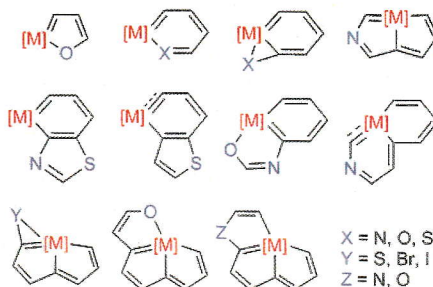


Chemistry Author Up Close

93  
Metallaaromatics Containing Main-group Heteroatoms

Metallaaromatics containing main-group atoms

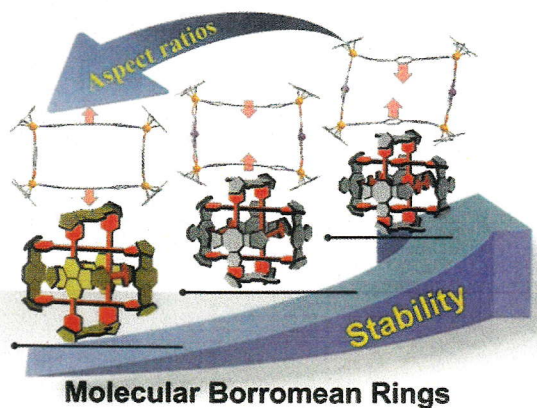


This personal account summarizes the work of Xia group on the chemistry of metallaaromatics containing main-group heteroatoms.

Hongjian Wang, Xiaoxi Zhou, Haiping Xia\*

Breaking Report

106  
Highly Stable Molecular Borromean Rings

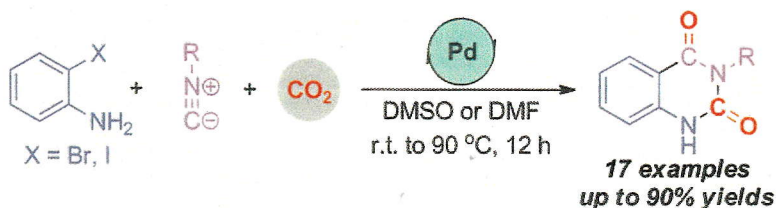


A series of Cp\*Rh-based molecular Borromean rings (BRs) are prepared from naphthazarine or metallaligand. Smaller aspect ratios of the metallarectangles could promote improved stability and yields of the BRs in solution. Increasing the width of ligand hinders the formation of BRs and leads to unoccupied monomeric rectangles, which were further used as catalysts for the acyl transfer reaction between *N*-acetylimidazole and (4-(pyridin-4-yl)phenyl)methanol.

Ye Lu, Yuejian Lin, Zhenhua Li, Guoxin Jin\*

Comprehensive Reports

112  
Palladium-catalyzed Cyclization Reaction of *o*-Haloanilines, CO<sub>2</sub> and Isocyanides: Access to Quinazoline-2,4(1*H*,3*H*)-diones

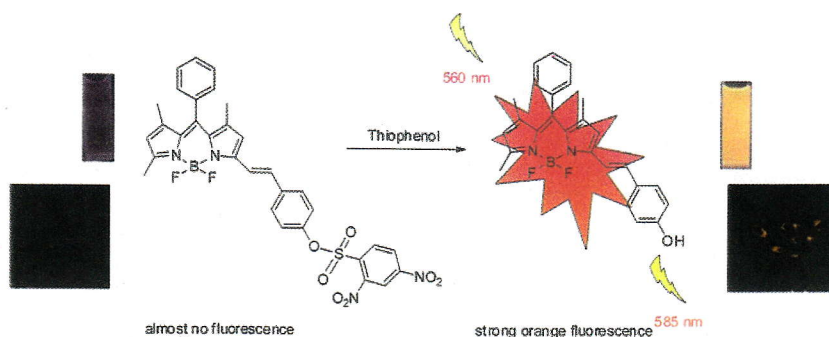


Wen-Zhen Zhang,\* Honglin Li, Yang Zeng, Xueyan Tao, Xiaobing Lu

A palladium-catalyzed cyclization reaction of *o*-haloanilines, CO<sub>2</sub> and isocyanides to prepare *N*3-substituted quinazoline-2,4(1*H*,3*H*)-diones in good yields is described.

119

## A BODIPY-based Fluorescent Probe for Thiophenol

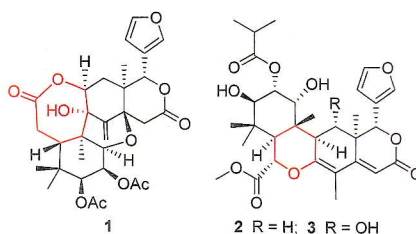


Dongxiang Zhang, Ning Xu, Liman Xian, Haoying Ge, Jiangli Fan, Jianjun Du, Xiaojun Peng\*

A fluorescent probe, BDP, for thiophenol detection shows high selectivity, fast response, high sensitivity and excellent stability, might be applied to identification of thiophenol in cells and water samples, and has potential applications in the fields of chemistry, environment and biology.

