

## IN THIS ISSUE

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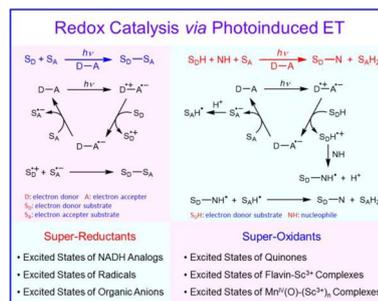
**Inside cover**  
See John McCracken, Selvan Demir, Aaron L. Odom *et al.*, pp. 4257–4264. Image reproduced by permission of Aaron L. Odom from *Chem. Sci.*, 2023, **14**, 4257.

## PERSPECTIVES

4205

### Redox catalysis via photoinduced electron transfer

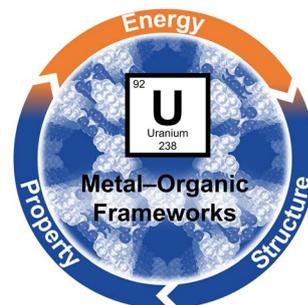
Yong-Min Lee,\* Wonwoo Nam\* and Shunichi Fukuzumi\*



4219

### Energy–structure–property relationships in uranium metal–organic frameworks

Sylvia L. Hanna and Omar K. Farha\*



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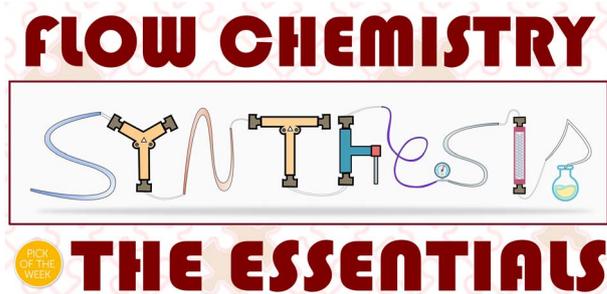


## REVIEW

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**A field guide to flow chemistry for synthetic organic chemists**

Luca Capaldo, Zhenghui Wen and Timothy Noël\*

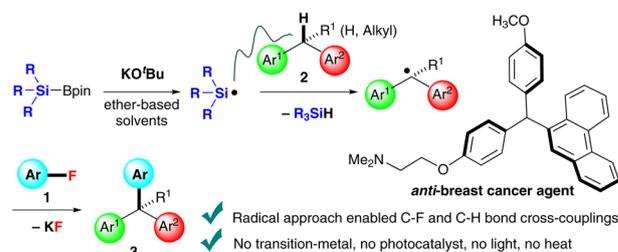


## EDGE ARTICLES

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**Synthesis of triarylmethanes by silyl radical-mediated cross-coupling of aryl fluorides and arylmethanes**

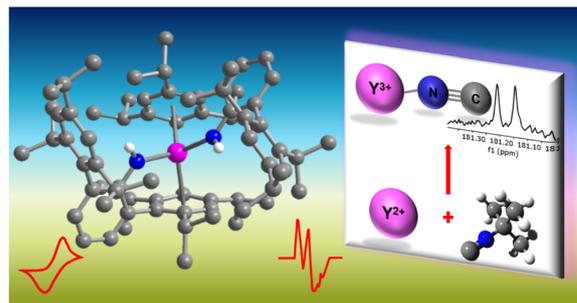
Jun Zhou, Zhengyu Zhao, Bingyao Jiang, Katsuhiko Yamamoto, Yuji Sumii and Norio Shibata\*



4257

**A rare isocyanide derived from an unprecedented neutral yttrium(II) bis(amide) complex**

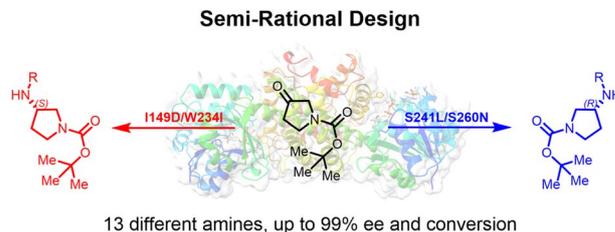
Rashmi Jena, Florian Benner, Francis Delano, IV, Daniel Holmes, John McCracken,\* Selvan Demir\* and Aaron L. Odom\*



