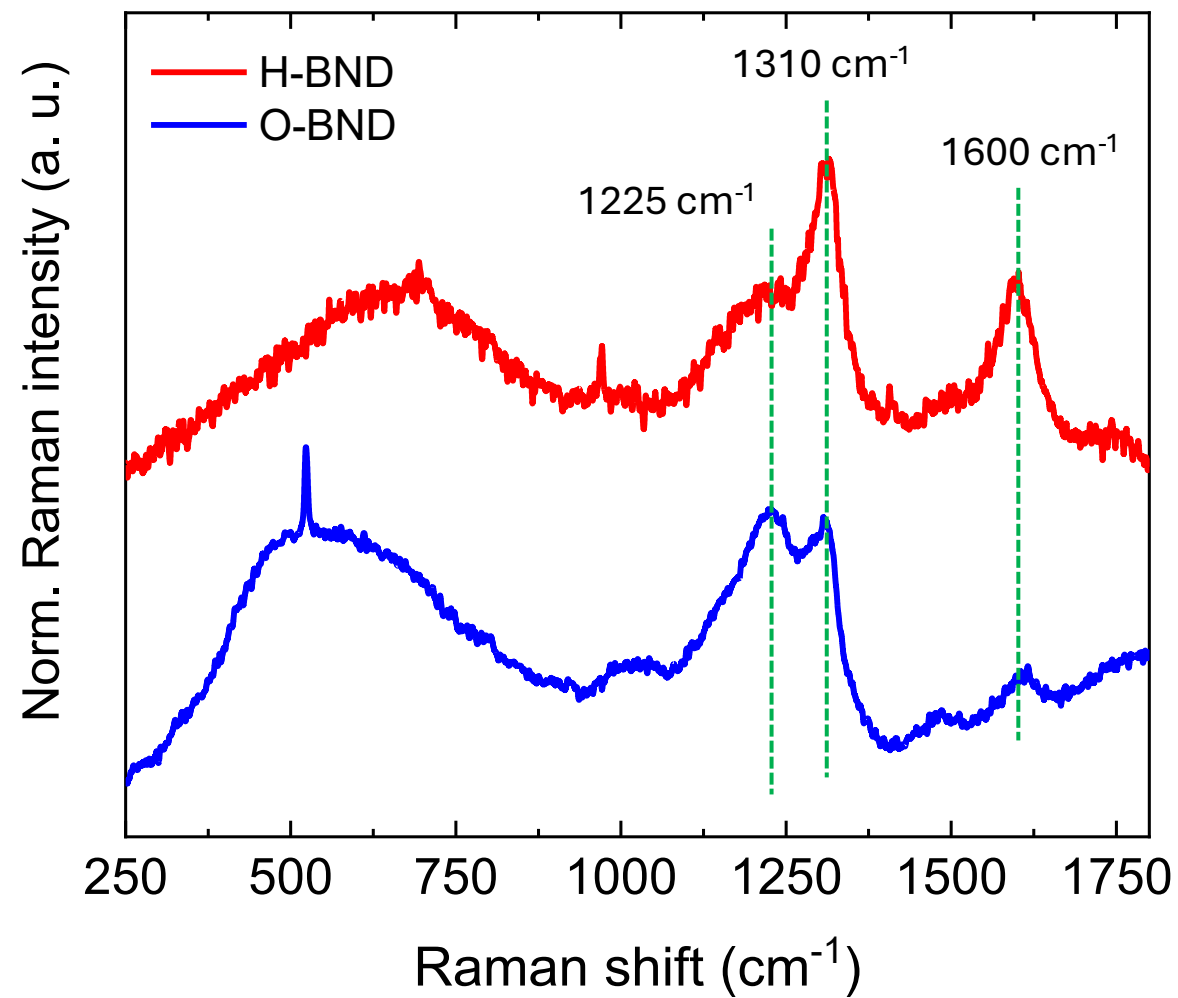
I



(a)



(b)

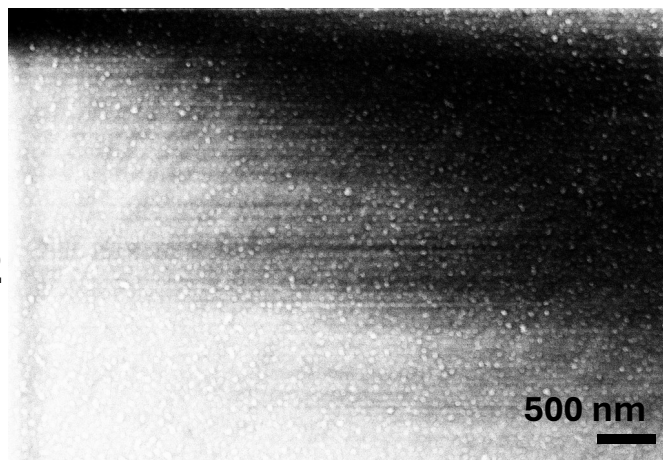




(a)

