

Organic & Biomolecular Chemistry

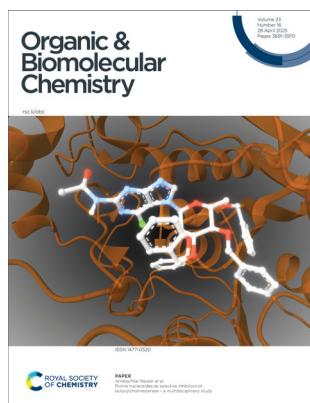
An international journal of synthetic, physical and biomolecular organic chemistry

rsc.li/obc

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 1477-0520 CODEN OBCRAK 23(16) 3691–3970 (2025)



Cover

See Amélia Pilar Rauter et al.,
pp. 3845–3859.

Image reproduced
by permission of
Amélia Pilar Rauter from
Org. Biomol. Chem.,
2025, **23**, 3845.

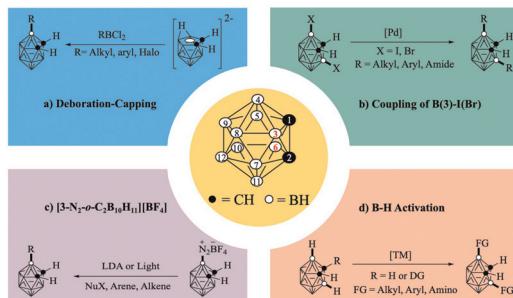
Cover image designed by
Vasco Cachatra.

REVIEWS

3701

Advances in the selective functionalization of B(3,6)-H of o-carboranes

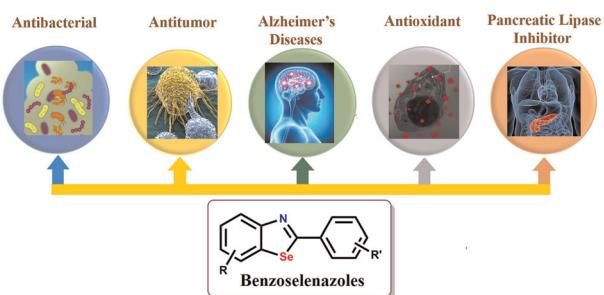
Ji Wu and Ke Cao*



3712

A review on benzoselenazoles: synthetic methodologies and potential biological applications

Manisha Yadav and Vijay P. Singh*



GOLD
OPEN
ACCESS

EES Solar

Exceptional research on solar
energy and photovoltaics

Part of the EES family

Join
in

Publish with us

rsc.li/EESSolar

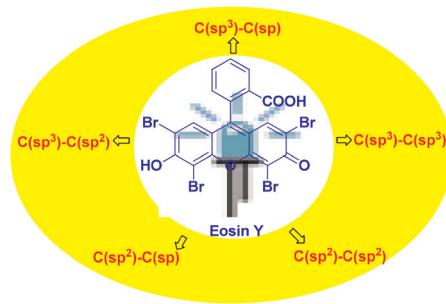


REVIEWS

3741

The formation reaction of a carbon–carbon bond promoted by Eosin-Y under visible light

Lirong Han, Hui Zhou, Jinsong Hou, Xiaohao Shi and Qinghan Li*



COMMUNICATIONS

3800

Visible-light-driven copper(II) catalysis for 2,3-disubstituted quinazolinone synthesis via Ullmann N-arylation and C–H oxidative amidation

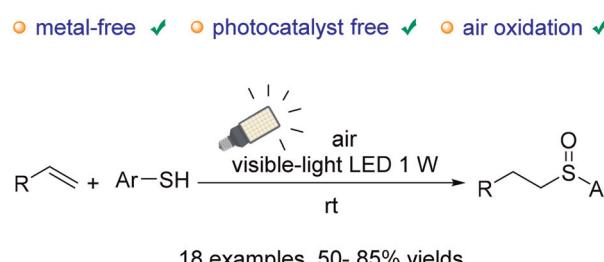
Ahmed Th. Abdulghaffar, Pei Hu, Yifan Hu, Chenxu Liu, Yanrong Ren, Zhongyan Cao, Yuanqing Xu,* Min Jiang* and Hao Xu*



3806

Visible-light-induced thiol–ene/air oxidation tandem reaction for sulfoxide synthesis: a photocatalyst-free and metal-free approach

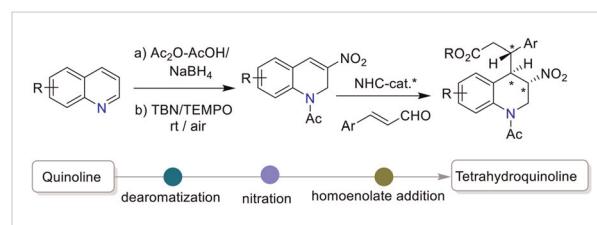
Ming-Hao Zhao, Xu Liu, Yu-Chen Yang and Lijia Wang*



