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J. Fluorine Chem., 131 (2010) 812

Stimulation on the addition reactivity of fluorinated vinyl monomers—Facile carbon–carbon bond formation by the aid of fluorine substituents

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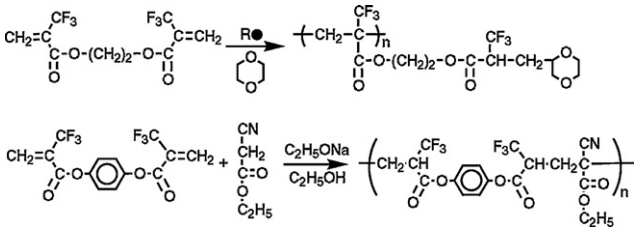
High addition reactivity of fluorinated vinyl compounds toward radical and anionic species was demonstrated to afford facile methods for carbon–carbon bond formation by the aid of fluorinated substituents. Some of the reactions are proved to be applicable to preparation of polymers by radical or anionic polyaddition reaction mechanism.



J. Fluorine Chem., 131 (2010) 829

Synthesis of β-amino-α-trifluoromethyl alcohols and their applications in organic synthesis

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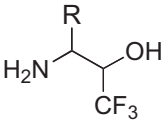
A comprehensive overview on methods applied for syntheses of β-amino-α-trifluoromethyl alcohols, including stereocontrolled variants, is presented. In addition, reported cases of the exploration of β-amino-α-trifluoromethyl alcohols for the preparation of trifluoromethylated peptidomimetics and other biologically active, fluorinated compounds are discussed. Attractive opportunities for their applications as organocatalysts are also presented.



J. Fluorine Chem., 131 (2010) 844

Synthesis and characterization of partially fluorinated ethers

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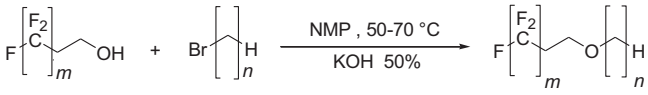
Partially fluorinated ethers are obtained, for instance, allowing 1H,1,2H,2H-perfluoro-1-alkanols to react with 1-bromoalkanes in the presence of a concentred aqueous solution of potassium hydroxide.



doi:10.1016/S0022-1139(10)00185-5

J. Fluorine Chem., 131 (2010) 852

1-Bromo-2-trifluoroacetylcyclobutenes as novel building blocks for the construction of trifluoromethyl substituted heterocycles. Part 2: Synthesis of trifluoromethyl substituted thiophenes, condensed with cyclobutene moieties

Andrey B. Koldobskii, Nikolay P. Tsvetkov, Ekaterina V. Solodova, Valery N. Kalinin

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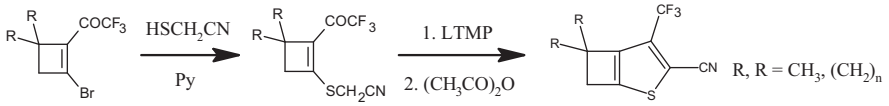

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Synthesis of *N*-aryl trifluoromethylarylketoimines by palladium-catalyzed Suzuki coupling reaction of *N*-aryltrifluoroacetimidoyl chlorides with aryl boronic acids

Chun-Lin Li, Mu-Wang Chen, Xing-Guo Zhang

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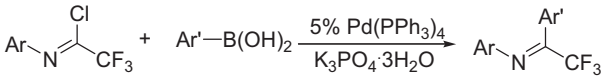
A highly efficient synthesis of *N*-aryl trifluoromethylarylketoimines by palladium-catalyzed Suzuki coupling reaction between *N*-aryltrifluoroacetimidoyl chlorides and aryl boronic acids is described.



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Synthesis and molecular structures of heptafluoropropylated fullerenes: $C_{70}(n\text{-}C_3F_7)_8$, $C_{70}(n\text{-}C_3F_7)_6O$, and $C_{70}(C_3F_7)_4$

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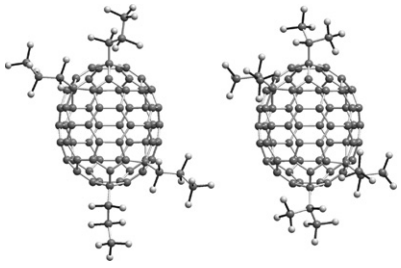
Ampoule reactions of C_{70} with *n*- and *i*-C_3F_7I followed by HPLC separation resulted in the isolation and subsequent crystallographic characterization of $C_{70}(n\text{-}C_3F_7)_8$-V, $C_{70}(n\text{-}C_3F_7)_6O$, $C_{70}(n\text{-}C_3F_7)_4$, and three isomers of $C_{70}(i\text{-}C_3F_7)_4$. Molecular structures of the new compounds are discussed in terms of addition patterns and relative energies of their formation.



