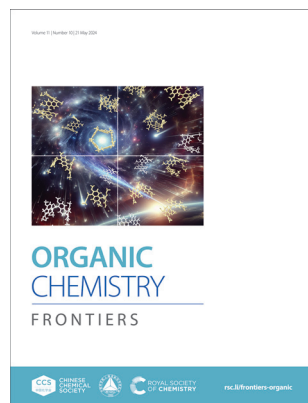


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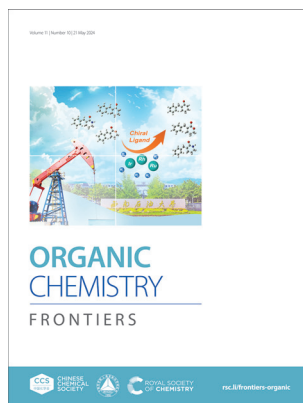
ISSN 2052-4129 CODEN OCFRA8 11(10) 2697–2982 (2024)



Cover

See Silvano Geremia, Carmine Gaeta *et al.*, pp. 2710–2719.

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Inside cover

See Pher G. Andersson, Taigang Zhou *et al.*, pp. 2934–2953.

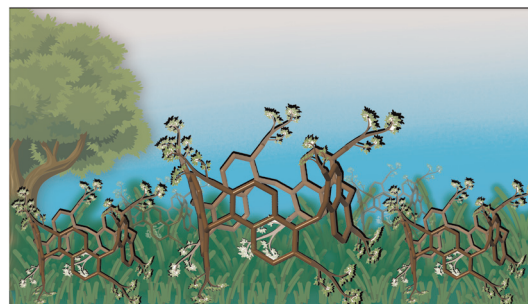
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RESEARCH ARTICLES

2710

Synthesis, conformational properties, and molecular recognition abilities of novel prism[5]arenes with branched and bulky alkyl groups

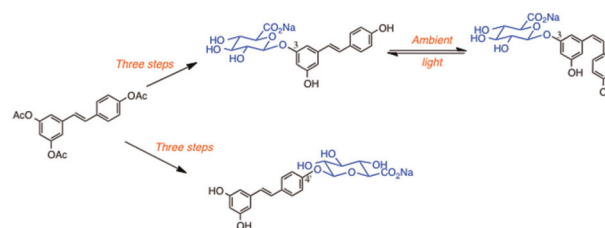
Rocco Del Regno, Paolo Della Sala, Ivan Vollono, Carmen Talotta, Placido Neri, Neal Hickey, Siddharth Joshi, Silvano Geremia* and Carmine Gaeta*



2720

Convenient syntheses of *trans*-resveratrol 3-*O* and 4'-*O*- β -D-glucuronides and a study of their aqueous stability

Megan K. Fraser, Aleksandra Gorecka, Edwin A. Yates, Jonathan A. Iggo, Krzysztof Baj and Andrew V. Stachulski*



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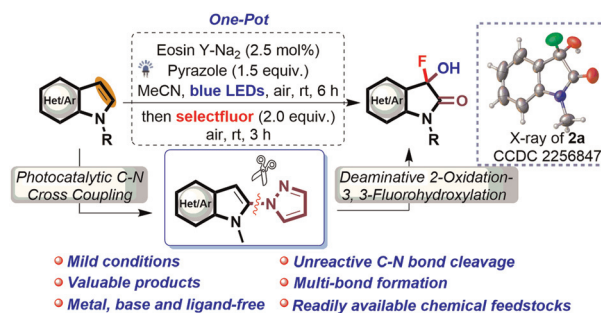
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RESEARCH ARTICLES

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Platform for 3-fluoro-3-hydroxyoxindoles: photocatalytic C–N cross-coupling and deaminative oxidation–fluorohydroxylation

