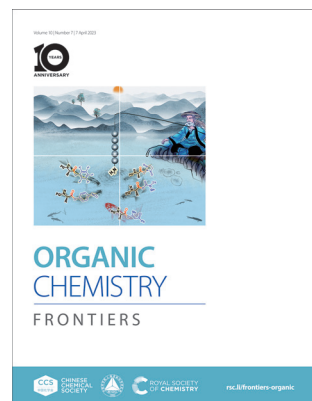


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pp. 1817–1846.

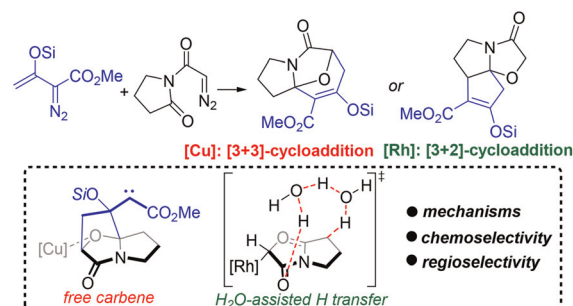
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RESEARCH ARTICLES

1606

Mechanistic insights into catalyst-dependent divergent cycloaddition reactions via discrimination between diazo compounds

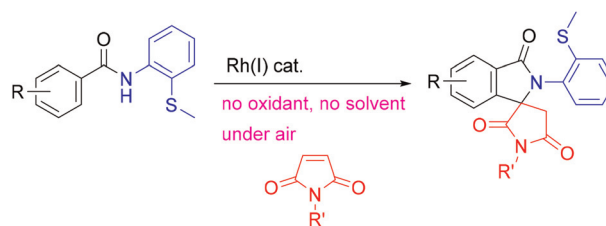
Jing Wang, Xiao-Jun Liu,* De-Zhan Chen and Jian-Biao Liu*



1617

Experimental and theoretical studies of the rhodium(I)-catalysed C–H oxidative alkenylation/cyclization of *N*-(2-(methylthio)phenyl)benzamides with maleimides

Aymen Skhiri, Attila Taborosi, Nozomi Ohara, Yusuke Ano, Seiji Mori* and Naoto Chatani*



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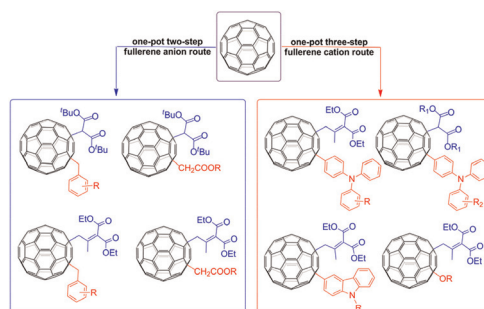


RESEARCH ARTICLES

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Synthesis of diverse unsymmetric 1,4-adducts via a three-component coupling reaction of malonate derivatives, [60]fullerene and electrophiles/nucleophiles

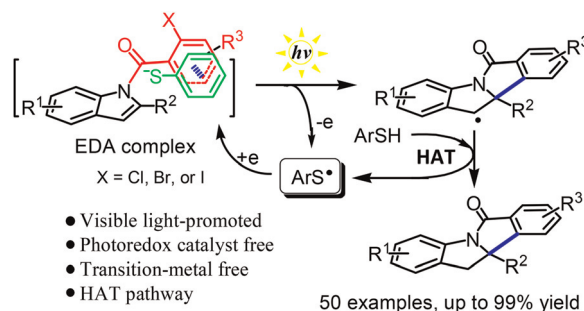
Da-Kang Zhang, Wen-Bin Ma, Shuo-Yuan Wei, De-Yun Chen, Xiao Hu, Jun Xuan and Fei Li*



1633

Visible-light-driven reductive dearomatization of *N*-arylformyl indoles in EDA complexes with a thiophenol via a HAT pathway

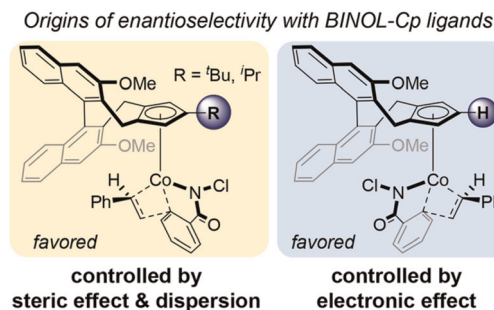
Yi-Ping Cai, Meng-Yue Ma, Xiao Xu and Qin-Hua Song*



