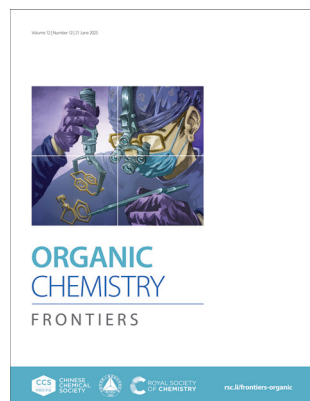


IN THIS ISSUE

ISSN 2052-4129 CODEN OCFRA8 12(12) 3537–3740 (2025)



Cover

See Stefan Bräse *et al.*,
pp. 3546–3550.

Image reproduced by
permission of Vincenzo Pani
from *Org. Chem. Front.*,
2025, **12**, 3546.

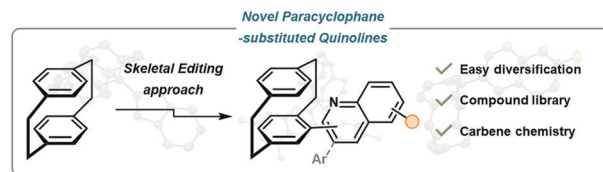
Cover image created by
Vincenzo Pani.

RESEARCH ARTICLES

3546

[2.2]Paracyclophane-substituted quinolines by skeletal editing strategies

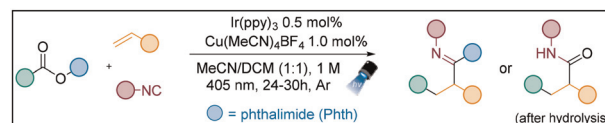
Tilman Köhler, Olaf Fuhr and Stefan Bräse*



3551

Pseudo-4-component photoredox-catalyzed alkylative amidination/carbamoylation of styrenes with isocyanides and redox-active esters

Alexandre Simon, Virgile Rouffeteau, Camilla Acconcia,
Sylvestre P. J. T. Bachollet, Jérémy Forté,
Mariateresa Giustiniano, Laurence Grimaud* and
Maxime R. Vitale*



Royal Society of Chemistry approved training courses

Explore your options.
Develop your skills.
Discover learning
that suits you.

**Courses in the classroom,
the lab, or online**

Find something for every
stage of your professional
development. Search our
database by:

- subject area
- location
- event type
- skill level

Members **get at least 10% off**

Visit rsc.li/cpd-training

**SAVE
10%**

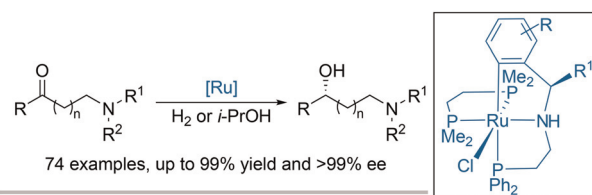


RESEARCH ARTICLES

3558

Cyclometallated chiral Ru complexes with a single labile coordination site for asymmetric reduction of aminoketones

Haoying Liu, Weijun Tang,* Jianliang Xiao and Chao Wang*

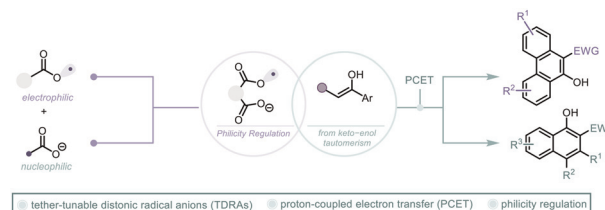


- AH and ATH of aminoketones with excellent enantioselectivities □ Modular cyclometallated catalysts with a single labile coordination site

3568

Intramolecular and intermolecular benzannulation of arylethanone derivatives enabled by visible light-induced catalytic generation of tether-tunable distonic radical anions

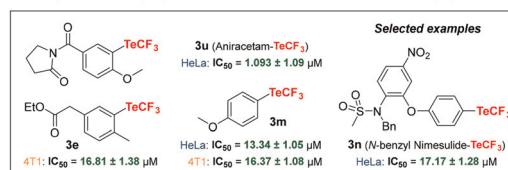
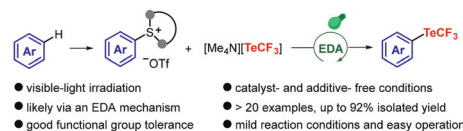
Zhiyou Yu, Ziyue Zhan, Kang Fu and Lei Shi*



3579

Photoinduced synthesis and biological investigation of aryl trifluoromethyl tellurides

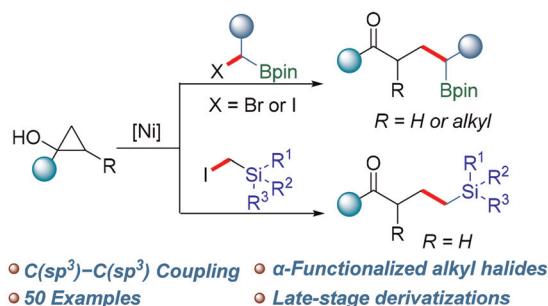
Peng-Yu Guan, Fei Li, Lijun Han, Yao Yu and Cheng-Pan Zhang*



