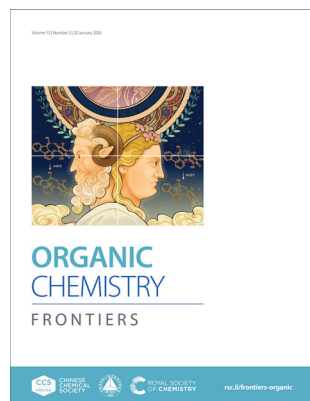


IN THIS ISSUE

ISSN 2052-4129 CODEN OCFRA8 13(2) 317–750 (2026)



Cover

See Yumiao Ma and Dongtian Xu, pp. 330–342.

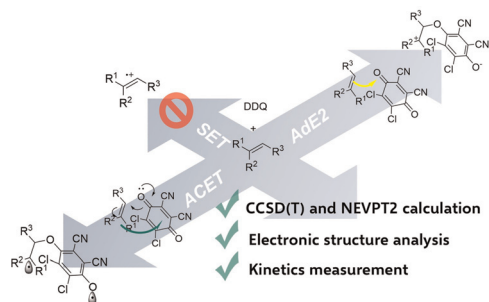
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RESEARCH ARTICLES

330

A unified mechanistic framework for DDQ-promoted transformation of electron-deficient alkenes: the addition-coupled electron transfer (ACET) perspective

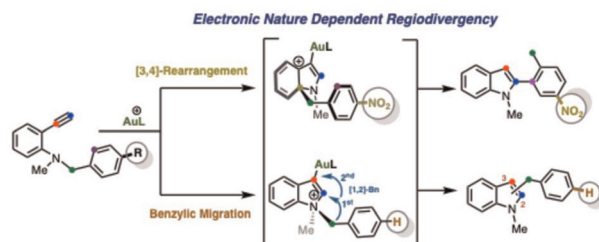
Yumiao Ma* and Dongtian Xu



343

Regiodivergent gold(i)-catalysed rearrangements in indole synthesis

Ana K. García-Dueñas, Edson D. Hernández-Velázquez, Jaime G. Ibarra-Gutiérrez, Rafael Ortiz-Alvarado, Jesús A. López, Luis Chacón-García,* Gabriel Merino,* Fernando Murillo* and César R. Solorio-Alvarado*



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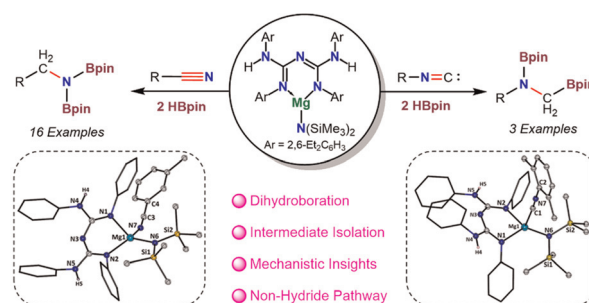
**Fundamental questions
Elemental answers**

RESEARCH ARTICLES

350

Bis-guanidinate magnesium amide-catalyzed hydroboration of nitriles and isocyanides via a substrate-assisted pathway

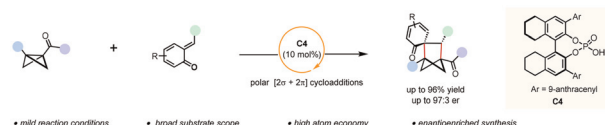
Sayantan Mukhopadhyay, Smrutirani Padhan, Anubhab Das and Sharanappa Nembenna*



364

Enantioselective polar $[2\sigma + 2\pi]$ cycloadditions of bicyclo[1.1.0]butanes and *ortho*-quinone methides enabled by chiral phosphoric acid catalysis