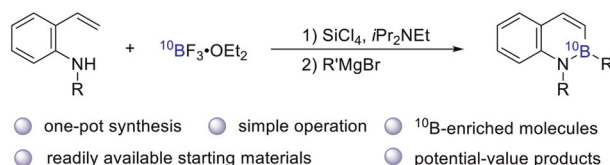
Letian Zhang, Yibin Wang, Jiabin Shen, Hao Xu and Chao Shen*



2733

Synthesis of ¹⁰B-enriched 2,1-borazonaphthalenes from o-aminostyrenes and ¹⁰BF₃

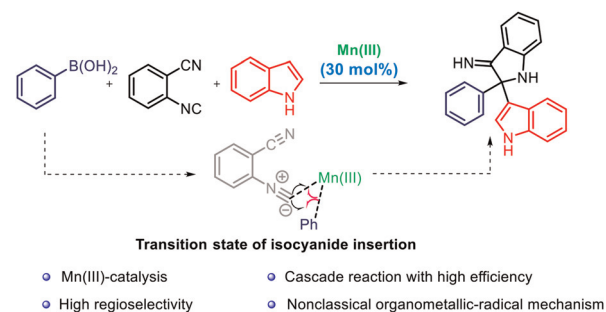
Weihua Qiu, Jide Zhu, Rencai Tao, Kai Yang* and Qiuling Song*



2739

A Mn(III)-catalyzed arylboronic acid-based cascade reaction via a nonclassical organometallic-radical mechanism

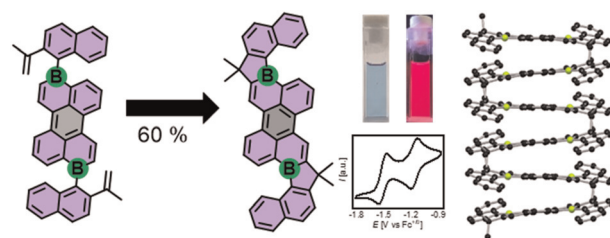
Hui-Min Qian, Jian-Dong Zhang, Shun-Jun Ji* and Xiao-Ping Xu*



2747

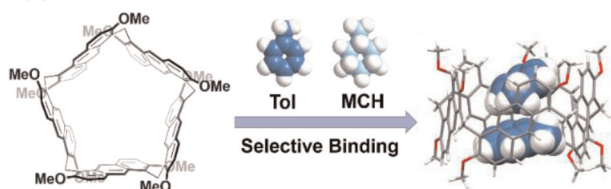
Synthesis of a helical boron-doped PAH by post-functionalization of 3,9-diboraperylene

Carina Mützel, Kazutaka Shoyama, Ana-Maria Krause and Frank Würthner*



RESEARCH ARTICLES

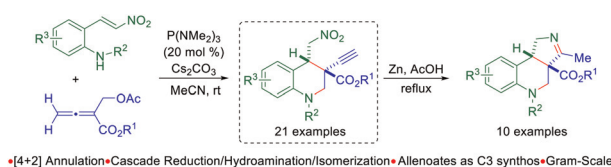
2756



Highly selective separation of toluene/methylcyclohexane based on pagoda[5]arene nonporous adaptive crystals

Zhongwen Liu, Ming Li,* Shuai Fang, Li Shao, Bin Hua* and Feihe Huang*

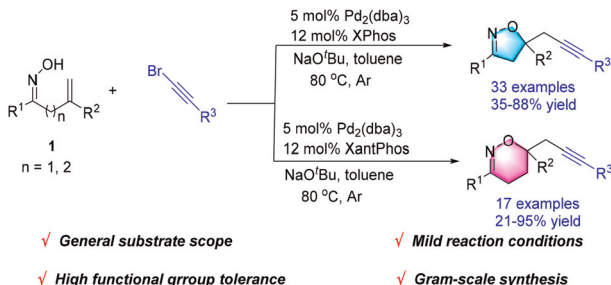
2762



Concise synthesis of pyrrolo[3,4-c]quinolines via a P(NMe₂)₃-catalyzed [4 + 2] annulation followed by a Zn/AcOH-mediated reduction–hydroamination–isomerization