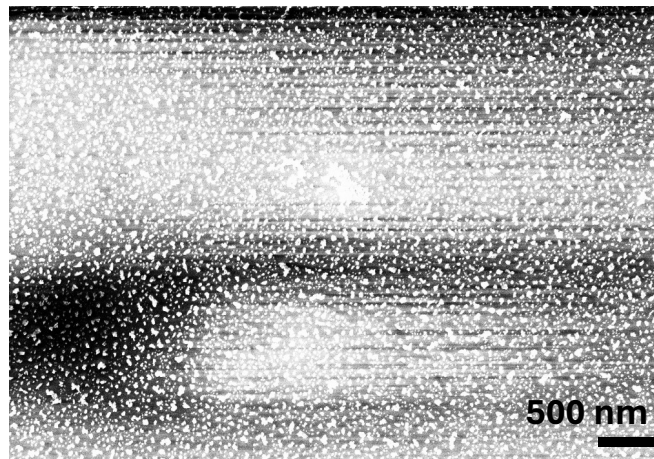
H-DND seeding

$\text{SiO}_2$



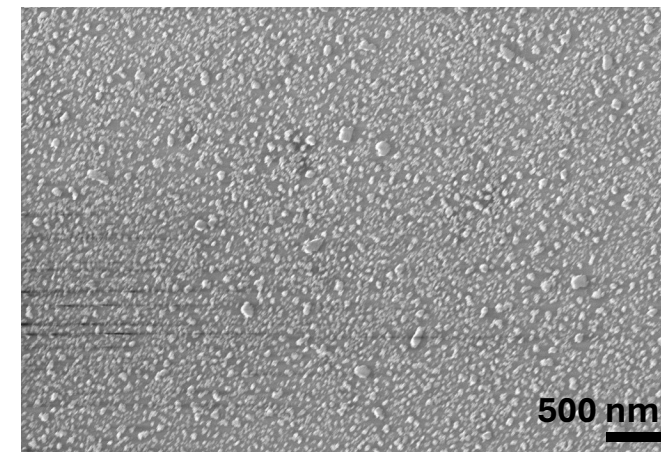
(b)

TD\_HPHT H-ND seeding

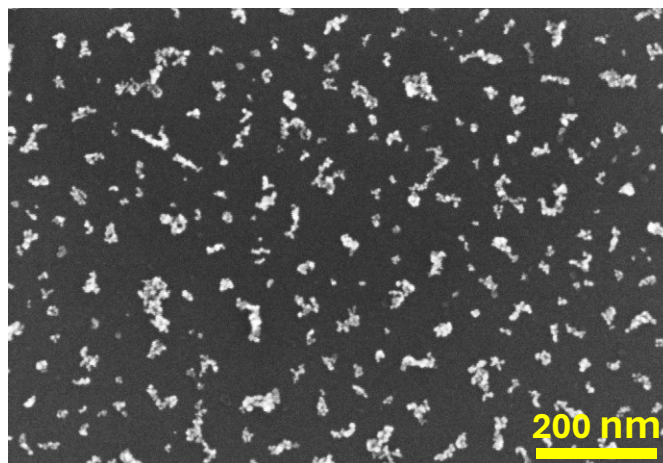


(c)