3812

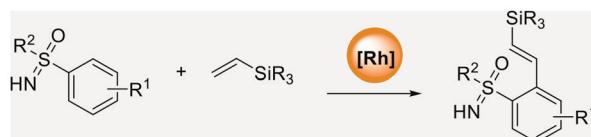
A stepwise dearomatization/nitration/enantioselective homoenolate reaction of quinolines to construct C₃-nitro-substituted tetrahydroquinolines

Aniruddh Pratap and Biswajit Maji*



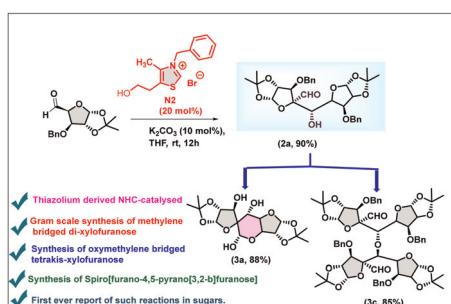
COMMUNICATIONS

3819

**Rh(III)-catalyzed C–H alkenylation of NH-sulfoxime with vinylsilanes**

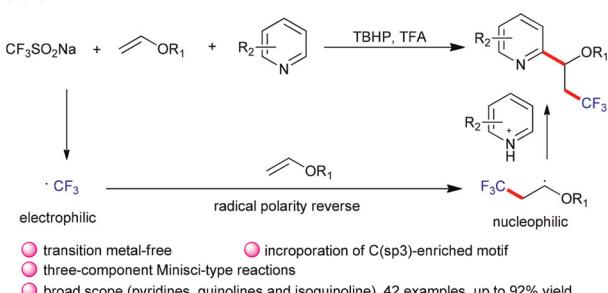
Yu Gao, Ya-Li Xu and Lin Dong*

3824

**NHC-catalysed synthesis of hydroxy methylene-bridged formyl-di-xylofuranose: access to tetrakis and spiro tricyclic xylofuranose**

Norein Sakander, Rahul Haldar and Debaraj Mukherjee*

3830

**Three-component Minisci reaction involving trifluoromethyl radicals promoted by TBHP**

Xiaole Zhang, Wengui Wang* and Shoufeng Wang*

3836

**Synthesis of 3,4-unsubstituted isoquinolone derivatives from benzimidates and vinylene carbonate via cobalt(III)-catalyzed C–H activation/cyclization**

Weiyan Xu, Haowen Dang, Huiru Sheng, Jiabin Shen* and Min Wang*

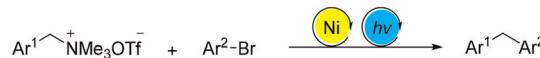


COMMUNICATIONS

3841

Visible-light-driven nickel-catalyzed reductive cross-coupling of benzyltrimethylammonium triflates with aryl bromides

Ren-Gui Tian, Mengyao Yu, Bo Ni, Muliang Zhang* and Shi-Kai Tian*



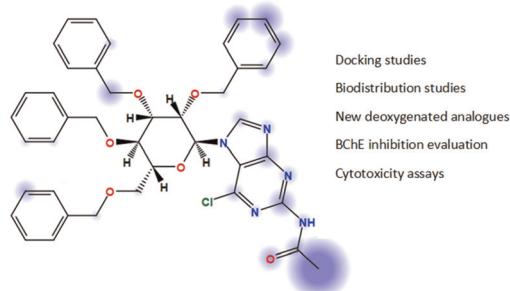
- ✓ Cross-Electrophile
- ✓ C–N Bond Cleavage
- ✓ Free Metal Reductant
- ✓ Nickel and Photoredox Dual-Catalysis

PAPERS

3845

Purine nucleosides as selective inhibitors of butyrylcholinesterase – a multidisciplinary study

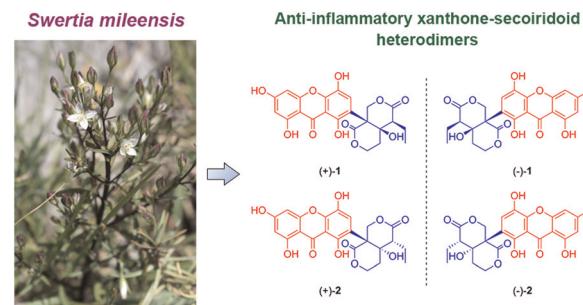
Vasco Cachatra, Alice Martins, Maria Conceição Oliveira, Maria Cristina Oliveira, Lurdes Gano, António Paulo, Óscar López, José G. Fernández-Bolaños, Marialessandra Contino, Nicola Antonio Colabufo, David Evans, Teresa Man and Amélia Pilar Rauter*



