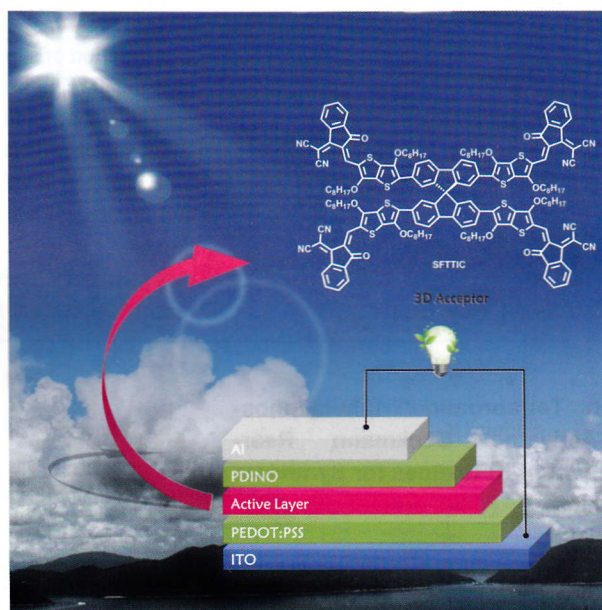


COVER PICTURE

The cover picture shows a new three-dimensional non-fullerene small molecular acceptor for solution-processed organic solar cells. The acceptor was named SFTTIC using spiro-bifluorene as the core unit linking with four thieno-[3,2-*b*]thiophenes and end-capped with 2-(3-oxo-2,3-dihydro-1*H*-inden-1-ylidene)malononitrile. SFTTIC has a high absorption coefficient, good thermal stability and appropriate energy levels and the optimized power conversion efficiency (PCE) of 5.66% was achieved for the devices with PBDB-T as donor material. These results indicate that the 3D non-fullerene small molecule is potential for achieving high photovoltaic performance. More details are discussed in the article by Chen *et al.* on page 1687—1692.

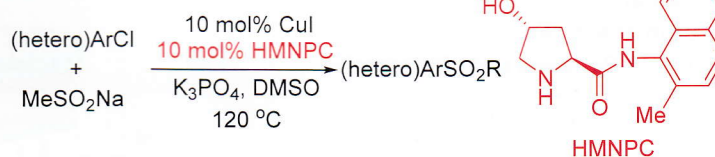


COMMUNICATIONS

1661

A New Class of Amide Ligands Enable Cu-Catalyzed Coupling of Sodium Methanesulfinate with (Hetero)aryl Chlorides

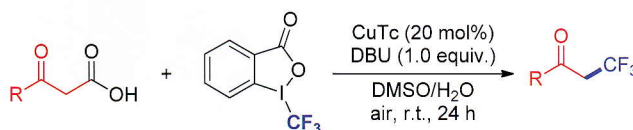
Dawei Ma,* Songtao Niu, Jinlong Zhao, Xi Jiang, Yongwen Jiang, Xiaojing Zhang, Tiemin Sun



1665

Copper-Catalysed Decarboxylative Trifluoromethylation of β -Ketoacids

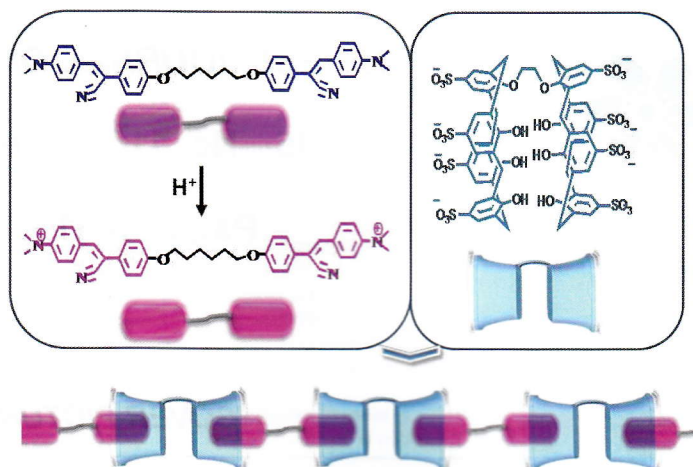
Xiaolan Xu, Huanhuan Chen, Jianbo He,* Huajian Xu*



An efficient method for Cu-catalyzed decarboxylative trifluoromethylation of β -ketoacids to achieve α -trifluoromethyl ketones was developed. A wide variety of synthetically useful α -trifluoromethyl ketones were obtained in modest to good yields under mild reaction conditions. The present method also exhibits good functional-group compatibility.