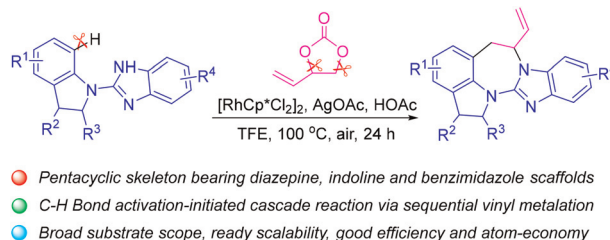
Lun Xu, Qingwei Zhong, Yalan Zhou, Runqin Liu, Xian Sun, Xiao-Yu Liu, Yong Qin and Hao Song*



372

Synthesis of benzodiazepine-containing polyheterocyclic compounds via C–H bond activation-initiated formal $[5 + 2]$ annulation

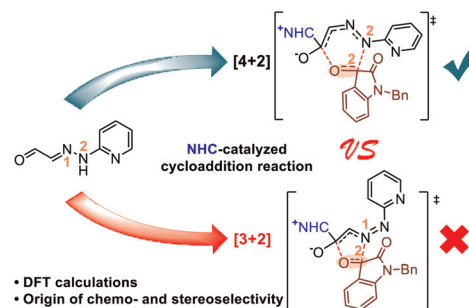
Bin Li,* Fan Yu, Chenchen Huang, Xinying Zhang and Xuesen Fan*



379

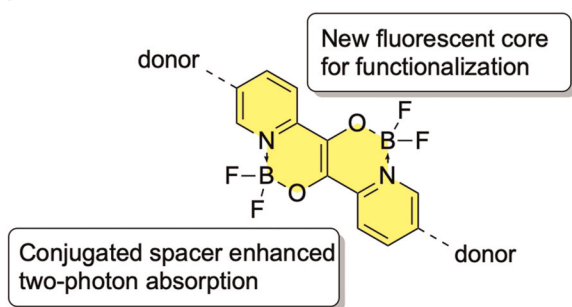
Origin of chemo- and stereoselectivity in NHC-catalyzed asymmetric intermolecular cycloadditions of hydrazone and isatin

Tingting Shen, Xinghua Wang,* Ziyuan Zhou and Donghui Wei*



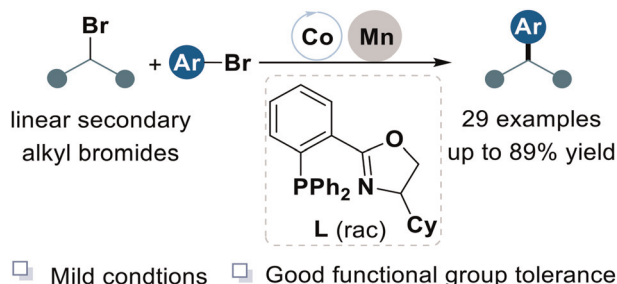
RESEARCH ARTICLES

389

**BisBF₂ pyridoindoles: a new platform for the design of efficient two-photon absorbers**

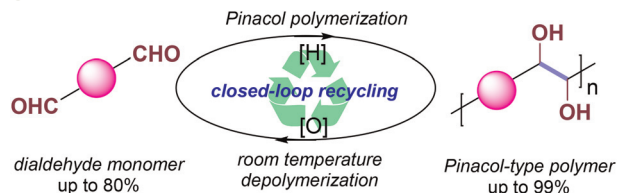
Patryk Rybczyński, Manuela Grelich-Mucha, Elizaveta F. Petrusevich, Damian Plažuk, Liliana Dobrzańska, Borys Ośmiatowski* and Joanna Olesiak-Bańska*

