## **Organic & Biomolecular Chemistry**

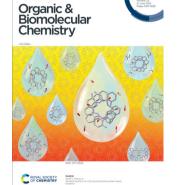
An international journal of synthetic, physical and biomolecular organic chemistry

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See Sarah J. Pike et al., pp. 5590-5599.

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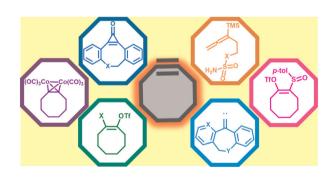
Cover image designed by Sena Ozturk.

#### **REVIEWS**

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Expanding the bioorthogonal chemistry toolbox: innovative synthetic strategies for cyclooctynes

Andrea Diana, Giuseppina I. Truglio, Elena Petricci and Daniela Lanari\*



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#### Recent applications of Cyrene as a chiral synthon

Yu. A. Khalilova\* and L. Kh. Faizullina







## Environmental Science: Atmospheres

Connecting communities and inspiring new ideas

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Fundamental questions Elemental answers

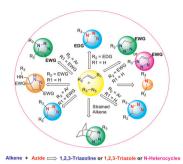


#### **REVIEWS**

#### 5483

Ene-azide chemistry in the synthesis of 1,2,3-triazoline/triazole and the corresponding mechanistic aspects

Kunj B. Mishra



#### **COMMUNICATIONS**

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Enantioselective access to 3,3'-disubstituted oxindole derivatives by N-heterocyclic carbene catalysis

Xiaomei Wang, Weixing Zeng, Shi-Wu Li,\* Jixin Pian and Zhifei Zhao\*

#### 5533

Synthesis of amide-functionalized isoquinoline derivatives by photo-induced carbamoyl radical cascade amidation/cyclization

Wei Niu, Yanlong Liu, Erling Dai, Jiarui Sun, Yuyu Dai\* and Xiangsheng Xu\*

#### 5542

Two-step electrochemically driven synthesis of sunitinib

Anita Alni,\* Robby Gus Mahardika, Ade Danova and Elvira Hermawati

#### COMMUNICATIONS

5549

## lodine-mediated *N*-benzylation of *NH*-sulfoximines with alcohols

Yuanfang Zhong\* and Linjie Yang

5554

## A protocol for selective synthesis of thiol-functionalized allylic sulfonyl fluorides

Monday Peter Ajisafe, Heba H. Mohamedy, Eman Fayad, Hanadi A. Katouah and Hua-Li Qin\*

5559

NH

Ar

NCS

$$CH_3CN, 100 \, ^{\circ}C$$

Y = O, S, NH

 $n = 1, 2, 3$ 

## Halogenation-enabled intramolecular deaminative cyclization

Wenbo Wang and Gang He\*

5564

## Photo-induced aerobic cross-coupling of quinoxalin-2(1*H*)-ones with electron-rich thiophenes

Wei Huang, Tong Wang, Shu-Ying Chen, Quan Zhou\* and Lei Wang

#### **COMMUNICATIONS**

#### 5569

Pd-catalyzed decarboxylative coupling of zinc polyfluorobenzoate with aryl imidazolylsulfonate for polyfluorinated biaryl synthesis

Chao Gui, Yun Zhou, Hong-Fei Tian, Xue-Qiang Chu, Hao Xu,\* Chengping Miao,\* Weidong Rao and Zhi-Liang Shen\*

32-97% yields

- using readily available aryl imidazolylsulfonate as arylating agent
- late-stage functionalization of bioactive molecules scalability
- C-O bond functionalization good functional group compatibility

#### 5576

Visible-light-induced dearomative 1,4-carbamoylpyridinylation of nonactivated naphthalenes

Cheng-An Jin, Hao Liu, Bo-Wen Xie, Ren-Xiao Liang\* and Yi-Xia Jia\*

#### 5582

Phosphine-catalyzed reaction of cyclopropenones with water: divergent synthesis of highly functionalized γ-butenolides, trisubstituted  $\alpha,\beta$ -unsaturated acids and anhydride

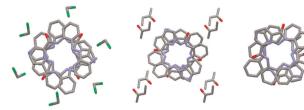
Fujuan Li, Danna Yang, Hongyan Qu, Mingqi Zhu and Suqing Zheng\*

#### **PAPERS**

#### 5590

Solvatomorphism of a 2,6-pyridyldicarboxamidebased foldamer

Sena Ozturk, Alexander R. Davis, Colin C. Seaton, Louise Male and Sarah J. Pike\*



#### **PAPERS**

#### 5600

#### Rhodium-catalyzed enantioselective hydrogenation of (1-arylvinyl)phosphonates with TADDOL-based phosphoramidite P,S ligands

