### **ORGANIC** CHEMISTRY

### FRONTIERS

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### IN THIS ISSUE

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ORGANIC CHEMISTRY FRONTIERS **Cover** See Sean P. Bew *et al.*, pp. 2397–2404.

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Inside cover See Omar Boutureira *et al.*, pp. 2405–2415.

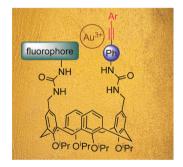
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**RESEARCH ARTICLES** 

### 2397

Upper-rim functionalised calix[4]arenes for chemoselective Au<sup>3+</sup> detection

Sean P. Bew,\* Sunil V. Sharma and William H. Gardiner



### 2405

Stereoselective access to 2-deoxy-2trifluoromethyl sugar mimetics by trifluoromethyl-directed 1,2-*trans* glycosylation

Jordi Mestre, Isabel Bascuas, Miguel Bernús, Sergio Castillón and Omar Boutureira\*



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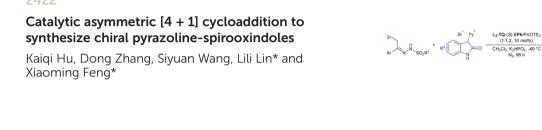
### 2416

Regio- and stereoselective oxidative conversion of alkynes to sulfenylated  $\alpha,\beta$ -unsaturated carbonyls

Meizhong Tang, Ye-Xin Wang, Shenlin Huang\* and Lan-Gui Xie\*



### 2422



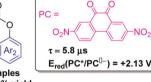
# $L_{3}-TQ_{-}(S)-EPh: R = (S)-2-phenylet$

### 2429

### 2,7-Dinitrophenanthrene-9,10-dione as a photosensitizer for the dehydrogenative lactonization of 2-arylbenzoic acids

Gaochang Shi, Yi Wang, Min He, Xiaoqiang Yu\* and Ming Bao



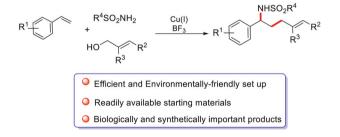


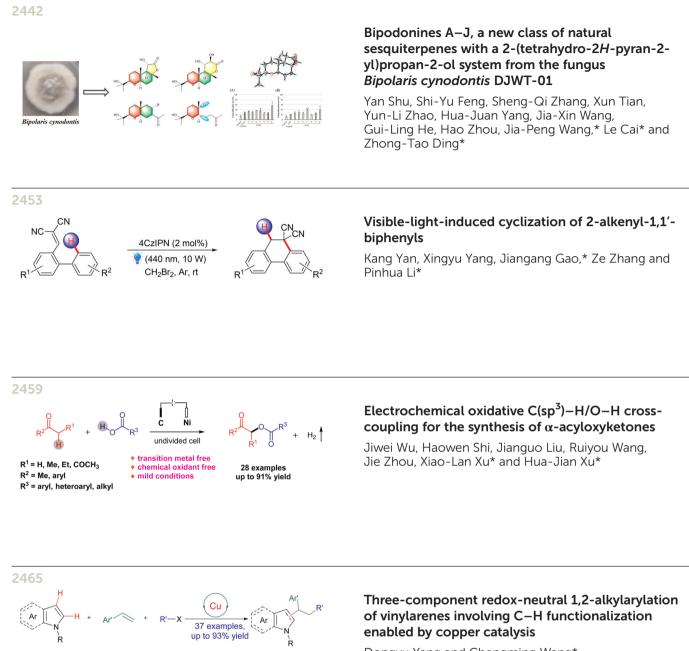
up to 99% yield

### 2434

Efficient and environmentally-friendly access to 4,5-unsaturated sulfonamides through ligand-free copper-BF<sub>3</sub>-catalyzed three-component alkene carbo-sulfonamidation

Waqar Ahmed,\* Aiman Sadaf and Pil Seok Chae\*





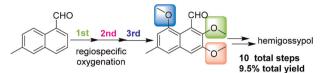


Dongyu Yang and Chengming Wang\*

### 2471

## Concise synthesis of hemigossypol *via* sequential palladium-catalyzed regiospecific oxygenations of the naphthalene ring

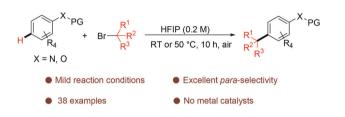
Jing Jiang, Yujian Mao, Yaoyu Lin, Jiayi Shen and Yinan Zhang\*



### 2476

### HFIP-promoted *para*-selective alkylation of anilines and phenols with tertiary alkyl bromides

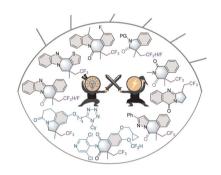
Pengcheng Huang, Xipeng Jiang, Du Gao, Cheng Wang, Da-Qing Shi\* and Yingsheng Zhao\*



