

A Novel Synthesis of Substituted Naphthalene

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Naphthalenes have been an interesting structural class of compounds by pharmacologists for many years, which have found many uses in the field of pharmaceuticals. Due to its wide applications in the field of pharmaceuticals, this group of compounds has attracted our attention. Recently, we developed an efficient method to synthesize highly substituted naphthalenes. A series of 2-phenyl naphthalenes, bearing electron-donating and electron-withdrawing substituents, were synthesized from 4,5-diphenyl-penta-2,4-dienoyl azides via the iodine-catalyzed thermal cyclization. The detailed mechanism was also discussed.