Zhengyang Chen, Dan Xiong, Nengzhong Wang,* Yufei Zhang, Hui Yao, Jinkun Zhang, Nianyu Huang* and Kun Zou*

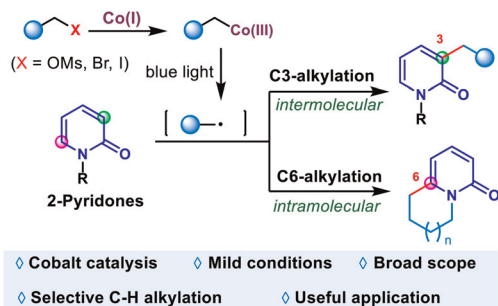
2768



The synthesis of isoxazolines and dihydrooxazines by Pd-catalyzed oxyalkynylation alkenyl oximes with alkynyl bromides

Cangzhu Hu, Shiji Xu, Qiang Wang, Jing Sun, Ying Han, Chao-Guo Yan and Lei Wang*

2774



Photoinduced cobalt catalyzed site selective alkylation of 2-pyridones

Chenyue Li, Jing Li, Zibin Jiang, Yiwei Xu, Hujie Xiong, Fei-Long Liu, Tingting Liu,* Fei Ye* and Chenggui Wu*

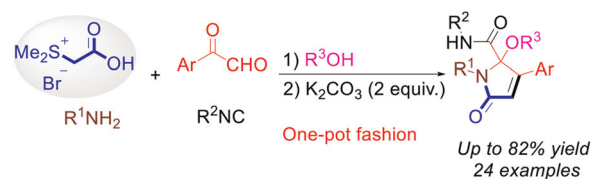


RESEARCH ARTICLES

2780

Solvent-involved synthesis of pyrrolidin-5-one-2-carboxamides via a sequential Ugi/olefination reaction

Na Chen, Tianyu Long, Han-Han Kong,*
Zheng-Wei Wu, Qing-Qing Yang, Nianyu Huang and
Long Wang*

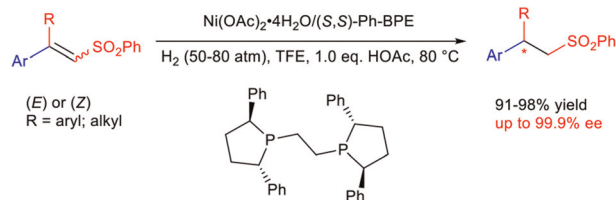


- Tandem reaction
- Solvent involved
- One-pot synthesis
- Carboxymethylated sulfur salts as acids

2786

Synthesis of chiral sulfones via nickel-catalyzed asymmetric hydrogenation

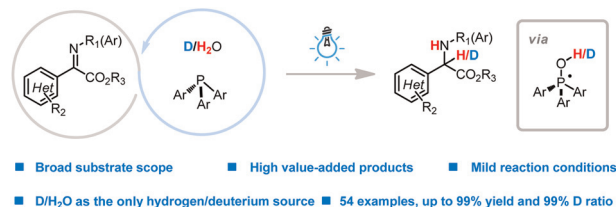
Guiying Xiao, Xiaoxue Wu, Zhangtao Zhou* and
Guohua Hou*



2793

H₂O/D₂O as the only H/D source for photocatalytic phosphine-mediated radical transfer hydrogenation/deuteration of α -aryl imino esters

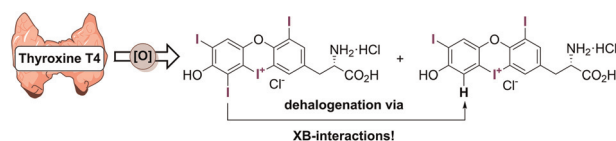
Yao Zhong, Xinhan Li, Xiaohan Zhao, Ruifeng Fan,
Jianbin Xu* and Baomin Fan*



