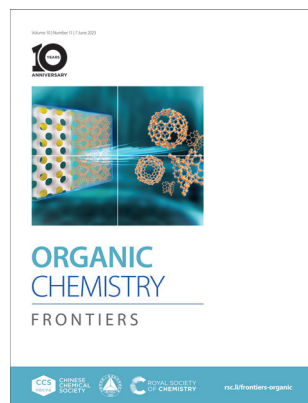


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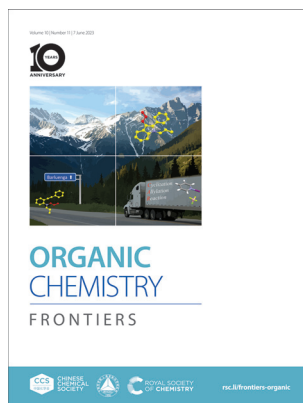
ISSN 2052-4129 CODEN OCFRA8 10(11) 2607–2880 (2023)



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See Zhaohui Wang *et al.*, pp. 2808–2812.

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See Akio Saito *et al.*, pp. 2618–2623.

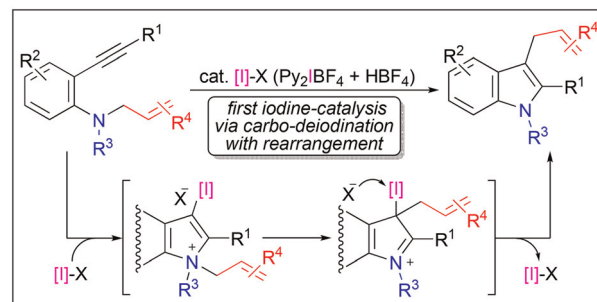
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RESEARCH ARTICLES

2618

Iodine-catalyzed cyclization–allylation of *N*-allyl-2-alkynylanilines via an iodocyclization–rearrangement–deiodination sequence

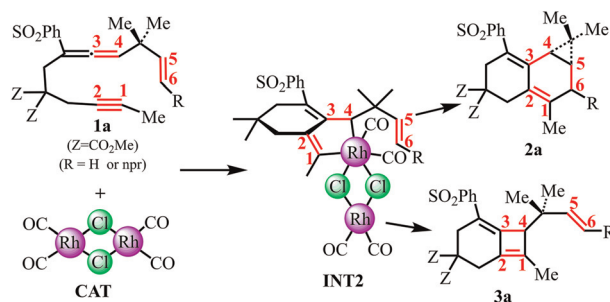
Sae Tsubata, Akira Tsubouchi and Akio Saito*



2624

DFT study on stereoselective Rh-catalyzed intramolecular [2 + 2 + 2] cycloaddition of allene–ene–ynes

Xin-Rui Zhu and De-Cai Fang*



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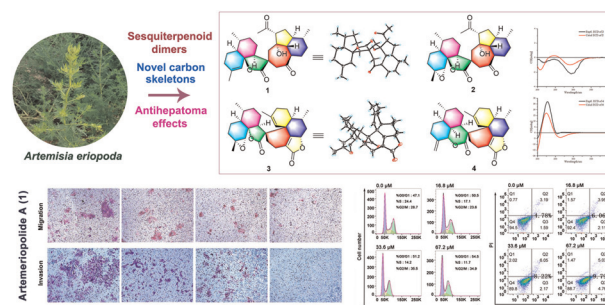


RESEARCH ARTICLES

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Artemeriopolides A–D, two types of sesquiterpenoid dimers with rare carbon skeletons from *Artemisia eriopoda* and their antihepatoma cytotoxicity

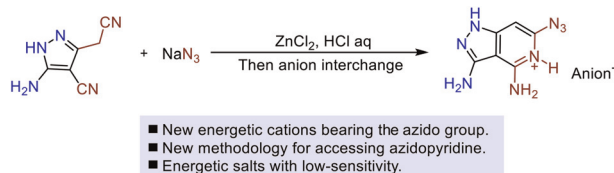
Xiao-Feng He, Qi-Hao Li, Tian-Ze Li, Yun-Bao Ma, Wei Dong, Ke-Xin Yang, Chang-An Geng, Hao-Wei Zhang, Yuan Wang and Ji-Jun Chen*