3587

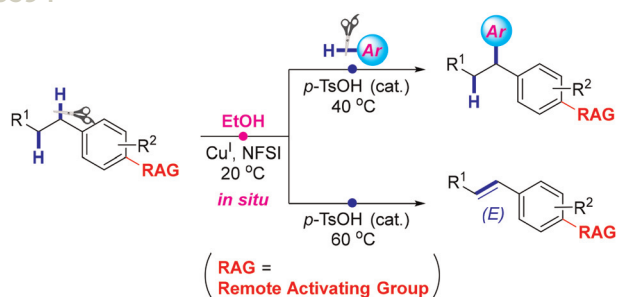
Ni-catalyzed C(sp³)-C(sp³) cross-coupling to access γ-carbonyl alkylboronates and alkylsilicones enabled by cyclopropanol-derived homoenolates

Linfei Zhu, Yang Sun and Hui Wang*



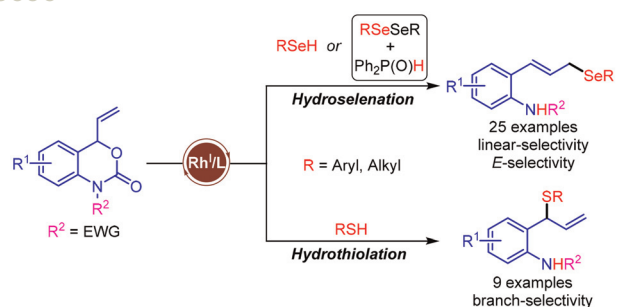
RESEARCH ARTICLES

3594

**Selective benzylic cross-dehydrogenative arylation and α,β -dehydrogenation under mild conditions**

Zhenyang Wan, Jiahao Gu, Yuhong Lu, Xiangmin Tian, Ziyue Zeng, Yichuan Yan, Xinyao Li,* Dailin Zhuang* and Ziyuan Li*

3606

**Rhodium-catalyzed regioselective decarboxylative hydroselenation and hydrothiolation of vinyl benzoxazinones**

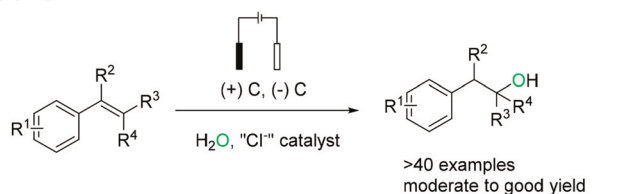
Yuan-Yi Lu, Guirong You, Yu Teng, Jun Zhao, Yi-Dong Zhong* and Hong-Shuang Li*

3614

**Pd-catalyzed arylation annulation of alkynyl nitriles with boronic acids to functionalized cyclopenten-3-ones/2-indenones**

Chada Raji Reddy,* Banoth Subhash and Veeramalla Ganesh

3620

**Metal-free electrochemical anti-markovnikov hydration of aryl alkenes**

Rongxing Linghu, Jun Shi, Biaobiao Jiang, Junrong Song, Wei Wu* and Hai Ren*

● anti-Markovnikov selectivity ● transition metal free

● cheap electrodes and electrolyte ● undivided cell

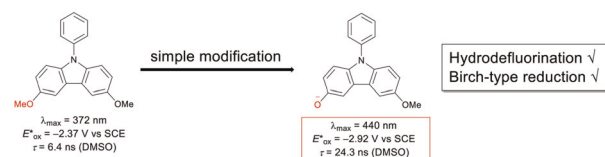


RESEARCH ARTICLES

3626

Carbazol-3-olate photosensitizers enable photocatalytic hydrodefluorination and Birch-type reduction reactions

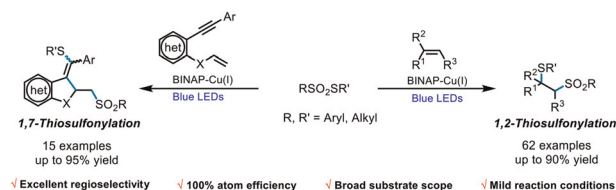
Huilong Kuang, Weibin Xie,* Tatsushi Yabuta, Masaaki Fuki, Masahiro Higashi, Yasuhiro Kobori,* Nozomi Sakai, Seiji Akimoto, Masahiko Hayashi and Ryosuke Matsubara*



3636

Copper-photocatalyzed atom transfer radical addition of thiosulfonates to alkenes

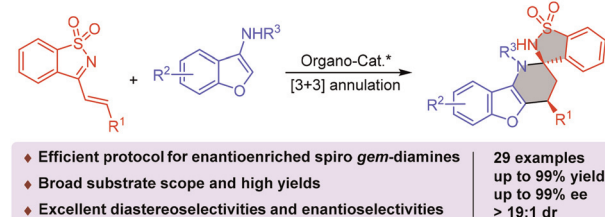
Ben Ma,* Zheng Zhao, Min Ma, Rui Zhang and Jingya Yang*