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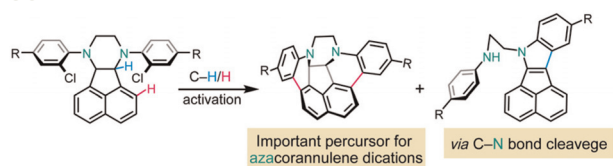
Oxidative cyclization and enzyme-free deiodination of thyroid hormones

Julian Spils, Lucien D. Caspers, Pim Puylaert and
Boris J. Nachtsheim*



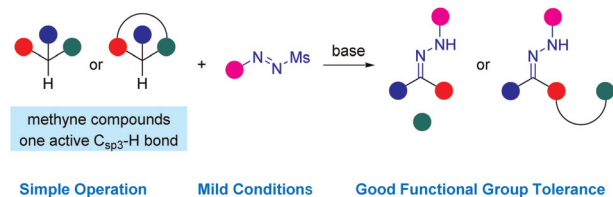
RESEARCH ARTICLES

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**C-H activation-enabled synthesis of a piperazine-embedded azadibenzo[*a,g*]corannulene analogue**

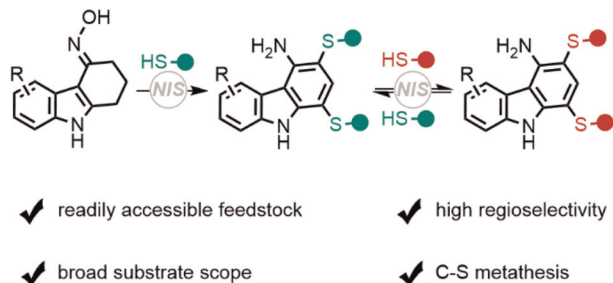
Lin Huang, Mengyu Qiu, Zhihao Chang, Duncan L. Browne and Jianhui Huang*

2815

**Diazenylation of active methyne compounds via arylazo sulfones**

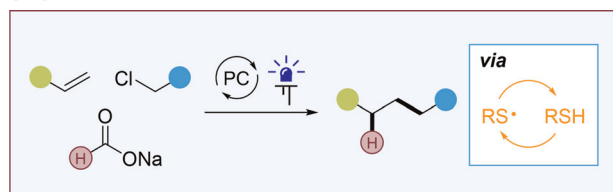
Ruiqing Wang, Lingkai Kong, Xinyu Zong, Minghui Zhang, Wenyi Chen, Yaxin Liu, Lingjuan Ma* and Yulei Zhao*

2821

**Synthesis of multisubstituted carbazol-4-amines from tetrahydrocarbazol-4-one oximes**

Jiahua Wang, Dandan Gao, Aanuoluwapo O. Oyejobi, Na Ji, Xiang-Ying Tang* and Long Wang*

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**Practical photocatalytic hydroalkylation of alkenes with chloroacetates mediated by the formate ion**

Ekaterina V. Malakhova, Vladislav S. Kostromitin, Vitalij V. Levin and Alexander D. Dilman*

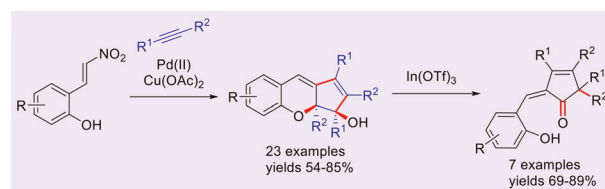


RESEARCH ARTICLES

2834

A Pd(II)-catalyzed denitrative alkyne annulation reaction for the synthesis of cyclopenta[*b*]chromanes