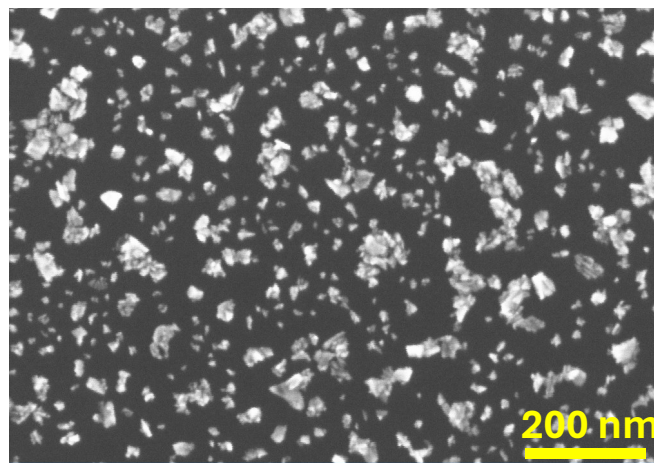
H-BND seeding



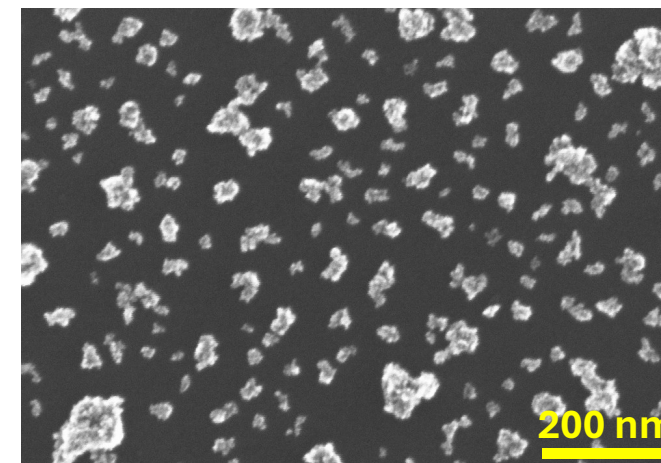
$\text{Si/SiO}_x$



coverage = 13%



coverage = 25%



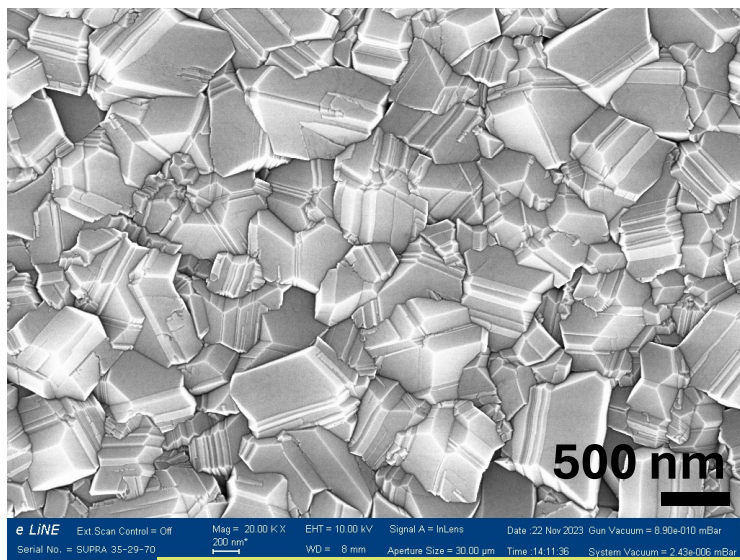
coverage = 24%



### H-DND nucleation

(a)

900 nm

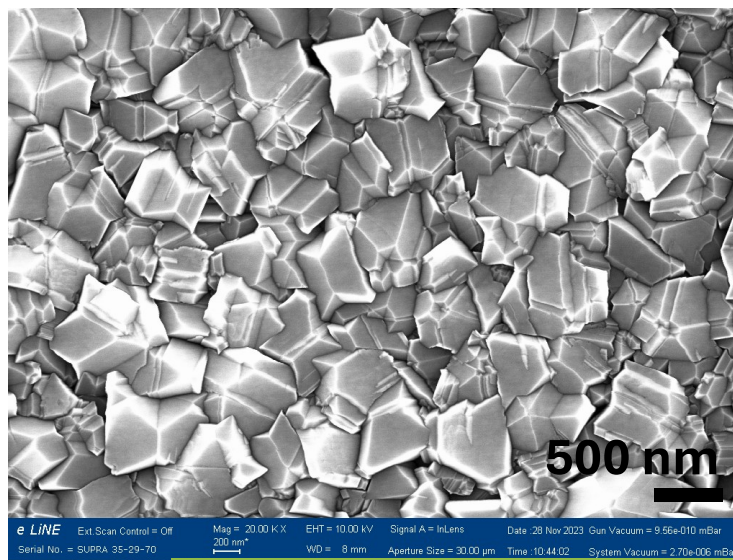


$R_s = 6200 \text{ ohm/sq}$

### TD\_HPHT H-ND nucleation

(b)

