

Supplementary Information

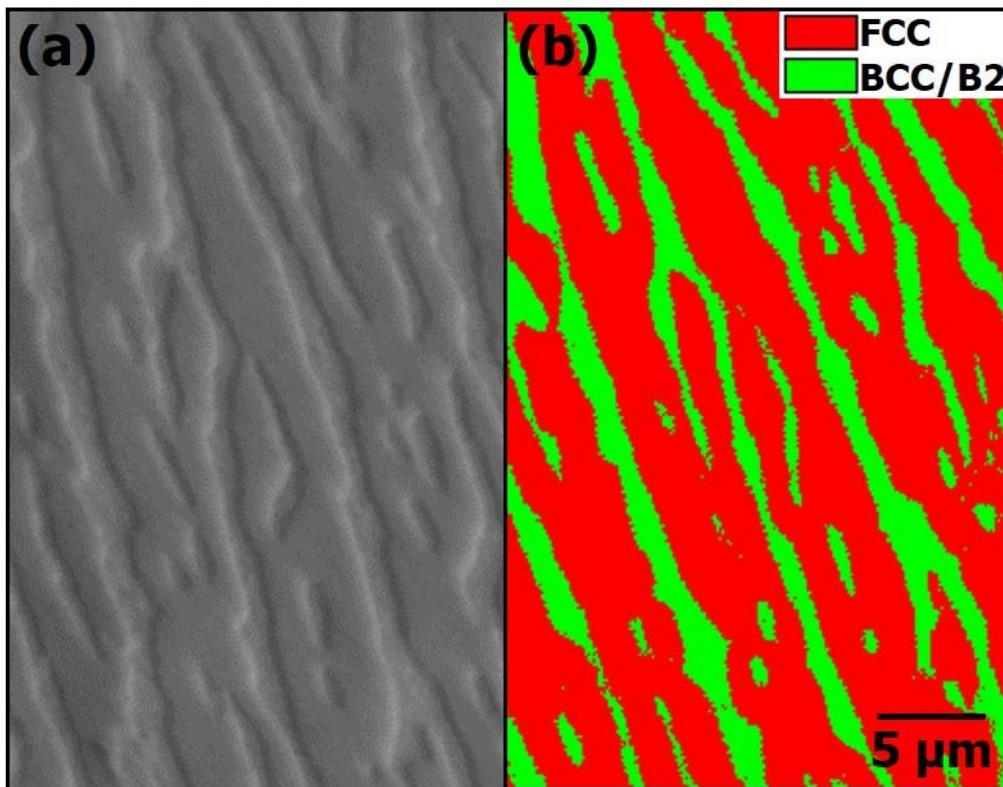


Figure S1 Representative EBSD results of AR sample; (a) SEM image and (b) phase map.

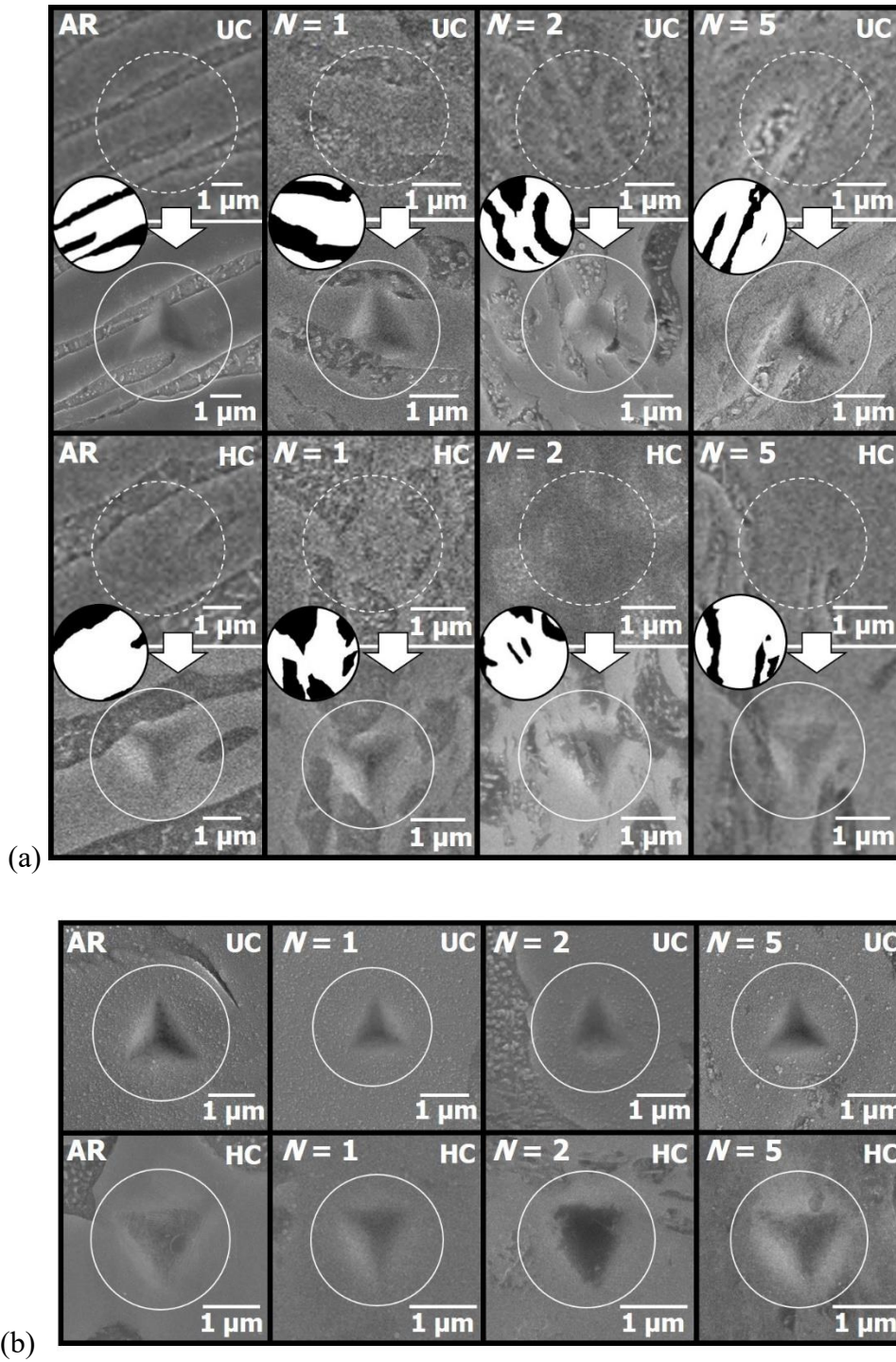


Figure S2 SEM images of uncharged (UC) and hydrogen-charged (HC) samples (a) before and after the indentation of $P_{\max} = 10$ mN and (b) after the indentation of $P_{\max} = 5$ mN only in the FCC phase.