

Supplementary Information for

Computational design of graphitic carbon nitride photocatalysts for water splitting

Gareth O. Hartley,^{a,b} Natalia Martsinovich^a

^a Department of Chemistry, University of Sheffield, Brook Hill, Sheffield, S3 7HF, United Kingdom

^b Department of Materials, University of Oxford, Parks Road, Oxford, OX1 3PH, United Kingdom

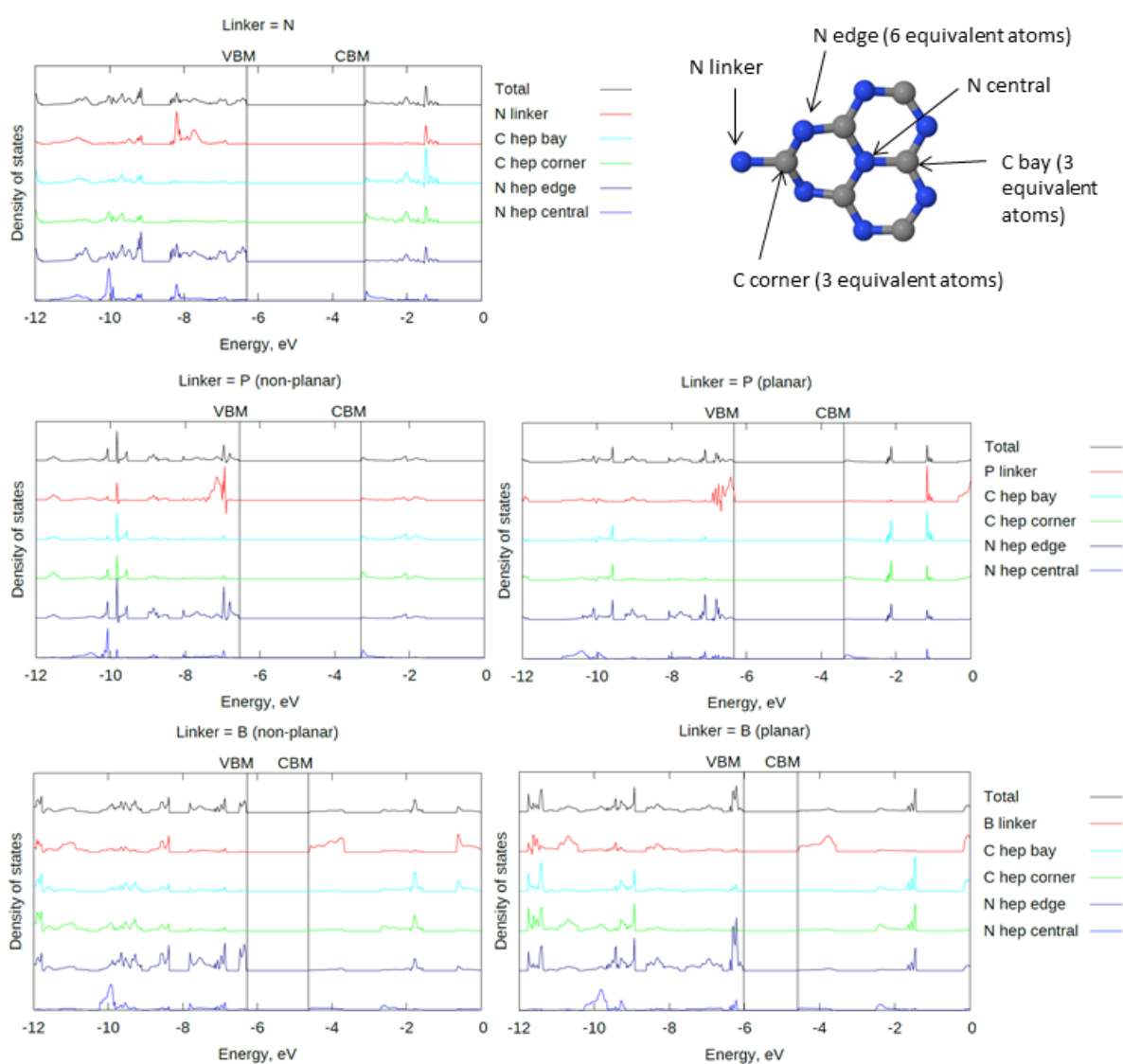


Figure S1. Projected densities of states for N-, P- and B-linked graphitic carbon nitride structures. Atom types (N central, edge and linker, C bay and corner) are indicated. The zero energy is the energy of electron in vacuum.