## Concise Reports

124

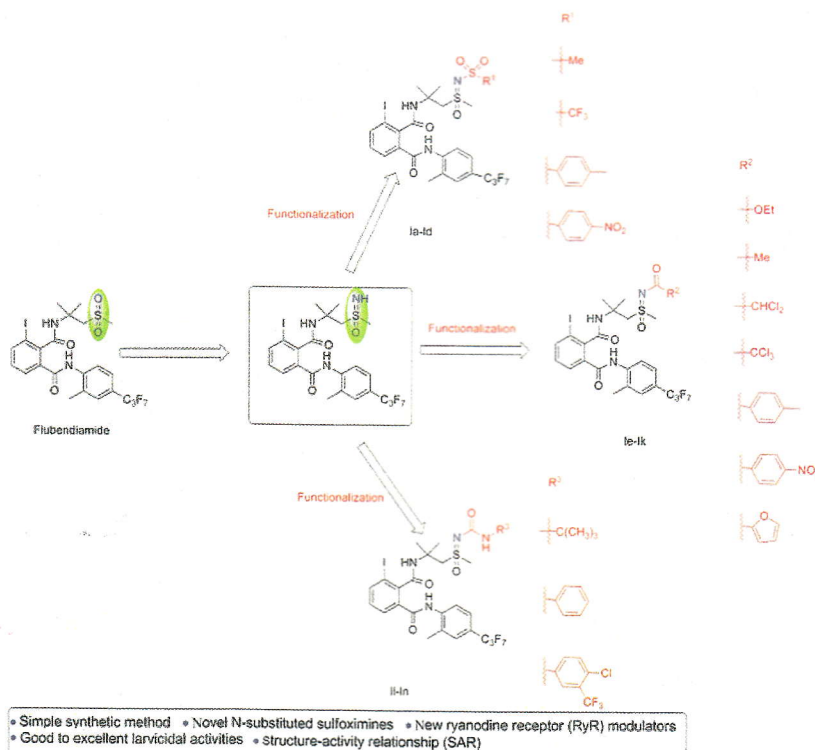
Cipaferoids A–C, Three Limonoids Represent Two Different Scaffolds from *Cipadessa baccifera*

Three limonoids with two different scaffolds were isolated from *Cipadessa baccifera*. Cipaferoid A (1) incorporates a seven-membered lactone ring formed between C-7 and C-11, while cipaferoids B (2) and C (3) feature an exceptional A<sub>1</sub>-ring of tetrahydro-2H-pyran furnished via a 6,9-ether bridge. 2 and 3 exhibited antimalarial activity.

Jinhai Yu, Bin Zhou, Seema Dalal, Qunfang Liu, Maria B. Cassera, Jianmin Yue\*

129

## Design, Synthesis, Biological Evaluation and SARs of Novel N-Substituted Sulfoximines as Potential Ryanodine Receptor Modulators

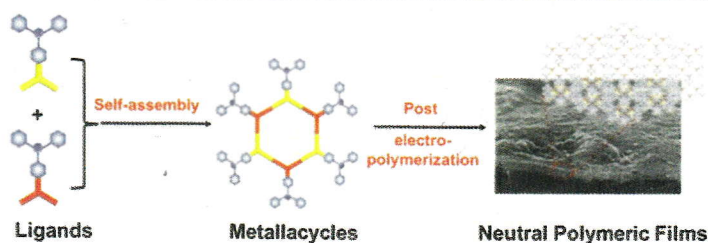


Yongtao Xie, Sha Zhou, Yuxin Li, Shaa Zhou, Minggui Chen, Baolei Wang, Lixia Xiong, Na Yang, Zhengming Li\*

The novel series of N-substituted sulfoximines as potential ryanodine receptor modulators were reported.

134

## Fabrication of Neutral Supramolecular Polymeric Films via Post-electropolymerization of Discrete Metallacycles



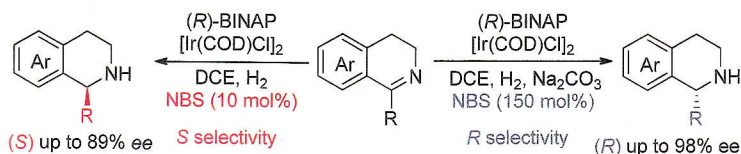
Guangqiang Yin, Lijun Chen, Cuihong Wang,\* Haibo Yang\*



139

### Dual Stereocontrol for Enantioselective Hydrogenation of Dihydroisoquinolines Induced by Tuning the Amount of *N*-Bromosuccinimide

Yue Ji, Jie Wang, Muwang Chen, Lei Shi,\* Yonggui Zhou\*

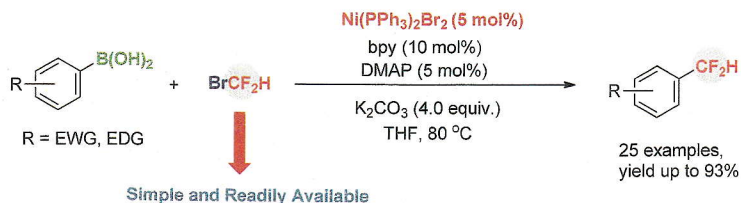


An efficient dual stereocontrol in iridium-catalyzed hydrogenation of 1-substituted 3,4-dihydroisoquinolines was realized by tuning the amount of *N*-bromosuccinimide using chiral ligand of single configuration. The dual activation role of *N*-bromosuccinimide is proposed to be responsible for the reversal of enantioselectivity under two hydrogenation conditions.

