

Graphical Abstracts/J. Fluorine Chem. 124 (2003) v–ix

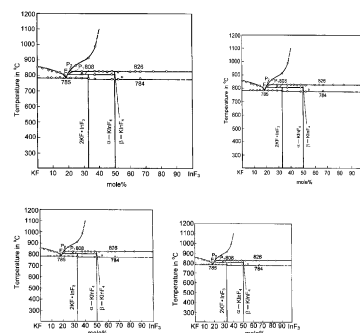
J. Fluorine Chem., **124** (2003) 1

Phase diagram of KF–InF₃ system

Rong Chen, Qiyun Zhang

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In KF–InF₃ system, two incongruent compounds, 2KF·InF₃ (orthorhombic) and α-KInF₄ (tetragonal) were observed.



Orientation disorder in ammonium elpasolites

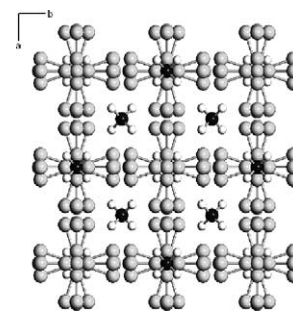
Crystal structures of (NH₄)₃AlF₆, (NH₄)₃TiOF₅ and (NH₄)₃FeF₆

A.A. Udovenko, N.M. Laptash, I.G. Maslennikova

Institute of Chemistry, Far Eastern Branch of RAS, Pr. Stoletiya 159, 690022 Vladivostok, Russia

Orientation disorder in ammonium elpasolites relating to distribution of fluorine (oxygen) atoms on 24e + 96j position of cubic *Fm3m* unit cell which is the averaged of 12 rhombic domains of *Aba2* symmetry.

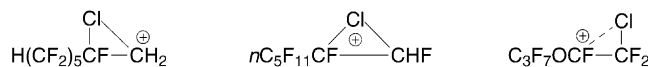
J. Fluorine Chem., **124** (2003) 5



Symmetry of chloronium ions from ionic reaction of chlorine, chlorine monofluoride gas, and chlorine monofluoride complex with terminal alkenes

Dale F. Shellhamer, Peter K. Titterington, Victor L. Heasley

Department of Chemistry, Point Loma Nazarene University, San Diego, CA 92106, USA



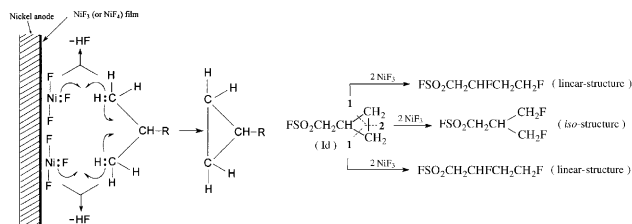
J. Fluorine Chem., **124** (2003) 17

Carbon-chain isomerization during the electrochemical fluorination in anhydrous hydrogen fluoride—a mechanistic study

Nikolai V. Ignat'ev^a, Urs Welz-Biermann^a, Udo Heider^a, Andriy Kucheryna^b, Stefan von Ahsen^b, Wolfgang Habel^b, Peter Sartori^b, Helge Willner^b

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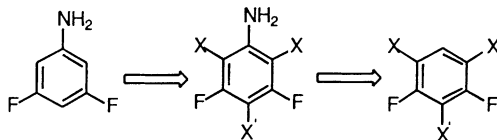
^bInorganic Chemistry Department, Gerhard-Mercator-University of Duisburg, Lotharstrasse 1, D-47048 Duisburg, Germany



Synthesis and thiolation of 1,3-difluoro-2,4,6-trihaloanilines and benzenes

Jason T. Manka, Piotr Kaszynski

Organic Materials Research Group, Department of Chemistry, Vanderbilt University, Box 1822 Station B, Nashville, TN 37235, USA

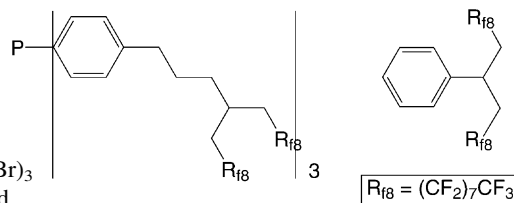


Synthesis and properties of fluorous arenes and triaryl phosphorus compounds with branched fluoroalkyl moieties (“split pony tails”)

Marc Wende, Florian Seidel, J.A. Gladysz

Institut für Organische Chemie, Friedrich-Alexander-Universität Erlangen-Nürnberg, Henkestraße 42, Erlangen 91054, Germany