### 2482

### Electrophotocatalytic tri- or difluoromethylative cyclization of alkenes

Danna Chen, Xuege Yang, Dongyin Wang, Yanni Li, Lou Shi\* and Deqiang Liang\*

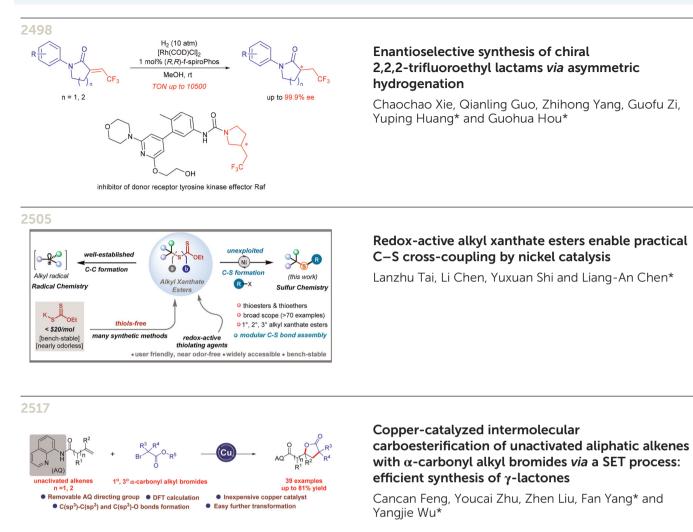


### 2491

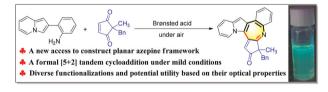
## DIC-borane-catalyzed selective methylation of primary amines with CO<sub>2</sub> using boranes as reducing agents

He Zhang, Yanmeng Zhang and Ke Gao\*





2526

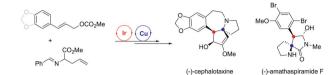


## Formal [5 + 2] cycloaddition of *ortho*-indolizinyl anilines with cyclopentenediones: access to planar indolizine-fused azepines

Qijian Ni,\* Lirong Zhang, Zhiming Zhu and Xiaoxiao Song\*

### 2532

### Enantioselective total syntheses of (–)-cephalotaxine and (–)-amathaspiramide F through a key Ir/Cu dual catalysis

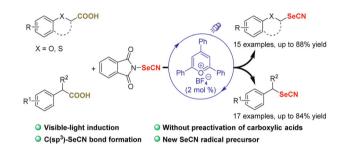


Peng-Zhen Sheng, Lu-Lu Li, Hongbin Zhang, Kun Wei\* and Yu-Rong Yang\*

### 2538

## Photocatalytic decarboxylative selenocyanation of 2-aryloxy and 2-aryl carboxylic acids with *N*-selenocyanatophthalimide

Yong Gao, Ruirui Hua, Hongquan Yin and Fu-Xue Chen\*



### 2544

## Regio- and diastereoselective construction of conjugate oxindole derivatives enabled by delayed acyl transfer of pyridinium ylides

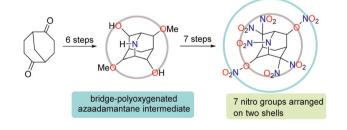
Mengchu Zhang, Gengxin Liu, Tianyuan Zhang, Kemiao Hong, Xiangji Yang, Huang Qiu and Wenhao Hu\*



### 2551

## Introduction of seven nitro groups on the 2-azaadamantane scaffold *via* a two-shell arrangement strategy

Qi Zhou, Rongbin Cai, Huan Li, Yunzhi Liu, Bing Li, Tianjiao Hou, Long Zhu, Guixiang Wang, Yu Zhang\* and Jun Luo\*

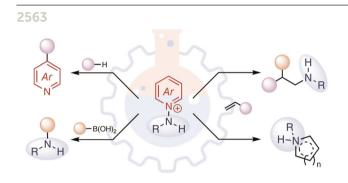




Dancing silanols: stereospecific rearrangements of silanol epoxides into silanoxy-tetrahydrofurans and silanoxy-tetrahydropyrans

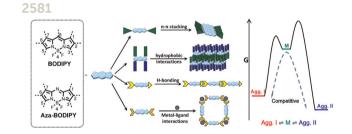
Harshit Joshi, Annu Anna Thomas, Joel T. Mague and Shyam Sathyamoorthi\*

#### REVIEWS



### N-Amino pyridinium salts in organic synthesis

Pritam Roychowdhury, Samya Samanta, Hao Tan and David C. Powers\*



Functional supramolecular aggregates based on BODIPY and aza-BODIPY dyes: control over the pathway complexity

Zhijian Chen\* and Zhaoying Chen

### CORRECTION

### 2603

**Correction: Copper-catalysed synthesis of trifluoromethyl allenes** *via* **fluoro-carboalkynylation of alkenes** Mengning Wang, Qiuzhu Wang, Mengtao Ma and Binlin Zhao\*