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Graphical Abstracts/J. Fluorine Chem. 129 (2008) 1057–1059

J. Fluorine Chem., 129 (2008) 1060

Mean amplitudes of vibration of molecules and ions with interhalogen bonds and related species

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$$u_{ij} = \langle (R_{ij} - R_{ij}^{e})^2 \rangle^{1/2}$$

XY XY_3 XF_5 XY_2^+

XF_6^+ XY_2^- XF_6^- XF_5^{2-}

FXO_2 F_3XO FXO_3

F_2XO^+ $F_2XO_2^-$

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Synthesis of new 1-substituted 4-perfluoroalkyl tetrazol-5-ones

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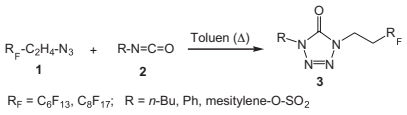
1-(n-Bu, phenyl or mesitylsulfonyl)-4-Perfluoroalkyl tetrazol-5-ones were prepared via a 1,3-dipolar cycloaddition of perfluoroalkyl azides with isocyanates.



J. Fluorine Chem., 129 (2008) 1076

Synthesis of novel poly(hydroxyether terephthalate) via polyaddition of 2,5-difluoroterephthalic acid with aromatic bis(epoxide)s

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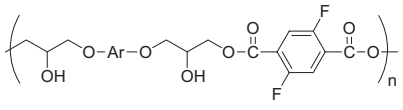

doi:10.1016/S0022-1139(08)00302-3

J. Fluorine Chem., 129 (2008) 1083

Biginelli reaction for synthesis of novel trifluoromethyl derivatives of bis(tetrahydropyrimidinone)benzenes

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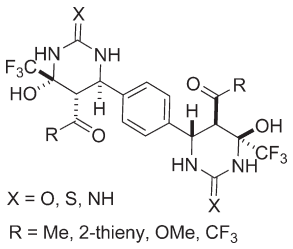
A facile one-pot three-component condensation of terephthalic aldehyde with (thio)urea or guanidine and fluorinated 1,3-dicarbonyl derivatives is developed using catalytic quantities of TMSCl at ambient temperature. As a consequence, efficient synthesis of novel trifluoromethyl derivatives of bis(tetrahydropyrimidinone)benzenes is observed within short time periods.



J. Fluorine Chem., 129 (2008) 1090

High-pressure freezing, crystal structure studies and Si–CF_3 bond polarizability of trimethyl(trifluoromethyl)silane

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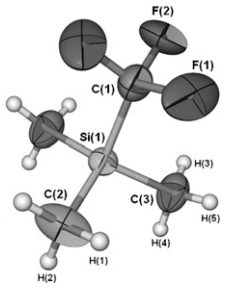
The X-ray diffraction determination of trimethyl(trifluoromethyl)silane, Ruppert's reagent $(CH_3)_3SiCF_3$, crystallized by isochoric freezing reveals elongation of the Si–CF_3 bond by 0.09 Å compared to Si–CF_3 bonds, and the patterns of very weak intermolecular interactions in this compound, the strongest between CH_3 methyl groups. The crystal is isostructural with $(CH_3)_3SiCl$ polymorph a, crystallized at isobaric conditions.



J. Fluorine Chem., 129 (2008) 1096

Fluorinated derivatives of a polyaspartamide bearing polyethylene glycol chains as oxygen carriers

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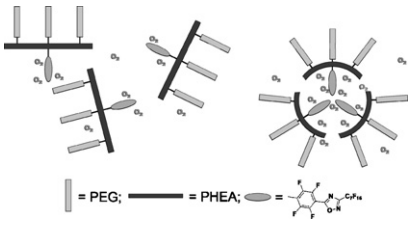
New fluorinated and pegylated copolymers have been prepared starting from a polyaspartamide (PHEA) derivatized with both polyethylene glycol and a fluorinated oxadiazole. These fluoropolymers undergo a self-association in aqueous medium, forming cell compatible, not haemolytic nano-aggregates able to maintain high oxygen levels in solution for a prolonged time.



