Contents lists available at ScienceDirect

Journal of Fluorine Chemistry

journal homepage: www.elsevier.com/locate/fluor

Graphical Abstracts/J. Fluorine Chem. 130 (2009) 767–769

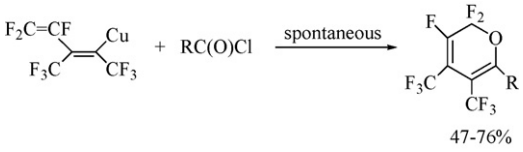
J. Fluorine Chem., 130 (2009) 775

The synthesis of fluorinated α-pyrans *via* fluorinated vinylcopper reagents

Donald J. Burton, Steven W. Hansen

Department of Chemistry, University of Iowa, Iowa City, IA 52242, United States

Fluorinated dienylcopper reagents are readily acylated to form a dienylketone which spontaneously cyclizes to the fluorinated α-pyrans.



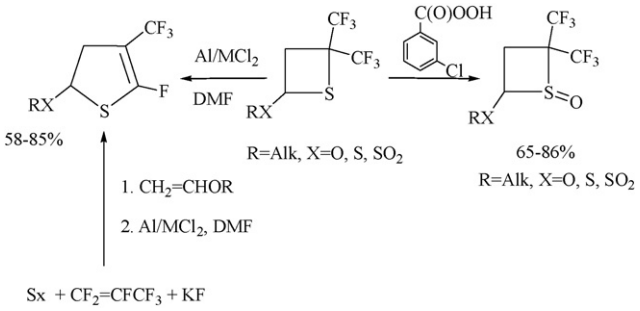
J. Fluorine Chem., 130 (2009) 780

Reactions of polyfluorinated thietanes. Selective synthesis of 4-R-2,2-bis(trifluoromethyl) thietane-1-S-oxides and 2-substituted 5-fluoro-4-(trifluoromethyl)-2,3-dihydrothiophenes

Viacheslav A. Petrov[a], William J. Marshall[b]

[a]*DuPont Central Research and Development, Experimental Station, PO Box 80500, Wilmington, DE 19880-0500, United States*

[b]*DuPont Corporate Center for Analytical Sciences, Experimental Station, PO Box 80500, Wilmington, DE 19880-0500, United States*



J. Fluorine Chem., 130 (2009) 788

Nitrosyl and dioxygenyl cations and their salts—Similar but further investigation needed

Zoran Mazej[a], Maja Ponikvar-Svet[a], Joel F. Liebman[b], Jack Passmore[c], H. Donald Brooke Jenkins[d]

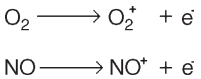
[a]*Department of Inorganic Chemistry and Technology, Jožef Stefan Institute, Jamova 39, SI–1000 Ljubljana, Slovenia*

[b]*Department of Chemistry and Biochemistry, University of Maryland, Baltimore County, Baltimore, MD 21250, USA*

[c]*Department of Chemistry, University of New Brunswick, Fredericton, E3B 6F2 Canada*

[d]*Department of Chemistry, University of Warwick, Coventry, CV4 7AL West Midlands, United Kingdom*

Are NO^+ and O_2^+ Salts Very Much the Same? YES and/or NO.



doi:10.1016/S0022-1139(09)00227-9

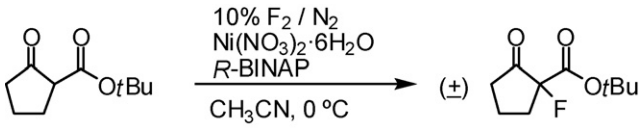
J. Fluorine Chem., 130 (2009) 792

Elemental fluorine, Part 23: Direct fluorination of β-ketoesters as an approach to enantioselective fluorination

Richard D. Chambers[a], Takashi Nakano[a], Takashi Okazoe[b], Graham Sandford[a]

[a]*Department of Chemistry, University of Durham, South Road, Durham DH1 3LE, UK*
[b]*Asahi Glass Co., 1150, Hazawa-cho, Yokohama, Kanagawa 221-8755, Japan*

Attempts to develop a direct enantioselective fluorination protocol using elemental fluorine and an appropriate Lewis acid and chiral ligand system are described.



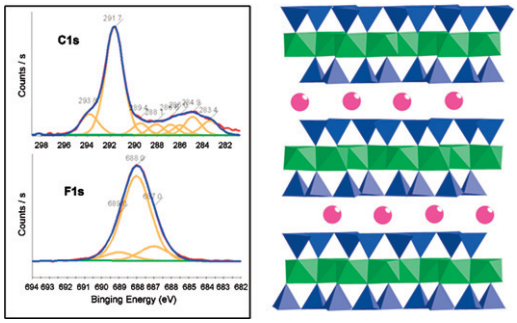
J. Fluorine Chem., 130 (2009) 799

Fluorination of alumino-silicate minerals: The example of lepidolite

Larisa P. Demyanova[a], Alain Tressaud[b]

[a]*Institute of Geology and Nature Management, Amur Science Centre, Far Eastern Branch, RAS, Blagoveshchensk, Russia*
[b]*Institute of Condensed Matter Chemistry of Bordeaux (ICMCB-CNRS), University Bordeaux, 33608 Pessac, France*

Mica-type minerals can be coated at room temperature with a carbon fluoride nano-layer of ~CF_2 composition using c-C_4F_8 fluorinated gas in rf-plasma conditions.

