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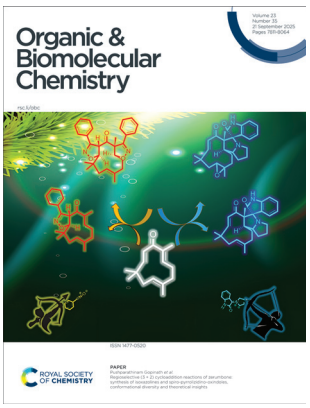

Cover
See Pushparathinam Gopinath *et al.*, pp. 7956–7961.

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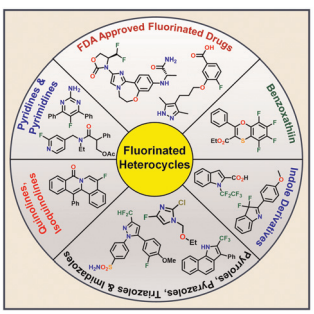
REVIEWS

7821

Recent advances in the synthesis of fluorinated heterocycles and a review of recent FDA-approved fluorinated drugs

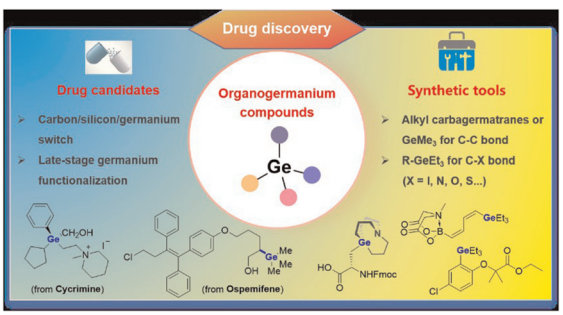
Sayan Mukherjee, Ujala Rani, Girish Chandra* and Shantanu Pal*



7852

Recently developed organogermanium(IV) compounds as drug candidates and synthetic tools in drug discovery

Meng-Yu Xu, Nan Li and Bin Xiao*



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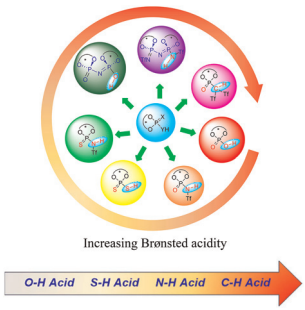
REVIEWS

7872

Recent advances in chiral phosphoric acids for asymmetric organocatalysis: a catalyst design perspective

Peng-Fei Zhao, Ke Wang, Jia-Xu Wen, Zhang-Mei-Duo Zhu, Hua Zhang, Zi-Heng Wang, Yu-Xin Liao, Chao-Shan Da* and Zhi-Hong Du*

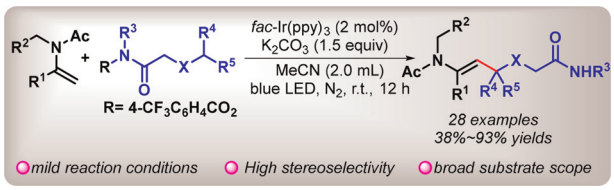


COMMUNICATIONS

7914

Photocatalytic remote alkenylation of hydroxamides with enamides: synthesis of trisubstituted enamides *via* a radical pathway

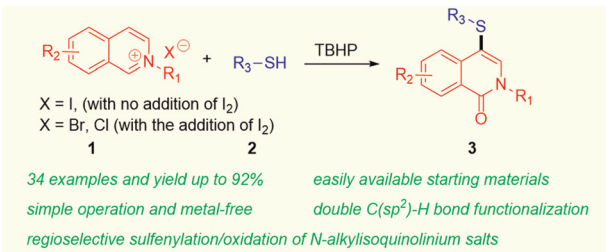
Yu-Ting Wang, Xiao Zou, Peng-Cheng Xu, Dai-Xiang Chen, Yue Zhang,* Sheng-Hu Yan* and Hang-Dong Zuo*



7919

Synthesis of 4-(arylthio)isoquinolin-1(2*H*)-ones *via* TBHP-mediated sequential amidation/thioetherification of *N*-alkylisoquinolinium salts