1669

Fluorescent Linear Supramolecular Polymer Based on Host-Guest Interactions

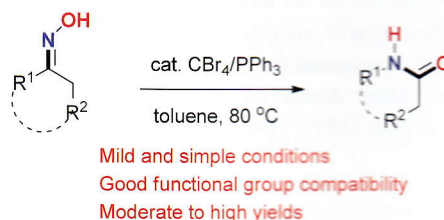


Construction of supramolecular polymers, in which functional monomer components are held together by noncovalent interactions, is considered as a promising design principle for functional materials. Linear fluorescent supramolecular polymer assembled on account of electrostatic attractions based host-guest interaction is synthesized and illustrated here. ^1H NMR was involved to ensure the structure of guest and polymer, UV-vis and fluorescent spectra were recorded to be a readout signal to investigate the assemble process of polymer. TEM and AFM measurements were carried out to confirm the homogeneous nanometer-sized molecular assembly. It shows the way to be used as remote readout fluorescent functional material in the future.

Chenxiao Xiong, Ruyi Sun*

1673

Carbon Tetrabromide/Triphenylphosphine-Activated Beckmann Rearrangement of Ketoximes for Synthesis of Amides

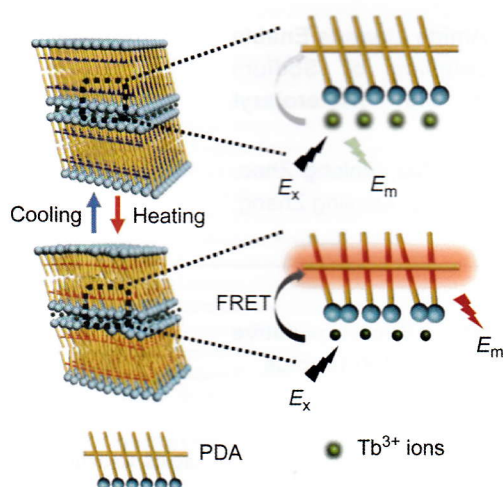


Peng Gao,* Zijiang Bai

FULL PAPERS

1678

Polydiacetylene- Tb^{3+} Nanosheets of Which Both the Color and the Fluorescence Can Be Reversibly Switched between Two Colors



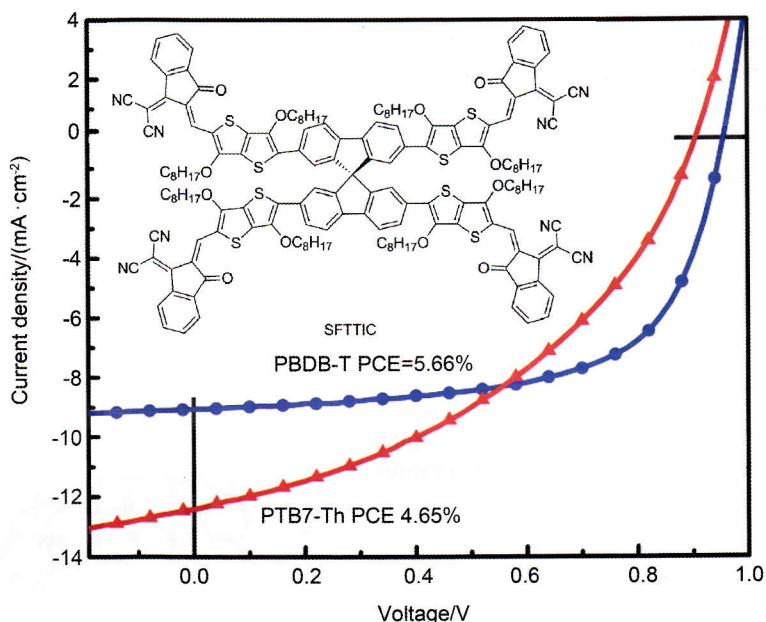
Yuansi Yao, Kaiyu Fu, Xiayun Huang,*
Daoyong Chen*

PDA- Tb^{3+} nanosheets with reversible color and fluorescence switching between two colors were realized by the intercalation of Tb^{3+} ions into layered PDA.

