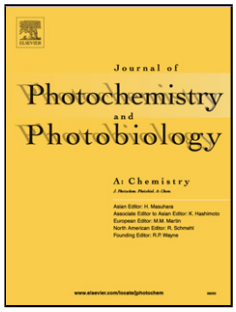

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Halogen-Bond-Mediated Atom Transfer Radical Addition of Perfluoroalkyl Iodides to Alkynes under Visible Light Irradiation

Dedicated to Professor Chen-Ho Tung on the occasion of his 80th birthday

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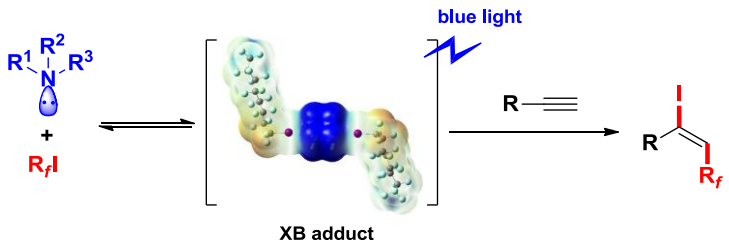
Graphical abstract



Highlight

Halogen bonding (XB) is an attractive noncovalent interaction between terminal halogen atoms and Lewis bases. Halogen bonding itself has been known for a long time and has garnered dramatically increased interest from chemists exploring crystal engineering, supramolecular chemistry and drug design since the early 1990s. Unlike another common intermolecular noncovalent interaction, hydrogen bonds playing an important role in noncovalent catalysis, halogen bonds, in contrast, have so far found very limited applications in organic synthesis. Herein we have