

## Electronic Supporting Information

# Understanding the Non-covalent interaction mediated modulations to the electronic structure of quasi-zero-dimensional graphene nanoflakes

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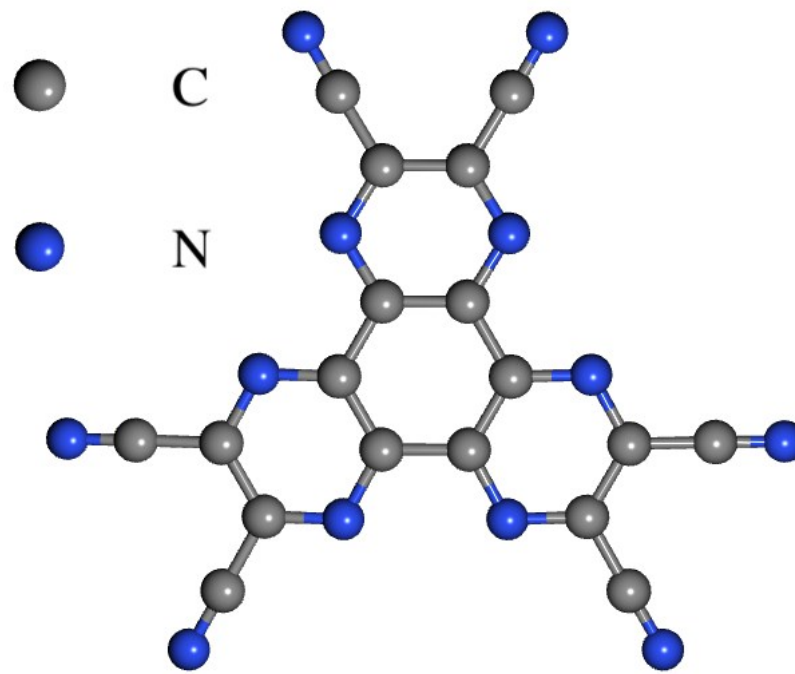
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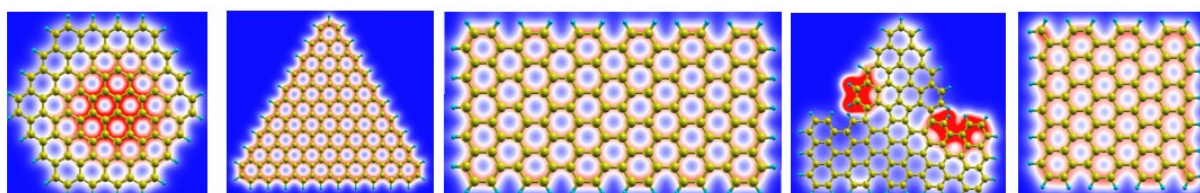
- S1 Pictorial representations of HATCN structure
- S2 Computed 2D charge density distribution contour maps
- S3 Computed density of states (DOS) for the five different GNF-HATCN nanosystems
- S4 Computed total magnetization values for the five GNF-HATCN composite systems
- S5 Computed differential charge density (DCD) distribution maps