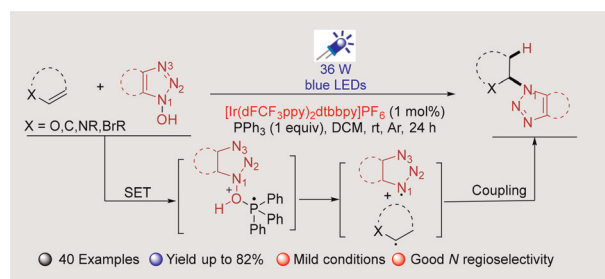
Pratiksha Bhorali, Deep J. Kalita, Babulal Das and Sanjib Gogoi*



2839

Photoredox catalyzed hydroazolylation of alkenes via phosphoranyl radicals

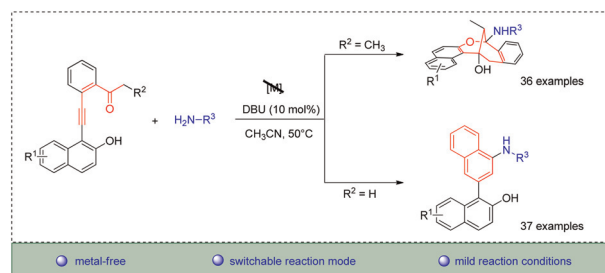
Fan Zhu, Zhi Qiao, Na He, Chunxiao Nong, Qiping He, Meilan Xi,* Xizhong Song,* Jun Lin, Jingbo Chen* and Yi Jin*



2845

DBU-catalyzed substitution-controlled synthesis of oxa[3.3.1] bridged ring and naphthylamine derivatives

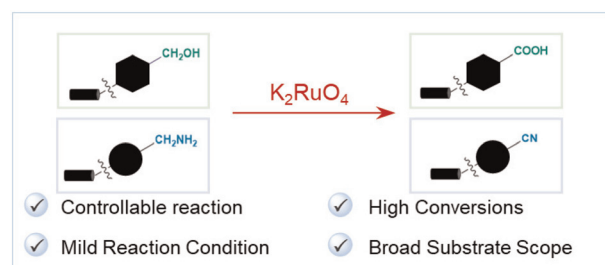
Shiyu Xu, Zhihui Sun, Pengyutian Liu, Yuanlin Wei, Fan Sun, Man Zhao, Ying Wang, Ming Zhang,* Guofeng Li* and Hong Liang*



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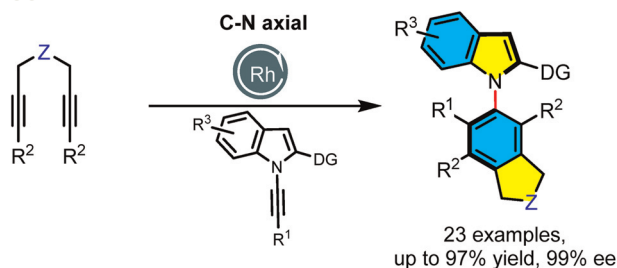
DNA-compatible functional group transformations via K₂RuO₄-mediated oxidation

Pengyang He, Guixian Zhao, Mengping Zhu, Yangfeng Li,* Gong Zhang* and Yizhou Li*



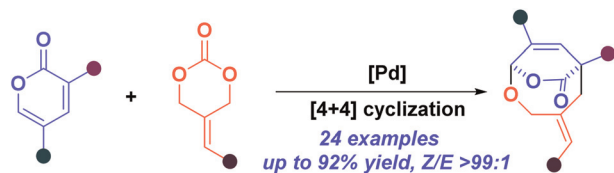
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**Neighboring group-directed asymmetric [2 + 2 + 2] cycloaddition to access C–N axially chiral indoles**