395

**Cobalt-catalyzed cross-electrophile coupling of aryl bromides and linear secondary alkyl bromides**

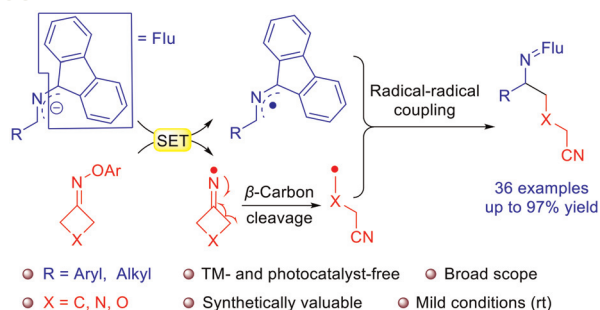
Rubin Wang, Qiang Hu and Jun Zhu*

402

**The photocatalytic synthesis and closed-loop recycling of poly(semi-aromatic 1,2-ethanediol)s**

Yi-Ming Chen, Yu Liu, Yong-Ze Chen and Yan-Biao Kang*

408

**Synthesis of aminoalkyl nitriles through 2-azaallyl-anion-driven cascade radical ring-opening/intermolecular coupling**

Yonggang Jiang, Cuirong Qin, Haoqin Tang, Liang Li, Hongbin Zhang* and Xiaodong Yang*

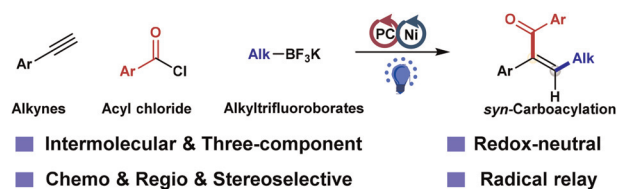


RESEARCH ARTICLES

417

***syn*-Selective carboacylation of terminal alkynes via organic photoredox and nickel catalysis**

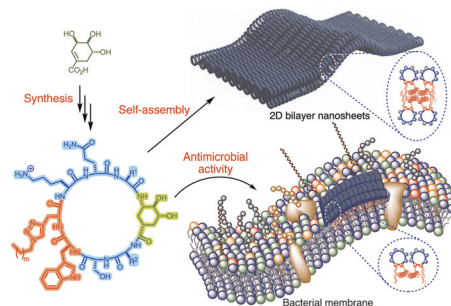
Li-Fang Wang, Chang-Xin Shi, Ming-Jie Xu, Zhe Qi, Tian-Chen Wang, Xian-Hua Pan and Lei Guo*



423

Novel antimicrobial self-assembled cyclic peptide nanotubes containing (1*R*,3*S*,4*R*,5*R*)-3-amino-4,5-dihydroxycyclohexane-1-carboxylic acid, a new building block for developing mimetics of saccharide-peptide hybrids

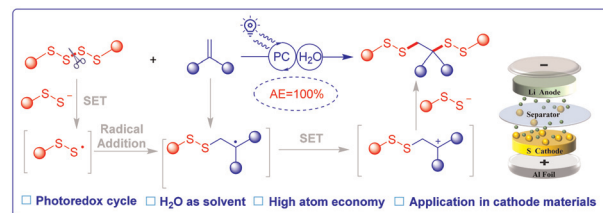
Eva González-Freire, Marcos Vilela-Picos, Verónica Prado, Antonio Pérez-Estévez, Rafael Seoane, Manuel Amorín,* Concepción González-Bello* and Juan R. Granja*



433

Photo-catalyzed bis-disulfidation of vinyl arenes with tetrasulfides in aqueous phase

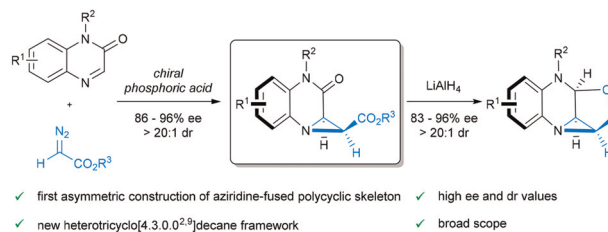
Ying-Ming Song, Binbin Huang, Yao Xiao, Zi-Shan Liu, Chen Zhang,* Hua Cao* and Yue Yu*