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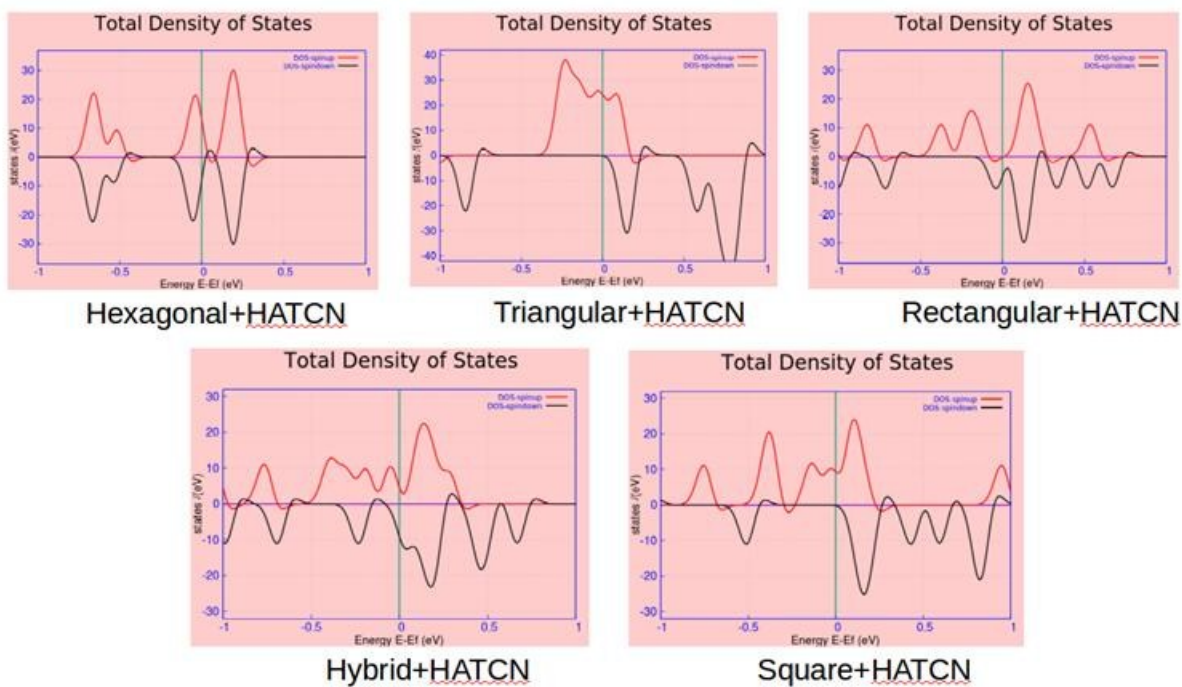
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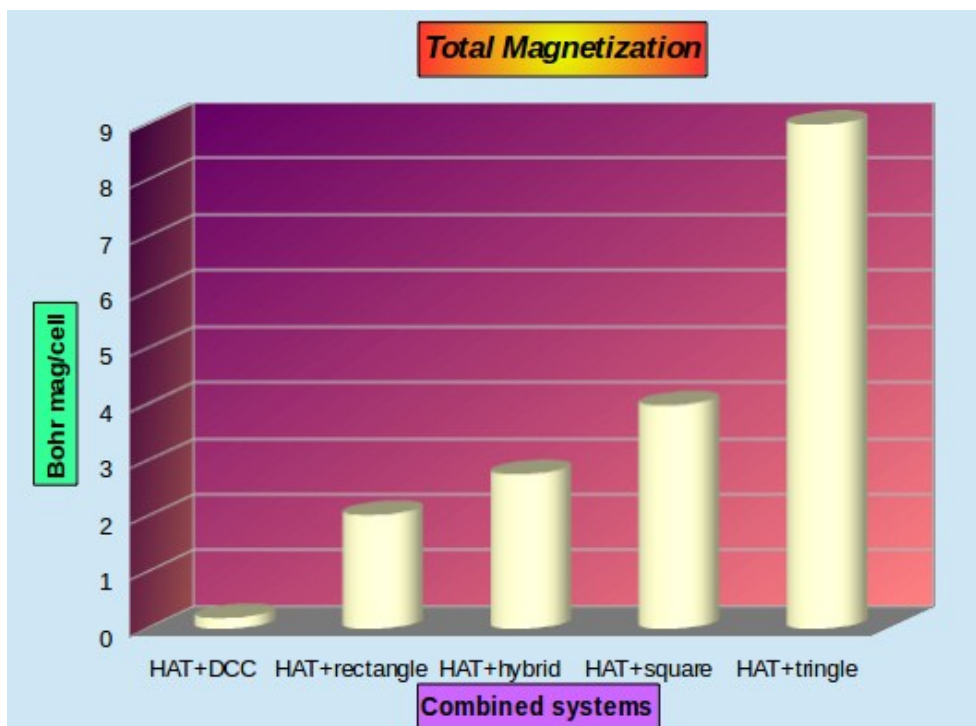
**Figure S1:** Pictorial representation of the hexaazatriphenylene-hexacarbonitrile (HATCN) molecule.



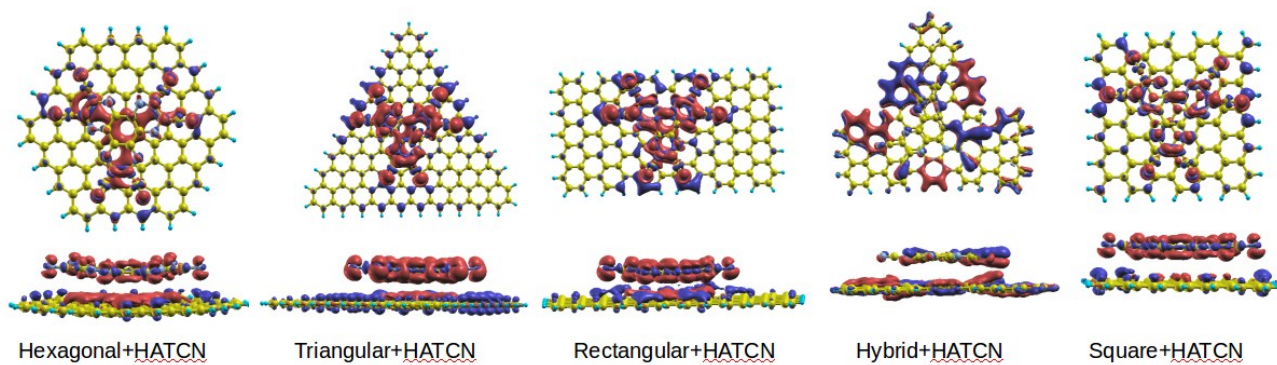
**Figure S2:** Computed 2D charge density distribution contour maps for the five GNF systems. Here the red and blue zones represent the gradual decrease in the electronic densities.



**Figure S3:** The graphical representations of the computed density of states (DOS) for the five different GNF-HATCN nanosystems. Here, the Fermi level is sets at zero.



**Figure S4:** Computed total magnetization values for the five GNF-HATCN composite systems.



**Figure S5:** Computed differential charge density (DCD) distribution maps for the five GNF-HATCN combined systems. Here the red and blue zones represent the gradual increase and decrease in the electronic charges, respectively.