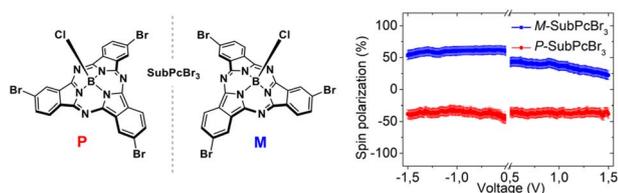
4265

**Structure-guided semi-rational design of an imine reductase for enantio-complementary synthesis of pyrrolidinamine**

Jun Zhang, Yaqing Ma, Fangfang Zhu, Jinping Bao, Qiaqing Wu, Shu-Shan Gao\* and Chengsen Cui\*



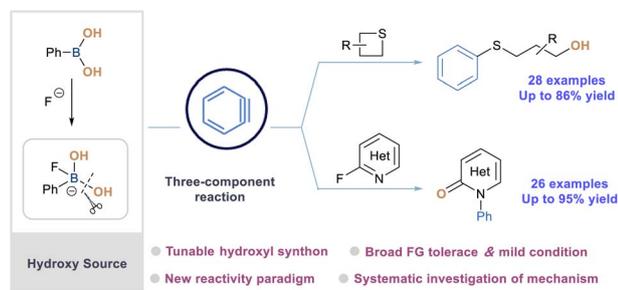
4273



### Easily processable spin filters: exploring the chiral induced spin selectivity of bowl-shaped chiral subphthalocyanines

Jorge Labella, Deb Kumar Bhowmick, Anil Kumar, Ron Naaman\* and Tomás Torres\*

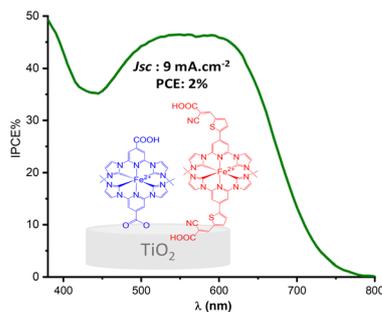
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### Empowering boronic acids as hydroxyl synthons for aryne induced three-component coupling reactions

Rong Fan, Shihan Liu, Qiang Yan, Yun Wei, Jingwen Wang, Yu Lan\* and Jiajing Tan\*

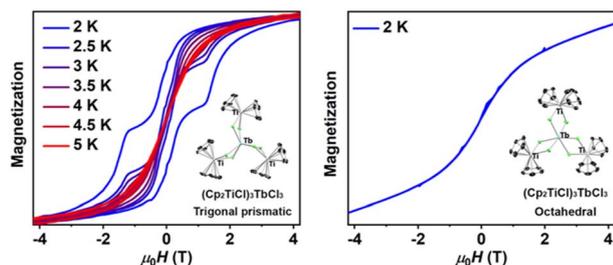
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### Panchromatic light harvesting and record power conversion efficiency for carboxylic/cyanoacrylic Fe(II) NHC co-sensitized FeSSCs

Anil Reddy-Marri, Edoardo Marchini, Valentin Diez Cabanes, Roberto Argazzi, Mariachiara Pastore,\* Stefano Caramori\* and Philippe C. Gros\*

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### Tuning symmetry and magnetic blocking of an exchange-coupled lanthanide ion in isomeric, tetrametallic complexes: [LnCl<sub>6</sub>(TiCp<sub>2</sub>)<sub>3</sub>]

