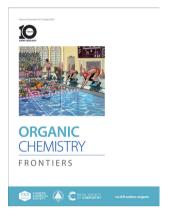
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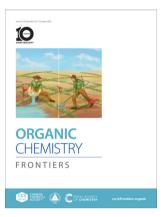


Cover

See Maïwenn Jacolot, Pierre-Adrien Payard, Florence Popowycz *et al.*, pp. 4732–4739.

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Inside cover

See Xiao-Xiao Huang, Shao-Jiang Song *et al.*, pp. 4740–4749.

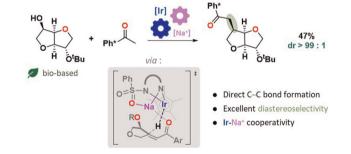
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RESEARCH ARTICLES

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Ir-Na cooperativity controls the diastereoselectivity of borrowing hydrogen C-C alkylation on isosorbide: synthesis methodology and mechanistic investigation

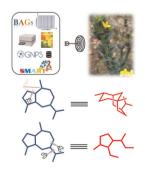
Jordan François, Jordan Rio, Erwann Jeanneau, Marie-Ève L. Perrin, Maïwenn Jacolot,* Pierre-Adrien Payard* and Florence Popowycz*



4740

Rapid screening of unprecedented sesquiterpenes with distinctive ring skeletons from *Daphne* aurantiaca employing an integrated strategy

Shu-Hui Dong, Jin-Ling Han, Xin-Yu Chang, Mei-Ya Lian, Xin Zhang, Xiao-Ling Liu, Ming Bai, Xiao-Xiao Huang* and Shao-Jiang Song*



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Sodiated Oppolzer enolates: solution structures, mechanism of alkylation, and origin of stereoselectivity

Nathan M. Lui and David B. Collum*

4758

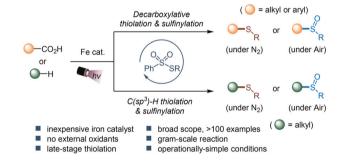
Photoinduced desaturative β -C(sp³)-H amidation of N-phenylpiperidine with phthalimide driven by electron donor-acceptor complexes

Bin Sun, Yu Jiang, Pan-Yi Huang, Pei-Xuan Li, Chun Lv, Yan Xu, Jia-Yang Wang and Can Jin*

4764

An iron-catalyzed C-S bond-forming reaction of carboxylic acids and hydrocarbons via photo-induced ligand to metal charge transfer

Ao-Men Hu, Jia-Lin Tu, Menggi Luo, Chao Yang, Lin Guo* and Wujiong Xia*



4774

N-Heterocyclic carbene catalyzed synthesis of benzotrifluorides from enals and **β-trifluoromethylenones**

Bang-An Zhou, Chun-Lin Zhang* and Song Ye*

4779

Visible light-driven direct access to iminecontaining azaarene-substituted highly functionalized pyrroles

Shuai Yao, Xiaowei Zhao, Xu Ban, Tianiu Shao, Yanli Yin, Weigao Hu* and Zhiyong Jiang*

4786

- ▶ wide scope of allenes (R = prim-, sec- and tert-alkyl groups, and heteroatoms)
- ▶ three-component coupling reaction ▶ high chemo-, regio-, and stereoselectivities
- ▶ formal synthesis of natural product ▶ stereospecific derivatizations

Synthesis of (Z)-alkenyl boronates via a copper(ı)-catalyzed linear-selective alkylboration of terminal allenes

Yu Ozawa, Yuma Shiratori, Hisao Koriyama, Kohei Endo, Hiroaki Iwamoto and Hajime Ito*

4794

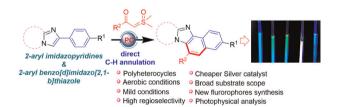
$$Ar^{1}$$
 + Ar^{2} -CHO + R^{1} R^{2} R^{2} R^{2} R^{2} R R^{2} R

four-component strategy tertiary amines as C2 unit readily available starting materials ammonium salt as nitrogen source

Modular synthesis of unsymmetric 2,4-diarylsubstituted pyridines through a four-component cyclization strategy under metal-free conditions

Yanfeng Ma, Tianci Xu, Fuhong Xiao, * Guojiang Mao and Guo-Jun Deng*

4800



Sustainable photocatalytic C-H annulation of heteroarenes with sulfoxonium ylides: synthesis and photophysical properties of fused imidazo[1,2-a]pyridine-based molecules