3860

Swermilactones A and B: racemic xanthone–secoiridoid heterodimers from *Swertia mileensis*

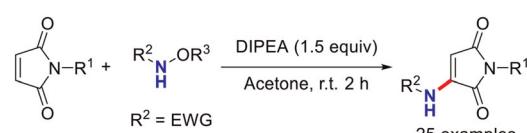
Yao Du, Hao Li, Xiao-Yu Qi, Yuan-Liang Xu, Yan Liu, Xue-Mei Niu,* Kai Guo* and Sheng-Hong Li*



3865

Metal-free amination of alkenes based on maleimides

Li-Wen Shen,* Shuang-Ling Lei, Hong-Yan Wang, Xin Wang, Lin-Mu Lu, Guang-Wei Wang, Yun-Qing Jia* and Min Xiang*



- ✓ The metal-free amination of maleimides
- ✓ Mild reaction conditions
- ✓ Highly functional-group compatible
- ✓ The synthesis of aminomaleimides bearing electron-withdrawing R² groups
- ✓ Scale-up synthesis and derivatization of product



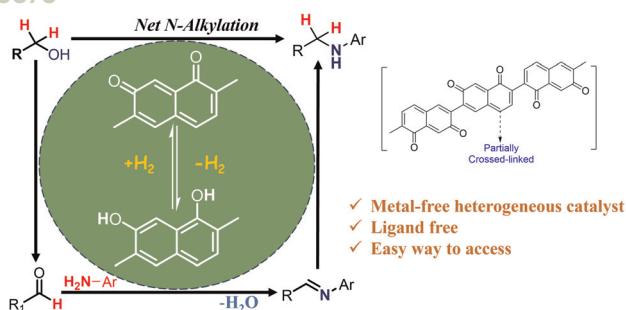
PAPERS

3870

**Meyer–Schuster rearrangement/allylic alkenylation of propynolaldehydes with olefins to synthesize skipped 1,4-dienes**

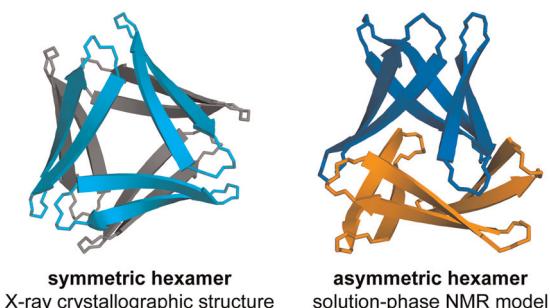
Cheng-Ping Shen, Hai-Tao Zhu,* Guo-Hua Li, Xin Chang, Jia-Jun Xi, Ni-Ni Zhou and An-Xi Zhou

3875

**Polynaphthoquinone mediated metal-free direct *N*-alkylation of (hetero)aryl amines using alcohols**

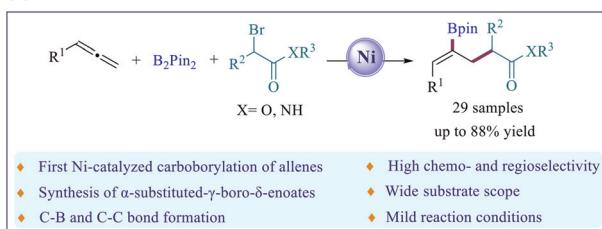
Uttam Kumar Panigrahi* and Vengadesh Kumara Mangalam Ramakrishnan*

3881

**A β -hairpin peptide derived from A β forms different oligomers in the crystal state and in aqueous solution**

Jason Zhu, Adam G. Kreutzer, Zhiwei Liu, Xingyue Li, Sabrina M. Richter, Vojislava Pophristic and James S. Nowick*

3894

**Ni-catalyzed highly regioselective carboborylation bifunctionalization of allenes: access to α -substituted- γ -boro- δ -enoates**

Jing Wu, Xinman Guo, Jinghan Zou, Ziyu Wang, Weixing Chang, Lingyan Liu* and Jing Li*

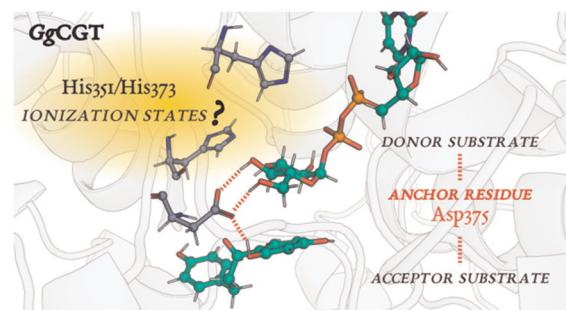


PAPERS

3899

Structural analyses of *Glycyrrhiza glabra* C-glycosyltransferase: a molecular dynamics study to elucidate catalytically active complexes