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A practical synthesis of 3,4-diamino-6-azido-1*H*-pyrazolo[4,3-*c*]pyridin-5-ium energetic ionic compounds

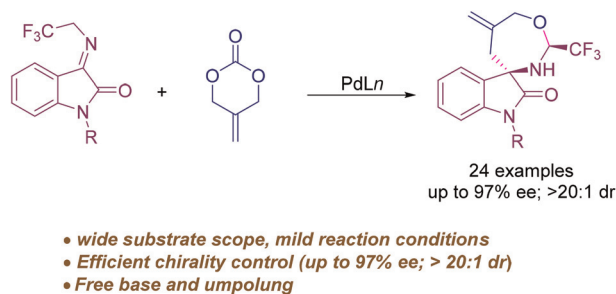
Wen-Hao Cui, Wen-Biao Zhou, Zhiwen Ye and Ying He*



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Palladium-catalyzed asymmetric (4 + 3) cycloaddition of *N*-2,2,2-trifluoroethylsatin ketimines: access to optically active spirooxindoles

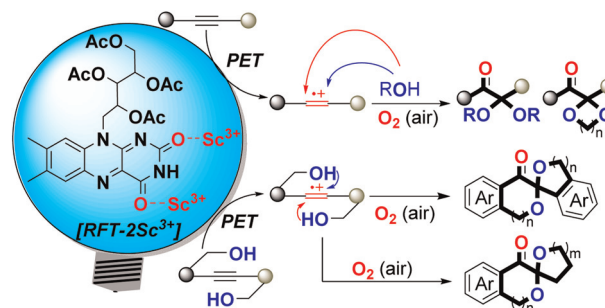
Yinggao Meng, Manman Song, Yue Wang, Yuxin Wang and Er-Qing Li*



2653

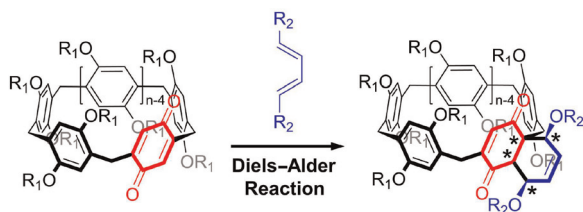
Aerobic oxyfunctionalization of alkynes by a bioinspired flavin–metal ion photocatalytic system

Duyi Shen,* Fubi Zhong, Linghui Li, Haixing Zhang, Ting Ren, Chaoyue Sun, Bin Wang, Mian Guo, Mianran Chao* and Shunichi Fukuzumi*



RESEARCH ARTICLES

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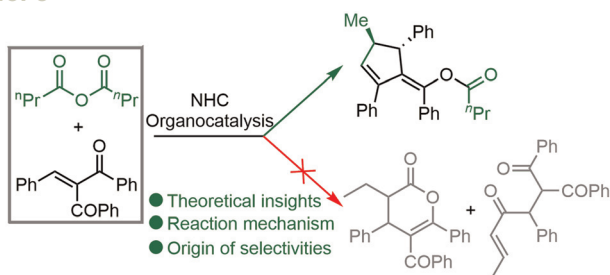


- Pillar[*n*]arene-based Diels–Alder adducts
- New chiral centres embedded in backbone
- Distorted “non-pillar-like” conformations

Synthesis, structures, and conformational characteristics of pillararene-based Diels–Alder adducts with embedded chiral centres

Haiying Wang, Tushar U. Thikekar, Jingfeng Xue, Yumei Zhu, Wangjian Fang, Jiong Xu, Andrew C.-H. Sue* and Hongxia Zhao*

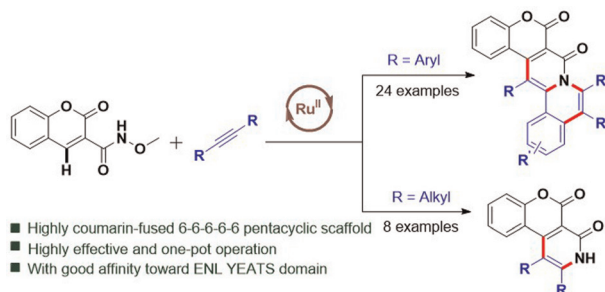
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Exploring a general mechanistic map on NHC-catalyzed activation/transformation reactions of saturated carboxylic anhydrides