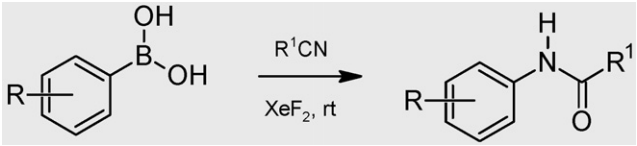


J. Fluorine Chem., 130 (2009) 806

Ipso-amidation of arylboronic acids: Xenon difluoride-nitriles as efficient reagent systems

G.K. Surya Prakash, Matthew D. Moran, Thomas Mathew, George A. Olah

Loker Hydrocarbon Research Institute and Department of Chemistry, University of Southern California, 837 Bloom Walk, Los Angeles, CA 90089-1661, USA



J. Fluorine Chem., 130 (2009) 810

Effect of surface fluorination and conductive additives on the electrochemical behavior of lithium titanate ($Li_{4/3}Ti_{5/3}O_4$) for lithium ion battery

Tsuyoshi Nakajima[a], Akimi Ueno[a], Takashi Achiha[a], Yoshimi Ohzawa[a], Morinobu Endo[b]

[a]*Department of Applied Chemistry, Aichi Institute of Technology, Yakusa, Toyota 470-0392, Japan*
[b]*Department of Electrical and Electronic Engineering, Faculty of Engineering, Shinshu University, Wakasato, Nagano 380-8553, Japan*

First charge capacities with VGCF

Fluorination temperature (°C)	First charge capacity (mAh/g)	
	300 mA/g	600 mA/g
Original	119	93
25	98	71
70	143	126
100	121	125
150	112	48

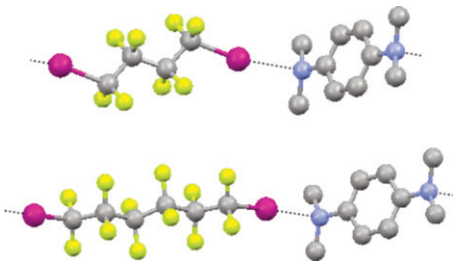
J. Fluorine Chem., 130 (2009) 816

The disorder of perfluoroalkyl chains in crystals: Two case histories of interpretation and refinement

Archan Dey[a], Pierangelo Metrangolo[a], Tullio Pilati[b], Giuseppe Resnati[a,b], Giancarlo Terraneo[a], Ivan Wlassics[c]

[a]*NFMLab-Department of Chemistry, Materials, and Chemical Engineering "Giulio Natta", Politecnico di Milano, Via L. Mancinelli 7, 20131 Milan, Italy*
[b]*CNR-Institute of Molecular Science and Technology, University of Milan, Via Golgi 19, 20133 Milan, Italy*
[c]*Solvay-Solexis, Research & Development, Viale Lombardia 20, 20021 Bollate, Milan, Italy*

Interpretation and refinement of two disordered perfluorinated alkyl compounds.



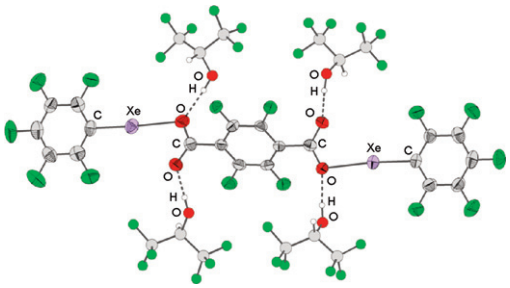
J. Fluorine Chem., 130 (2009) 824

Bis(pentafluorophenylxenonium) tetrafluoroterephthalate, *p*-$C_6F_5XeO(O)CC_6F_4C(O)OXeC_6F_5$, a hypervalent compound with two xenon–carbon bonds

Vural Bilir, Dieter Bläser, Roland Boese, Hermann-Josef Frohn

Inorganic Chemistry, University of Duisburg-Essen, Lotharstr. 1, D-47048 Duisburg, Germany

Electrophilic pentafluorophenylxenonium and nucleophilic tetrafluoroterephthalate ions combine to form the hypervalent molecule *p*-$C_6F_5XeO(O)CC_6F_4C(O)OXeC_6F_5$ (**1**). Crystals obtained from a $(CF_3)_2CHOH$/MeCN solution contain four alcohol molecules attached to the carboxylate groups of **1** via hydrogen bridges.



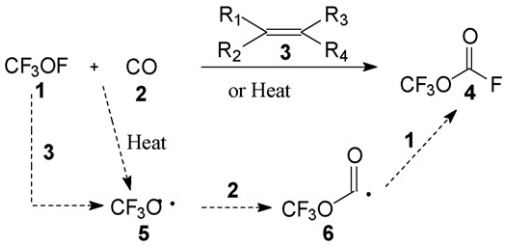
J. Fluorine Chem., 130 (2009) 830

Synthesis of trifluoromethyl fluoroformate from trifluoromethyl hypofluorite and carbon monoxide: Thermal and catalyzed reaction

Libin Du[a], Darryl D. DesMarteau[a], V. Tortelli[b], M. Galimberti[b]

[a]*Department of Chemistry, Clemson University, Clemson, SC 29634, USA*
[b]*Solvay Solexis, R&D Center, Viale Lombardia 20, 20021 Bollate (Milano), Italy*

Improved routes to trifluoromethyl fluoroformate were developed using radical initiated and thermal reactions of trifluoromethyl hypofluorite with carbon monoxide.



J. Fluorine Chem., 130 (2009) 836

The structure and energetics of triplet [B, C, F, H_2]

Carol A. Deakyne[a,b], Haunani M. Thomas[a,b], Joel F. Liebman[a,b]

[a]*Department of Chemistry, University of Missouri-Columbia, 601 S. College Avenue, Columbia, MO 65211-8600, USA*
[b]*Department of Chemistry and Biochemistry, University of Maryland, Baltimore County, 1000 Hilltop Circle, Baltimore, MD 21250, USA*

Transition structures connecting the three most stable minima on the [B, C, F, H_2] triplet potential energy surface.