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Mechanism of Co(III)-catalyzed annulation of *N*-chlorobenzamide with styrene and origin of cyclopentadienyl ligand-controlled enantioselectivity

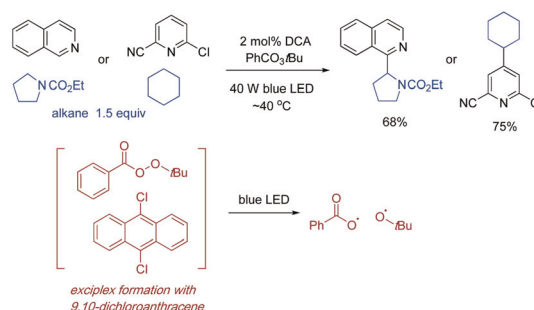
Han Gao, Wujie Wang, Xiangying Lv, Gang Lu* and Yuliang Li*



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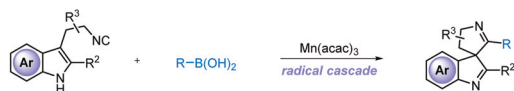
Pursuing high efficiency in photocatalytic oxidative couplings of heteroarenes and aliphatic C-H bonds

Luoqiang Zhang, Dao-Yong Zhu, Jingyao Hu, Minjun Feng, Tze Chien Sum, Haoran Sun, Hajime Hirao, Yonggui Robin Chi and Jianrong Steve Zhou*



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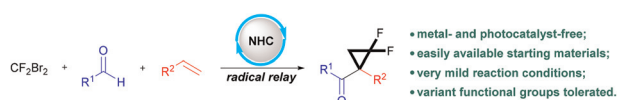


- ✓ Synthesis of spiroindolines ✓ Readily available starting materials
 ✓ Good yields of products ✓ Broad substrate scopes ✓ Mild reaction condition

Radical addition/spirocyclization cascade of tryptamine-derived isocyanides with aryl boronic acids: efficient access to spiroindoline derivatives

Shuai Jiang, Yu-Xin Huang, Xiao-Feng Wang, Xiao-Ping Xu* and Shun-Jun Ji*

1669

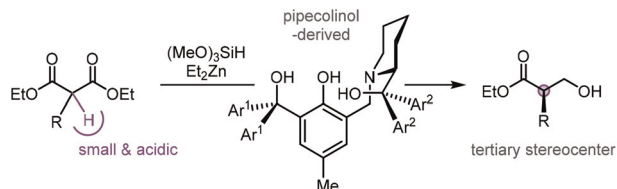


- metal- and photocatalyst-free;
 • easily available starting materials;
 • very mild reaction conditions;
 • variant functional groups tolerated.

Facile access to *gem*-difluorocyclopropanes via an *N*-heterocyclic carbene-catalyzed radical relay/cyclization strategy

Jibin Li, Zheng Liang, Yuzhi Ren, Jian Gao* and Ding Du*

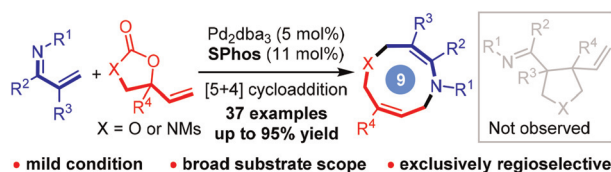
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Zinc-catalyzed desymmetric hydrosilylation of monosubstituted malonic esters

Yixiao Zhang, Pengwei Xu, Qiongli Zhao, Jun (Joelle) Wang and Zhongxing Huang*

1680



- mild condition • broad substrate scope • exclusively regioselective

Pd-catalyzed exclusively regioselective [5 + 4] cycloaddition for the construction of 1,5-di/ox-azonanes

Wenqi Liu, Meng Zang, Jian Zhang, Quannan Wang, Yang-Zi Liu* and Wei-Ping Deng*

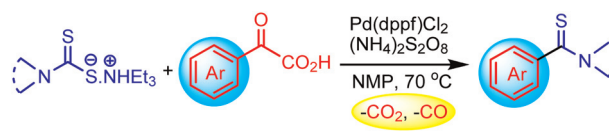


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Dithiocarbamate-mediated thioamidation of arylglyoxylic acids by decarboxylative–decarbonylative C–C bond formation reactions

