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See Sumrit Wacharasindhu et al., pp. 8667-8674.

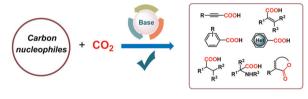
Image reproduced by permission of Sumrit Wacharasindhu from Org. Biomol. Chem., 2023, 21.8667.

#### **REVIEW**

Base-mediated carboxylation of C-nucleophiles with CO<sub>2</sub>

Yanlong Luo\* and Wenbin Huang\*

Base-mediated carboxylation of C-nucleophiles with CO2



● Simple manipulation ■ Environmentally friendly ■ Transition metal free systems

#### **COMMUNICATIONS**

#### 8642

Visible-light-driven 1,2-hydro(cyanomethylation) of alkenes with chloroacetonitrile

Keito Fuke and Tomoya Miura\*

$$\begin{array}{c} \text{cat.} \\ \text{fac-Ir(ppy)}_3 \\ \text{NaAscH} \\ \text{Pr}_4 \text{NI} \\ \text{blue LEDs} \end{array} \begin{array}{c} \text{Cat.} \\ \text{Co}_6 \text{F}_5 \text{SH} \\ \text{CN} \\ \text$$

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#### **COMMUNICATIONS**

#### 8646

Electrochemical chemoselective hydrogenation of 1,4-enediones with HFIP as the hydrogen donor: scalable access to 1,4-diketones

Hao-Ran Li, Xue-Yang Guo, Ming-Zhong Guo, Kui Liu, Li-Rong Wen, Ming Li\* and Lin-Bao Zhang\*

#### 8651

C3-Functionalization of indoles with  $\alpha$ -heteroarylsubstituted methyl alcohols

Ethan J. Pazur, Nikhil R. Tasker and Peter Wipf\*

Selective and controllable amination and defluoroamidation of  $\alpha$ -trifluoromethylstyrene

Shuang-Lian He, Yong-Sheng Bao, Juan Hu, Chaolumen Bai and Dan Liu\*

#### 8663

#### Umpolung trifluoromethylthiolation of alcohols

Ye Yang, Jiemin Ma, Jiaxiang Zhang, Hu Cai\* and Wentao Xu\*

#### 8667



# Electrochemical Nal-mediated one-pot synthesis of guanidines from isothiocyanates *via* tandem addition-guanylation

Thao Nguyen Thanh Huynh, Khuyen Thu Nguyen, Mongkol Sukwattanasinitt and Sumrit Wacharasindhu\*

#### 8675

# 

#### Variant B: a-S..2 Coupled Mechanis

# Exploring $\alpha$ -electron-deficiency-induced [1,2]-fluorine migration

Ke Zhang, Xi Chen, Zhoujie Zhang, Caijie Bu, Yong Wu\* and Jiawei Xu\*

#### 8690



# Photochemically induced chloromethylation/cyclization of benzimidazole derivatives with CCl<sub>4</sub>/CHCl<sub>3</sub>

Yanmin Liu, Ziwei Li, Luyao Yang, Shuo Li and Zhiwei Chen\*

#### 8695



#### Highly asymmetric aldol reaction of isatins and ketones catalyzed by chiral bifunctional primaryamine organocatalyst on water

Xiao-Xiong Lv, Ning Liu,\* Fei Chen, Hao Zhang, Zhi-Hong Du,\* Pei Wang, Meng Yuan and Chao Shan Da

#### 8702

Adaptive carbonyl umpolung involving a carbanionic carbene Breslow intermediate: an alternative mechanism for NHC-mediated organocatalysis

Rinat R. Aysin and Konstantin I. Galkin\*



#### 8708

Support studies toward the hicksoane alkaloids reveal cascade reactions of a (tryptophanamido) methylglycinate

Stephanie Lee, Tilo Söhnel and Jonathan Sperry\*

#### 8716

Synthesis of the diazatricycloundecane scaffold via gold(1)-catalysed Conia-ene-type 5-exo-dig cyclization and stepwise substituent assembly for the construction of an sp<sup>3</sup>-rich compound library

Tomoya Doi, Kohei Umedera, Kazuki Miura, Taiki Morita and Hiroyuki Nakamura\*

#### 8727

A sequential Friedländer and anionic benzannulation strategy for the regiodefined assembly of unsymmetrical acridines