1100 nm



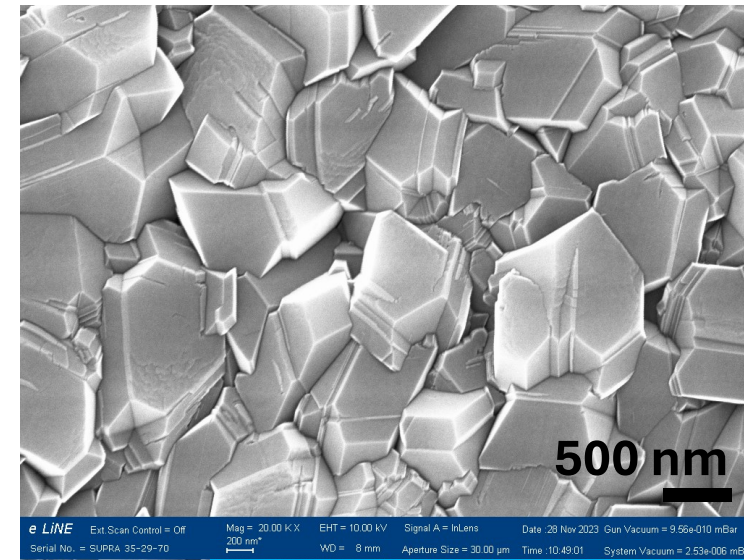
>

$R_s = 1700 \text{ ohm/sq}$

### H-BND nucleation

(c)