Debabrata Patra and Amit Saha*

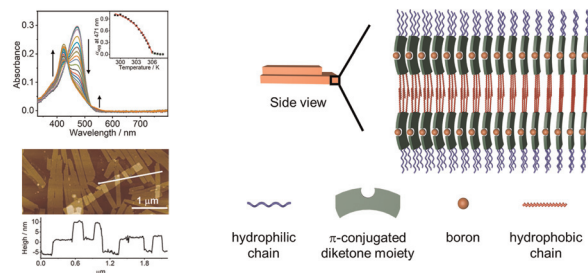


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Lamellar assembly and nanostructures of amphiphilic boron(III) diketonates through suitable non-covalent interactions

Jingjie Cao, Chun-Ting Poon, Michael Ho-Yeung Chan, Eugene Yau-Hin Hong, Yat-Hin Cheng, Franky Ka-Wah Hau, Lixin Wu* and Vivian Wing-Wah Yam*

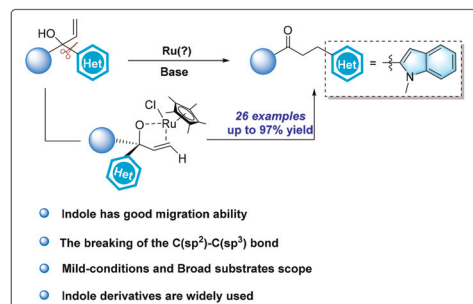
Lamellar Assembly of Amphiphilic Boron(III) Diketonates



1705

Ruthenium-catalyzed 1,3-indolyl migration within α,α -disubstituted allylic alcohols

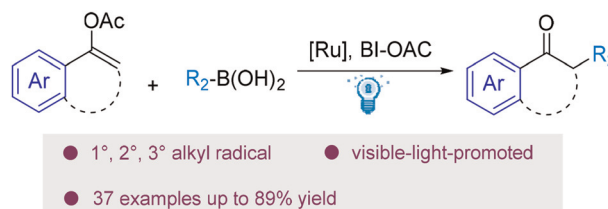
Xue Zhang, Zhen Luo, Tang-Lin Liu* and Qing-Hua Li*



1710

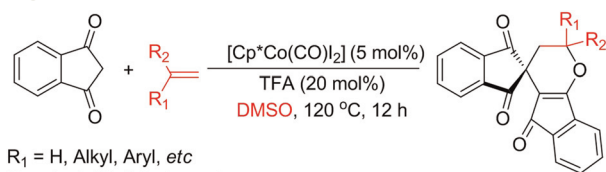
Visible light-enabled alkylation of enol acetates with alkylboronic acids for the synthesis of α -alkyl ketones

Yunpu Li, Zhenqiang Ma, Xiaopei Liu, Zhongxian Li*, Fengqian Zhao* and Junliang Wu*



RESEARCH ARTICLES

1715



★ pre-activation not required

★ excellent site-selectivity

★ broad substrate scope

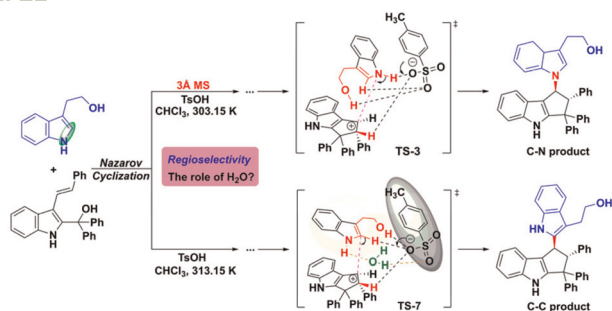
★ good functional group tolerance

★ gram scalability

Cp*Co(III)-catalyzed C–H functionalization/spiroannulation for the synthesis of spiroindenes from 1,3-indandione and alkenes

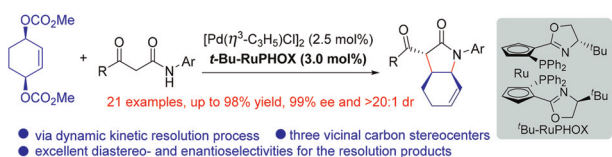
Xuefeng Xu, Di Wang, Mengfan Chang, Yue Shi and Xu Zhang*

1721

**Insights into the regioselectivity and diastereoselectivity of the Nazarov cyclization of 3-alkenyl-2-indolylmethanol with tryptophol**

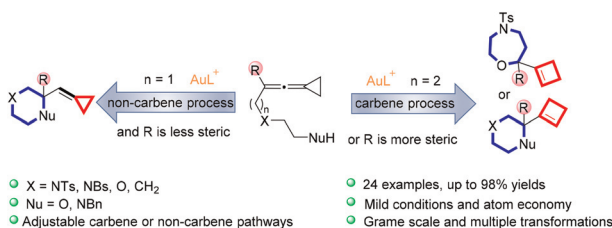
Qi Cheng, Wenxin Yan, Tian Li, Yinchun Jiao* and Zilong Tang

