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Graphical Abstracts/J. Fluorine Chem. 139 (2012) 1–3

Chemoselective halogenation of 2-hydroperfluoroalkyl aldehydes

J. Fluorine Chem., 139 (2012) 4

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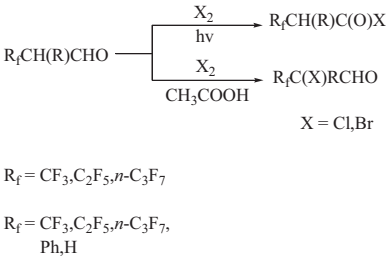
Free-radical chlorination or bromination of 2-hydroperfluoroalkyl aldehydes chemoselectively affords the corresponding acyl halide. Only the formyl hydrogen is replaced by halogen. However, in a polar solvent, such as acetic acid, chlorination or bromination of 2-hydroperfluoroalkyl aldehydes affords only the 2-haloperfluoroalkyl aldehydes. Hydrolysis of the 2-hydroperfluoacyl halides provides a useful, convenient, non-toxic entry to the corresponding 2-hydroperfluoroalkyl branched carboxylic acids. The requisite 2-hydroperfluoroalkyl aldehydes are conveniently prepared *via* reaction of a perfluoroalkyl ketone with Ph3HOCH, followed by acid hydrolysis of the perfluoroalkyl vinyl ethers.



A thermogravimetric study of the reactions of tungsten disilicide with anhydrous hydrogen fluoride and fluorine

J. Fluorine Chem., 139 (2012) 12

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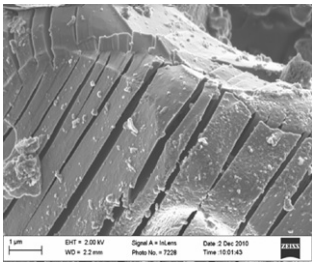
Parallel cracks are observed on the surface of the WSi_2 particles after reacting with HF(g), evidently after the removal of the silicon from the crystalline matrix, the more dense tungsten metal forms, leaving unoccupied strips in the particles.



Synthesis of fluorine containing N-heterocycles using oxides of terminal perfluoroolefins and urea

J. Fluorine Chem., 139 (2012) 16

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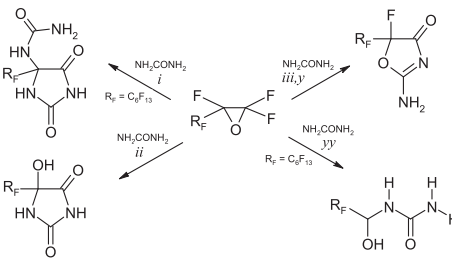
Perfluoroalkyl containing allantoins, hydantoins, oxazols and substituted urea have been obtained by the reaction of oxides of terminal perfluoroolefins with urea.



doi:10.1016/S0022-1139(12)00147-9

J. Fluorine Chem., 139 (2012) 23

DAST mediated preparation of β-fluoro-α-aminophosphonates

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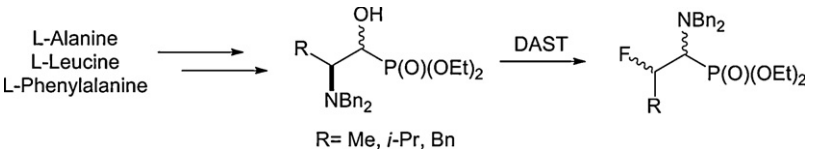

J. Fluorine Chem., 139 (2012) 28

Formal [3+3] cyclocondensations of 1,3-bis(silyloxy)-1,3-butadienes with 1-chloro-1,1-difluoro-4,4-dimethoxybut-3-en-2-one and 1,1-difluoro-4,4-dimethoxybut-3-en-2-one. Regioselective synthesis of fluorinated salicylates and pyran-4-ones

Sebastian Reimann[ab], Alina Bunescu[ab], Robert Litschko[a], Silke Erfle[ab], Lutz Domke[a], Franziska Bendrath[a], Zharylkasyn A. Abilov[c], Anke Spannenberg[b], Alexander Villinger[a], Peter Langer[ab]

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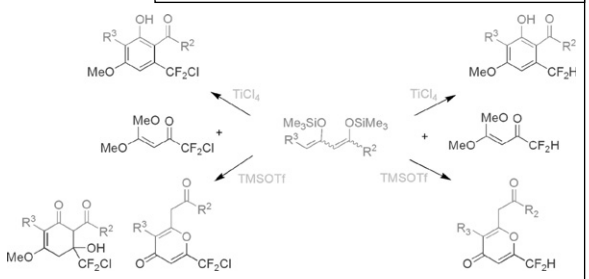

6-Chlorodifluoromethylsalicylates and -pyran-4-ones are prepared by regioselective [3+3] cyclizations of 1,3-bis(silyloxy)-1,3-butadienes with CF2Cl-substituted 3-alkyloxy-2-en-1-ones. The regioselectivity is controlled by the choice of Lewis acid employed.

J. Fluorine Chem., 139 (2012) 46

Synthesis and evaluation of fluoroethyl cyclofenil analogs: Models for potential estrogen receptor imaging agent

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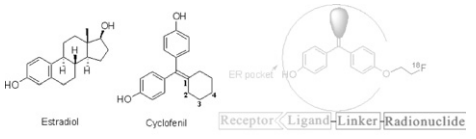
[c]*Key Laboratory of Nuclear Medicine (Ministry of Health), Jiangsu Key Laboratory of Molecular Nuclear Medicine, Jiangsu Institute of Nuclear Medicine, Wuxi, Jiangsu 214063, China*



ER Ligands and Proposed Cyclofenil-ER Pharmacophore Model.

Structural studies on the ERs have suggested there is ample unoccupied space within the ligand binding pocket. Since our previous study focused on the effect of developing Tc-99m cyclofenil complexes for potential SPECT imaging agents. In the study reported here, a series of fluorinated cyclofenil analogs were designed and evaluated for a estrogen receptor imaging agent. These preliminary results suggested that the FEt-cyclofenil (**3a**) analogs might be potential PET imaging agents.

J. Fluorine Chem., 139 (2012) 53

Filling the gap: Chemistry of 3,5-bis(trifluoromethyl)-1*H*-pyrazoles

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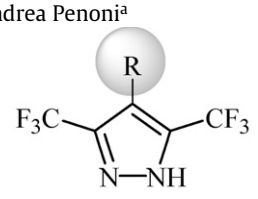

An optimized synthesis of 3,5-bis(trifluoromethyl)-1*H*-pyrazole was developed and a series of 4-substituted derivatives were prepared and characterized

R = H, F, Cl, Br, I, NO_2, NH_2

J. Fluorine Chem., 139 (2012) 58

Fluorous catalyst recycling utilising highly fluorinated zinc compounds: Ring opening polymerisation of ε-caprolactone

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Recycling strategies for a zinc catalysed ring opening polymerisation of caprolactone have been explored. The use of fluorous alkoxide compounds of zinc and quenching with a fluorous alcohol allows the catalyst to be recycled three times before loss of activity.