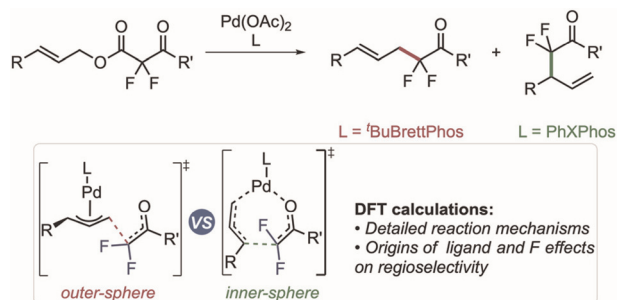
Xuan Zhang, Qi Teng,* Yanru Ren, Baitong Wei, Chen-Ho Tung and Zhenghu Xu*

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**Palladium-catalyzed [4 + 4] cycloaddition of 2-pyrones with 2-alkylenetriethylene carbonates: access to bridged eight-membered oxygen heterocycles**

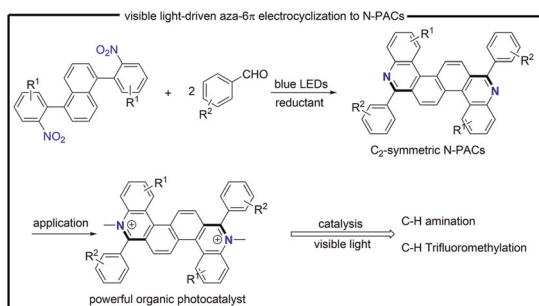
Huawei Lin, Biming Mao, Bing Han, Jiayi Luo, Yanqing Ge, Xuerui Zhang, Chang Wang,* Hongchao Guo* and Chunhao Yuan*

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**Computational insights into the synergistic interplay of ligand and fluorine effects in palladium-catalyzed regiodivergent decarboxylative allylic alkylation**

Shiyu Wang, Hongli Wu, Xiangyang Tang* and Genping Huang*

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**Modular synthesis of C_2 -symmetric nitrogen-containing polyaromatics via visible light-enabled reductive aza-6 π electrocycloaddition**

Qun-Liang Zhang, Qing-Tian Fan, Yirong Zhou,* Jingli Zhang* and Fang-Lin Zhang*

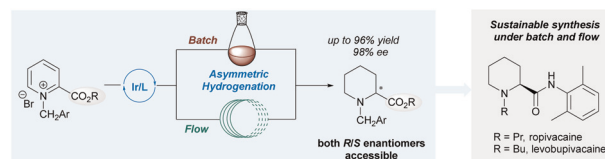


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Sustainable synthesis of long-acting local anesthetics ropivacaine and levobupivacaine under batch and continuous flow via asymmetric hydrogenation

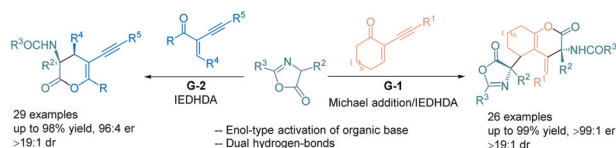
Zhi Yang, Hanlin Chen, Linxi Wan, Xinyi Feng, Lingshuang Ma, Pei Tang* and Fen-Er Chen*



2897

Chiral guanidine catalyzed cyclization reactions of 1,3-enynes for lactone synthesis: switchable H-bond catalysis

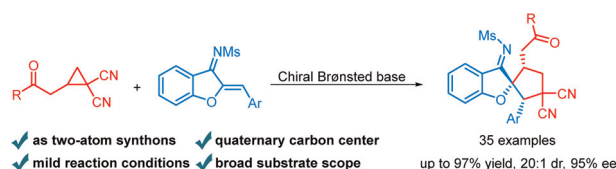
Yongyan Zhang, Lichao Ning, Tianxin Zhu, Zheng Xie, Shunxi Dong, Xiaoming Feng and Xiaohua Liu*



2905

Asymmetric [3 + 2] cycloaddition of donor–acceptor cyclopropanes with azadienes enabled by Brønsted base catalysis