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**The construction of chiral 3-acyl bicyclic lactams via a RuPHOX/Pd catalyzed asymmetric allylic substitution cascade of α -carbonylamides**

Siqi Dong, Shaofeng Xu, Yashi Zou, Zhaodi Li, Kai Xu, Daxu Fu,* Delong Liu* and Wanbin Zhang

1738

**Gold(I)-catalyzed cycloisomerization of alcohol or amine tethered-vinylidenecyclopropanes providing access to morpholine, piperazine or oxazepane derivatives: a carbene versus non-carbene process**

Jun-Sheng Wei, Song Yang, Yin Wei, Sima Shamsaddinimotlagh, Hossein Tavakol* and Min Shi*

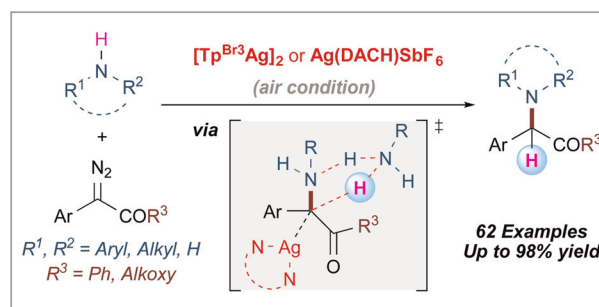


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Ligand-enabled silver-catalyzed carbene insertion into the N–H bond of aliphatic and electron-rich aromatic amines

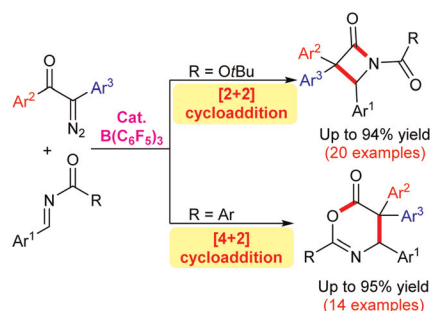
Linxuan Li, Paramasivam Sivaguru, Xinyue Han, Swastik Karmakar and Xihe Bi*



1754

B(C₆F₅)₃-catalyzed Wolff rearrangement/[2 + 2] and [4 + 2] cascade cyclization of α -diazoketones with imines

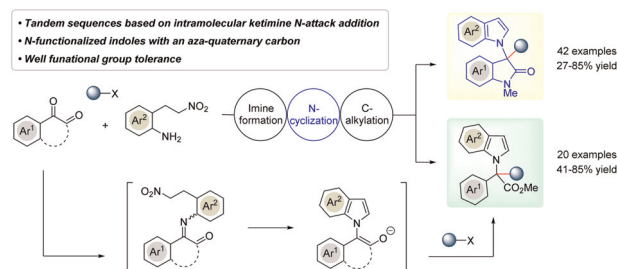
Weihong Song, Jing Guo* and Douglas W. Stephan*



1759

Tandem imine generation/N-cyclization/C-alkylation sequence to access N-functionalized indoles featuring an aza-quaternary carbon

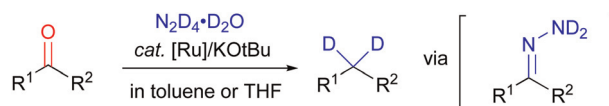
Jun-Song Tian, Zhi Tu, Feng Zhou, Jin-Sheng Yu and Jian Zhou*



1767

Regiospecific deoxygenative deuteration of ketones via HOME chemistry

Ruohua Gui and Chao-Jun Li*

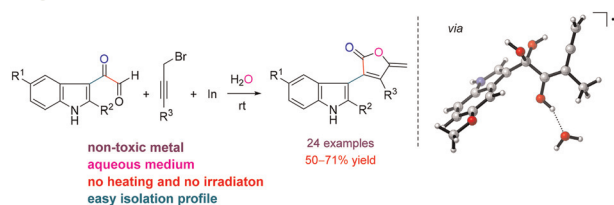


- Direct conversion of C=O to methylene-d₂
- R = aromatic, alkyl or heteroaromatic groups
- 20 examples, up to 92% yield, 91-96% deuterium
- Mild condition at 75 °C



