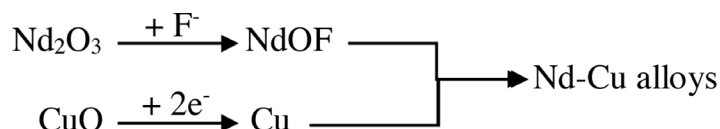




Graphical Abstracts/J. Fluorine Chem. 184 (2016) iv–vii

Neodymium electrowinning into copper-neodymium alloys by mixed oxide reduction in molten fluoride media

J. Fluorine Chem., 184 (2016) 1

M. Ciumag^{a,b}, M. Gibilaro^a, L. Massot^a, R. Laucournet^c, P. Chamelot^a^aLaboratoire de Génie Chimique UMR CNRS 5503, Université Paul Sabatier, 118 route de Narbonne, 31069 Toulouse Cedex 9, France^bCEA-Tech Midi-Pyrénées, 135 avenue de Rangueil, 31400 Toulouse, France^cCEA Grenoble LITEN, 17 rue des Martyrs, 38054 Grenoble Cedex 9, France

- Nd_2O_3 electrochemical reduction into metallic Nd did not occur in molten fluorides.
- Limitations were Nd_2O_3 conductivity, Pilling–Bedworth factor and CaO layer.
- Cu–Nd alloys were obtained by reduction of Nd_2O_3 –CuO mixtures.
- CuO was reduced into Cu, which acts as reactive cathode for Nd_2O_3 reduction.

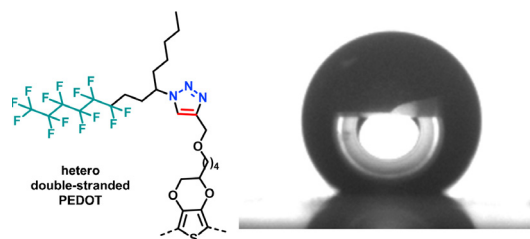
Hydrocarbon/perfluorocarbon mixed chain azides for surface post-functionalization

J. Fluorine Chem., 184 (2016) 8

Guilhem Godeau, Thierry Darmanin, Frédéric Guittard

Univ. Nice Sophia Antipolis, CNRS, LPMC, UMR 7336, 06100 Nice, France

- Synthesis of mixed hydrocarbon/perfluorocarbon azides.
- Post-treatment of conducting polymers by Huisgen reaction.
- Influence of hydrocarbon and perfluorocarbon chains on surface wettability.

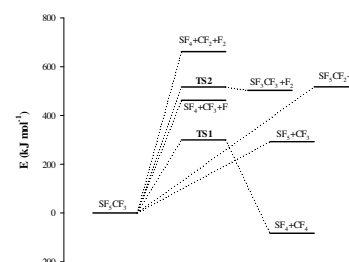
Theoretical kinetics studies on the unimolecular degradation of trifluoromethyl sulfur pentafluoride, SF_5CF_3

J. Fluorine Chem., 184 (2016) 16

Tahereh Sedighikhah, Vahid Saheb

Department of Chemistry, College of Science, Shahid Bahonar University of Kerman, Kerman, Iran

- The PES for the unimolecular reaction of SF_5CF_3 is explored.
- The rate coefficients are calculated by VRC-TST theory.
- The major reaction is the S–C bond dissociation channel.
- Discussion is made on the lifetime of SF_5CF_3 in the atmosphere.



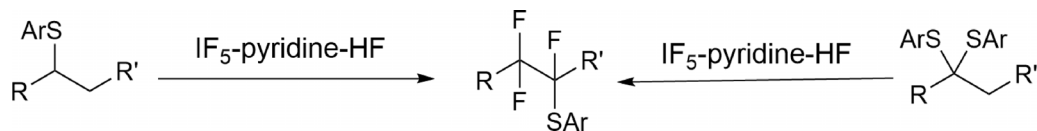
Trifluorination of sulfides and dithioketals using IF₅-pyridine-HF

J. Fluorine Chem., 184 (2016) 22

Toshiya Inoue, Sho Nakabo, Shoji Hara

Graduate School of Engineering, Hokkaido University, Sapporo 060-8628, Japan

● Trifluorination of aryl alkyl sulfides was performed with IF₅-pyridine-HF. ● The reaction was carried out at 80°C. ● Introduction of methyl group to the aryl group was effective. ● The trifluorinated products were also formed from dithioketals.