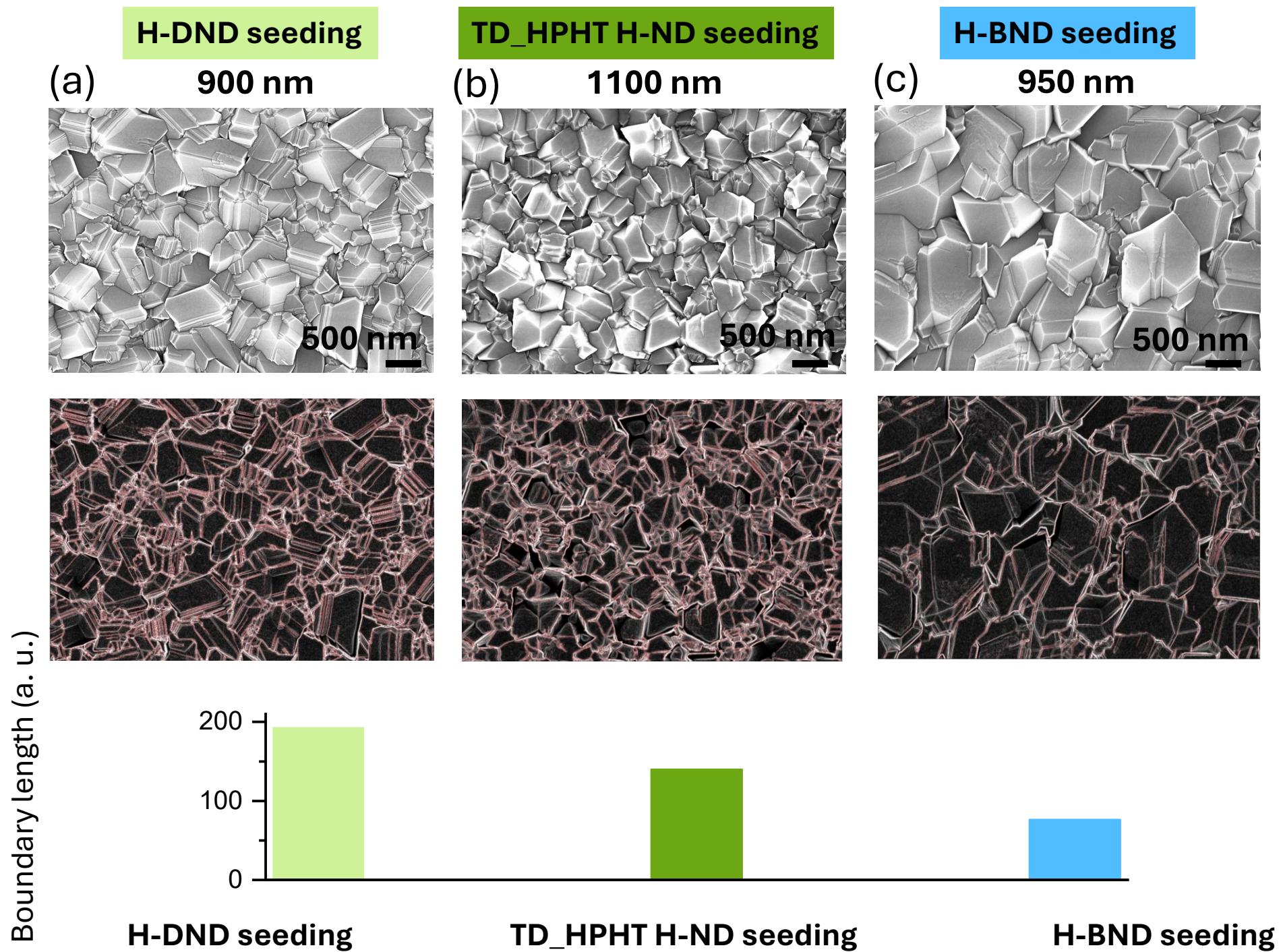
950 nm



>

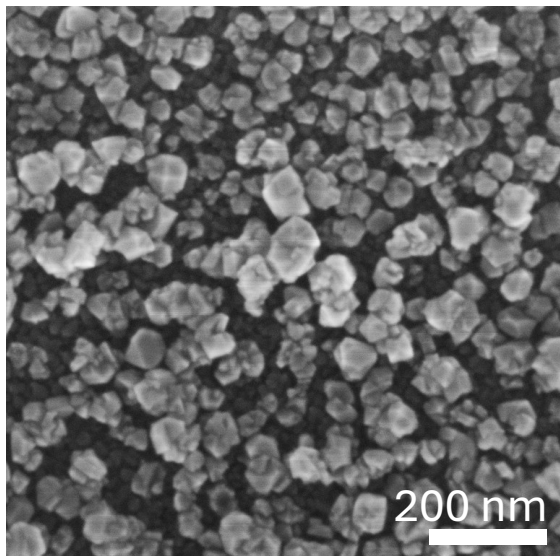
$R_s = 440 \text{ ohm/sq}$



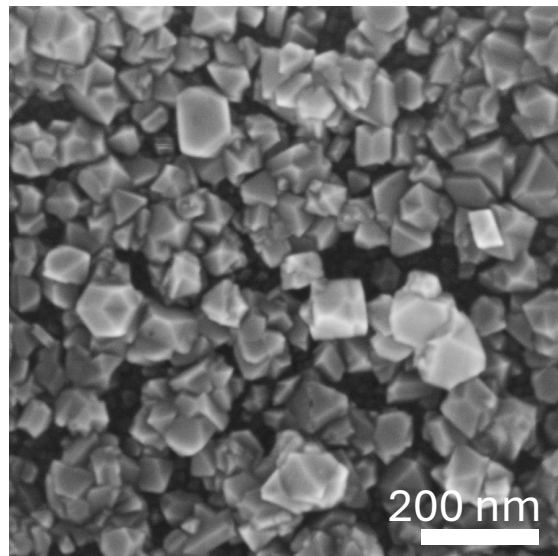




