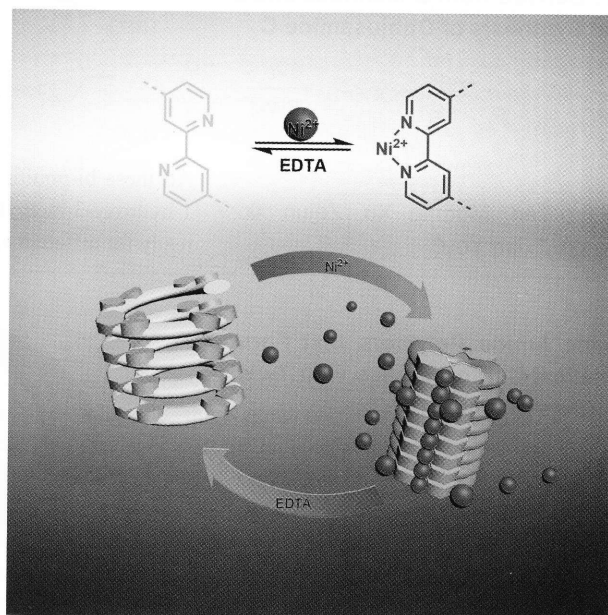


中国科学院科学出版基金资助出版

COVER PICTURE

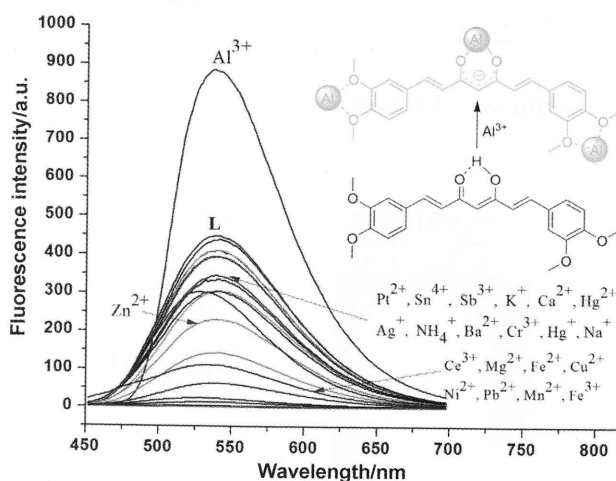
The cover picture shows that benzene/2,2'-bipyridine-alternately incorporated amide polymers are driven by hydrophobicity to form two helical conformations both of which exhibit helicity bias. Switching between the two helical conformations can be tuned by the coordination of the 2,2'-bipyridine units to Ni^{2+} ions. More details are discussed in the article by Li *et al.* on page 678—682.



COMMUNICATIONS

657

A Fluorescent Chemosensor for Al^{3+}
Based on C=O Isomerization Deri-
vated from Curcumin

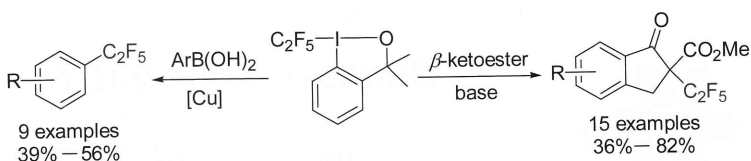


Zhengyi Li,* Jinbei Yan, Yue Yin, Zhihui Zhang, Zhiming Wang, Defeng Xu, Xiaoqiang Sun*

A simple and nontoxic fluorescent chemosensor based on C=O isomerization derived from curcumin has been prepared. The sensor exhibited selective and sensitive fluorescent responses toward Al^{3+} over a wide range of metal ions in ethanol/water.

662

Pentafluoroethylbenziodoxole (BIX-C₂F₅): A Shelf-Stable Reagent for Pentafluoroethylation of β -Ketoesters and Arylboronic Acids



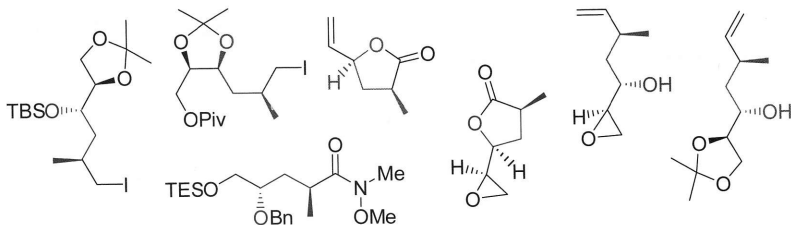
An improved method for the preparation of pentafluoroethylating reagent pentafluoroethyl-substituted benziodoxole (BIX-C₂F₅) was described. Under mild conditions, BIX-C₂F₅ was able to react with β -ketoesters or aryl/heteroaryl boronic acids to generate pentafluoroethylated compounds in good yields.

