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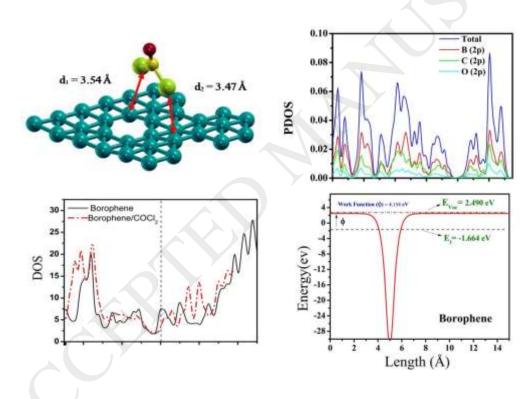
ACCEPTED MANUSCRIPT

A new flatland buddy as toxic gas scavenger: a first principles study

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Graphical Abstract



Highlights:

- Sensing behaviour of highly anisotropic borophene is investigated.
- Borophene interaction with toxic gases: phosgene and carbon monoxide.
- Structural and electronic properties of pristine and gas adsorbed borophene.
- Change in the work function of borophene over adsorption.

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