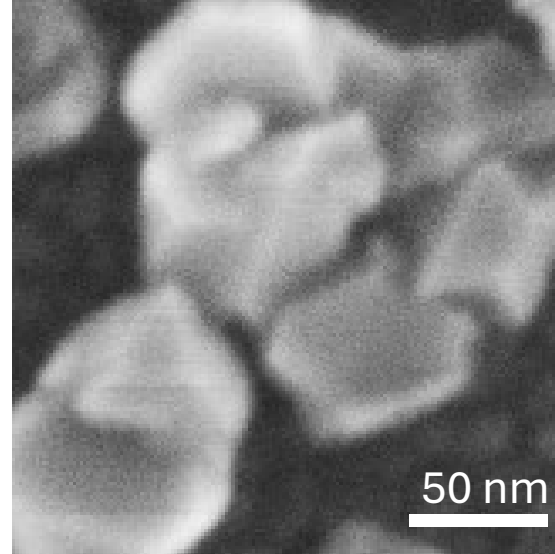
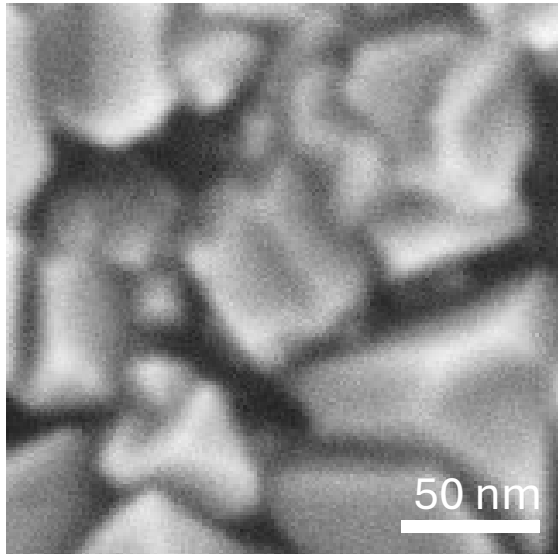
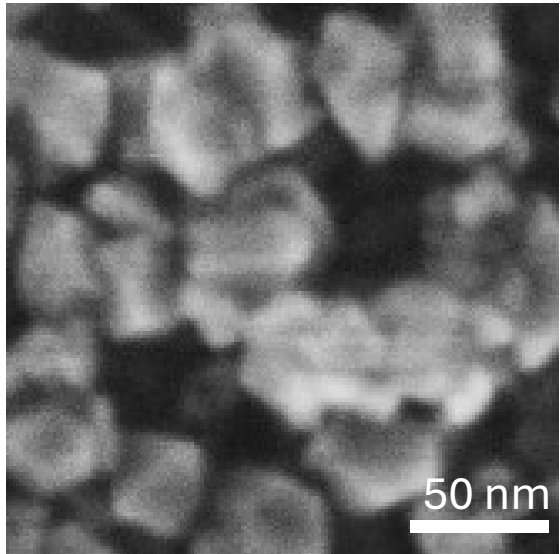
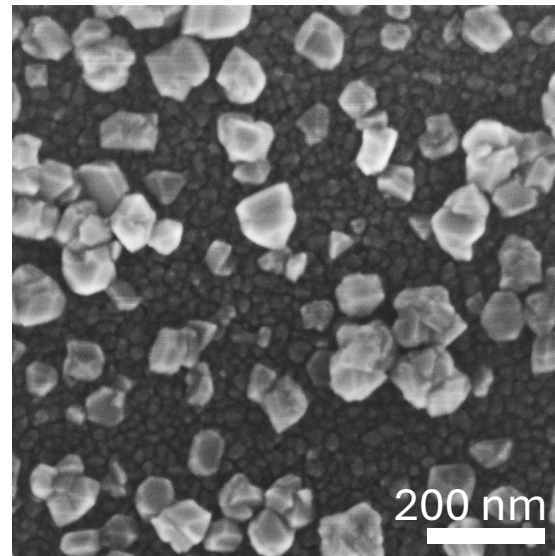
**H-DND seeding**