Jiansheng Zhu, Yuguang Li, Chuanfa Ni, Qilong Shen*

FULL PAPERS

669

Several Enantiopure Chiral Building Blocks Derived from *D*-Mannose and a Formal Synthesis of Dubiusamine C

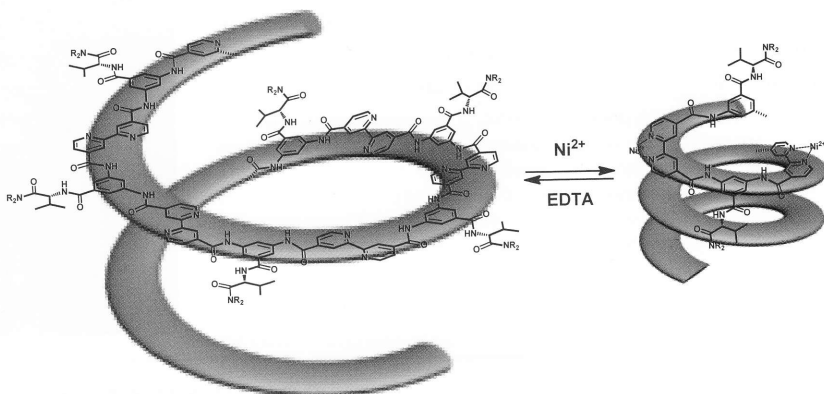


All these bi-/multi-functional small molecules contain a configurationally well-defined 1-hydroxy-3-methyl structural unit, with different reacting sites at the chain terminals ready for different applications

Dongxing Tan, Murong Xu, Zejun Xu, Yikang Wu,* Jun You*

678

Aromatic Amide Polymers that Form Two Helical Conformations with Twist Sense Bias in Water

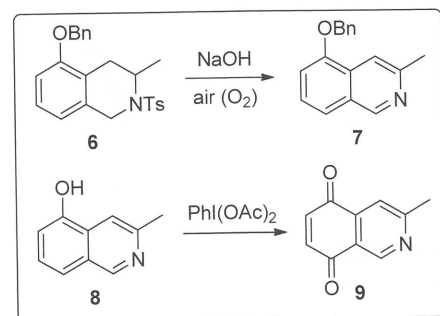
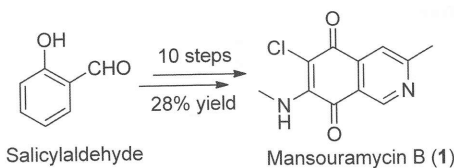


The 2,2'-bipyridine unit has been incorporated into an aromatic amide polymer to tune the backbone to form two helical conformations as a result of Ni²⁺ coordination.

Peng Zhang, Zekun Wang, Liang Zhang, Hui Wang,* Danwei Zhang, Junli Hou, Zhanting Li*

683

Novel Total Synthesis of Mansoura-mycin B

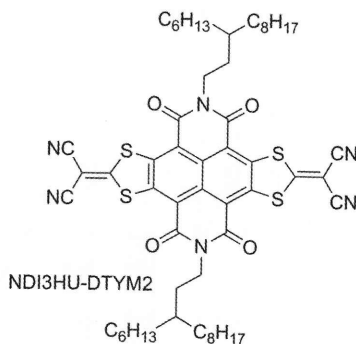


A novel total synthesis of Mansoura-mycin B (**1**) was performed via 10 steps in 28% overall yield starting from the readily available and cheap salicylaldehyde. Two key steps of this total synthesis are noteworthy. The first one is base-promoted one-pot aerobic aromatization of *N*-tosyltetrahydroisoquinoline **6**, and the second one is oxidation of 5-hydroxy-3-methyl-isoquinoline **8** with iodobenzene diacetate.