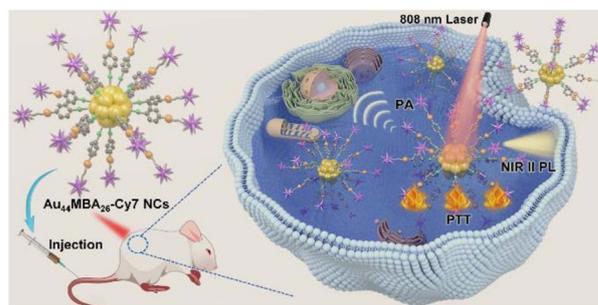
Ningxin Jiang, Daria D. Nakritskaia, Jiaze Xie, Arun Ramanathan, Sergey A. Varganov and Henry S. La Pierre\*



4308

### Ligand engineering of Au<sub>44</sub> nanoclusters for NIR-II luminescent and photoacoustic imaging-guided cancer photothermal therapy

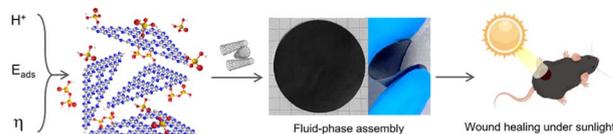
Ge Yang, Xueluer Mu, Xinxin Pan, Ying Tang, Qiaofeng Yao, Yaru Wang, Fuyi Jiang, Fanglin Du, Jianping Xie,\* Xianfeng Zhou\* and Xun Yuan\*



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### Molecular assembly of carbon nitride-based composite membranes for photocatalytic sterilization and wound healing

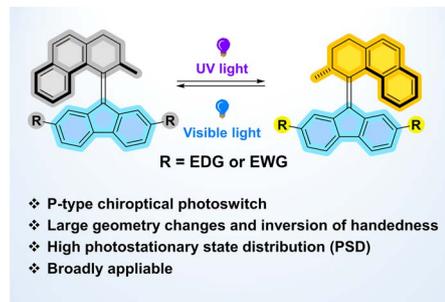
Xiaoxiao Peng, Jin Ma, Zhixin Zhou, Hong Yang, Jingjing Chen, Ran Chen, Kaiqing Wu, Guangcheng Xi, Songqin Liu, Yanfei Shen\* and Yuanjian Zhang\*



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### Designing P-type bi-stable overcrowded alkene-based chiroptical photoswitches

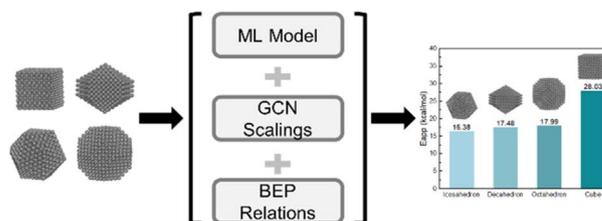
Jinyu Sheng, Wojciech Danowski,\* Stefano Crespi, Ainoa Guinart, Xiaobing Chen, Cosima Stähler and Ben L. Feringa\*



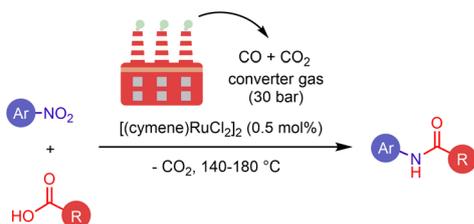
4337

### Reconciling experimental catalytic data stemming from structure sensitivity

Xue Zong and Dionisios G. Vlachos\*



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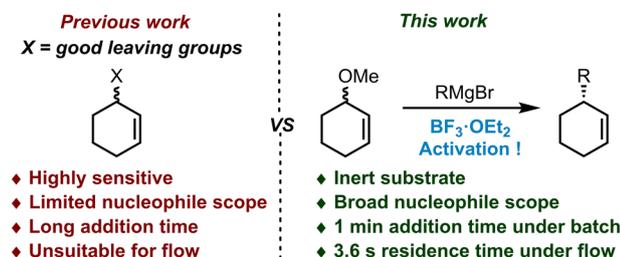


- Good selectivity
- Pharmaceutical products
- Using waste as reductant
- High efficiency

### Catalytic utilization of converter gas – an industrial waste for the synthesis of pharmaceuticals

Sofiya A. Runikhina, Oleg I. Afanasyev, Ekaterina A. Kuchuk, Dmitry S. Perekalin, Rajenahally V. Jagadeesh,\* Matthias Beller\* and Denis Chusov\*