1687

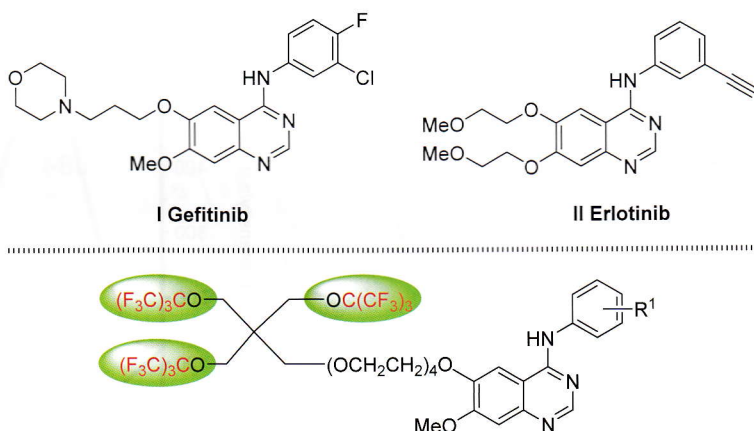
A Three-dimensional Non-fullerene Small Molecule Acceptor for Solution-processed Organic Solar Cells

Meijia Chang, Yunchuang Wang,
Nailliang Qiu, Yuan-Qiu-Qiang Yi,
Xiangjian Wan, Chenxi Li, Yongshen
Chen*



1693

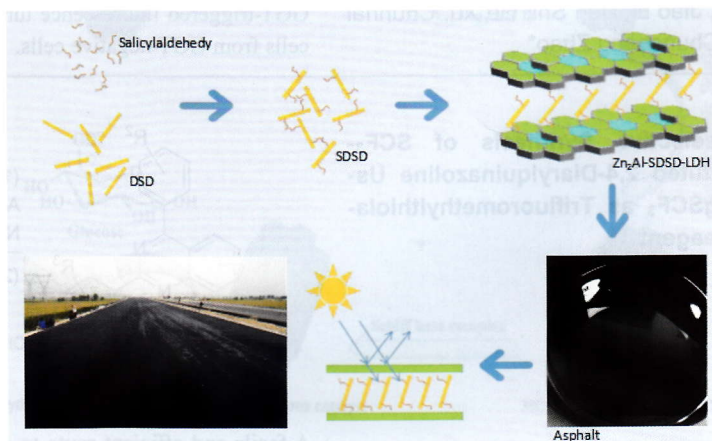
Facile Synthesis of Novel Perfluoro-carbon-Modulated 4-Anilinoquinazoline Analogues



Huiping Shi, Bonan Lai, Shizhen Chen,
Xin Zhou, Jing Nie,* Jun-An Ma*

1701

An Effective Asphalt UV Blocking Material Based on Host-Guest Schiff Base/Layered Double Hydroxides



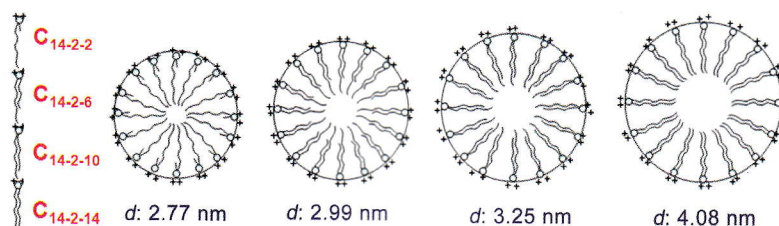
Chunhui Xia, Rui Gao, Kaitao Li, Yang
Yang, Yanjun Lin,* Dongpeng Yan*

N,N'-Bis(salicylidine)-4,4'-diaminostilbene-2,2'-disulfonic acid was intercalated into Zn-Al-LDH by anion-exchange method, which could serve as UV blocking material for asphalt.