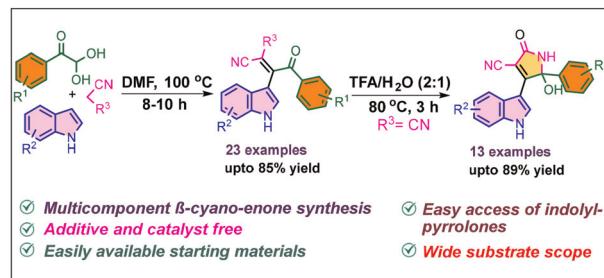
Gonzalo A. Jaña, Fabiola E. Medina, Francisco Barrios, Jorge I. Martínez-Araya and Fernanda Mendoza*



3913

Synthesis of indole-linked β -cyano-enones: a pathway to indolyl-2-pyrrolones

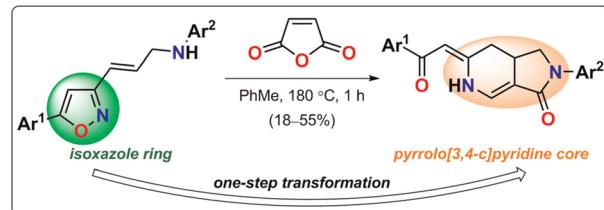
Nurabul Mondal, Vidya Kumari, Danish Ali and Lokman H. Choudhury*



3925

The IMDAV reaction between 3-(isoxazol-3-yl) allylamines and maleic anhydrides: an unusual approach to pyrrolo[3,4-c]pyridine derivatives, possessing anti-inflammatory activity

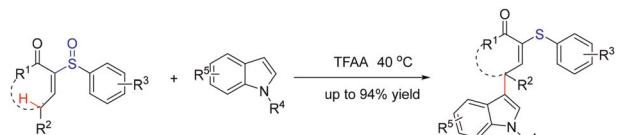
Vladimir P. Zaytsev,* Daria N. Simakova, Viktoriya S. Maslova, Valentina V. Ilyushenkova, Roman A. Novikov, Mikhail S. Grigoriev, Roman D. Danilov, Roman Litvinov, Irina A. Kolesnik, Vladimir I. Potkin and Fedor I. Zubkov



3937

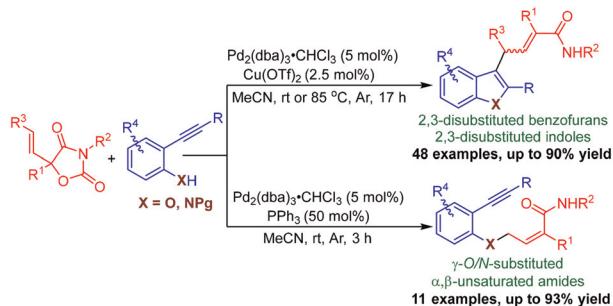
O-Acylation triggered γ -umpolung functionalization of electron-poor alkenyl sulfoxides for the synthesis of 3-allyl indoles

Wenjie Wei, Qiangrong Xie, Xiaoyu Li, Yuanyuan Xie* and Hongwei Zhou*



PAPERS

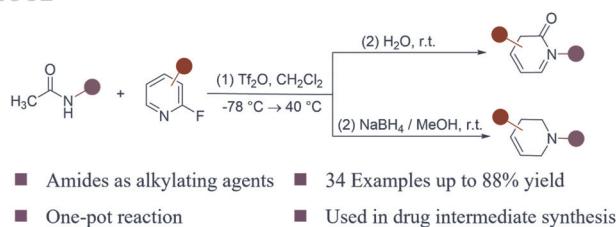
3942



Palladium-catalyzed decarboxylation of vinyloxazolidine-2,4-diones used in the divergent reaction with 2-alkynylphenols and 2-alkynylanilines

Zhong-Lie Yang, Zhen-Hua Wang, Yan-Ping Zhang, Yong You, Jian-Qiang Zhao, Ming-Qiang Zhou* and Wei-Cheng Yuan*

3951



A novel strategy for alkylation via amide activation: synthesis of *N*-substituted 2-pyridones and tetrahydropyridines

Qiao Song,* Shun Wang, Sheng Wang, Dong Xing and Zhouyu Wang*

3956



Catalyst and transition-metal free 1,6-conjugate addition of azobisisobutyronitrile: access to isobutyronitrile containing diarylmethanes

Ajay G. Mamale, Balaji M. Ghodake, Rajesh G. Gonnade and Asish K. Bhattacharya*

CORRECTION

3967

Correction: Metal-free amination of alkenes based on maleimides

Li-Wen Shen,* Shuang-Ling Lei, Hong-Yan Wang, Xin Wang, Lin-Mu Lu, Guang-Wei Wang, Yun-Qing Jia* and Min Xiang*