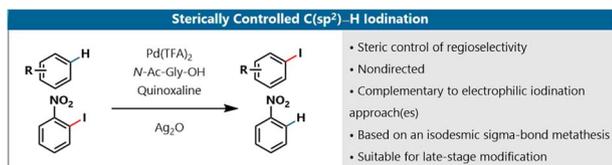
4351



### Copper-catalyzed asymmetric allylic alkylation of racemic inert cyclic allylic ethers under batch and flow conditions

Jun Li, Xiao Song, Yan Wang, Junrong Huang,\* Hengzhi You\* and Fen-Er Chen\*

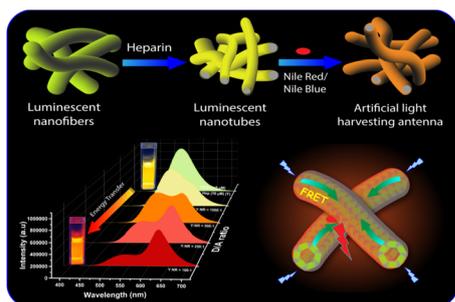
4357



### Sterically controlled isodesmic late-stage C–H iodination of arenes

Mirxan Farizyan, Rita de Jesus, Jyotirmoy Dey and Manuel van Gemmeren\*

4363



### Efficient light harvesting in self-assembled organic luminescent nanotubes

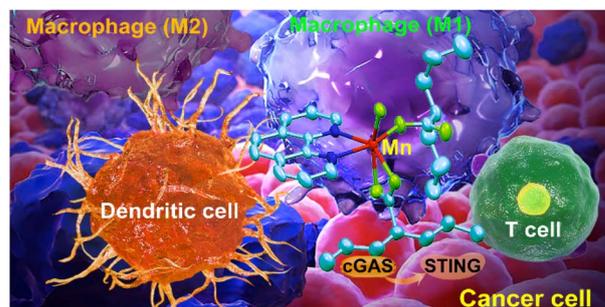
Shubhra Kanti Bhaumik, Dibyendu Maity, Ipsita Basu, Suman Chakrabarty\* and Supratim Banerjee\*



4375

### Manganese(II) complexes stimulate antitumor immunity *via* aggravating DNA damage and activating the cGAS-STING pathway

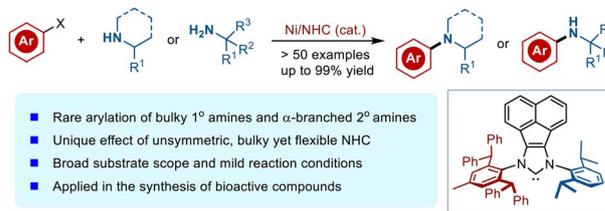
Linxiang Cai, Ying Wang, Yayu Chen, Hanhua Chen, Tao Yang, Shuren Zhang, Zijian Guo and Xiaoyong Wang\*



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### Unsymmetric N-heterocyclic carbene ligand enabled nickel-catalysed arylation of bulky primary and secondary amines

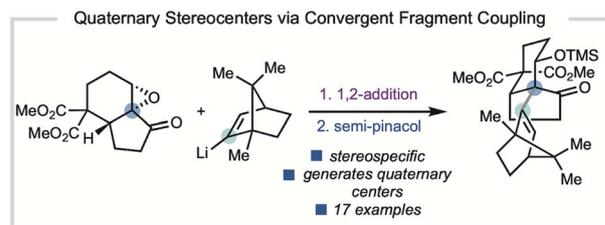
Zi-Chao Wang, Yan-Yu Li, Shuo-Qing Zhang, Xin Hong\* and Shi-Liang Shi\*



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### A convergent fragment coupling strategy to access quaternary stereogenic centers

