ELECTRONIC SUPPORTING INFORMATION (ESI)

An insight into $C_{sp^2}$–H···π hydrogen bonds and stability of complexes formed by acetylene and its substituted derivatives with benzene and borazine

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Figure S1. Topological shapes of the complexes at the MP2/aug-cc-pVDZ level of theory
Figure S2. The relationship between $G(r)$ and $V(r)$

\[ V(r) = -1.02G(r) + 9.59 \]
\[ R^2 = 0.99 \]

Figure S3. Relationship of kinetic energy density with respect to $R(H \cdots \text{ring})$

\[ G(r) = 0.01R(H \cdots \text{ring}) + 0.03 \]
\[ R^2 = 0.97 \]

Figure S4. Relationship of potential energy density with respect to $R(H \cdots \text{ring})$

\[ V(r) = 0.01R(H \cdots \text{ring}) - 0.03 \]
\[ R^2 = 0.97 \]
Figure S5. Diagram of total electron density for the obtained complexes (isovalue = 0.005 au)