Shuang-Liang Liu, Yan Qiao* and Yang Wang*

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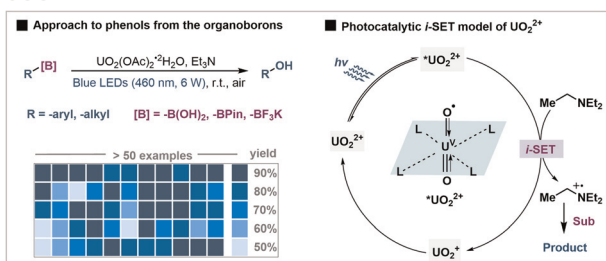


- Highly coumarin-fused 6-6-6-6-6 pentacyclic scaffold
- Highly effective and one-pot operation
- With good affinity toward ENL YEATS domain

A Ru(II)-catalyzed C–H activation and annulation cascade for the construction of highly coumarin-fused benzo[*a*]quinolizin-4-ones and pyridin-2-ones

Jing Wang, Xiaoxue Zhang, Jianhui Zhou, Liping Yan, Yuan Li, Naixuan Zhao, Hong Liu, He Huang* and Yu Zhou*

2688



Hydroxylation of organoborons via uranyl photocatalysis

Yixin Jia, Jiaolong Meng, Deqing Hu, Hao Kang and Xuefeng Jiang*

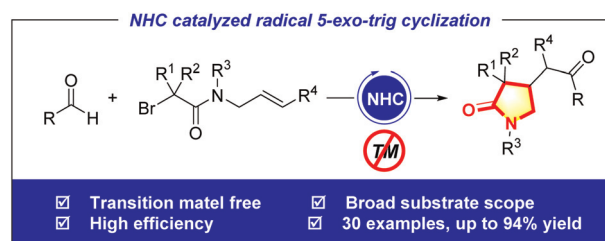


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Synthesis of 2-pyrrolidinone derivatives via N-heterocyclic carbene catalyzed radical tandem cyclization/coupling reactions

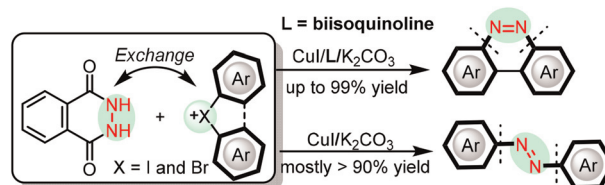
Huiping Yin, Tianjiao Huang, Bai Shi, Wei Cao, Chenxia Yu, Tuanjie Li, Kai Zhang* and Changsheng Yao*



2701

Efficient synthesis of benzo[c]cinnolines and azoarenes via dual C–N coupling of phthalhydrazide and trivalent halogen reagents

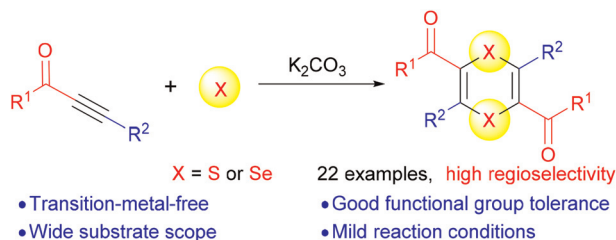
Yanyan Yang, Rongrong Xie, Yiwen Wang, Peiyan Zhu, Jinhua Wang and Shiqing Li*



2708

Synthesis of 1,4-dithiins and 1,4-diselenins from alkynes and elemental sulfur/selenium under transition metal-free conditions with high regioselectivity