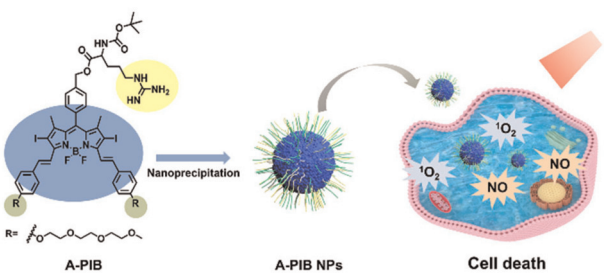
Chuanquan Chu, Jinhui Peng, Lijuan Jin, Yilin Chen, Dahan Wang,* Jinbing Liu, Junyuan Tang, Zi Yang,* Mingming Yu and Jinhui Cai*



7925

A carrier-free nano-photosensitizer for red light-activated NO release and combination therapy

Chaonan Li, Huixuan Qi, Jinjun Jia, Qingxia Lin* and Wenhai Lin*



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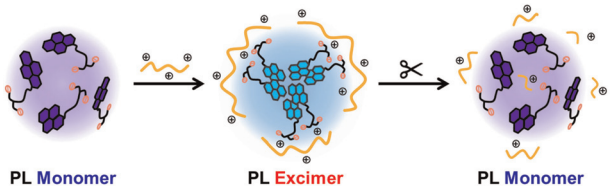
COMMUNICATIONS

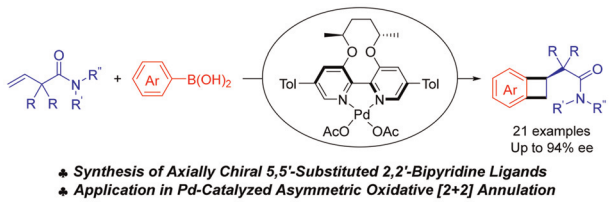
7929



A highly sensitive fluorogenic assay for trypsin in urine: a simple diagnostic approach for pancreatic diseases

Jaemin Lim, Hyeonjeong Seong and Seoung Ho Lee*

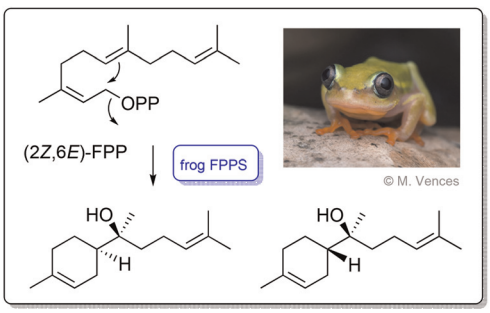
7935



Synthesis of axially chiral 5,5′-substituted 2,2′-bipyridine ligands and their application in palladium-catalyzed asymmetric oxidative [2 + 2] annulation

Kai Xue, Jian Chen, Yu-Qing Bai, Bo Wu* and Yong-Gui Zhou*

7940



Frog farnesyl pyrophosphate synthases and their role as non-canonical terpene synthases for bisabolane sesquiterpenes

Kexin Yang, Houchao Xu, Miguel Vences, Andolalao Rakotoarison, Stefan Schulz and Jeroen S. Dickschat*

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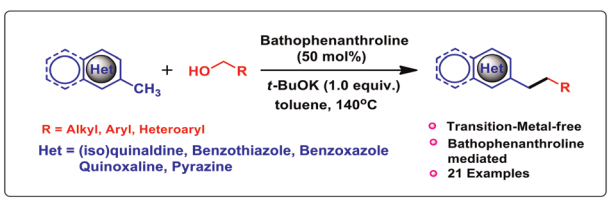

Bathophenanthroline-promoted C(sp^3)–H alkylation of N-heteroarenes using alcohols: a practical approach

Velayudham Sankar, Radhakrishnan Sakthiganapathi, Akanksha Singh Baghel, Bitragunta Sivakumar* and Subramaniyan Mannathan*