440

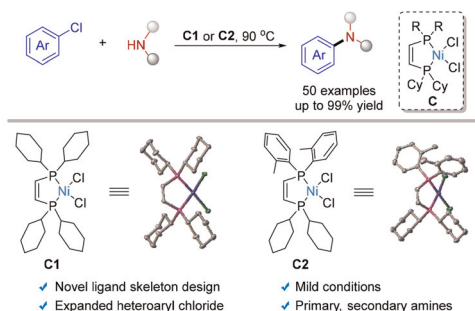
Enantioselective synthesis of aziridine-fused polycyclic architectures via a catalytic asymmetric aza-Darzens reaction and reductive cyclization

Zi-Yi Xie, Cong-Lun Xu, Yu Zhu, Jian-Peng Tai, Yang Liu, Hao-Ting Duan, Yi-Jie Jing, Chao-Nan Cheng, Chongqing Pan* and Jun Xuan*



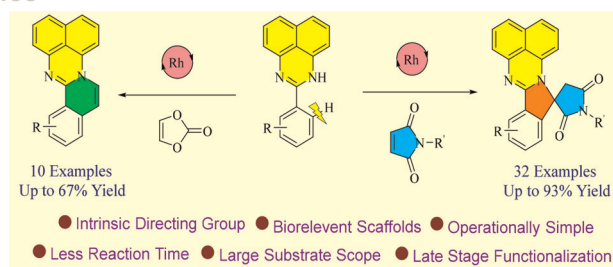
RESEARCH ARTICLES

447

**cis-Diphosphine ethene ligands enable Ni-catalyzed amination of aryl chlorides**

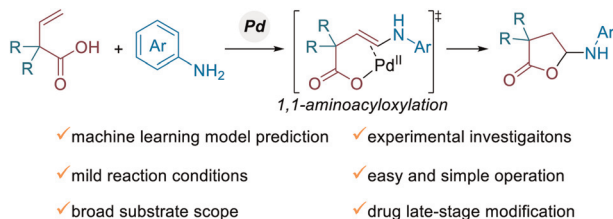
Guizhi Zhai, Xulu Lv, Xiaoli Li, Yalong Li, Xiaofen Wang, Fengqian Zhao* and Junliang Wu*

455

**Perimidine directed Rh(III)-catalyzed [4 + 1] and [4 + 2] annulations: synthesis of perimidine linked spiro-succinimides and isoquinolines**

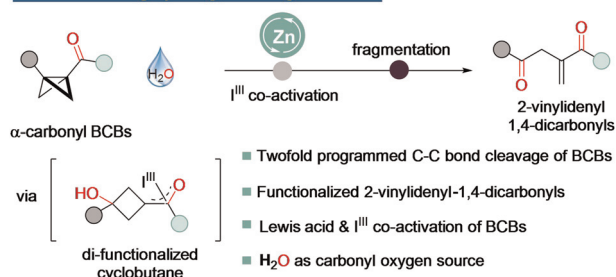
Vidya Kumari and Lokman H. Choudhury*

462

**Investigations of palladium catalysed 1,1-aminoacyloxylation of unsaturated carboxylic acids via experiments and machine learning**

Xiangwen Tan, Yinwu Li, Jiahao Wu, Wanqing Wu, Zhuofeng Ke* and Huanfeng Jiang*

472

Tandem BCB ring-opening/Grob fragmentation**Lewis acid catalyzed tandem difunctionalization/fragmentation reactions of bicyclobutanes: access to 2-vinylidenyl 1,4-dicarbonyl compounds**

Kun Deng, Xue-Chun Yang, Jian-Jun Feng* and Zhaofeng Wang*

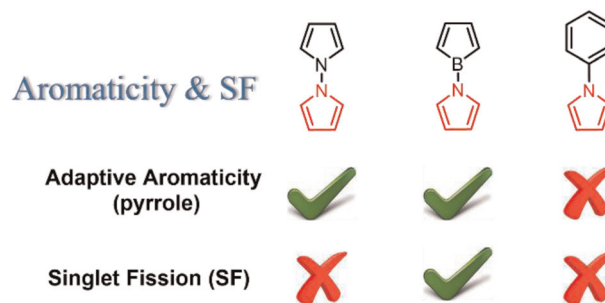


RESEARCH ARTICLES

484

A “sacrificial reagent” strategy for tailoring adaptive aromaticity in pyrrole rings with its application to singlet fission: a combined DFT and unsupervised machine learning study