1706

Gemini Surfactants Templated Mesoporous Silica Microparticles: from Solid to Hollow Mesoporous Spheres

Min Li, Chun Zhang,* Xiangliang Yang

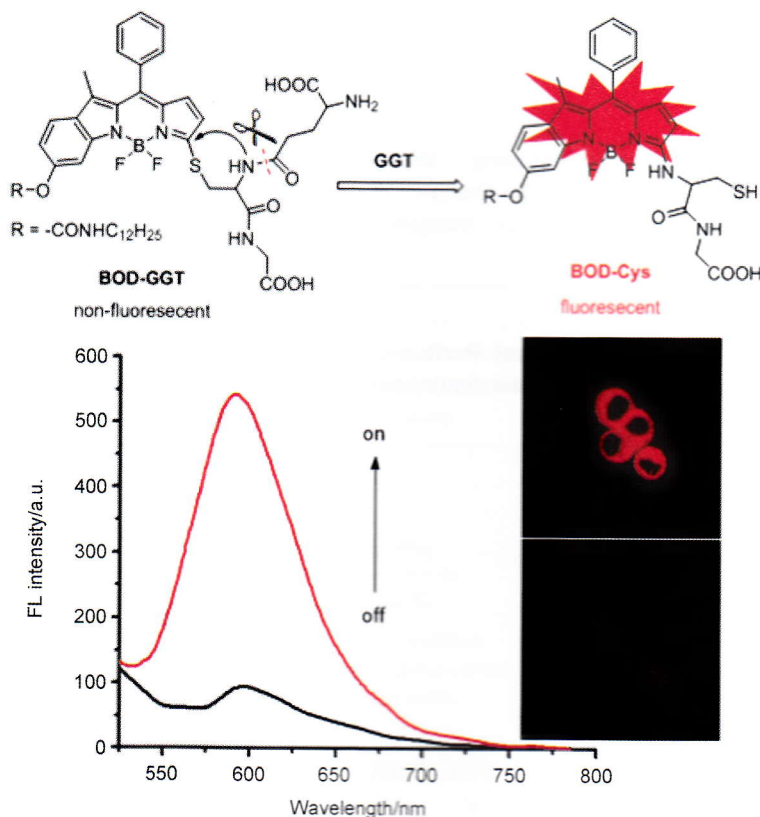


Changing with the structures of gemini surfactant templates, the MSs showed different structures from solid to hollow mesoporous spheres with different pores.

1711

Enzyme-Triggered Fluorescence Turn-on: A Probe for Specifically Imaging Ovarian-Cancer-Related γ -Glutamyl-transpeptidase

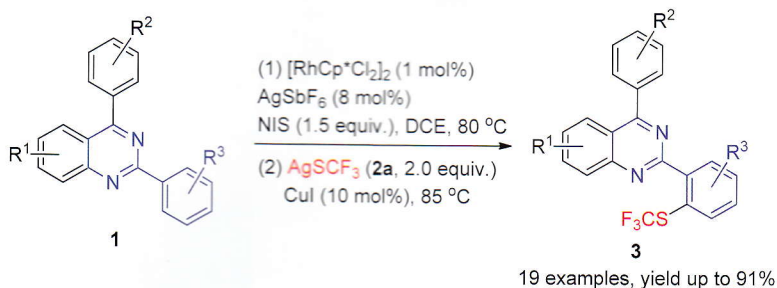
Jie Tian, Qinglong Yan, Ying Zhu, Jichao Zhang, Jiao Li, Ben Shi, Ge Xu, Chunhai Fan,* Chunchang Zhao*



GGT-triggered fluorescence turn-on was capable of differentiating GGT-positive cancer cells from GGT-negative cells.