Suman Bhatta, Bidyut Kumar Senapati,\* Sanjib Kumar Patra and Samik Nanda\*

$$\begin{array}{c} \text{CHO} \\ \text{R}_1 \\ \hline \\ \text{NO}_2 \\ \hline \\ \text{NO}_2 \\ \hline \\ \text{NO}_2 \\ \hline \\ \text{EIOH, heat} \\ \hline \\ \text{ii) NalO}_4, \\ \text{MeOH, rt} \\ \text{PhS} \\ \hline \\ \text{OR}_2 \\ \end{array} \\ \begin{array}{c} \text{EIOH, heat} \\ \hline \\ \text{ii) NalO}_4, \\ \text{MeOH, rt} \\ \text{(Friedlânder)} \\ \end{array} \\ \begin{array}{c} \text{Up to 90\%} \\ \text{(two steps)} \\ \end{array} \\ \begin{array}{c} \text{CO}_2 \\ \text{R}_3 \\ \hline \\ \text{LHMDS, THF} \\ \text{-}78 ° C to rt \\ \text{(benzannulation)} \\ \end{array} \\ \begin{array}{c} \text{Acridines} \\ \text{22 examples} \\ \text{yields up to 95\%} \\ \end{array}$$

- Abundant and cheap reagents o Mild conditions & broad scope
- Transition metal (TM) free benzannulation
- High functional-group tolerance
- High regioslectivity & atom economical
   Operationally simple and late stage synthetic modification

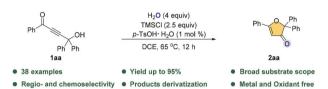
# N<sub>2</sub>BF<sub>4</sub> Catalyst (10mol%) R Het H R 36 examples up to 81% yield Base and metal free Simple operation and mild conditions

Photochemical acridone-mediated direct arylation of (hetero)arenes with aryl diazonium salts

Zhenhua Li,\* Lijun Chen, Dayou Rong, Longfeng Yuan and Yuanyuan Xie\*

#### 8744

Broad substrate scope

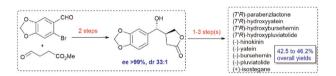


Gram-scale synthesis

Synthesis of 3(2*H*)-furanone derivatives: *p*-TsOH/ halotrimethylsilane promoted cycloketonization of  $\gamma$ -hydroxyl ynones

Yi-Feng Qiu,\* Jian-He Cao, Shutao Wang, Qiang Wang, Ming Li, Jun-Jiao Wang, Zheng-Jun Quan\* and Xi-Cun Wang\*

#### 8749



Organocatalytic aldol approach for the protecting group-free asymmetric synthesis of (7R')-parabenzlactone, (–)-hinokinin, (–)-yatein, (–)-bursehernin, (–)-pluviatolide, (+)-isostegane and allied lignans

Mainak Bera, Biswajit Sen, Sujay Garai and Saumen Hajra\*

#### 8757

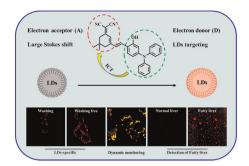
Recyclable gold(ι)-catalyzed heterocyclization of ynamides with benzyl or indolyl azides towards 2-aminoindoles or 3-amino-β-carbolines

Li Wei, Xiaoqiang Xiao and Mingzhong Cai\*

#### 8767

A wash-free fluorescent probe with a large Stokes shift for the identification of NAFL through tracing the change of lipid droplets

Jing Yang, Zhiyu Wang, Yi Deng, Cuifeng Zhang, Xuebin Shen, Jing He, Lei Hu\* and Hui Wang\*



#### 8772

Synthesis of 1,2,3-triazole-fused N-heterocycles from *N*-alkynyl hydroxyisoindolinones and sodium azide *via* the Huisgen reaction

Pallav Jyoti Arandhara, Bipin Kumar Behera, Subhamoy Biswas and Anil K. Saikia\*



- **O**Transition Metal Free Strategy
- Three C-N Bond and Two New Ring Formation in One Step
- Broad Substrate Scope, upto 86% Yield
- Gram Scale Synthesis