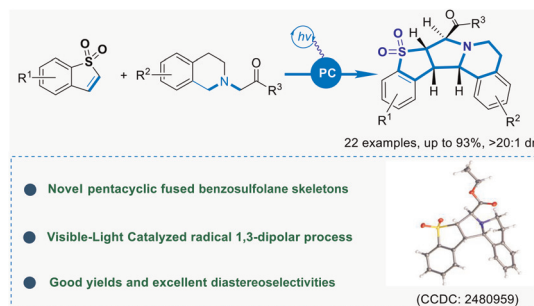
Qianqian Deng, Sajid Imran, Zijie Qiu, Daigo Miyajima and Jun Zhu*



494

Visible-light photocatalyzed radical dipolar annulations for diastereoselective synthesis of pyrrolo[2,1-a] isoquinoline-fused benzosulfonane skeletons

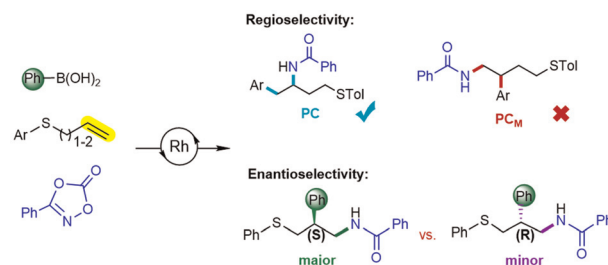
Jian-Ping Tan,* Chang Liu, Zi-Qi Yi,* Subarna Jyoti Kalita, Jia Li, Lincheng Li, Li Ji, Hao Zhang, Yanjun Xie and Bing Yi*



501

Computational investigation of Rh-catalyzed three-component arylamidation of alkenes: mechanism, regioselectivity, and enantioselectivity

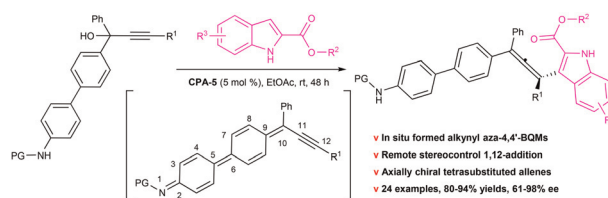
Qifeng Jiang, Peizhi Han, Meng Lu, Tao Feng and Juping Wang*



512

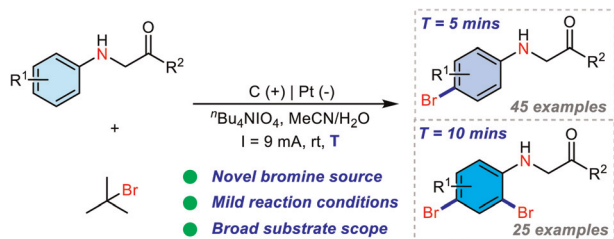
Organocatalytic enantioselective synthesis of tetrasubstituted chiral allenes via 1,12-addition of alkynyl aza-biphenyl quinone methides formed *in situ*

Changzhen Zhai, Yuqing Zhang, Boming Shen, Meiwen Liu, Tian Liang, Peiyuan Yu, Yunkun Qi,* Wenjun Li* and Pengfei Li*



RESEARCH ARTICLES

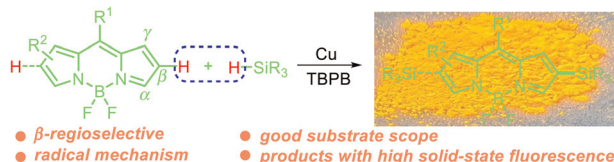
518



Straightforward and fast access to electrochemical synthesis of selective brominated *N*-aryl glycine amides

Donghao Wang, Zimei Zhong, Yi Chen, Aifang Wang, Xinyi Huang, Jiabin Shen* and Min Wang*

