

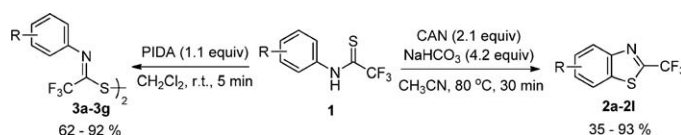
Graphical Abstracts/J. Fluorine Chem. 132 (2011) 303–305

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Switching reaction pathways of trifluoromethylated thiobenzanilides by choice of different oxidative systems

Jiangtao Zhu^a, Haibo Xie^a, Shan Li^a, Zixian Chen^b, Yongming Wu^a^aKey Laboratory of Organofluorine Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 345 Lingling Road, Shanghai 200032, China^bDepartment Chemistry, Huazhong University of Science and Technology, Wuhan, Hubei 430074, China

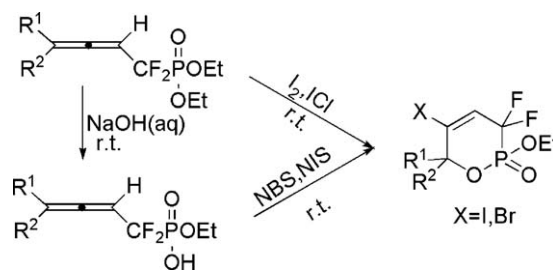
Trifluoromethylated thiobenzanilides are efficiently converted to 2-trifluoromethylbenzothiazoles via intramolecular oxidative cyclization under CAN/NaHCO₃ oxidation, while the dimerized products with “–S–S–” bond linkage are obtained when PIDA is used as an oxidant.



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A facile method to construct cyclic α,α -difluoromethylenephosphonate—A novel cyclic phosphate mimicYun Lin^a, Jin-Tao Liu^b^aJiangsu Key Laboratory of Biofunctional Materials, College of Chemistry and Materials Science, Nanjing Normal University, 122 Ninghai Road, Nanjing 210097, China^bKey Laboratory of Organofluorine Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 345 Lingling Road, Shanghai 200032, China

An efficient synthesis of six-membered α,α -difluoromethylenephosphonates as biologically interesting cyclic phosphate mimics in good yields has been described.

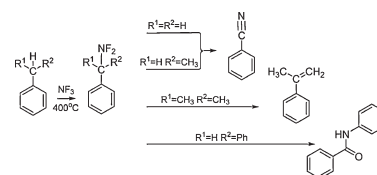


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High temperature vapor phase reactions of nitrogen trifluoride with benzylic substrates

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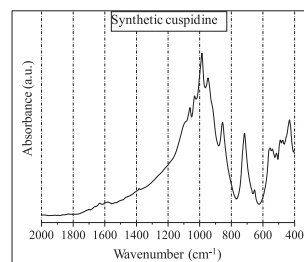
J. Fluorine Chem., 132 (2011) 323

An application of infrared analysis to determine the mineralogical phases formation in fluxes for thin slab casting of steel

Alejandro Cruz-Ramírez, Julio Romo-Castañeda, María de los Ángeles Hernández-Pérez, Marissa Vargas-Ramírez, Antonio Romero-Serrano, Manuel Hallen-López

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Fluorite (CaF₂) is an important component in casting powders for steel production. When casting powders are heated the constituents react to form mainly cuspidine (Ca₄Si₂O₇F₂) which promotes an adequate solidification for the medium carbon and peritectic grade steel.



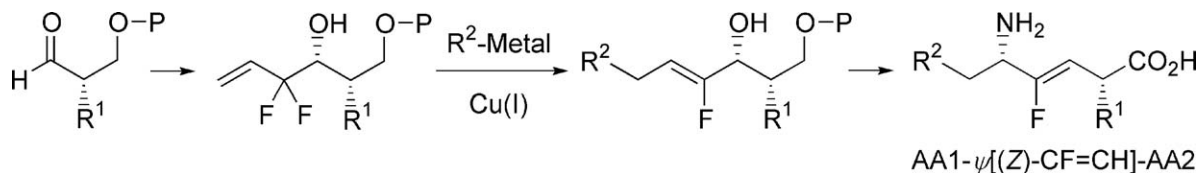
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Copper mediated defluorinative allylic alkylation of difluorohomoallyl alcohol derivatives directed to an efficient synthetic method for (Z)-fluoroalkene dipeptide isosteres

Daisuke Watanabe^a, Minoru Koura^a, Akio Saito^a, Hikaru Yanai^a, Yuko Nakamura^b, Midori Okada^b, Azusa Sato^b, Takeo Taguchi^a