**TD\_HPHT H-ND seeding**

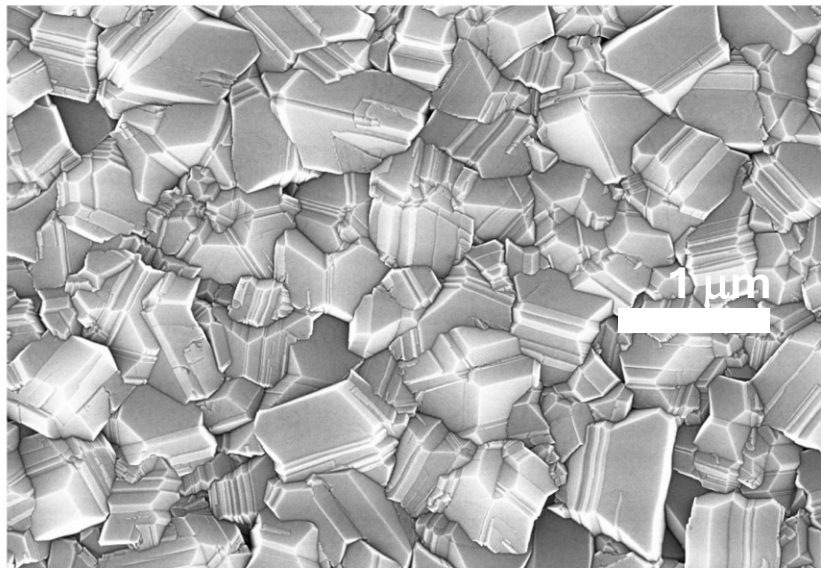


**H-BND seeding**

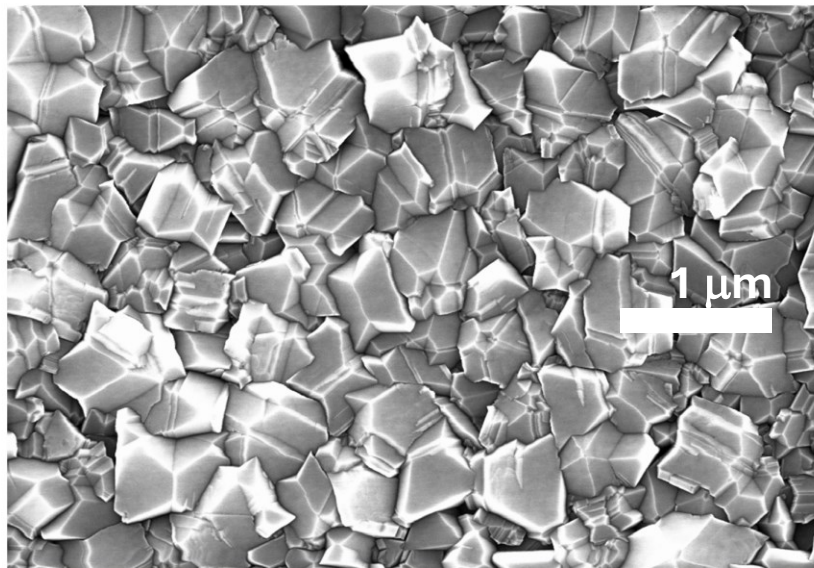


BDD, 3000 ppm on fused silica

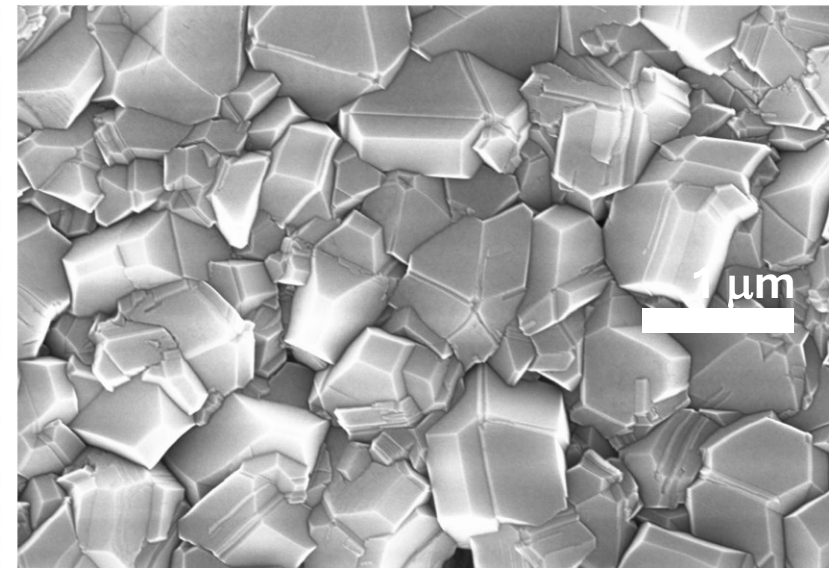