Sravani Sana, Srinivas Reddy Dannarm, Ramya Tokala, Sowmya Dastari, Manda Sathish, Rahul Kumar, Rajesh Sonti and Nagula Shankaraiah*

4809

Copper-catalyzed functionalization/transformation of styrenes with polyhaloalkanes and arenes enables the synthesis of heteroarene-containing gem-dihaloalkenes

Yi-Lin Zhao, Yong Yao, Wan-Ting Li, Jing-Hao Qin, Qing Sun, Jin-Heng Li* and Xuan-Hui Ouyang*

4816

A photochemical halogen-atom-transfer pathway for the carboxylation of alkenes with CO₂

Senmao Zhai, Rong Wang, Quan Dong, Jiajia Cheng, Meifang Zheng* and Xinchen Wang*

4821

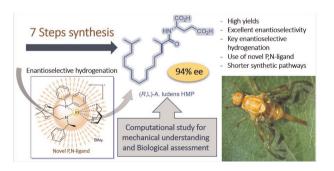
A copper-catalyzed direct C(sp²)-H alkylsulfonylation of alkenes using alkylsilyl peroxides and DABCO·(SO₂)₂

Xueni Tian, Lingling Chen, Tonghao Zhu* and Jie Wu*

4827

New synthetic pathways to the Anastrepha ludens host marking pheromone: harnessing iridiumcatalysis with novel P,N-ligand for enantioselective construction

Tushar Janardan Pawar, Liliette Barcelona-Cazanave, Israel Bonilla-Landa, Magdalena Escobar, J. Oscar C. Jimenez-Halla, Alma Altúzar-Molina, Patricia Romero-Arellano, Andrew J. F. Edmunds, Martín Aluja and José Luis Olivares-Romero*



4836

on no metal waste excellent stereoselectivity high functional-group tolerance

Metal-free photocatalyzed allylic silvlation of allyl acetates and chlorides

Xin-Long Yu, Jia-Wei Hu, Jian Cao* and Li-Wen Xu*

4843

Ar² NH₂ +
$$Ar^2$$
 NH₂ + Ar^2 NH₂ + Ar^2

- Unprecedented dual C_{sp}²-H functionalization
- O Cyclization between two functional groups
- O Four bonds formation of 1 C-C, 1 C-O, 2 C-N Simple operation and accessible substrates

 I_2 -DMSO mediated dual α,β -C(sp²)-H functionalization/bicyclization of o-hydroxyphenyl enaminones to construct C2,C3-disubstituted chromone derivatives: chromeno[2,3-b]pyrrol-4(1H)-ones

Shuang-Gui Lei, You Zhou, Li-Sheng Wang, Zhi-Cheng Yu, Ting Chen, Yan-Dong Wu, Meng Gao* and An-Xin Wu*

4848

- two adjacent tetrasubstituted carbon stereocenters
 good chemoselectivity, high enantioselectivity with excellent diastereoselectivity
- easy operation and transition-metal free

Enantioselective construction of spirodihydrofuran oxindoles via one-pot organo-/iodine sequential catalysis

Ai-Bao Xia,* Li-Sha Huang, Chang-Ping Li, Qing-Bo Hu, Jin-Yao Zhu, Liang Bai and Dan-Qian Xu*

4854 OC₈H₁₇ Regioselective Polymerization D-Enantiomer Fast Polymerization OC8H17 Low 2,3-selective (74.6%) trans-Ni(II)/LR-

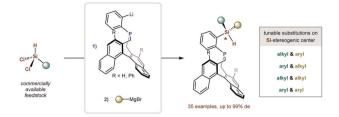
Reversibly photoswitchable catalysts for high regioselectivity and enantioselectivity in polymerization of allenes

Li Zhou, Yong-Jie Wu, Kun Chen, Xing-Yu Zhou, Hui Zou, Shu-Ming Kang, Na Liu* and Zong-Quan Wu*

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Stereodivergent asymmetric synthesis of P-atropisomeric Si-stereogenic monohydrosilanes

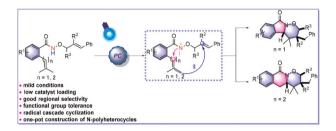
Bo Yang, Xingfa Tan, Yicong Ge, Yingzi Li and Chuan He*