RESEARCH ARTICLES

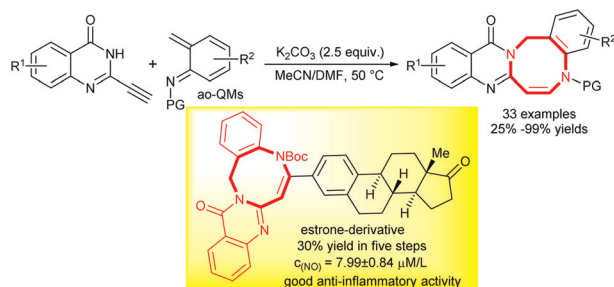
1773



Indium-promoted butenolide synthesis through consecutive C–C and C–O bond formations in aqueous tetrahydrofuran enabled by radicals

Hikaru Yanai, M. Rosa Márquez, Sara Cembellín, Teresa Martínez del Campo* and Pedro Almendros*

1780



Synthesis of biologically active [1,5]diazocino[2,1-b]quinazolinones through [4 + 4] cycloaddition of 2-alkynyl quinazolinones with aza-ortho-quinone methides

Li Pang, Shu-Jun Fang, Pei-Sen Zou, Wang Wang, Jun-Cheng Su,* Xiao-Qing Liu, Cheng-Xue Pan, Dong-Liang Mo* and Gui-Fa Su*

1788

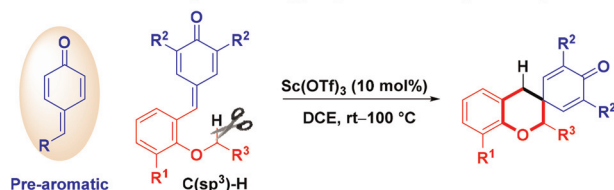


Synthesis of fluorinated allylic alcohols via photoinduced decarboxylative cross-coupling of α -fluoroacrylic acids and alcohols

Xiao-Yu Lu,* Meng-Ting Gao, Li-Juan Yu, Hong-Ye Pan, Xiang Zhang, Rui Huang, Kang Yang, Fu-Yi Shui, Yi-Wei Song and Gui-Xian Yang

1796

Aromatization as driving force to trigger hydride transfer/cyclization process



Aromatization-driven cascade [1,5]-hydride transfer/cyclization for synthesis of spirochromanes

Lianyi Cao, Fangzhi Hu, Jiacheng Dong, Xiao-Mei Zhang* and Shuai-Shuai Li*

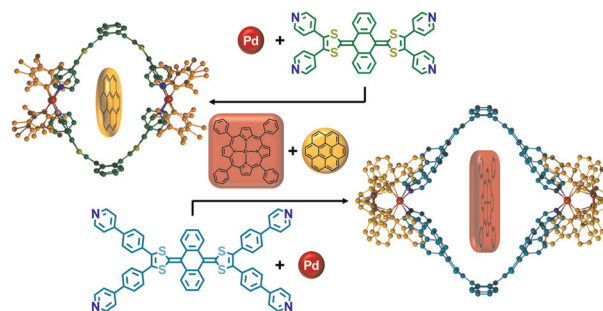


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Playing with the cavity size of exTTF-based self-assembled cages

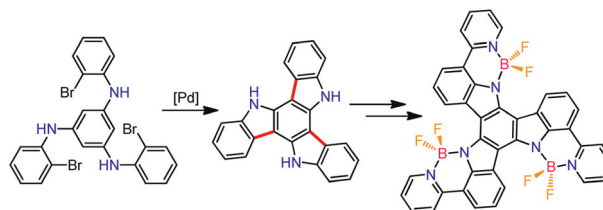
Maksym Dekhtiarenko, György Szalóki, Vincent Croué, Jennifer Bou Zeid, David Canevet, Magali Allain, Vincent Carré, Frédéric Aubriet, Zoia Voitenko, Marc Sallé* and Sébastien Goeb*



1811

An alternative approach to triazatruxene synthesis and derivatization to a boron difluoride complex

Yuheng Wang, Si Chen and Gang Zhang*

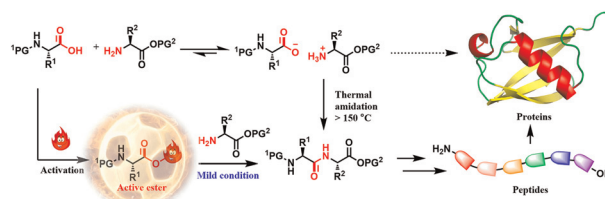


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Active ester-based peptide bond formation and its application in peptide synthesis

Jinhua Yang, Huanan Huang and Junfeng Zhao*



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Recent advances in aza Friedel–Crafts reaction: strategies for achiral and stereoselective synthesis

Ameni Hadj Mohamed and Nicolas Masurier*

