

# Organic & Biomolecular Chemistry

An international journal of synthetic, physical and biomolecular organic chemistry

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### Cover

See Isao Kadota,  
Kenta Tanaka *et al.*,  
pp. 9032–9035.

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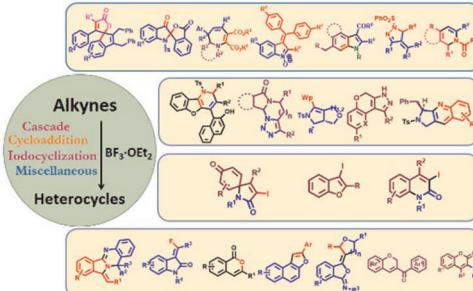
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*Org. Biomol. Chem.*, 2024,  
**22**, 9032.

## REVIEWS

8991

### BF<sub>3</sub>·OEt<sub>2</sub>-catalyzed/mediated alkyne cyclization: a comprehensive review of heterocycle synthesis with mechanistic insights

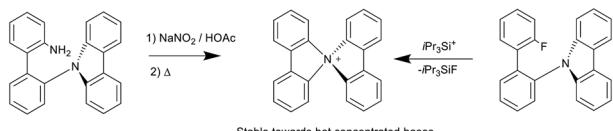
Priya Ghosh\* and Anil K. Saikia\*



9021

### Tetraarylammonium salts – synthesis, properties and emerging use

Alexander Marriott and Götz Bucher\*



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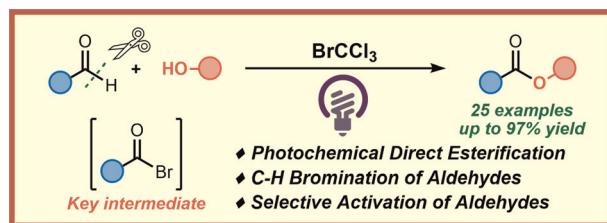
Fundamental questions  
Elemental answers

## COMMUNICATIONS

9032

**A direct oxidative esterification of aldehydes with alcohols mediated by photochemical C–H bromination**

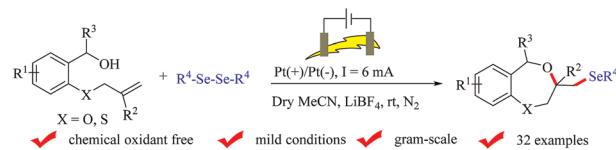
Haru Ando, Sakura Kodaki, Hiroyoshi Takamura, Isao Kadota\* and Kenta Tanaka\*



9036

**Synthesis of 1,4-benzodioxepines via electrochemical oxyselenenylation of 2-O-tethered alkenyl phenylmethanol and diselenides**

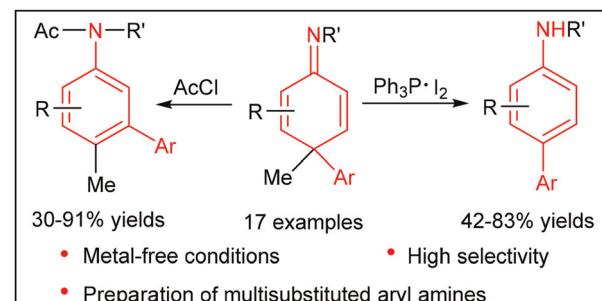
Junsheng Hou, Bingxin You, Ruiqi Lv, Xinxin Zhang, Jinyang Shen, Jiaojiao Li, Xi Zuo and Qiang Liu\*



9041

**The synthesis of aryl amines enabled by rearrangement and demethylaromatization of cyclohexadienimines**

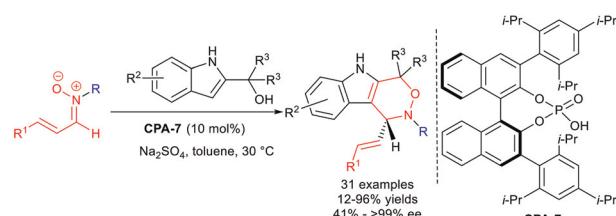
Xueyu Fang, Hongyan Xie, Hongkun Huang, Yu Wang, Tian Chen, Zhaohua Yan\* and Hua Yao\*