3643

Asymmetric construction of enantioenriched spiro *gem*-diamines via [3 + 3] annulation of α,β -unsaturated *N*-sulfonyl ketimines and 3-aminobenzofurans

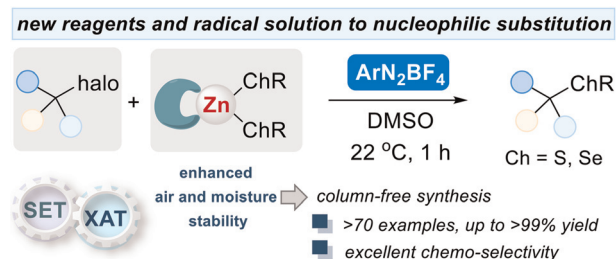
Xin Shu, Tingting Zhang, Yongxing Zhang, Kexin Tong, Shumin Wang and Yang Wang*



3649

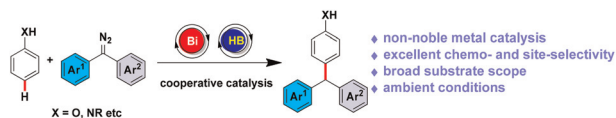
Discovery of zinc-bound dithiolates for C(sp³)-S couplings of alkyl iodides: a radical solution to nucleophilic substitution

Yanchuang Zhao, Yuenian Xu, Han Qian, Aman Ullah, Shao-Fei Ni,* Ying Bai and Xinxin Shao*



RESEARCH ARTICLES

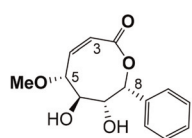
3658



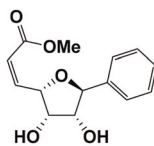
Highly chemo- and site-selective C(sp²)-H bond functionalization of aniline and phenol derivatives with aryl/aryl diazo compounds

Yuzhu Wang, Xiaoyan Wei, Yinuo Chen, Yueyue Liu and Lu Liu*

3665



Proposed structure



Revised structure

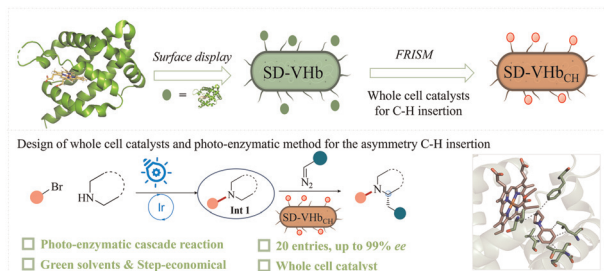
Gonioheptenolactone

(significant cytotoxicities against a panel of human cancer cells)

Total synthesis and structure revision of gonioheptenolactone

Jun Liu,* Jingjing Bi, Yuxin Cui, Minhao Chen, Chuanfang Zhao, Wenting Li, Aishuang Zhan and Yuguo Du

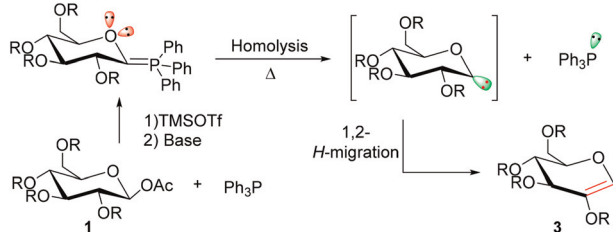
3673



Enantioselective synthesis of α -functionalized phenylpyrrolidine via photo-enzymatic cascade multi-component reaction

Fengxi Li, Shenhan Xie, Wenxian Dong, Yihang Dai, Qikai Sun, Zhengqiang Li, Chuang Du,* Zhi Wang* and Lei Wang*

3681



Fragmentation of glucosylphosphonium ylides for the synthesis of glycals

Chao Chen, Zhichao Mei, Mengyao You, Ziwei Zhang, Haiyang Huang* and Qiang Xiao*

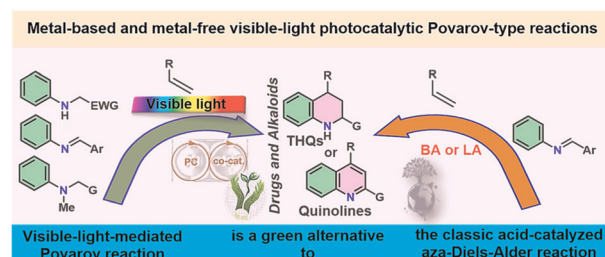


REVIEWS

3687

Achievements in photocatalytic Povarov-type reactions: a key step in green diversification of the quinoline chemical space

Vladimir V. Kouznetsov* and Fedor I. Zubkov



3725

Recent advances in the diverse transformations of trifluoromethyl alkenes

Fei Liu, Qi Wu, Xin Wang,* Qinghao Dong and Kai Sun*