143

### Nickel-Catalyzed Difluoromethylation of Arylboronic Acids with Bromodifluoromethane

Xia-Ping Fu, Yu-Lan Xiao, Xingang Zhang\*

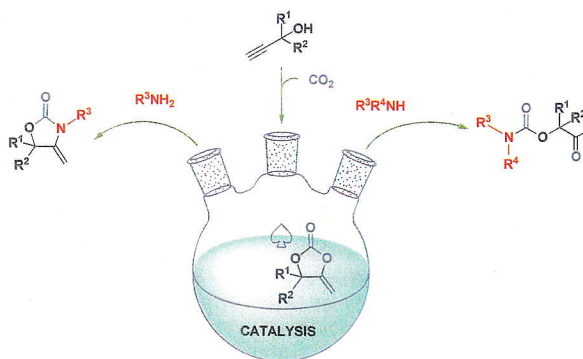


An efficient method to access difluoromethylated arenes through a nickel-catalyzed difluoromethylation of arylboronic acids with  $\text{BrCF}_2\text{H}$  has been described. The reaction exhibits high efficiency, good functional group tolerance and broad substrate scope, thus providing an efficient route for applications in drug discovery and development.

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### Upgrading $\text{CO}_2$ by Incorporation into Urethanes through Silver-Catalyzed One-Pot Stepwise Amidation Reaction

Qing-Wen Song, Ping Liu, Li-Hua Han, Kan Zhang,\* Liang-Nian He\*

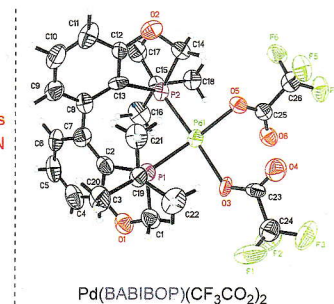
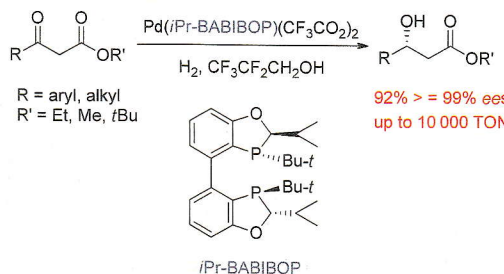


One-pot two-step procedure fixation of  $\text{CO}_2$  for urethanes synthesis with unprecedented TON and TOF value through silver catalysis was described.

153

### Efficient P-Chiral Biaryl Bisphosphorus Ligands for Palladium-Catalyzed Asymmetric Hydrogenation

Wenhao Jiang, Qing Zhao, Wenjun Tang\*

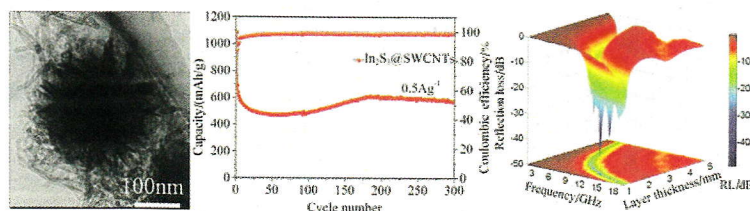


A series of structurally novel P-chiral biaryl bisphosphorus ligands BABIBOPs are developed, providing high ees and TONs for the first time in palladium-catalyzed asymmetric hydrogenation of  $\beta$ -aryl and  $\beta$ -alkyl substituted  $\beta$ -keto esters.

157

### Microwave Synthesized $\text{In}_2\text{S}_3$ @CNTs with Excellent Properties in Lithium-Ion Battery and Electromagnetic Wave Absorption

Cong Wang, Congpu Mu,\* Jianyong Xiang, Bochong Wang, Can Zhang, Jiefang Song, Fusheng Wen\*



The three-dimensional flower-like  $\beta\text{-In}_2\text{S}_3$  nanomaterials composited with carbon nanotubes have been synthesized. For LIBs applications, the  $\text{In}_2\text{S}_3$ @CNTs nanocomposite exhibited excellent cycling stability with a high reversible charge capacity of  $575 \text{ mA}\cdot\text{h}\cdot\text{g}^{-1}$  after 300 cycles at  $0.5 \text{ A}\cdot\text{g}^{-1}$ . And for the electromagnetic wave absorption application, the nanocomposite displayed a maximum reflection loss of  $-42.75 \text{ dB}$  at  $11.96 \text{ GHz}$  with a thickness of  $1.55 \text{ mm}$ .