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Graphical Abstracts/J. Fluorine Chem. 128 (2007) 885–888

J. Fluorine Chem., 128 (2007) 889

Ethyl-4,4,4-trifluoroacetoacetate (ETFAA), a powerful building block for enantiopure chirons in trifluoromethyl-β-amino acid series

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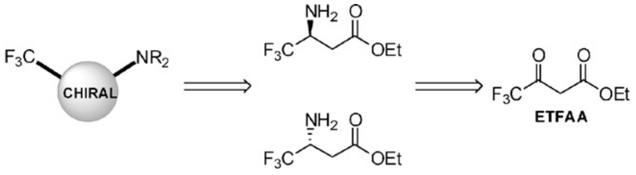

New transformations of ethyl-4,4,4-trifluoroacetoacetate (ETFAA) give access to a series of enantiopure chirons bearing both a trifluoromethyl group and an amino moiety. The key intermediate is obtained optically pure by a resolution procedure.

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Synthesis and reactions of 2-SF_5-butadiene

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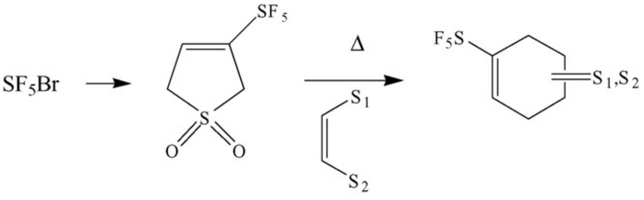
A stable and storable precursor of 2-SF_5-butadiene, 3-SF_5-3-sulfolen, has been synthesized and its reactivity studied with several olefinic compounds.



J. Fluorine Chem., 128 (2007) 902

The cross-aldol reaction of hexafluoroacetone (HFA) with ketones catalyzed by an acid

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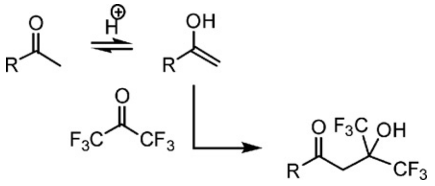

The cross-aldol reaction of hexafluoroacetone (HFA) and ketones using an acid catalyst occurred efficiently.

doi:10.1016/S0022-1139(07)00226-6

J. Fluorine Chem., 128 (2007) 910

Radical telomerization of 3,3,3-trifluoropropene with diethyl hydrogen phosphonate: Characterization of the first telomeric adducts and assessment of the transfer constants

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$$\mathrm{HP(O)\,(OC_2H_5)_2} + n\mathrm{H_2C{=}CH\,(CF_3)} \xrightarrow[140\,°\mathrm{C}]{\mathrm{DTBP}} \mathrm{H[CH\,(CF_3)CH_2]}_n\mathrm{\text{-}P\,(O)\,(OC_2H_5)_2}$$

The transfer constant value, C_T^n, for $HP(O)(OEt)_2$ is 0.75 at 140 °C.

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A novel ytterbium/perfluoroalkylated-pyridine catalyst for Baylis–Hillman reaction in a fluorous biphasic system

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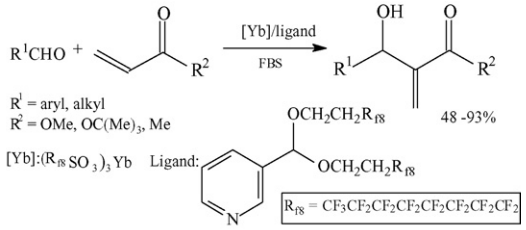
Ytterbium perfluorooctanesulfonate [Yb(OPf)$_3$] catalyses the highly efficient Baylis–Hillman reaction in the presence of a catalytic amount of a novel perfluoroalkylated-pyridine as a ligand in a fluorous biphase system (FBS).



J. Fluorine Chem., 128 (2007) 925

Fluorinated-plasma coating on polyhydroxyalcanoate PHBV. Effect on the biodegradation

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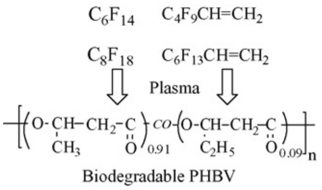
A hydrophobic coating (γ_s = 18.8 mJ m^{-2}) from plasma-polymerization of saturated and unsaturated fluorinated monomers, that delays the biodegradation of PHBV.



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Synthesis of new 3-(2,2,2-trifluoroethyl)-5-hydroxy-5-(phenylsulfanyl- or phenylsulfonyl-methyl)-1,5-dihydropyrrol-2-ones starting from α,β-unsaturated γ-lactones and primary amines

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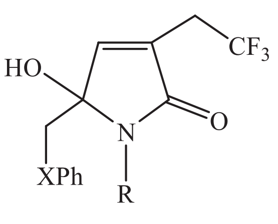

X = S: 41-79%
X = SO_2: 60-87%

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Platinum fluorides beyond PtF_6?