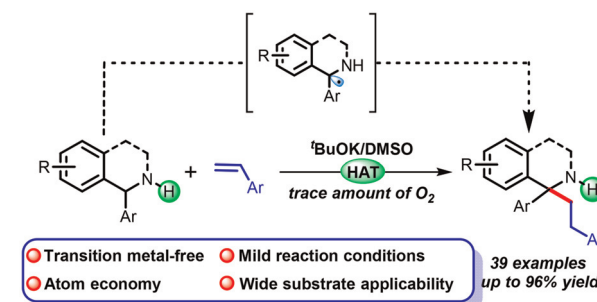
Lu Cheng, Mengdan Wang, Yingge Gu, Peng He, Zongkang Wang, Ziyi Zhuang, Lingkai Kong* and Yanzhong Li*



2714

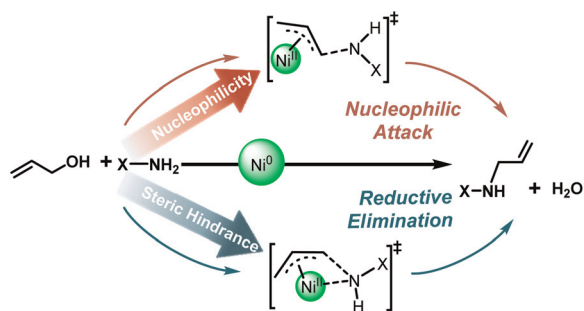
^tBuOK/DMSO/O₂ catalyzed direct α-C(sp³)–H alkylation with styrenes: productive α-amino radicals for hydroaminoalkylation

Zhangqiang Yan, Zhen Zhang,* Tao Wen, Lihua Ye, Bo Jin, Chihong Zhang, Wenkun Wang, Zhong-Ning Chen and Hu Cai*



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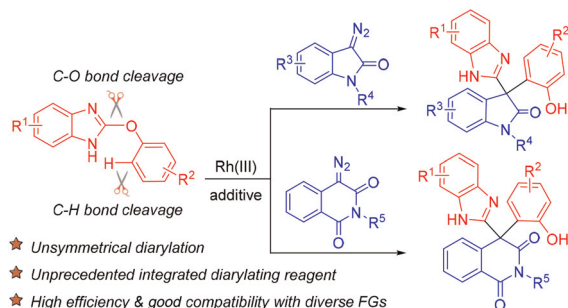
2721



A substrate-dependent mechanism for nickel-catalyzed *N*-allylation with allylic alcohols: nucleophilic attack vs. reductive elimination

Ruiming Yao, Yaru Jing, Jiahao Liu, Yan Liu,*
Tiejun Wang and Zhuofeng Ke*

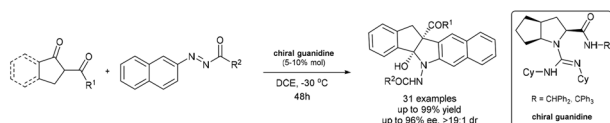
2728



Synthesis of unsymmetrical diaryl oxindoles/isoquinolinediones using 2-phenoxy-1*H*-benzo[*d*]imidazole as an integrated diarylating reagent

Guiqing Xu, Yue Wang, Kangli Liu, Yuqin Jiang,
Xinying Zhang* and Xuesen Fan*

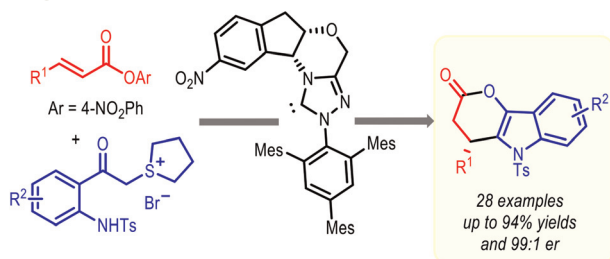
2734



Asymmetric synthesis of cyclopenta[*b*]indoles via organocatalytic formal (3 + 2) cyclization of β -keto ester with azonaphthalene

Yanji Song, Shi Tang, Qianping Chen, Qingfa Tan,
Weidi Cao, Xiaoming Feng and Xiaohua Liu*

2740



Enantioselective construction of dihydropyranone-fused indoles by [3 + 3] annulation of *in situ*-derived indolin-3-ones and unsaturated carboxylic esters