Catalytic asymmetric detrifluoroacetylative aldol reactions of aliphatic aldehydes for construction of C-F quaternary stereogenic centers

J. Fluorine Chem., 184 (2016) 28

Lijun Zhang^a, Chen Xie^a, Yanling Dai^a, Haibo Mei^a, Jianlin Han^{a,b}, Vadim A. Soloshonok^{c,d}, Yi Pan^a

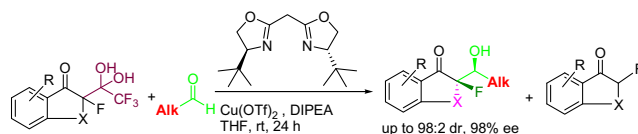
^aSchool of Chemistry and Chemical Engineering, State Key Laboratory of Coordination Chemistry, Nanjing University, Nanjing 210093, China

^bHigh-Tech Research Institute of Nanjing University, Changzhou 213164, China

^cDepartment of Organic Chemistry I, Faculty of Chemistry, University of the Basque Country UPV/EHU, Paseo Manuel Lardizabal 3, 20018 San Sebastián, Spain

^dIKERBASQUE, Basque Foundation for Science, Alameda Urquijo 36-5, Plaza Bizkaia, 48011 Bilbao, Spain

● Asymmetric catalytic detrifluoroacetylative aldol reaction of aliphatic aldehydes was reported. ● The enantioselectivity of the new two contiguous stereogenic carbons was excellent. ● Preparation of structurally new 1,3-hydroxy ketones was achieved. ● These methods provide a way to ketones containing C-F quaternary stereogenic center



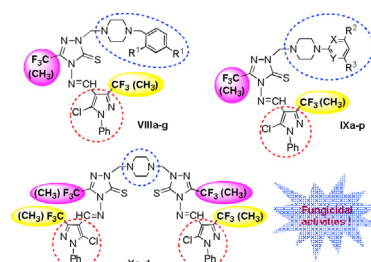
Synthesis and biological activities of novel 1,2,4-triazole thiones and bis(1,2,4-triazole thiones) containing phenylpyrazole and piperazine moieties

J. Fluorine Chem., 184 (2016) 36

Bao-Lei Wang, Li-Yuan Zhang, Yi-Zhou Zhan, Yan Zhang, Xiao Zhang, Li-Zhong Wang, Zheng-Ming Li

State Key Laboratory of Elemento-Organic Chemistry, Collaborative Innovation Center of Chemical Science and Engineering, Nankai University, Tianjin 300071, PR China

● 27 novel phenylpyrazole- and piperazine-containing (bis)1,2,4-triazole thiones were synthesized. ● Several compounds exhibited significant fungicidal activities. ● The compounds with two CF₃ groups on triazole and pyrazole rings had excellent fungicidal activities. ● **VIIIg**, **IXi**, **IXo** and **IXp** could be used as new fungicide lead compounds.



An optimized condition for practical and scalable hydrodeiodination of perfluoroalkyl iodides

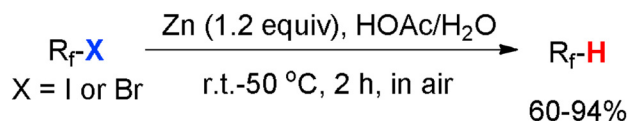
J. Fluorine Chem., 184 (2016) 45

Junhui Wu^a, Zhen-Jiang Liu^a, Qing-Yun Chen^b, Chao Liu^b

^aSchool of Chemical and Environmental Engineering, Shanghai Institute of Technology, 100 Haiquan Road, Shanghai 201418, China

^bKey Laboratory of Organofluorine Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 345 Lingling Road, Shanghai 200032, China

● A practical method for hydrodehalogenation of various perfluoroalkyl iodides and bromides under mild conditions is presented. ● Substrates with base-sensitive groups can be smoothly subjected to the reaction. ● Water as a co-solvent plays an important role in the reaction.



● Mild reactions with good isolated yields
● Practical and scalable

Download English Version:

<https://daneshyari.com/en/article/7752728>

Download Persian Version:

<https://daneshyari.com/article/7752728>

[Daneshyari.com](https://daneshyari.com)