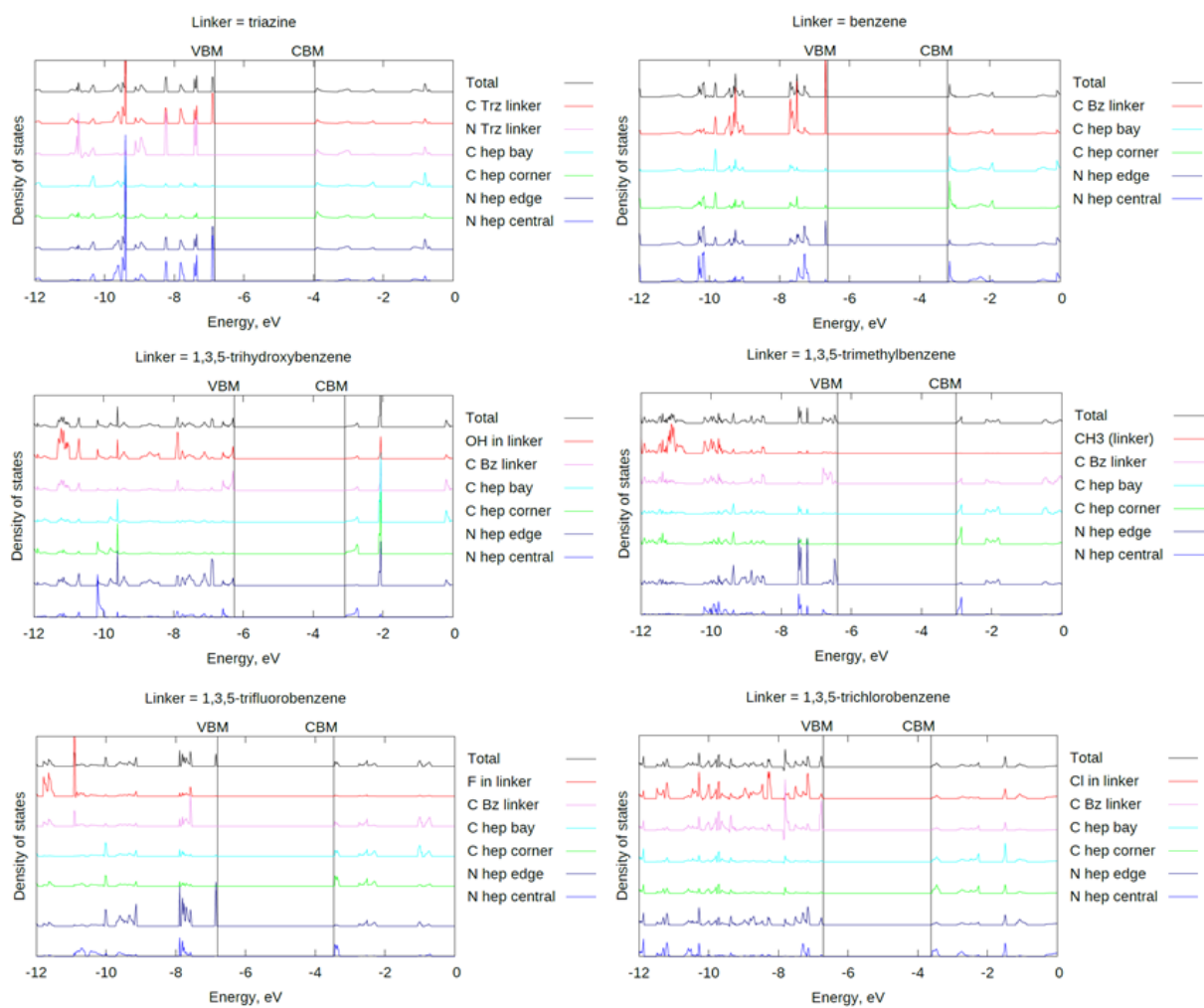


Figure S2. Projected densities of states for triazine-, benzene- and substituted benzene-linked graphitic carbon nitride structures. The zero energy is the energy of electron in vacuum.