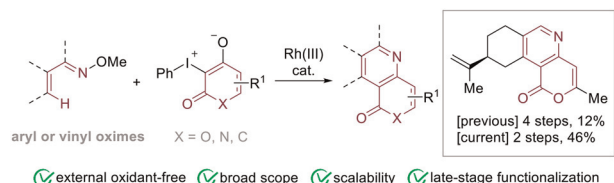
524



Copper-catalyzed oxidative C–H silylation of BODIPY dyes at the 2- or 2,6-positions with silanes

Shuangshuang Zhu, Yunjie Li, Hongdi Yuan, Kangle Liu, Qingbao Gong* and Fan Lv*

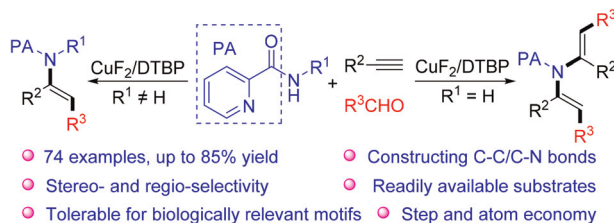
534



Rh(III)-catalyzed C–H [4 + 2] annulation of oximes with (hetero)cyclic iodonium ylides to access pyrano[4,3-*b*]pyridin-5-one derivatives

Hailang Cui, Shijin Zhou, Borong Su, Bin Yang, Shaoyu Mai* and Huaming Tao*

540



Copper-catalyzed stereo- and regio-selective decarbonylative alkylation and sequential amination of alkynes with aldehydes and amides

Kelu Yan,* Xiaoyu Wang, Jiangwei Wen, Jianjing Yang, Yuanyuan Zhang, Bingxin Zhou and Daoshan Yang

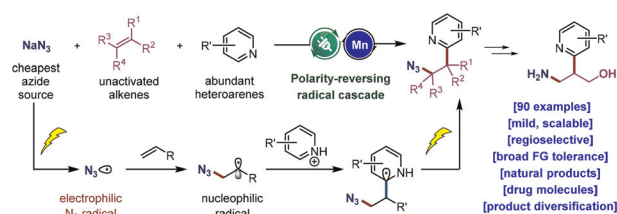


RESEARCH ARTICLES

550

Scalable manganese-electrocatalytic three-component heteroarene azidoalkylation via a polarity-reversing radical cascade

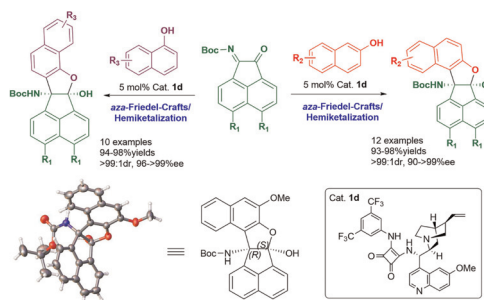
Qi-Liang Yang,* Zhong-Xu Zhang, Ye Zhu, Zu-Lin Qiao, Xin Liu, Rong Wang, Shu-Xian Liu, Er-Jun Hao, Peng Xiong* and Hai-Ming Guo*



560

Cinchona-derived squaramide organocatalyzed asymmetric domino aza-Friedel–Crafts/hemiketalization of acenaphthenequinoneimines and naphthols

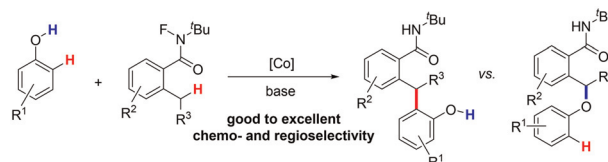
Yuhong Sun, Hao Wu, Mingshan Zheng, Liming Wang* and Ying Jin*



567

N-directed, Co-catalyzed functionalization of distal C(sp³)–H bonds with phenols: arylation vs. aryloxylation

