Organo-selenium compounds

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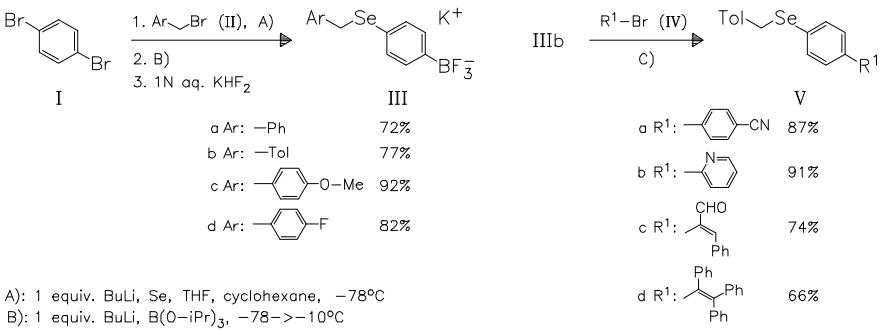
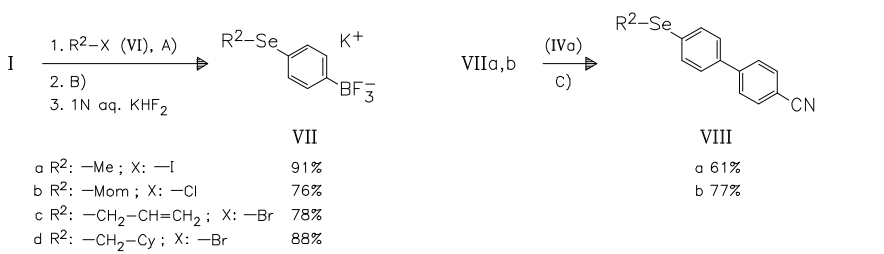
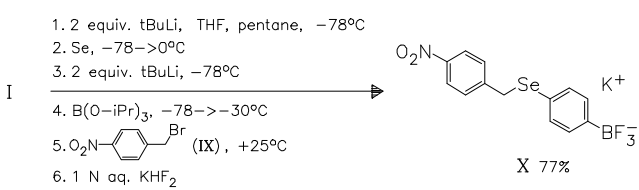
A Facile One-Pot Preparation of Organoselanyltrifluoroborates from Dihalobenzenes and Their Cross-Coupling Reaction. — A facile multicomponent reaction of dihalobenzenes like (I) with selenium powder and electrophilic halides (II) is presented, followed by one-pot construction of the trifluoroborate functionality to afford potassium organylselanylphenyltrifluoroborates (III) and (VII) in good yields. The reaction proceeds with a wide variety of electrophiles. The presence of strongly electron-withdrawing substituents like nitro or cyano at the benzyl halides, however, requires a sequential construction of the selanylphenyltrifluoroborates [cf. (X)]. Pd-catalyzed cross coupling reaction of the trifluoroborates with aryl and alkenyl bromides (IV) proceeds smoothly [cf. (V), (VIII)]. — (AHN, H. R.; CHO, Y. A.; KIM, D.-S.; CHIN, J.; GYOUNG, Y.-S.; LEE, S.; KANG, H.; HAM*, J.; Org. Lett. 11 (2009) 2, 361-364; Korea Inst. Sci. Technol., Gangneung 210, S. Korea; Eng.) — Mischke







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