J. Fluorine Chem., 129 (2008) 1104

Concise access to enantiopure (*S*)- and (*R*)-α-trifluoromethyl pyroglutamic acids from ethyl trifluoropyruvate-based chiral CF_3-oxazolidines (Fox)

Grégory Chaume[a], Marie-Céline Van Severen[a], Louis Ricard[b], Thierry Brigaud[a]

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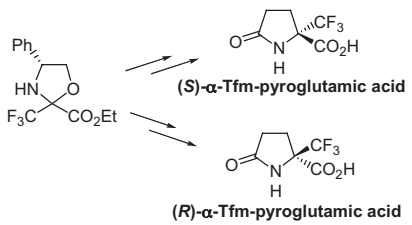
[b]*Laboratoire Hétéroéléments et Coordination, UMR CNRS 7653, Ecole Polytechnique, 91128 Palaiseau, France*

A straightforward synthesis of enantiopure (*S*)- and (*R*)-α-Tfm-pyroglutamic acid ethyl trifluoropyruvate-based chiral CF_3-oxazolidines (Fox) is reported.

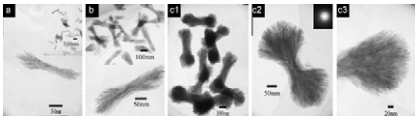


J. Fluorine Chem., 129 (2008) 1110

Size-dependent upconversion luminescence in YF_3:Yb^{3+}/Tm^{3+} nanobundles

Guofeng Wang, Weiping Qin, Yue Xu, Lili Wang, Guodong Wei, Peifen Zhu, Ryongjin Kim

State Key Laboratory on Integrated Optoelectronics, College of Electronic Science and Engineering, Jilin University, Changchun 130012, PR China



TEM images of YF_3:Yb^{3+}/Tm^{3+} nanobundles aged for different time: (a) 24 h, (b) 48 h, and (c) 72 h.

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Preparation and optical properties of CeF_3-containing oxide fluoride glasses

Hiroshi Takahashi[ab], Susumu Yonezawa[a], Masayuki Kawai[c], Masayuki Takashima[ac]

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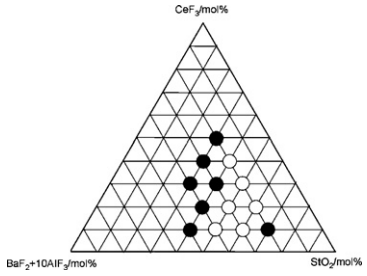
[b]*Kutani Ware Research Center, Industrial Research Institute of Ishikawa, Ha 21-3 Shorenji, Komatsu-shi Ishikawa 923-0151, Japan*

[c]*Cooperative Research Center, University of Fukui, 3-9-1, Bunkyo, Fukui-shi Fukui 910-8507, Japan*



Phase diagram of CeF_3–BaF_2–$10AlF_3$–SiO_2 system by nominal composition. Open and closed circles correspond to glass and not glass products respectively.

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Halophilic reaction of *N*-sodium-substituted azoles with polyhaloperfluoroethanes containing different vicinal halogen atoms

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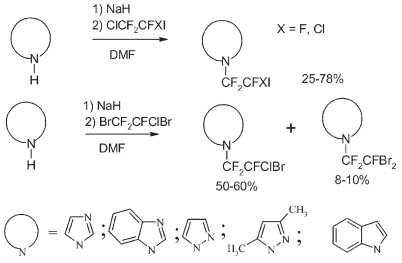
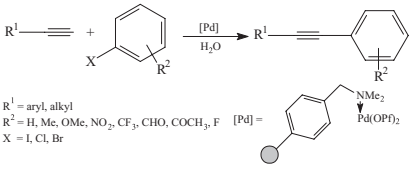


J. Fluorine Chem., 129 (2008) 1124

Polymer-supported palladium perfluorooctanesulfonate [$Pd(OPf)_2$]: A recyclable and ligand-free palladium catalyst for copper-free Sonogashira coupling reaction in water under aerobic conditions

Zhi-Wen Ye, Wen-Bin Yi

Chemical Engineering College, Nanjing University of Science & Technology, 200 XIaolingwei, Nanjing, Jiangsuang 210094, China



A polymer-supported fluorous palladium for the highly efficient Sonogashira coupling reaction in water was prepared from palladium perfluorooctanesulfonate [$Pd(OPf)_2$] and Amberlyst A-21. The Sonogashira reaction can be performed under copper- and ligand-free conditions in an air atmosphere. The palladium catalyst is easily separated and can be reused several times without a significant loss of catalytic activity.