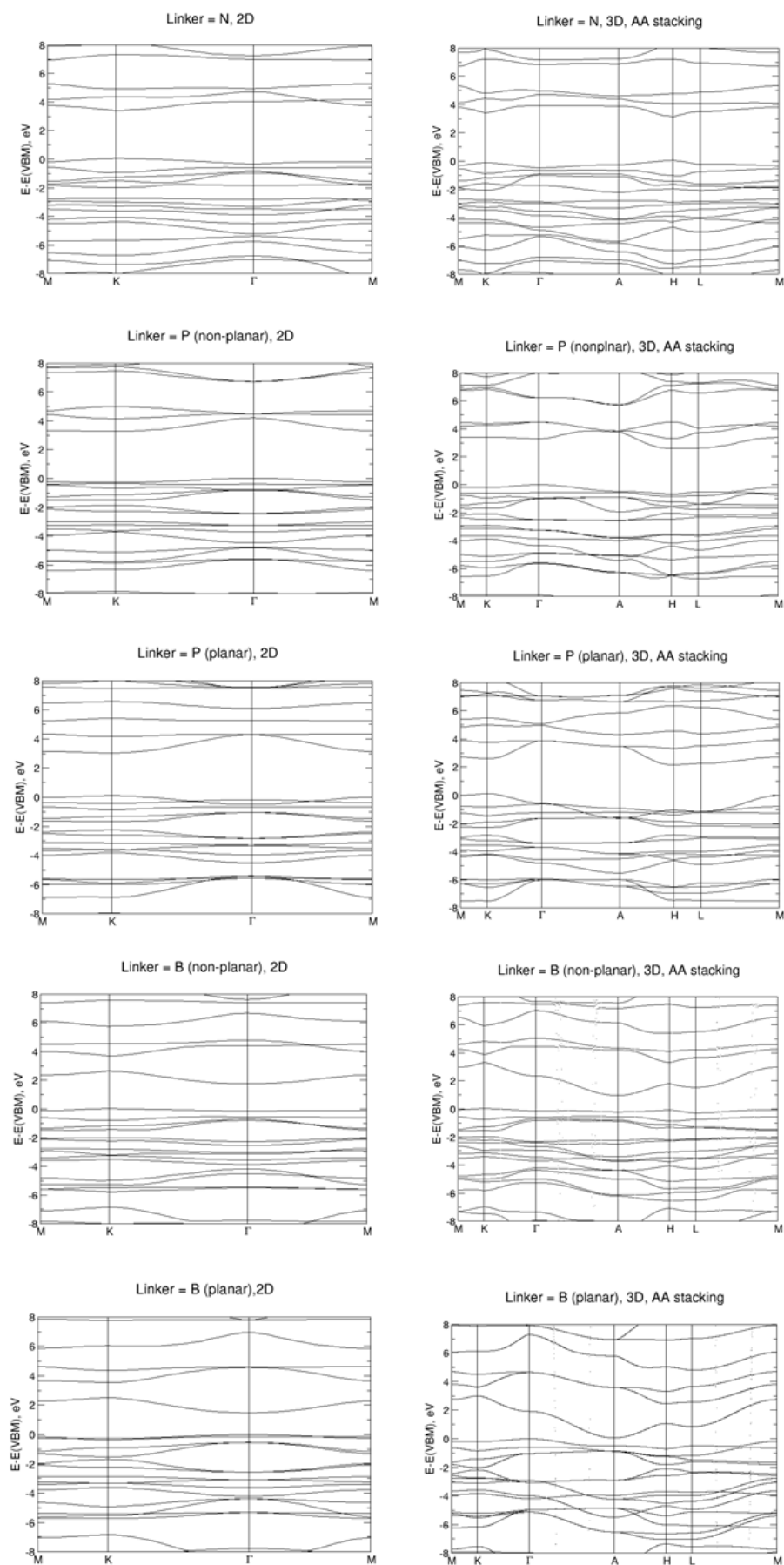


Figure S3. Band structure plots for N-, P- and B-linked graphitic carbon nitrides (2D and 3D AA-stacked structures). The zero energy is at the top of the valence band.