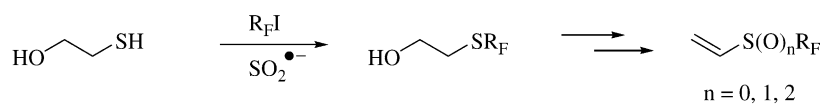
A series of reactions involving allyl tri(*n*-butyl)tin and R₁₈I lead to the alkene H₂C=CHCH₂CH(CH₂R₁₈)₂, which undergoes a Heck reaction with O=P(*p*-C₆H₄Br)₃ to give triaryl phosphine oxides, phosphines, and H₃B adducts. A CuBr-catalyzed reaction of ICH(CH₂R₁₈)₂ and C₆H₅MgBr gives the arene C₆H₅CH(CH₂R₁₈)₂.

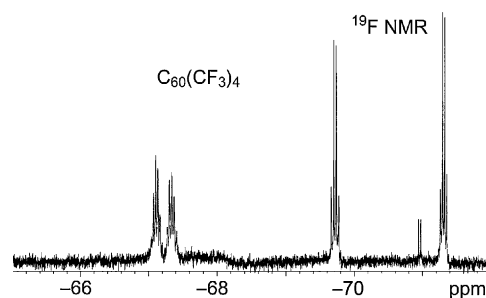


Perfluoroalkylation of 2-mercaptoethanol as a key step for a new synthesis of perfluoroalkyl vinyl sulfides, sulfoxides and sulfones

Emmanuel Magnier, Marc Tordeux, Régis Goumont, Karine Magder, Claude Wakselman

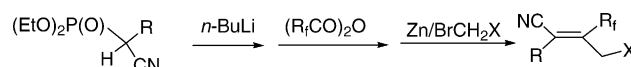
SIRCOB-CNRS, Bâtiment Lavoisier, Université de Versailles-Saint-Quentin, 45 avenue des Etats-Unis, 78035 Versailles, France



J. Fluorine Chem., **124** (2003) 61Isolation of $C_{60}(CF_3)_n$ ($n = 2, 4, 6, 8, 10$) with high compositional purityAlexey A. Goryunkov^{a,b}, Igor V. Kuvychko^b, Ilya N. Ioffe^a, Donald L. Dick^b, Lev N. Sidorov^a, Steven H. Strauss^b, Olga V. Boltalina^{a,b}^aChemistry Department, Moscow State University, Moscow 119899, Russia^bDepartment of Chemistry, Colorado State University, Fort Collins, CO 80523, USAThe high temperature reaction of C_{60} with silver(I) trifluoroacetate yields compositionally and isomerically pure trifluoromethyl[60]fullerenes including the C_1 symmetry derivatives $C_{60}(CF_3)_4$ and $C_{60}(CF_3)_6$.*J. Fluorine Chem.*, **124** (2003) 65Stereoselective synthesis of (*Z*)- γ -cyano- β -perfluoroalkyl- β,γ -unsaturated esters

Yanchang Shen, Jiahong Ni

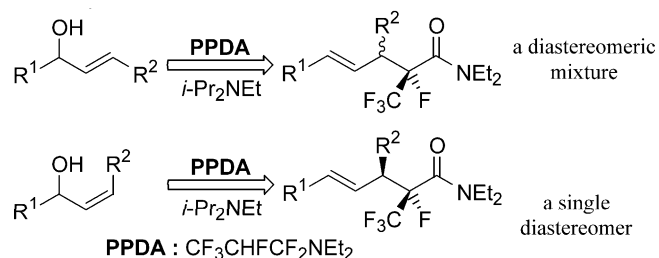
State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai 200032, PR China

*J. Fluorine Chem.*, **124** (2003) 69

A novel reaction of allylic alcohols with hexafluoropropene-diethylamine adduct (PPDA) to form 2-fluoro-2-trifluoromethyl-4-alkenamides

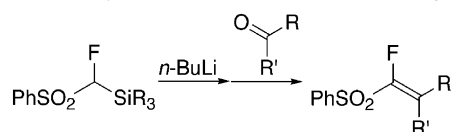
Ken-ichi Ogu, Motohiro Akazome, Katsuyuki Ogura

Department of Materials Technology, Faculty of Engineering, Chiba University, 1-33 Yayoicho, Inageku, Chiba 263-8522, Japan

*J. Fluorine Chem.*, **124** (2003) 81A new synthesis of α -fluorovinylsulfones utilizing the Peterson olefination methodology

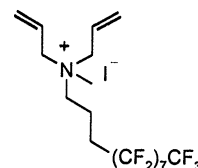
Noriaki Asakura, Yoshinosuke Usuki, Hideo Iio

Department of Material Science, Graduate School of Science, Osaka City University, Sugimoto, Sumiyoshi-ku, Osaka 558-8585, Japan