J. Fluorine Chem., 131 (2010) 867

Reactions of fluoroalkanesulfonyl azides with pyrrole and its derivatives

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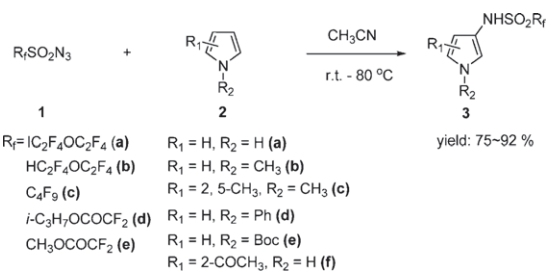
The reactions of fluoroalkanesulfonyl azides with pyrrole and its derivatives were studied. The reaction proceeded smoothly under mild conditions to give the 3-(fluoroalkanesulfonamido) pyrroles in good yield. The electron donating groups on the pyrrole core accelerated the reaction, while the electron withdrawing groups decelerated it. All the products were fully characterized by spectrum methods, and one of the products was further confirmed by X-ray diffraction analysis. A possible reaction mechanism for these reactions was proposed.



J. Fluorine Chem., 131 (2010) 873

1-Bromo-2-trifluoroacetylcyclobutenes as novel building blocks for the construction of trifluoromethyl substituted heterocycles. Part 3: Synthesis of trifluoromethylsubstituted pyridines, condensed with cyclobutene moieties

Andrey B. Koldobskii, Ekaterina V. Solodova, Ivan A. Godovikov, Pavel V. Verteletskii, Valery N. Kalinin

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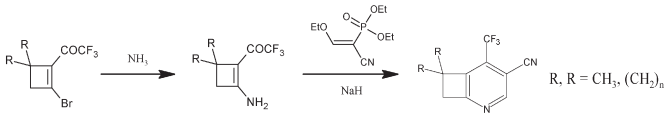

J. Fluorine Chem., 131 (2010) 879

An efficient, recoverable fluorous organocatalyst for direct reductive amination of aldehydes

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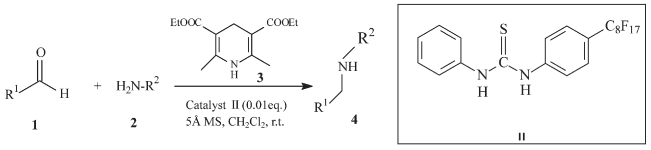
A commercially available perfluorooctyl aniline and phenyl isothiocyanate were reacted under mild conditions to give 1-[4-(perfluorooctyl)phenyl]-3-phenylthiourea as an analogue of thiourea-based organocatalyst. This fluorous organocatalyst was successfully employed to direct reductive amination of aldehydes. It could be readily separated from reaction product by fluorous solid phase extraction for direct use.



J. Fluorine Chem., 131 (2010) 883

Photoluminescence properties of new BF_2 complexes with pyrazolone ligands: Dependence on volume and electronic effect of substituents

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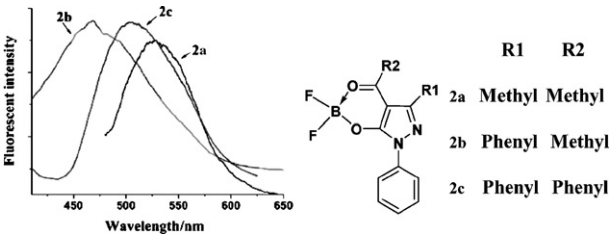
[b]*State Key Laboratory of Coordination Chemistry, Nanjing University, Nanjing 210093, China*



Novel fluorine–boron complexes with donor–acceptor architecture have been synthesized and well characterized. The substituents on the pyrazoline were found to have a significant impact on the luminescence properties. As a result, some significant differences in charge transfer modes were observed in the solid state among these complexes.