Vladislav S. Zimarev, Ilva D. Firsin, Alexander V. Larin, Victor A. Tafeenko, Grigoriv N. Bondarenko, Ilva V. Chuchelkin, Vladislav K. Gavrilov, Konstantin N. Gavrilov, Nataliya S. Goulioukina\* and Irina P. Beletskaya

#### 5611

20 examples

#### Tandem process of asymmetric organocatalysis and selective post-functionalization: enantiodivergent synthesis of bioactive indane-1-carboxylic acid derivatives

Madina Zhanabaeva, Ruslan A. Kovalevsky, Alexander S. Kucherenko,\* Alexander A. Korlyukov and Sergei G. Zlotin\*

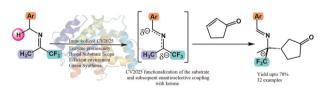
### 5616



#### Constructing chiral bicyclo[3.2.1]octanes via low-loading organocatalysis

Etikala Ashok, Pandhiti R. Lakshmi, Revoju Sravanthi and Dhevalapally B. Ramachary\*

#### 5629



#### An enzyme catalyzed umpolung strategy for the green synthesis of Schiff bases and their derivatives

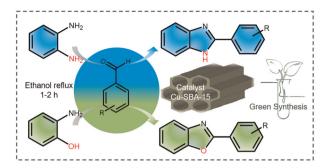
Taimur Khan, Daixi Wang, Khan Bahadar, Muhammad Shahab, Qaim Ali, Tausif Ahmad Khan and Guojun Zheng\*

#### **PAPERS**

#### 5635

Cu(II)-SBA-15 mediated synthesis of 2-aryl benzimidazoles and benzoxazoles: a sustainable approach

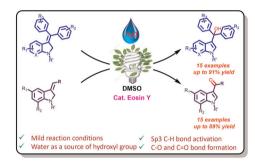
Athira M P, Arun R and Suja Haridas\*



#### 5643

Visible-light-triggered organophotoredoxcatalyzed oxidation of 3-(benzylidine)indoline to indole-3-carbinols and 3-acyl indoles

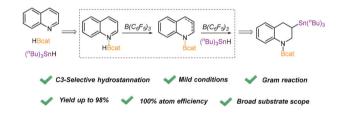
Sourav Ghosh, Gopal Rana, Abhishek Kar, Rajkamal Sahoo and Umasish Jana\*



#### 5657

An efficient method for constructing C3-stannyltetrahydroquinoline: cascade hydroboration and hydrostannation of quinoline

Tianwei Liu,\* Jianghua He\* and Yuetao Zhang



#### 5666

Catalytic dynamic kinetic reductive addition of simple aldehydes and aldimines with heterobiaryl triflates: harnessing both central and axial chirality

Hui Ni, Anyao Liu, Xiaoying Fu, Xinyi Zhang, Xiaowen Xue,\* Xiang Lyu,\* Aijun Lin\* and Yuli He\*



#### **PAPERS**

#### 5672

Regioselective synthesis of  $\alpha$ -(2-indolyl) ketones with arylaldehydes  $\emph{via}$  a tandem reaction of 2-alkynylanilines

Jianwei Wang,\* Qingxia Zhao, Hangxiao Fu and Jie Li\*

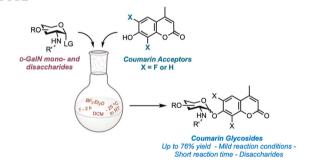
■ transition metal-free ■ tandem reaction
■ operationally simple ■ broad scope

# S677 R<sub>1</sub> R<sub>2</sub> R<sub>3</sub> + PhSO<sub>2</sub>SCF<sub>2</sub>H | dual catalysis | mild conditions | mechanistic studies | mechanistic

Dual photoredox/copper-catalyzed selective difluoromethylthiolation of remote unactivated  $C(sp^3)$ -H bonds at room temperature

Shengwen Li, Guanfeng Ji, Wengui Wang\* and Shoufeng Wang\*

#### 5682



## Systematic studies toward the synthesis of D-galactosamine-containing coumarin glycosides

Hannah S. Wootton and Gavin J. Miller\*

#### **CORRECTION**

#### 5689

Correction: TBAI-mediated electrochemical oxidative synthesis of quinazolin-4(3*H*)-ones from 2-aminobenzamides and isothiocyanates

Jingbin Huang, Yafeng Liu, Yu Huang, Xiuli Wu, Xiao-Bing Lan, Jian-Qiang Yu, Wenxue Li, Ping Zheng,\* Jian Zhang\* and Zhenyu An\*