

Copy of a printed diagram referenced as "Carbon atoms 'prepared' for binding in the ethylene molecule"

Contributors

Fuller, Watson, 1935-

Publication/Creation

November 1963

Persistent URL

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trigonally, and the overlapping orbitals A_1 and B_1 are paired: $A_2, A_3, B_2,$ and B_3 are paired with four overlapping hydrogens.

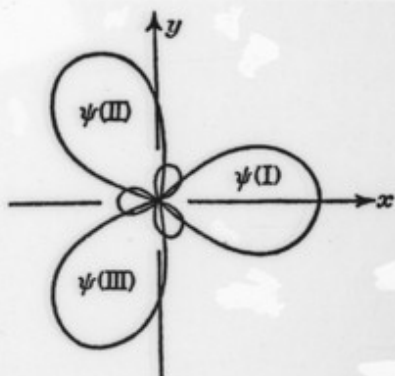


FIG. 8.4. The three trigonal sp^2 -hybrids.

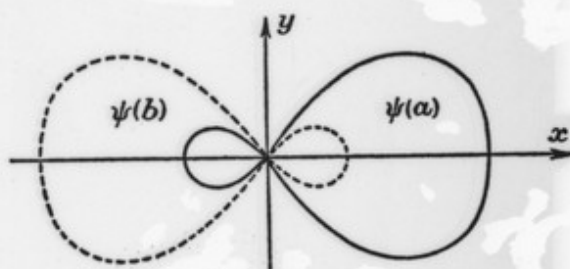
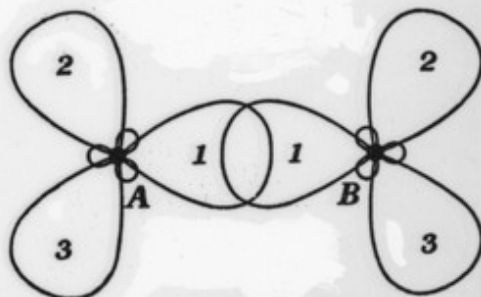


FIG. 8.5. The two digonal sp -hybrids.



The carbon atoms 'prepared' for binding in the ethylene molecule $\text{CH}_2=\text{CH}_2$. The π orbitals on A and B are not shown to avoid confusion. They are directed perpendicularly to the plane of the paper.

This gives six σ -bonds, and there remain the two unmixed p_z a.o.'s of A and B . These must be paired to form a π -bond, as in Fig.