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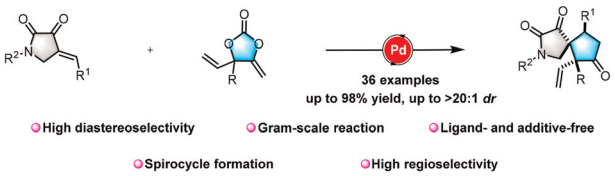
COMMUNICATIONS

7951

Highly regio- and diastereoselective construction of spirocyclic compounds *via* palladium-catalyzed [3 + 2] cycloaddition of vinyl methylene cyclic carbonates with pyrrolidinones

Huizhi Liu, Jiayi Zong, Boxuan Zhang, JiaHao Wang, Guohui Zheng, Miaolin Ke* and Fener Chen*



PAPERS

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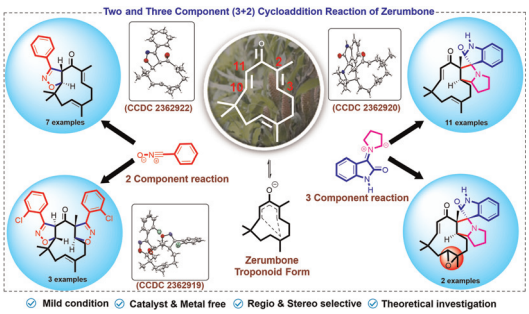
Regioselective (3 + 2) cycloaddition reactions of zerumbone: synthesis of isoxazolines and spiro-pyrrolizidino-oxindoles, conformational diversity and theoretical insights

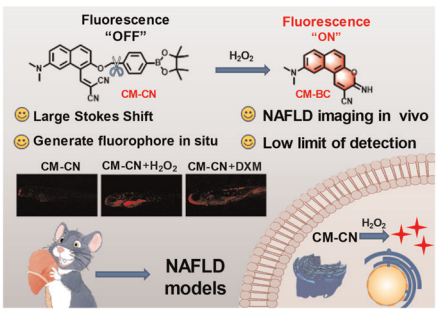
Nandha Kumar Murthi, Naga Venkateswara Rao Nulakani, Mohamad Akbar Ali, Tanay Kundu and Pushparathinam Gopinath*



7962

A self-assembled fluorescent probe for H_2O_2 detection in NAFLD diagnosis

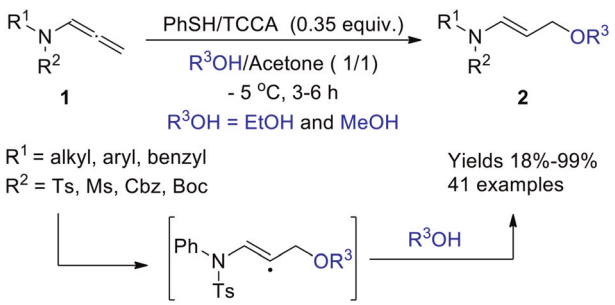
Mengzhao Zhang, Junlei Hao, Chengcheng Wu, Suntao Shi, Zhengyu Ma, Xiaowen Ren, Fei Han, Jiang Wu, Haijuan Zhang* and Baoxin Zhang*



7969

TCCA/PhSH-mediated regioselective hydroethoxylation and hydromethoxylation of allenamides *via* a radical process

Qingsong Liu, Gele Jiri, Xingyao She, Zhigang Zhao and Xiaoxiao Li*



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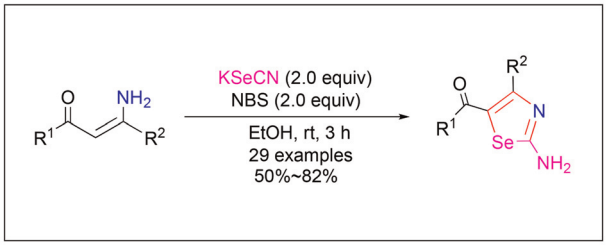
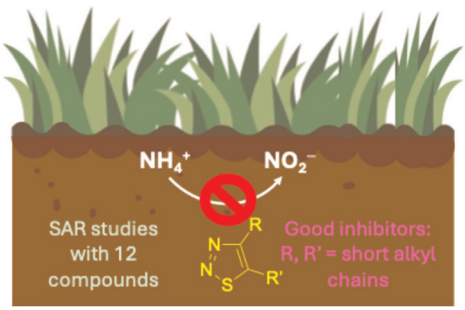