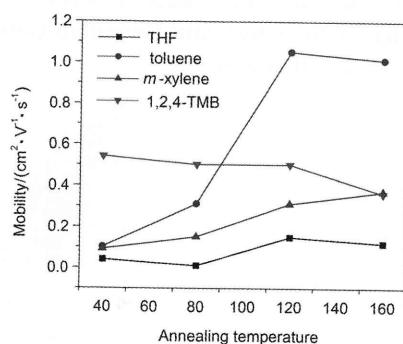
Yi Zhang, Xiaoxin Shi,* Tianzhuo Meng, Qiqi Fan, Xia Lu

689

n-Channel Organic Transistors Processed from Halogen-Free Solvents: Solvent Effect on Thin-Film Morphology and Charge Transport



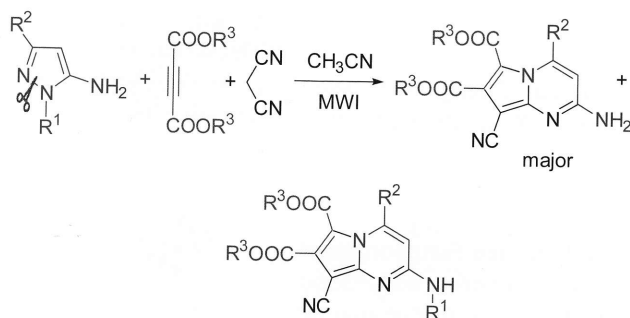
Halogen-free Processing



Simin Gao, Yonghui Hu, Zhiming Duan,*
Xike Gao*

696

Multicomponent Strategy for the Preparation of Pyrrolo[1,2-a]pyrimidine Derivatives under Catalyst-Free and Microwave Irradiation Conditions

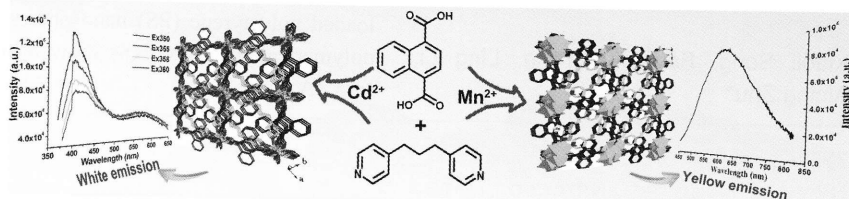


A simple and efficient one-pot procedure has been developed for the construction of pyrrolo[1,2-a]pyrimidines via the three-component domino reaction of 5-aminopyrazoles, acetylenedicarboxylates and malononitrile under catalyst-free, microwave irradiation conditions. The key step in this transformation is the N–N bond cleavage reaction of the 5-aminopyrazole substrate, which has been reported in this context for the first time in this study. The advantages of this protocol include readily available starting materials, short reaction times and good regioselectivity.

Zhan Xun, Xian Feng, Jianjun Wang,
Daqing Shi,* Zhibin Huang*

703

A Comparative Study on the Luminescence of the Cd²⁺ and Mn²⁺ Coordination Polymers Based on the Same Mixed Ligands

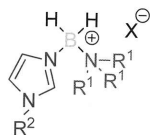


The luminescent properties of a Cd²⁺- and a Mn²⁺-based coordination polymer constructed from the same mixed ligands have been comparatively studied.

Zhaofeng Wu, Xiaoying Huang*

709

Synthesis and Improved Properties of Hypergolic Boronium-Based Ionic Liquids



R¹ = CH₃ or C₂H₅;
R² = CH₃ or CH₂CHCH₂;