9047

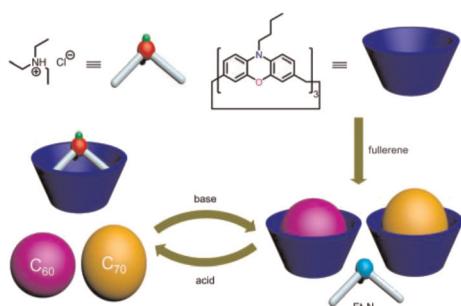
**Asymmetric [3 + 3] cycloaddition of cinnamaldehyde-derived *N*-aryl nitrones with 2-indolemethanols enabled by chiral phosphoric acid**

Ning Zou, Yu-Zheng Wu, Zi-Wei Shang, Yu-Wei Cao, Li-Min Liao, Cui Wei,\* Dong-Liang Mo\* and Wen-Jun Zhou\*



## COMMUNICATIONS

9053



## Reversible encapsulation and release of fullerenes using calix[n]phenoxazines

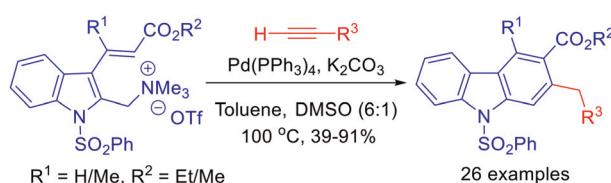
Lu Wang, Yunxiao Li, Xin Qu, Da Ma,\* M. Zubair Iqbal,\* Xiangdong Kong and Lijun Mao\*

9058

Synthesis of bis(indolyl)methanes using N-heterocyclic carbene salt as a C<sub>1</sub> precursor

Bingwei Zhou,\* Zhao Gao, Yanhao Yang and Yuanyuan Hu\*

9063

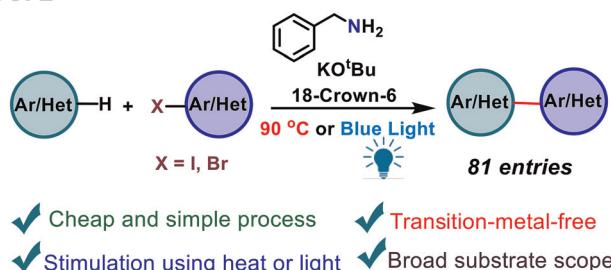


## Synthesis of di/tri-substituted carbazoles involving Pd-mediated Sonogashira coupling of indolyltriflates with aryl acetylenes

Rudrasenan Agneswaran and Arasambattu K. Mohanakrishnan\*

## PAPERS

9072



## Benzylamine promoted direct C–H arylation of arenes and heteroarenes via excitation with heat or light

Souvik Chatterjee, Sabnam Azmi, Nilaj Bandopadhyay, Krishnendu Paramanik, Gayetri Sarkar, Bhaskar Biswas\* and Hari Sankar Das\*

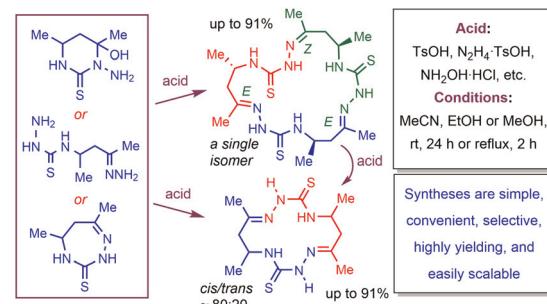


## PAPERS

9078

**Effective self-assembly of 21- and 14-membered azamacrocycles via condition-controlled cyclotrimerization or cyclodimerization of different thiosemicarbazide-based precursors**