NBS-mediated *C*-selenocyanation/cyclization of enaminones with KSeCN: a mild and efficient synthesis of 2-aminoselenazoles

Fei Yuan, Yi-Yuan Xin, Cai-Feng Yuan, Zhuo Chen, Tong-Ling Qin, Wen-Xia Hu, Jia-Huan Duan and E Tang*

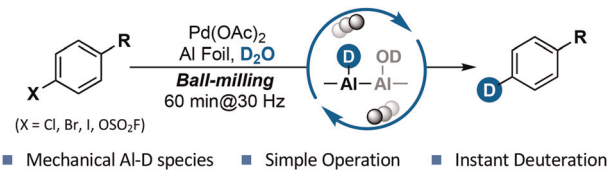
7984



Structure–activity relationship study of substituted 1,2,3-thiadiazoles as novel nitrification inhibitors for agriculture

Parvinder Kaur Sidhu, Yue Ming and Uta Wille*

7993



Mechanochemical deutero-dehalogenation of aryl halides and fluorosulfates with activated aluminum

Si-Han Xu, Jia Chen,* Linwei Wang, Si-Qi Li, Jian-Fei Bai, Jingbo Yu, Zhanghua Gao* and Zhi-Jiang Jiang*

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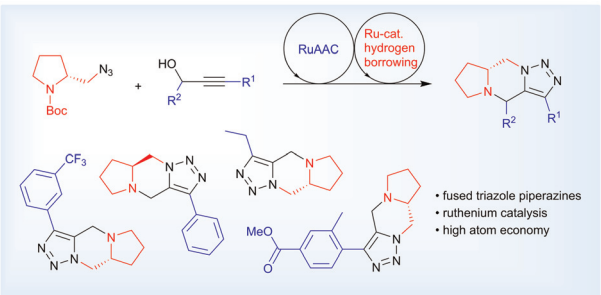

Ruthenium-catalyzed synthesis of tricyclic 1,5-fused 1,2,3-triazole piperazines

Anna Said Stålsmeden, Flavia Ferrara, Andreas Ekebergh, Maureen Gumbo, August Runemark, Johan R. Johansson, Per-Ola Norrby and Nina Kann*

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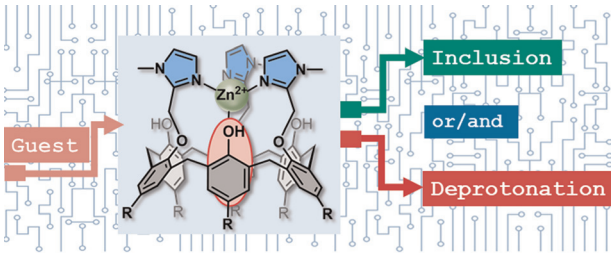
8012

Interplay between molecular recognition and acid–base reactivity in tailored metal-based calix [6]arene receptors

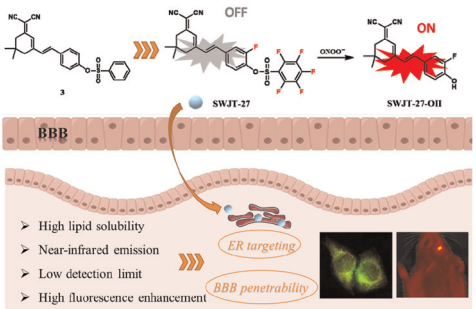
Martin Lepeintre, Aleksandar Višnjevac, Ivan Jabin* and Benoit Colasson*



8023

A high lipid-soluble probe for $ONOO^-$ recognition in the endoplasmic reticulum and imaging of cerebral ischemia-reperfusion injury

