

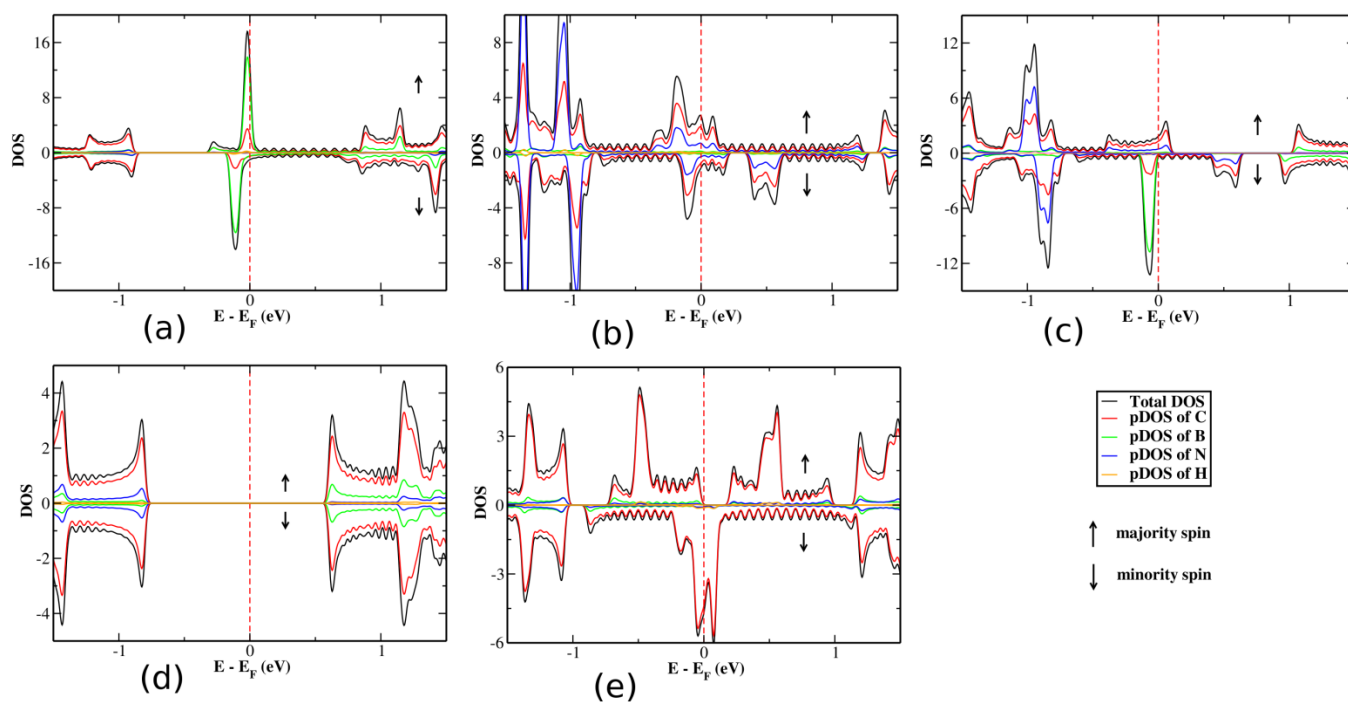
## Supporting Informations

### Title of the Article:

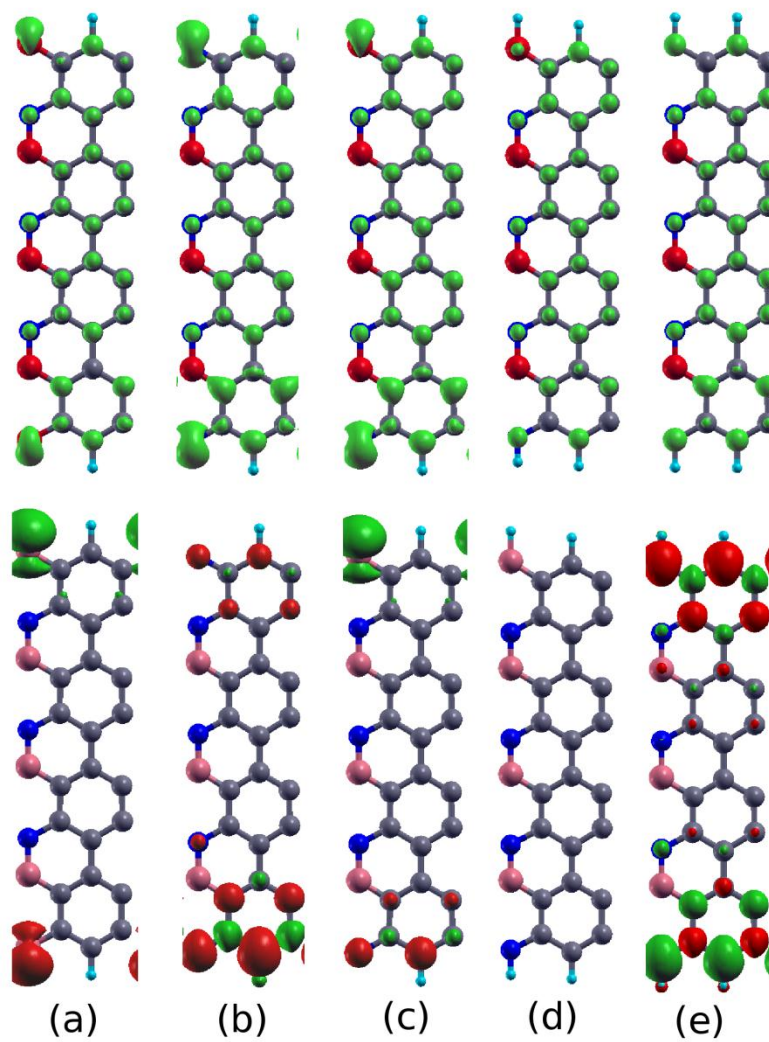
Effect of Edge States on the Electronic, Magnetic and Transport Properties of BN-Fused Polyacene Zigzag Nanoribbons

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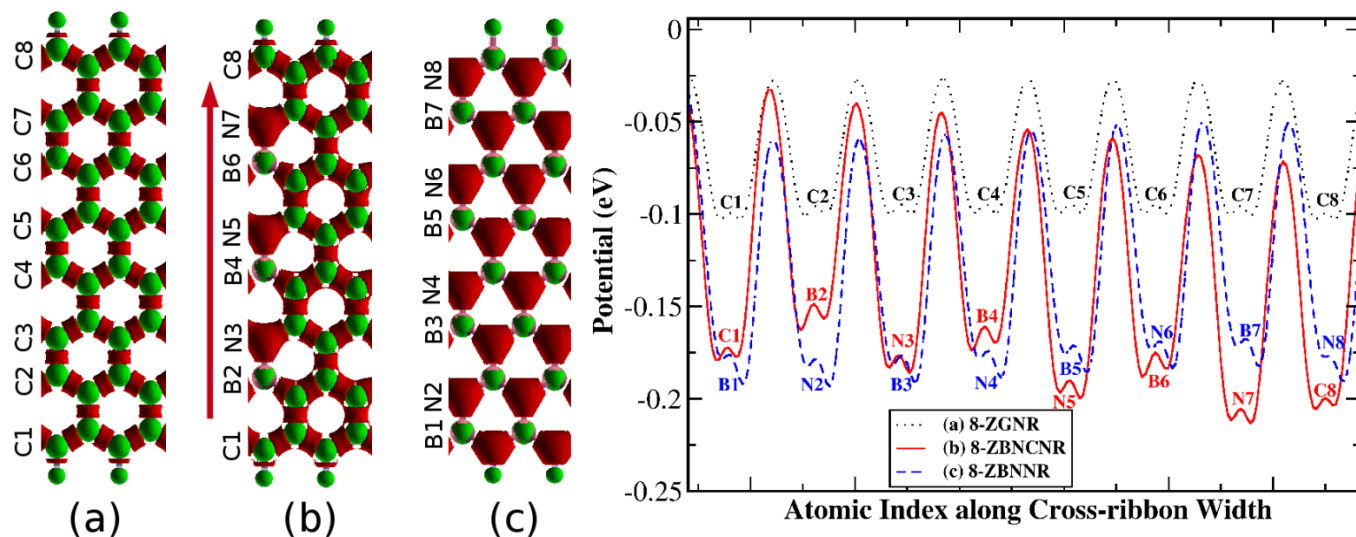
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**Figure S1:** Spin polarized total electronic density of states (DOS) and projected density of states (pDOS) for various 8-ZBNCNRs with different edge geometries. Individual DOS corresponds to the structure as shown in Fig. 1. The Fermi level is set to zero of energy.



**Figure S2:** Local density of states (top panel) and spin density (bottom panel) of various 8-ZBNCNRs.



**Figure S3:** Total charge density distribution (top panel) for the pristine 8-ZGNR (a), H-passivated C-edged 8-ZBNCNR (b) and pristine 8-ZBNNR (c) and the electrostatic potential (right panel) averaged over yz plane (x-axis: cross-ribbon direction) of these three nanoribbons.