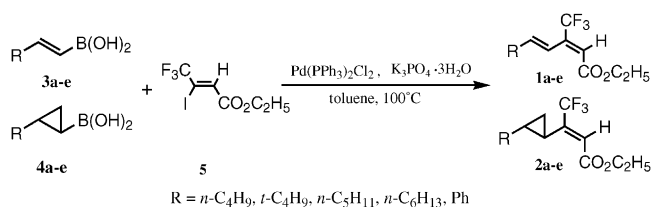
 α -Fluoro- α -silyl-substituted sulfones undergo a smooth Peterson olefination reaction with less-enolizable carbonyl compounds to give moderate to good yields of the expected α -fluoro-vinylsulfones, in some cases with high *E*-stereoselectivity.

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Synthesis and antimicrobial activity of a perfluoroalkyl-containing quaternary ammonium salt

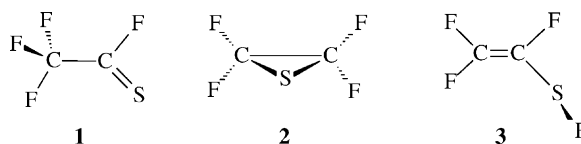
Hui Shao^a, Li Jiang^a, Wei-Dong Meng^a, Feng-Ling Qing^{a,b}^aCollege of Chemistry and Chemical Engineering, Donghua University,
1882 West Yanan Road, Shanghai 200051, China^bKey Laboratory of Organofluorine Chemistry, Shanghai Institute of Organic Chemistry,
Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai 200032, China*J. Fluorine Chem.*, **124** (2003) 93

Facile access to stereodefined dienoates and cyclopropylenoates containing a trifluoromethyl group

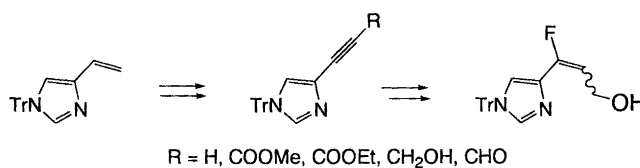
Ping-An Wang^a, Min-Zhi Deng^b, Rui-Qi Pan^c, Sheng-Yong Zhang^a^aDepartment of Chemistry, Fourth Military Medical University,
17 Changle XiLu, Xi'an 710032, PR China^bLaboratory of Organometallic Chemistry, Shanghai Institute of
Organic Chemistry, Academy of Sciences, 354 Fenglin Lu,
Shanghai 200032, PR China^cDepartment of Chemistry, Northwest University, Xi'an 710069,
PR China*J. Fluorine Chem.*, **124** (2003) 99Ab initio investigations of the C₂F₄S isomers and of their interconversions

Irene Shim, Sandra Vallano-Lorenzo, Pilar Lisbona-Martin, Alexander Senning

Department of Chemistry, Technical University of Denmark, DTU 207, DK-2800 Kgs. Lyngby, Denmark

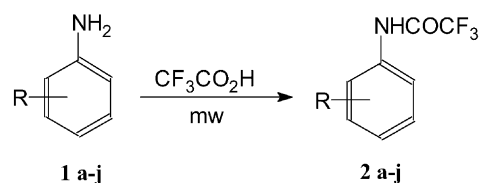
The three C₂F₄S isomers with divalent sulfur.*J. Fluorine Chem.*, **124** (2003) 105New approaches to side-chain fluorinated bioimidazoles:
4-alkynylimidazoles as substrates for fluorination

Bohumil Dolensky, Kenneth L. Kirk

Laboratory of Bioorganic Chemistry, National Institute of Diabetes, and
Digestive and Kidney Diseases, National Institutes of Health, DHHS,
Bethesda, MD 20892, USA

J. Fluorine Chem., **124** (2003) 111**Direct microwave promoted trifluoroacetylation of aromatic amines with trifluoroacetic acid**

José Salazar, Simón E. López, Oscar Rebollo

Departamento de Química, Universidad Simón Bolívar, Valle de Sartenejas, Baruta, Caracas 1080-A, Apartado 89000, Venezuela*J. Fluorine Chem.*, **124** (2003) 115**A novel direct synthesis of (2,2-difluorovinyl)benzenes from aromatic aldehydes**Valentine G. Nenajdenko^a, Georgy N. Varseev^a, Vasily N. Korotchenko^a, Alexey V. Shastin^b, Elisabeth S. Balenkova^a^a*Department of Chemistry, Moscow State University, Leninskie Gory, Moscow 119992, Russia*^b*Institute of Problems of Chemical Physics, Chernogolovka, Moscow 142432, Russia*