Yu-An Feng, Zi-Hao Liu, Wei Du, Ya-Wen Wang* and Yu Peng*



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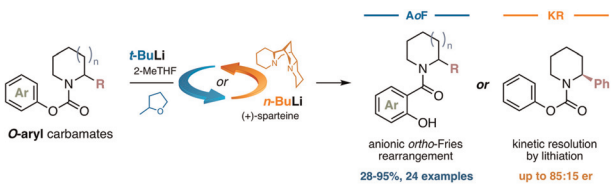
***O*-Aryl carbamates of 2-substituted piperidines: anionic Fries rearrangement and kinetic resolution by lithiation**

Francesco Marra, Fabrizio Morelli, Federica De Nardi, Emanuele Priola, Iain Coldham* and Marco Blangetti*



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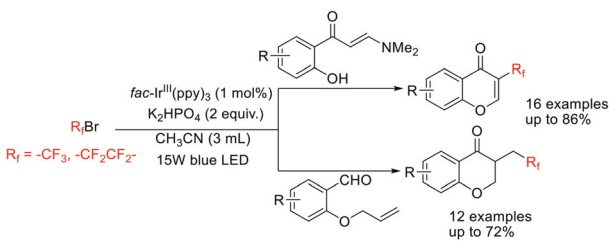
Visible-light-promoted tandem radical fluoroalkylation/cyclization to access fluoroalkyl-containing chromones/chroman-4-ones

Yuanyuan Ren, Yuxiu Zhou, Xiaona Pan, Ke-Hu Wang, Junjiao Wang, Danfeng Huang* and Yulai Hu*



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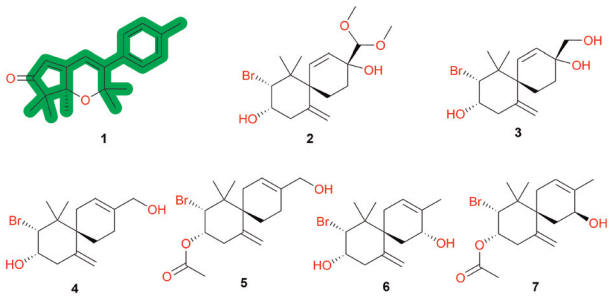
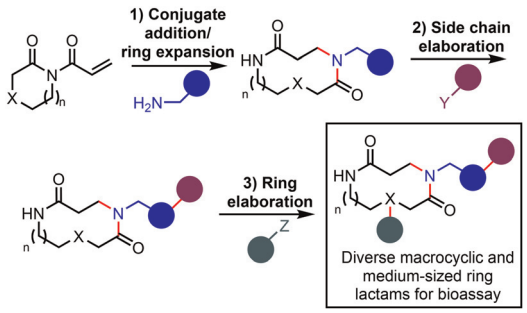


A novel diterpene and six new sesquiterpenes from the sea hare *Aplysia dactylomela*

Pham Thanh Binh, Duong Thu Trang, Kieu Thi Phuong Linh, Nguyen Phuong Thao, Nguyen Chi Mai, Tran My Linh, Dang Vu Luong, Nguyen Hoai Nam* and Nguyen Van Thanh*

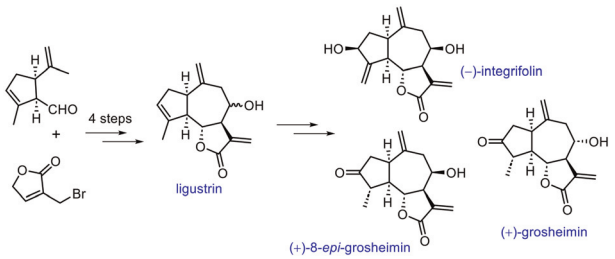
8053



Synthesis of a macrocyclic and medium-sized ring lactam library using cascade ring expansion reactions

Selin Yilmaz, Haimei Zhou, Çağrı Özsan, Angelo Frei, Peter O'Brien and William P. Unsworth*

8059



Protecting-group-free total syntheses of (−)-integrifolin, (+)-8-*epi*-grosheimin and (+)-grosheimin

Rodney A. Fernandes,* Dnyaneshwar A. Gorve and Gujjula V. Ramakrishna

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