## **Supporting Information**

Structural, optical and hydrogen adsorption properties of  $B_9/\text{metal-}B_9$  clusters: A Density Functional Theoretical Study

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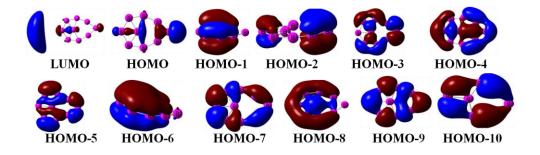


Figure S1 Molecular Orbital representations, involved in delocalization and structural framework for  $B_9^{3-}$  conformer-A, are given.

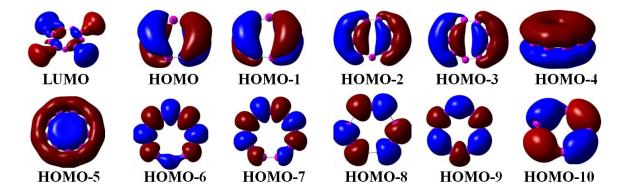


Figure S2 Molecular Orbital representations, involved in delocalization and structural framework for  ${\rm B_9}^{3-}$  conformer-C are given.

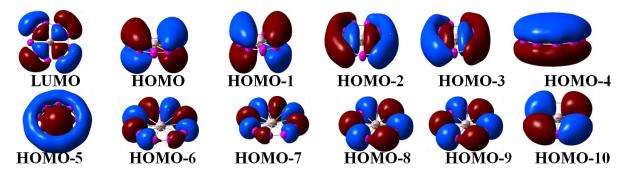


Figure S3 Molecular Orbital representations, involved in delocalization and structural framework for  $GM@B_9$  are given.