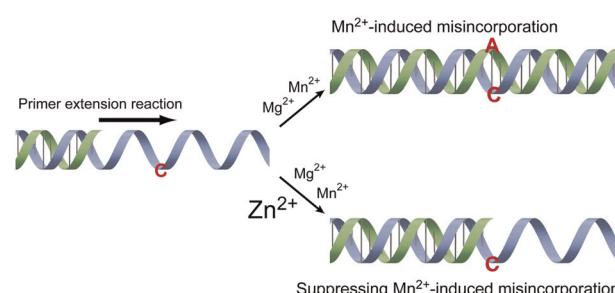
Anastasia A. Fesenko, Mikhail S. Grigoriev and Anatoly D. Shutalev\*



9094

**Zn<sup>2+</sup> ions improve the fidelity of metal-mediated primer extension while suppressing intrinsic and Mn<sup>2+</sup>-induced mutagenic effects by DNA polymerases**

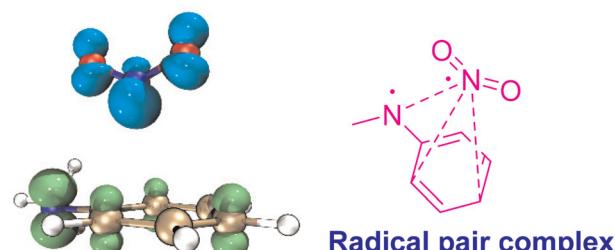
Tatsuya Funai, Natsumi Tanaka, Ryo Sugimachi, Shun-ichi Wada and Hidehito Urata\*



9101

**Theoretical mechanistic insights on the thermal and acid-catalyzed rearrangements of N-methyl-N-nitroanilines**

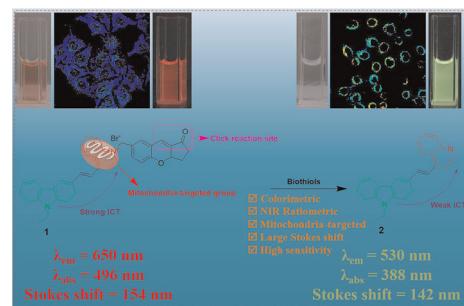
Shi Cheng, Chongjie Su, Tian Chen and Jiaxi Xu\*



9113

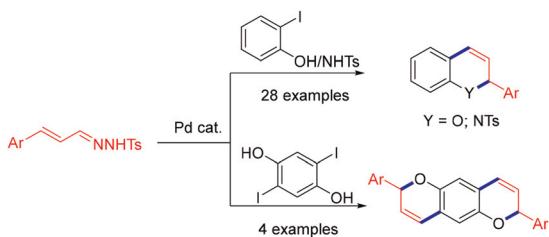
**A mitochondria-targeted colorimetric and NIR ratiometric fluorescent probe for biothiols with large Stokes shift based on thiol–chromene click reaction**

Dongjian Zhu, Aishan Ren\* and Lin Xue\*



## PAPERS

9121

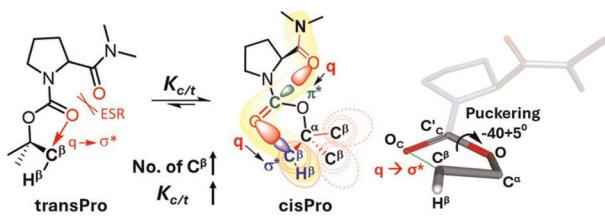


- ✓ Wide substrate scope and high functional group compatibility
- ✓ 2H-chromenes and 2H-quinolines were obtained with satisfactory yields
- ✓ Ternary heterocyclic skeleton was formed in the catalytic system

### Palladium-catalyzed cascade cyclization of $\alpha,\beta$ -unsaturated *N*-tosylhydrazones with iodoarenes: access to 2*H*-chromenes and 2*H*-quinolines

Yiyi Zheng, Xi-Wei Zhu, Yi-Yun Pan, Fei Sun, Long Yao\* and Xin-Xing Wu\*

9125



### *cis*Pro stabilization in prolyl carbamates influenced by tetrel bonding interactions

Shreya Banerjee, Shama Tumminakatti, Sudip Ghosh, Vamsee K. Voora and Erode N. Prabhakaran\*