Hongling Wang, Qiangqiang Zhang, Shuai Xiao,
Guanjie Wang, Xuan Huang, Xingkuan Chen* and
Junmin Zhang*

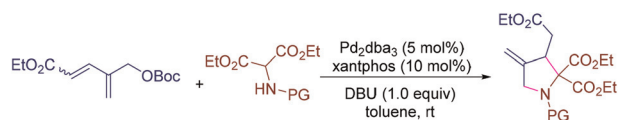


RESEARCH ARTICLES

2746

Palladium-catalyzed (3 + 2) annulations of 1,3-bis-electrophilic motifs: straightforward synthesis of functionalized pyrrolidines

Li Jing, Zhong-Jun Li* and Er-Qing Li*

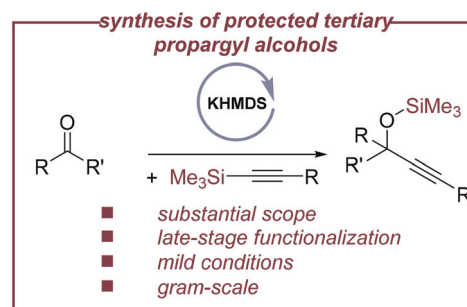


- ♥ 24 examples up to 98% yield; ♥ New 1,3-bis electrophiles
- ♥ Complete regio- and chemoselectivity; ♥ Mild reaction conditions
- ♥ Scale-up synthesis and various synthetic transformations

2752

Base-catalyzed addition of silylacetylenes to ketones: a route to protected tertiary propargyl alcohols

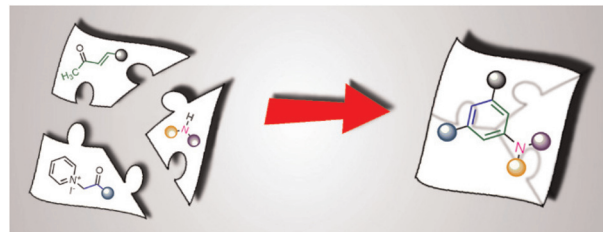
Krzysztof Kuciński,* Alicja Łuczak, Aliaksei Mankouski and Grzegorz Hreczycho



2760

De novo three-component synthesis of meta-substituted anilines

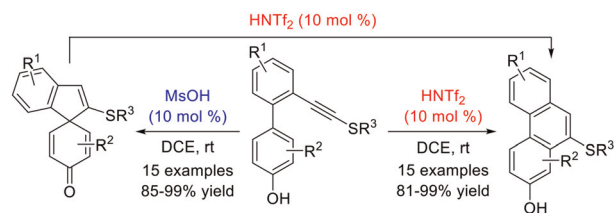
Anton S. Makarov,* Arthur N. Bakiev and Diana A. Eshmemeteva



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Controllable cyclization of alkynyl thioethers via Brønsted acid-catalyzed dearomatization

Xin-Yang Fan, Xin Liu, Yin-Zhu Kong, Bo-Han Zhu, Jian Lin, Peng-Cheng Qian,* Bo Zhou and Long-Wu Ye*

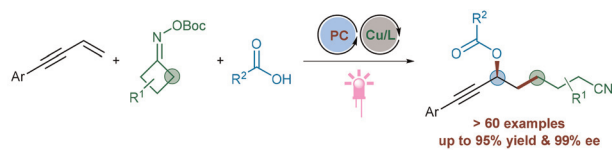


- ♦ controllable cyclization
- ♦ 1st spirodearomatization based on alkynyl thioethers
- ♦ mild conditions
- ♦ 1st intramolecular alkyne hydroarylation via spirodearomatization



RESEARCH ARTICLES

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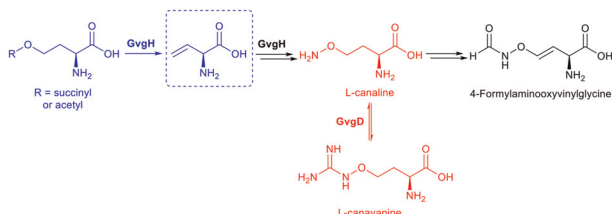