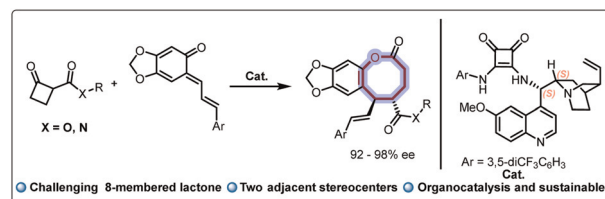
Shu Li, Zhi-Hong Dong, Si-Yu Dan, Mei-Jun Zheng, Teng Long, Jie Zhan, Qing Zhou, Wen-Dao Chu* and Quan-Zhong Liu*



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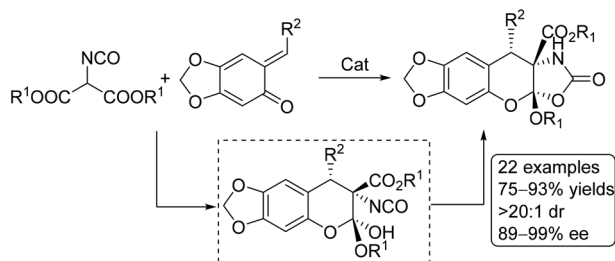
Enantioselective synthesis of 8-membered lactone derivatives via organocatalytic cascade reactions

Dong-Sheng Ji, Rui Zhang, Xu-Yan Han, Hai-Long Chai, Yucheng Gu, Xiu-Qin Hu and Peng-Fei Xu*



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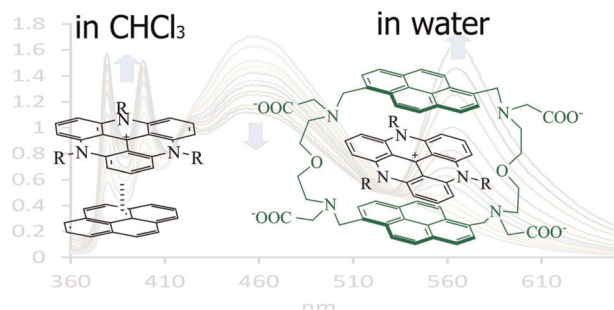
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Organocatalytic formal [4 + 2] cycloaddition of o-quinone-methyl derivatives and 2-isocyanatomalonate diesters for the construction of chroman derivatives with adjacent quaternary chiral centers

Tong Xiong, Yi-Zhao Xu, Yao Wang, You-Cai Xiao* and Fen-Er Chen*

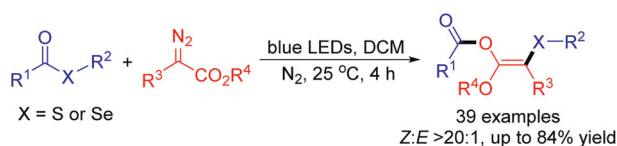
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Triazatriangulenium salts – hosts and guests in supramolecular assemblies in solution

Sayan Sarkar, Michael Böck, Agnes Uhl, Aleksandr Agafontsev, Jürgen Schatz* and Evgeny A. Kataev*

2928

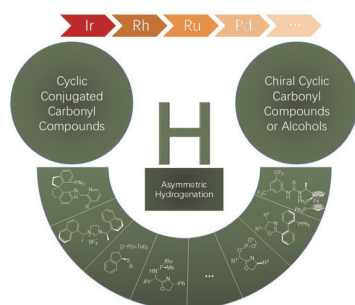


Blue light-mediated carbene transfer reaction of thioesters with diazoesters: efficient synthesis of tetrasubstituted Z-enol esters

Shuncheng Wang, Hua Zhang, Jin Yang, Dongfang Zhang and Xin-Ping Hui*

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Recent advances in the metal-catalyzed asymmetric alkene hydrogenation of cyclic conjugated carbonyl compounds

Min Tan, Bram B. C. Peters, Pher G. Andersson* and Taigang Zhou*



REVIEWS

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Electrochemical switching in mechanically interlocked molecules (MIMs)

Ayush Bhadani and Murugavel Kathiresan*