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Intramolecular cascade cyclization via photogenerated N-amidyl radicals toward isoindolin-1-one/3,4-dihydroisoguinolin-1(2H)-one fused oxazinane

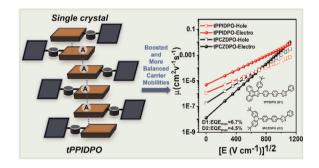
Yuan-Xiang He, Kui Hu, Yu Ran, Zhen-Yao Lei, Shu Geng, Li-Na Chen, Li Pan,* Jun-Bo Zhong* and Feng Huang*



4878

An efficient blue electro-fluorescence material with high electron and balanced carrier mobilities based on effective π -stacking between acceptors

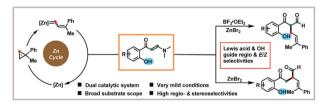
Mizhen Sun, Chenglin Ma, Mingliang Xie, Lizhi Chu, Xin Wang, Qikun Sun, Wenjun Yang and Shanfeng Xue*



4887

Stereoselective synthesis of 1,3- and 1,4dicarbonyl-alkenes from cyclopropenes in a catalytic zinc system

Jiabin Han, Yu Liu, Xiaoyan Yang, Xuheng Zhang, Yuanhao Zhu, Min Zhao, Gefei Hao* and Yaojia Jiang*



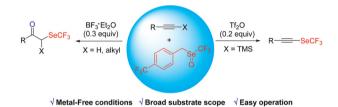
4895

- Catalytic oxidation-reduction condensation
- Compatible with all proteinogenic amino acids
- Applicable to SPPS
- Scalable continuous-flow process

A practical approach for oligopeptide synthesis via synergistic photoredox, cobaloxime and organophosphorus triple catalysis

Junqi Su, Jia-Nan Mo, Guofeng Zhang, Ziyu Jiang and Jiannan Zhao*

4905



Metal-free Lewis-acid-catalyzed divergent trifluoromethylselenolation of alkynes: construction of α -trifluoromethylselenolated ketones and alkynes

Yan Gao, Rui Xiao, Bingbing Feng, Zhiyi Bian, Han Zhang, Gangguo Zhu, Yanan Wang* and Zheliang Yuan*

4912



6-Exo-dig cyclization/dearomatization cascade towards N-O fused spiro polyheterocycles

Zhenwei Lv, Yan Li, Erik V. Van der Eycken,* Lingchao Cai* and Liangliang Song*

4918



Photo-induced stereo- and regiospecific sulfonylation of C-C multiple bonds exploiting the dual reactivity of sulfonium iodate(i) species

Aakanksha Gurawa, Nitin Kumar and Sudhir Kashyap*

4927

Catalyst-controlled and visible light-induced acylmethylation and bromoacylmethylation of Morita-Baylis-Hillman acetates with α -bromo ketones: access to highly functionalized 1,5-dicarbonyl compounds

De-Run Zhang, Lin-Ping Hu, Feng-Lin Liu, Xiao-Hong Huang, Xia Li, Bo Liu, Ming-Yu Teng and Guo-Li Huang*

- \checkmark Catalyst-controlled and photoinduced \checkmark High functional-group tolerance
- √ Exclusive chemo- and regio-selectivities √ Large-scale synthesis
- √ Broad substrate scope √ Mild reaction conditions

4935

Copper-catalyzed asymmetric propargylation of imines enabled by a biphenol-based phosphoramidite ligand

Qi-Qi Yan, Cheng-Kai Ruan, Yu-Qin Deng, Yu-Chuan Pu, Wen-Dao Chu, Cheng-Yu He* and Quan-Zhong Liu*

Cricap and easy-named outo-roy catalyst

novel and simple phosphoramidite ligand with atropoisomerically flexible biphenol skeleton

REVIEWS

4941

Strained cycloalkanols in C–C bond formation reactions: a boon in disguise!

Neha Jha, Pragya Mishra and Manmohan Kapur*

4972

Recent advances in the dichalcogenation reactions of unsaturated compounds *via* double functionalization

Chang-Sheng Wang, Yuan Xu, Yi-Liang Zhou, Chun-Ling Zheng, Guowei Wang and Qiao Sun*