- three-component radical cross-coupling
- readily availability of each reaction component
- redox-neutral conditions and wide scope
- excellent chemo-, regio- and enantioselectivity

Photoinduced copper-catalyzed asymmetric radical three-component cross-coupling of 1,3-enynes with oxime esters and carboxylic acids

Guo-Qing Li, Fan-Rong Meng, Wen-Jing Xiao and Jia-Rong Chen*

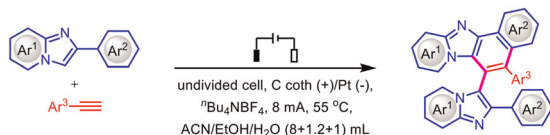
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Characterization of GvgD and GvgH encoded in the biosynthetic gene cluster of 4-formylaminoxyvinylglycine

Linlin Pang, Weijing Niu, Yuwei Duan, Xiaoying Bian, Youming Zhang and Guannan Zhong*

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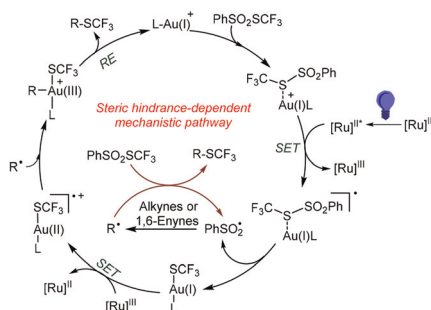
Electrosynthesis of asymmetrical biaryls through arylation of in-situ generated fused polycyclic heteroaromatics

- ☑ Readily available substrates
- ☑ Practical and mild conditions
- ☑ Metal and oxidant-free
- ☑ Excellent H₂O and air tolerance
- ☑ Broad functional group tolerance
- ☑ High regioselectivity

Electro-catalytic multicomponent reaction toward asymmetrical biaryls through heteroarylation of *in situ* generated fused polycyclic heteroaromatics

Wenjing Guan, Jinlin Hang, Yaqi Qiao, Chengkou Liu,* Chengcheng Yuan, Jiawei Chen, Hong Qin, Zheng Fang, Dong Ji and Kai Guo

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Mechanistic understanding of the dual gold and photoredox-catalyzed thiosulfonylation of alkynes and enynes: a DFT study

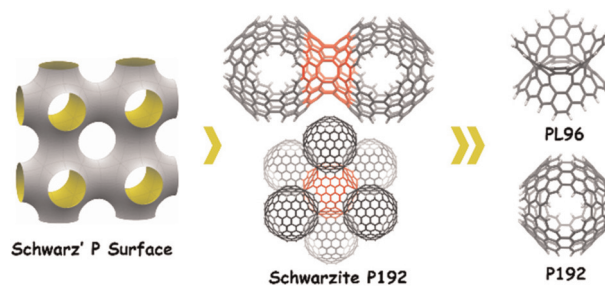
Kaifeng Wang and Xiaoguang Bao*



2808

Precise synthesis of schwarzite carbon: hypothesis or reality?

Ming-Wei Wang, Zuoyu Li, Yujian Liu, Wei Jiang and Zhaohui Wang*

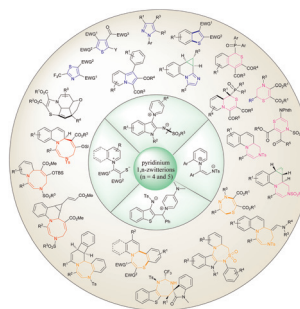


REVIEWS

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Recent advances in the cyclization reactions of pyridinium 1,*n*-zwitterions (*n* = 4 and 5): scope and mechanism

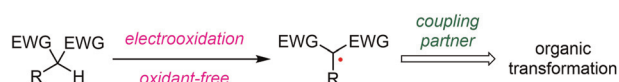
Jiali Huang, Lei Zhang and Xiangtai Meng*



2830

Recent advances in the electrochemical generation of 1,3-dicarbonyl radicals from C–H bonds

Qinhui Wan, Zhongyi Zhang, Zhong-Wei Hou* and Lei Wang*



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Dirhodium: carbene transformations and beyond

Rui Wu, Dong Zhu and Shifa Zhu*