1717

Regioselective Synthesis of SCF_3 -Substituted 2,4-Diarylquinazoline Using AgSCF_3 as Trifluoromethylthiolation Reagent

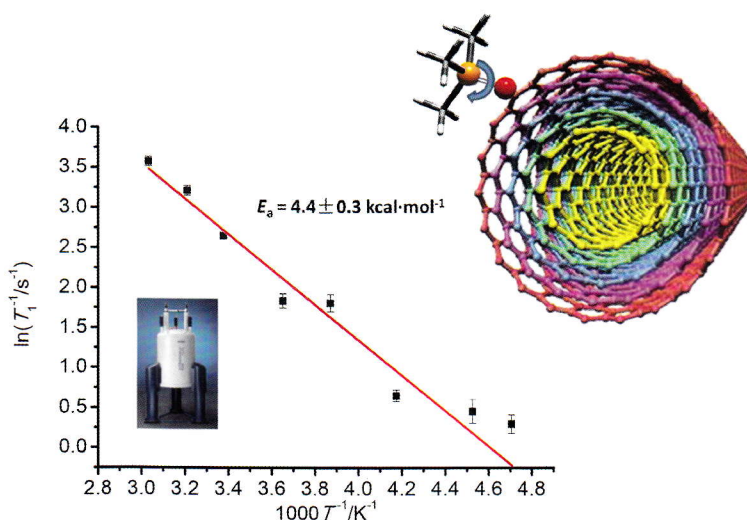


A facile and efficient route to 4-aryl-2-[2-(trifluoromethylthio) aryl]quinazoline derivatives through a tandem directed Rh-catalyzed C-H iodination and trifluoromethylthiolation is described. This strategy provides an access to various structurally versatile trifluoromethylthiolated 2,4-diarylquinazolines with potentially useful biological and pharmaceutical activities.

Wei Gao, Qiuping Ding, Jianjun Yuan, Xuechun Mao, Yiyuan Peng*

1726

Motions of Trimethylphosphine Oxide in Carbon Nanotubes as Revealed by Solid-state NMR

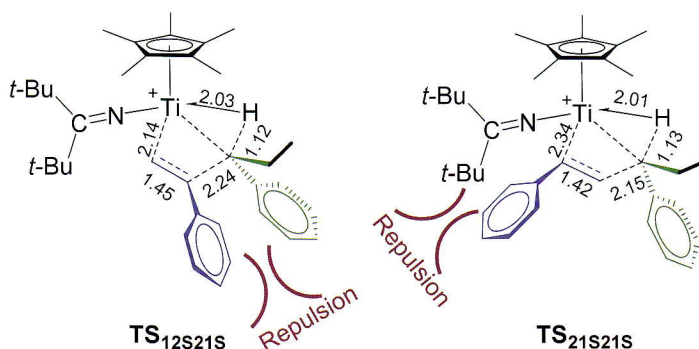


The Arrhenius activation energy for the motion of the phosphorus-proton vector of trimethylphosphine oxide adsorbed in carbon nanotubes was measured as $4.4 \pm 0.3 \text{ kcal}\cdot\text{mol}^{-1}$ by using solid-state NMR.

Wanling Shen,* Xin Li*

1731

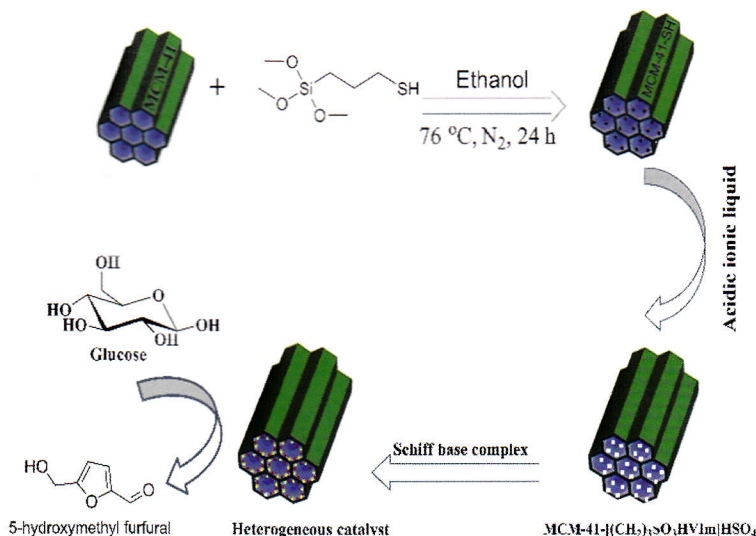
Selective Insertion in Copolymerization of Ethylene and Styrene Catalyzed by Half-Titanocene System Bearing Ketimide Ligand: A Theoretical Study



