With the Same Clar Formulas, Do the Two-dimensional Sandwich Nanostructures X-Cr-X (X=C$_4$H, NC$_3$ and BC$_3$) Behave Similarly?

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**Figure S1**: Calculated electronic band structure of isolated 2D (a) C₄H, (b) NC₃ and (c) BC₃ monolayers using PBE (black lines) and hybrid HSE06 (blue lines) functionals.
Figure S2: The electron density isosurfaces for VBM and CBM of the NM phase of AA stacking-H1 (a) C$_4$H-Cr-C$_4$H and (b) NC$_3$-Cr-NC$_3$. The isovalue is 0.001 au.