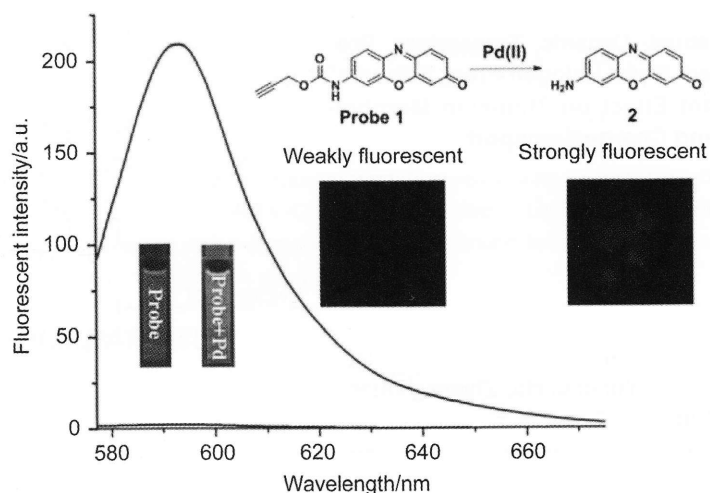


Xingye Li, Huijie Lu, Qi Wang, Jinglun
Huang, Fude Nie, Haibo Li, Fu-Xue
Chen*

Asymmetric structure of cation around the boron atom gives some improved performance of boronium-based hypergolic ionic liquids (HILs).

715

A Turn-On Fluorescent Probe for Highly Selective and Sensitive Detection of Palladium

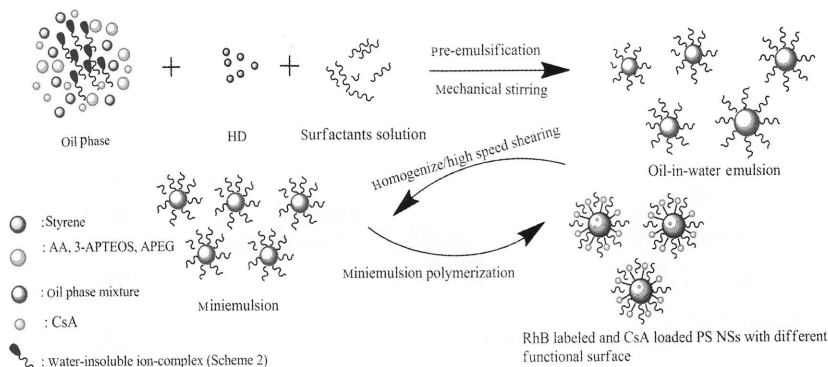


A novel turn-on fluorescent probe for the detection of palladium has been designed. The probe can selectively and sensitively detect palladium in solution, and the limit of detection was calculated to be $11.4 \text{ nmol} \cdot \text{L}^{-1}$. Furthermore, the probe was successfully used for fluorescence imaging of palladium in living cells.

Junliang Zhou, Jian Zhang, Hang Ren, Xiaochun Dong, Xing Zheng,* Weili Zhao*

720

Size-controlled/Surface-Functionalized Polystyrene Nanospheres with Good Biocompatibility and High Encapsulation Efficiency of Cyclosporin A via Miniemulsion Polymerization in One Step

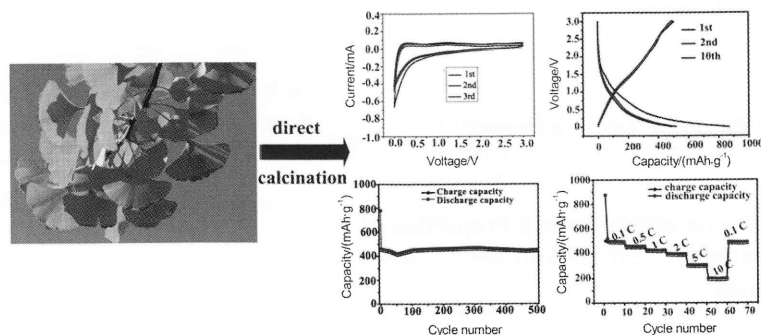


Size-controlled and surface-functionalized RhB-labeled and Cyclosporin A (CsA)-loaded polystyrene (PS) nanospheres were successfully synthesized *via* miniemulsion polymerization. These NSs showed high biocompatibility and encapsulation efficiency for CsA.

Xiaoli Song, Fangfang Yang, Ling Li, Aiping Zhu*

727

Biomass Inspired Nitrogen Doped Porous Carbon Anode with High Performance for Lithium Ion Batteries



A porous N-doped carbon has been fabricated through a convenient, economical, and scalable route without the assistance of any activation or template technique. The biomass derived porous carbon delivers high reversible capacity ($505 \text{ mAh} \cdot \text{g}^{-1}$ at 0.1 C), excellent rate capability ($190 \text{ mAh} \cdot \text{g}^{-1}$ at 10 C), suggesting that the as-obtained carbon can be a promising anode material for lithium ion batteries (LIBs).

Junke Ou,* Lin Yang, Xianghui Xi