Xiaowei Xu, Gaohong He, Ning-Ning Wei, Ce Hao, Yu Pan*

1739

MCM-41 Immobilized Acidic Functional Ionic Liquid and Chromium(III) Complexes Catalyzed Conversion of Hexose into 5-Hydroxymethylfurfural

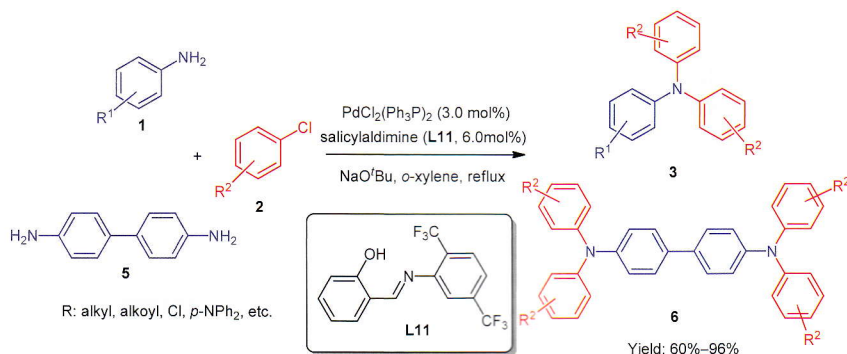


A heterogeneous catalyst was prepared by immobilizing the Schiff base chromium metal complex on the acidic ionic liquid modified MCM-41 and used in the conversion of hexose to HMF. A higher HMF yield was obtained when glucose was used as raw material.

Wenwen Yuan, Yi Huang, Chunyan Wu, Xiang Liu, Yongmei Xia, Haijun Wang*

1749

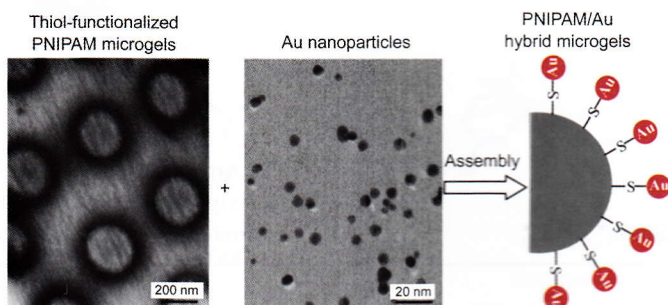
PdCl₂(Ph₃P)₂/Salicylalimine Catalyzed Diarylation of Anilines with Unactivated Aryl Chlorides



Xiaochun Tao, Lei Li, Yu Zhou, Xuanying Qian, Min Zhao,* Liangzhen Cai, Xiaomin Xie*

1755

Assembly of Preformed Gold Nanoparticles onto Thermoresponsive Poly(*N*-isopropylacrylamide)-Based Microgels on the Basis of Au-thiol Chemistry

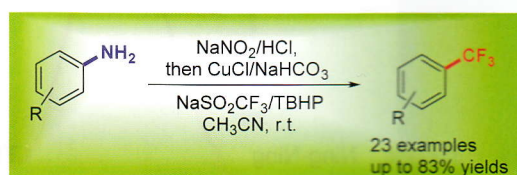


Tao Wang, Yanan Song, Liang Jin, Jiayi Li, Yu Gao, Shan Shi*

The assembly of preformed gold nanoparticles (AuNPs) onto the thermoresponsive poly(*N*-isopropylacrylamide) (PNIPAM)-based microgels was achieved on the basis of the driving force of Au-thiol chemistry instead of the traditional electrostatic attraction.

1761

Copper-Promoted Conversion of Aromatic Amines into Trifluoromethylated Arenes: One-Pot Sandmeyer Trifluoromethylation



Jianquan Hong, Guifu Wang, Lianguang Huo, Changge Zheng*

A simple copper-promoted one-pot trifluoromethylation of aromatic amines with Langlois' reagent has been developed in mild reaction conditions under an air atmosphere. The present transformation, possessing good substrate scope and functional group compatibility, provides an alternative and attractive approach to access a variety of trifluoromethylated arenes, which are of broad interest in pharmaceuticals, agrochemicals and functional materials.