H-DND seeding



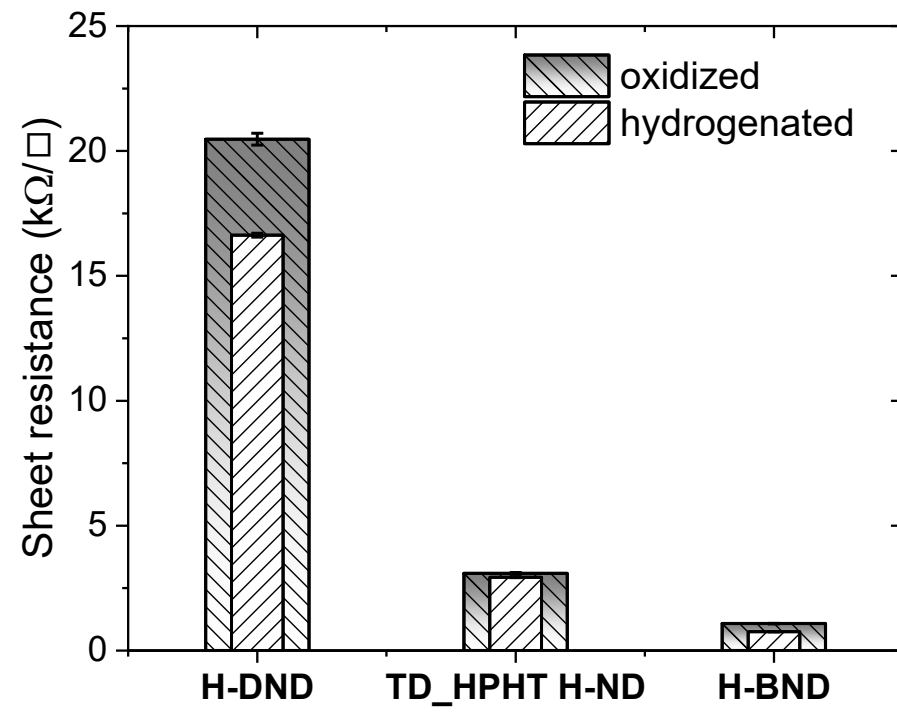
TD\_HPHT H-ND seeding



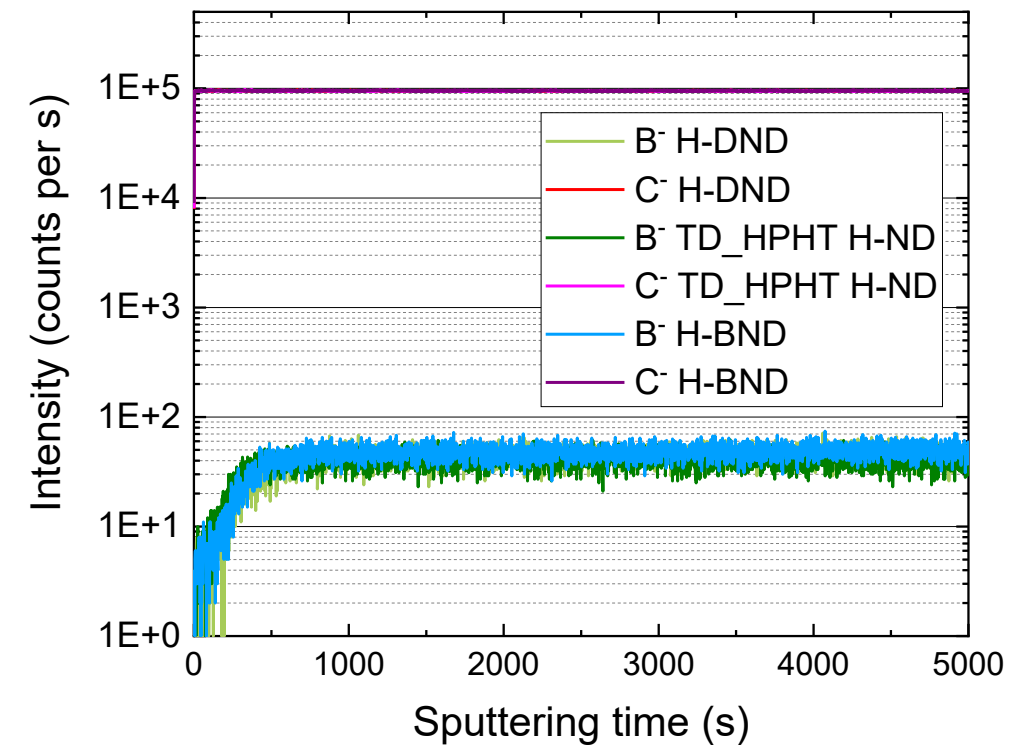
H-BND seeding



(a)



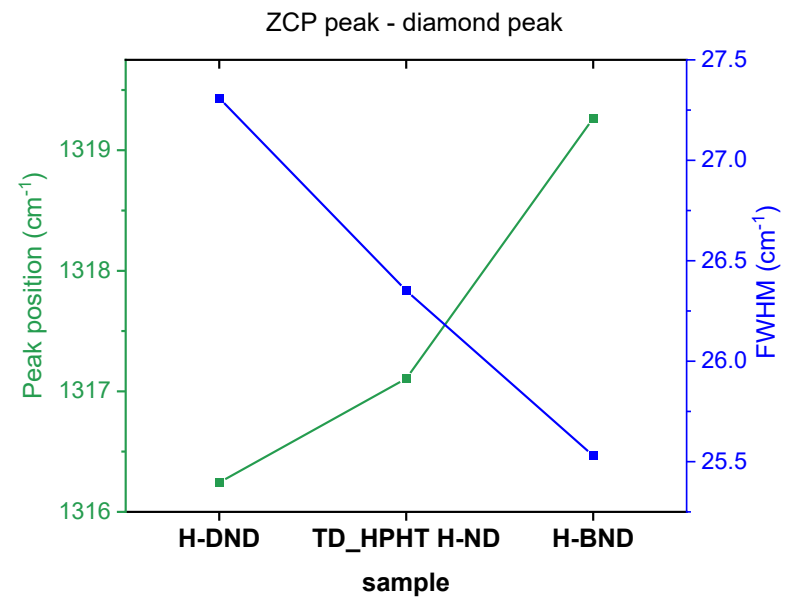
(b)







(a)



(b)