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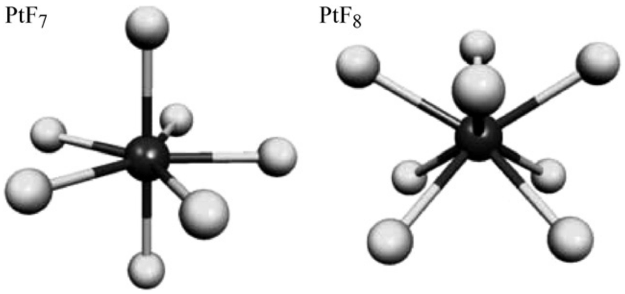
While the highest platinum fluoride characterized beyond doubt is PtF_6 we have investigated higher platinum fluorides by state-of-the-art quantum-chemical calculations up to high oxidation state +VIII.



J. Fluorine Chem., 128 (2007) 943

Pentamethylcyclopentadienyl rhodium(III) trifluorovinyl phosphine complexes and attempted intramolecular dehydrofluorinative coupling of pentamethylcyclopentadienyl and trifluorovinyl phosphine ligands

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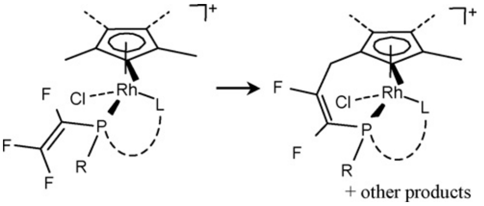

Treatment of cationic rhodium piano stool complexes with trifluorovinylphosphines with proton sponge yields complexes of tethered ligands.

J. Fluorine Chem., 128 (2007) 952

Regioselective synthesis of 6-trifluoromethyl-1,4,5,6-tetrahydropyrazolo[3,4-*b*]pyran derivatives

Dongmei Li[a], Liping Song[a,b], Shaodi Song[a], Shizheng Zhu[b]

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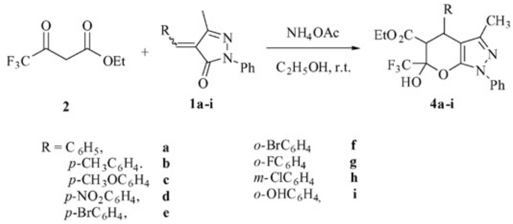
[b]*Key Laboratory of Organofluorine Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai 200032, China*



A facile two-step procedure for synthesis of 6-(trifluoromethyl)-1,4,5,6-tetrahydropyrazolo[3,4-b]pyran (**4**) derivatives from 1-phenyl-4-arylidene-5-pyrazolones(**1**) with ethyl trifluoroacetoacetate (**2**) is presented. To increase the efficiency of this reaction the one-pot process was also developed, with little lower yield. Treatment of **4** with P_2O_5 or conc. H_2SO_4 could not give the dehydrated products.

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Preparation of COF_2 using CO_2 and F_2 in the electrochemical cell with $PbSnF_4$ as a solid electrolyte

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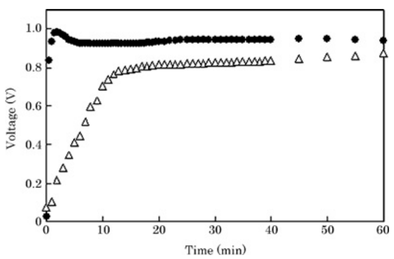
[b]*Forensic Science Laboratory, Fukui Prefectural Police Headquarters, 3-17-1 Ote, Fukui 910-8515, Japan*



Emf with anode gas of 0.1 MPa CO_2 and cathode gas of F_2 and argon.

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Synthesis and polymerization of novel fluorinated acrylates and methacrylates bearing alkoxyl groups derived from radical addition reaction of perfluoroisopropenyl ester

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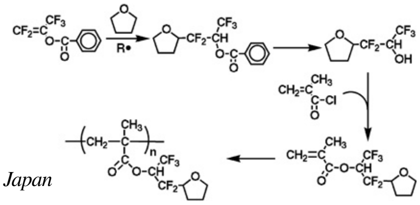
[b]*Department of Life Science and Green Chemistry, Saitama Institute of Technology, 1690 Fusaiji, Fukaya 369-0293, Japan*



Radical addition of 2-benzoxypentafluoropropene [$CF_2{=}C(CF_3)OCOC_6H_5$] (BPFP) with alcohols such as ethanol and 2-propanol was investigated to afford fluorinated alcohols. Radical addition of BPFP with cyclic ethers such as tetrahydrofuran, 1,3-dioxolane and tetrahydropyran was also achieved to afford addition products followed by hydrolysis to yield fluorinated alcohols possessing cyclic structures. Novel fluoroalkyl acrylates and methacrylates were synthesized from the fluorinated alcohols with (meth)acryloyl chlorides. Radical polymerization of the fluoroalkyl (meth)acrylates yielded polymers of 1.2×10^5 as the highest molecular weight.