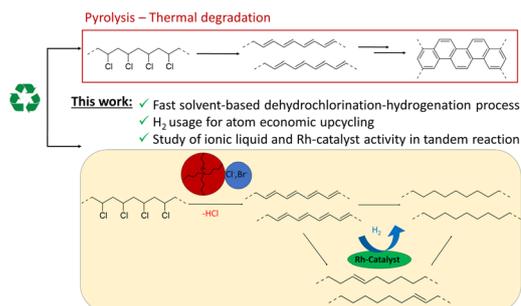
Jeff K. Kerkovius, Alice R. Wong, Victor W. Mak and Sarah E. Reisman\*



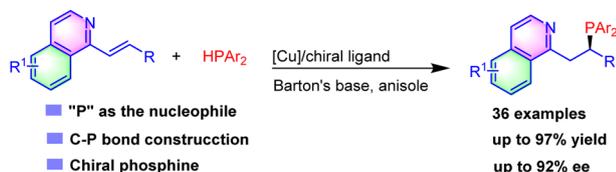
4401

### Catalytic tandem dehydrochlorination–hydrogenation of PVC towards valorisation of chlorinated plastic waste

Galahad O'Rourke, Tess Hennebel, Maxime Stalpaert, Alina Skorynina, Aram Bugaev, Kwinten Janssens, Lisa Van Emelen, Vincent Lemmens, Rodrigo De Oliveira Silva, Christel Colemonts, Philippe Gabriels, Dimitrios Sakellariou and Dirk De Vos\*



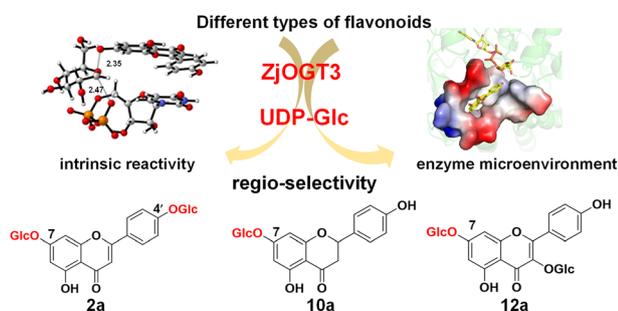
4413



### Enantioselective copper-catalyzed hydrophosphination of alkenyl isoquinolines

Qingjing Yang, Jian Zhou and Jun (Joelle) Wang\*

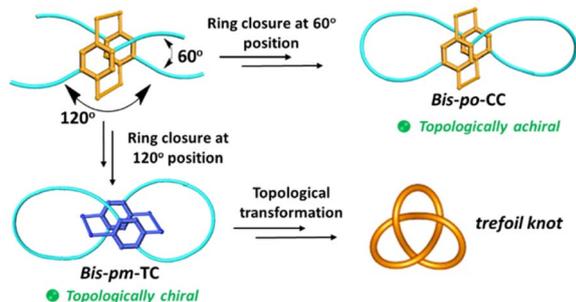
4418



### Functional characterization, structural basis, and regio-selectivity control of a promiscuous flavonoid 7,4'-di-O-glycosyltransferase from *Ziziphus jujuba* var. *spinosa*

Zi-Long Wang, Wanqing Wei, Hai-Dong Wang, Jia-Jing Zhou, Hao-Tian Wang, Kuan Chen, Rong-Shen Wang, Fu-Dong Li, Xue Qiao, Huan Zhou,\* Yong Liang\* and Min Ye\*

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### Lemniscular carbon nano hoops with contiguous conjugation from planar chiral [2.2]paracyclophane: influence of the regioselective synthesis on topological chirality

Jing He, Mo-Han Yu, Zhe Lian, Yan-Qing Fan, Sheng-Zhu Guo, Xiao-Nan Li, Ying Wang, Wen-Guang Wang, Zhi-Yun Cheng and Hua Jiang\*

## CORRECTION

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### Correction: Polymers as advanced antibacterial and antibiofilm agents for direct and combination therapies

Zhangyong Si, Wenbin Zhong, Dicky Prananty, Jianghua Li, Chong Hui Koh, En-Tang Kang, Kevin Pethe and Mary B. Chan-Park\*

