Influence of RF(N_2) plasma conditions on the chemical interaction and stability of activated nitrogen with polycrystalline diamond surfaces: a XPS, TPD and HREELS study

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Highlights

- Produced low damage nitride diamond surfaces by exposing to RF(N_2) plasma
- A neutralizer was used at the exit of the plasma source to decrease the active species energy
- HREELS measurements confirmed the crystalline quality of nitride diamond surfaces
- Nitrogen surface species thermal stability is lower than the bulk diamond