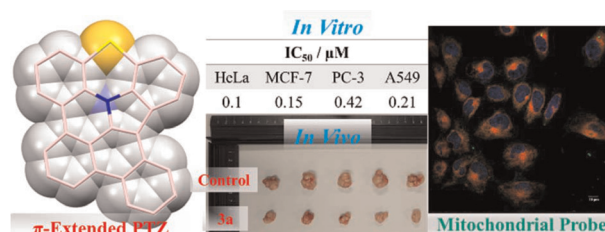
Yu-Han Wang, Hai-Tao Qin* and Feng Liu*



573

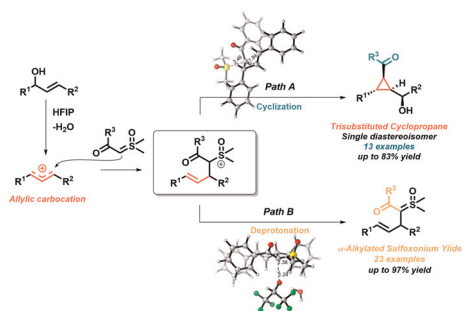
π-Extended phenothiazines with fused pentagons and hexagons

Qiyuan Cai, Fengyi Zhao, Dong Jiang, Hiroyasu Sato, Yusuke Yamauchi,* Gang Zhang* and Weifan Wang*



RESEARCH ARTICLES

584

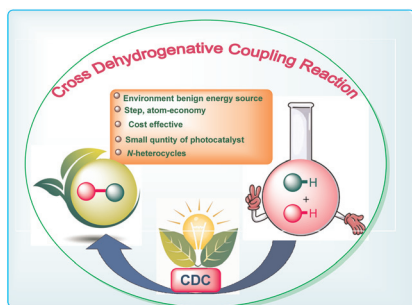


Reactions of ketosulfoxonium ylides with allylic carbocations: stereoselective and direct access to highly-substituted cyclo-propanes and α -alkylated ylides

Viktor S. Camara, Marcio Hayashi, Alex S. Moraes, Pedro H. O. Santiago, Javier Ellena, Marco A. B. Ferreira* and Antonio C. B. Burlonoso*

REVIEWS

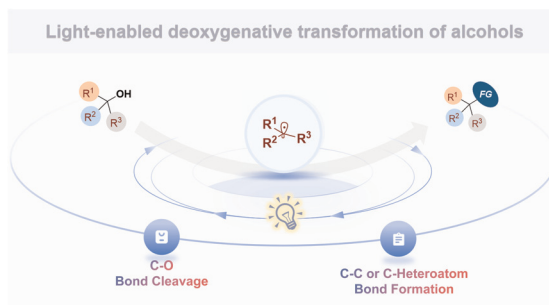
597



Visible light-induced cross-dehydrogenative coupling of N-heterocyclic compounds: green and efficient synthetic strategies

Divyani P. Patel, Vishwa K. Patel and Satish Kumar Singh*

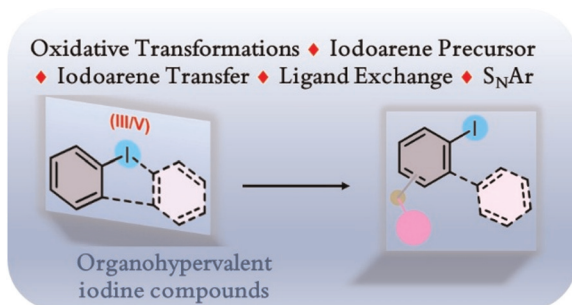
656



Recent advances in light-enabled deoxygenative transformation of alcohols

Shiwei Lü, Jie Ding and Zhenda Tan*

686



Transition metal-free transfer of iodoarenes by organohypervalent iodine compounds

Ishita Neogi,* Simi Achankunju, Gourab Mohanty and Keshaba Nanda Parida*



713

Recent advances in asymmetric C–H bond functionalization enabled by chiral directing groups

Yun Wang, Shuang Wang,* Jiayang Wang and Shaojie Lou*