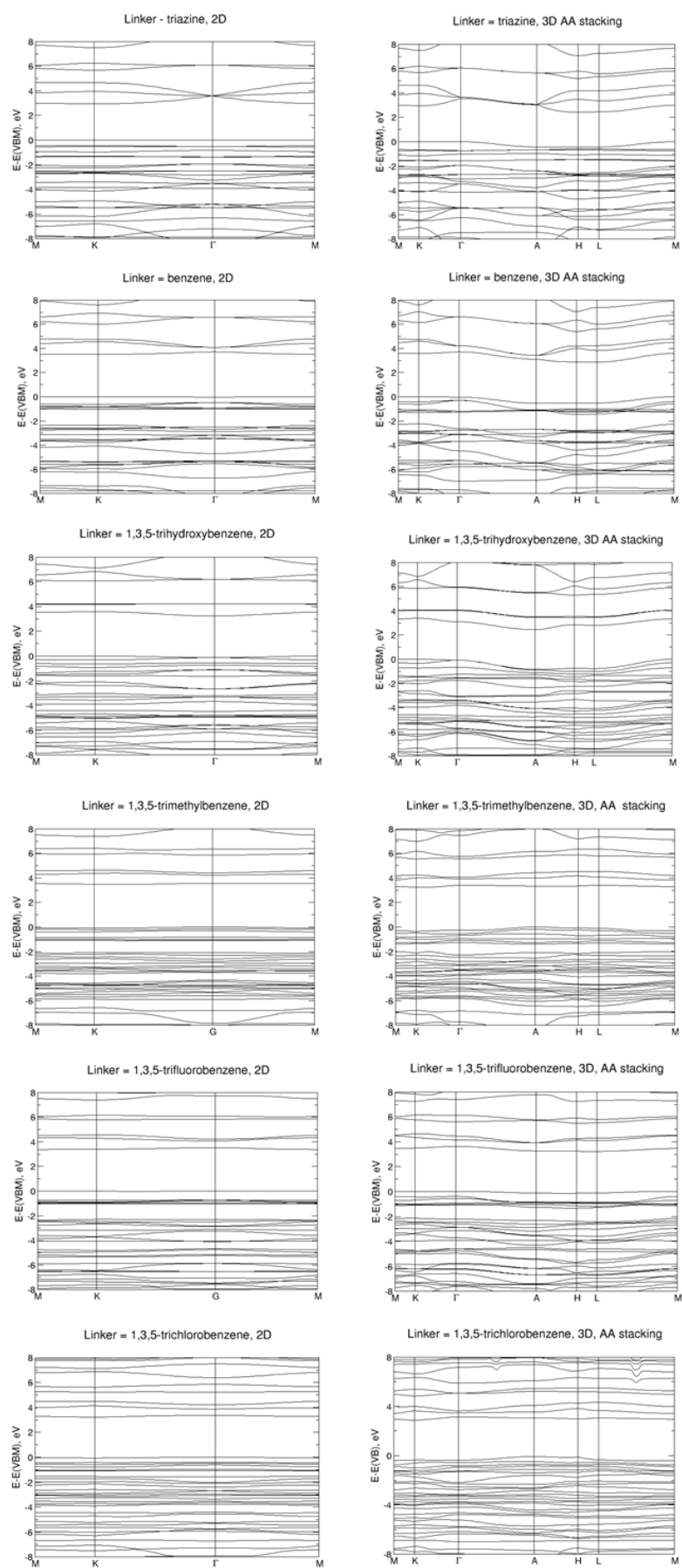


Figure S4. Band structure plots for triazine-, benzene- and substituted benzene-linked graphitic carbon nitrides (2D and 3D AA-stacked structures). The zero energy is at the top of the valence band.