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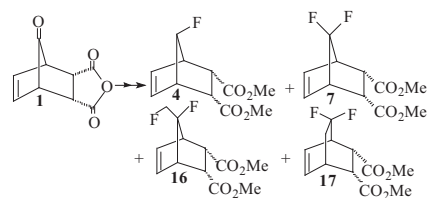
Stereospecific mono- and difluorination of the C₇-bridge of norbornenes

David E. Rajsfus^a, Sari Alter-Zilberfarb^a, Pessia Sharon^a, Mary Ann B. Meador^b, Aryeh A. Frimer^a

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A synthetic strategy for the stereospecific mono- or difluorination of the C₇-carbon in norbornene systems by beginning with 7-ketonadic anhydride is described.



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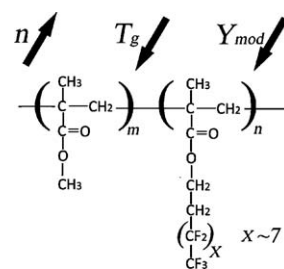
Mechanical and thermal properties of perfluoroalkyl ethyl methacrylate–methyl methacrylate statistical copolymers synthesized in supercritical carbon dioxide

Ugur Cengiz^a, Nevin A. Gengec^a, N. Ugur Kaya^b, H. Yildirim Erbil^a, A. Sezai Sarac^b

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^bIstanbul Technical University, Department of Chemistry, Polymer Science and Technology, Maslak, 34469 Istanbul, Turkey

Increase in the perfluoro ethyl methacrylate content with methyl methacrylate comonomer feed resulted in decrease in the both of glass transition temperature and Young's modulus of the copolymers.



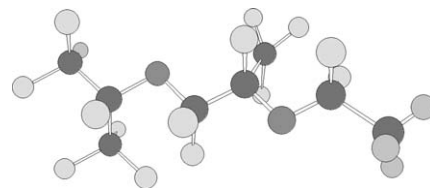
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New hydrofluoropolyethers II: Physico-chemical characterization

Claudio Tonelli, Antonella Di Meo, Rosaldo Picozzi, Mattia Bassi

Solvay Solexis S.p.A., V.le Lombardia 20, 20021 Bollate, Milano, Italy

A novel family of hydrofluoropolyethers (HFPEs) has been obtained through an original synthetic approach. The physico-chemical properties of these HFPEs are here described and compared to those of similar perfluorinated or partially hydrogenated molecules. The contribution of the end-groups to the specific property vanishes at a sufficient high molecular weight, but becomes more and more important at the lowest oligomerization degrees.



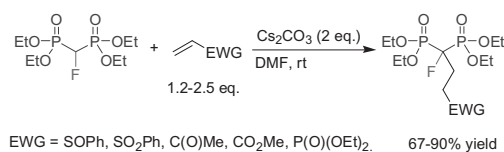
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1,4-Addition of tetraethyl fluoromethylenebisphosphonate to α,β -unsaturated compounds

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Tetraethyl fluoromethylenebisphosphonate in the presence of cesium carbonate in DMF undergoes efficient 1,4-addition to Michael acceptors having terminal double bond such as α,β -unsaturated ketones, esters, sulfones, sulfoxides, and phosphonates to yield the corresponding adducts (α -alkyl- α -fluoromethylenebisphosphonates) in good to excellent yields.



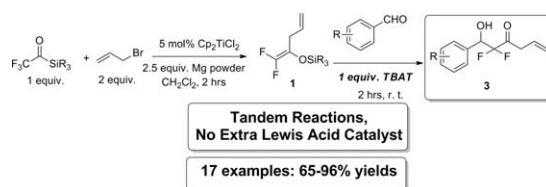
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A facile tandem reaction to access β -hydroxy- α,α -difluoroketone derivatives catalyzed by titanocene dichloride/magnesium

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Tandem reactions of Barbier-type allylation, Brook rearrangement and fluoride-promoted aldol reaction were developed, which afforded a facile, "one-pot" process to β -hydroxy- α,α -difluoroketone derivatives with good to excellent yields.



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Corrigendum to "Selenium(IV) fluoride and oxofluoride anions" [J. Fluorine Chem. 131 (2010) 791–799]

Karl O. Christe^a, David A. Dixon^b, Ralf Haiges^a, Mathias Hopfinger^a, Virgil E. Jackson^b, Thomas M. Klapötke^c, Burkhard Krumm^c, Matthias Scherr^c

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