Organic & Biomolecular Chemistry

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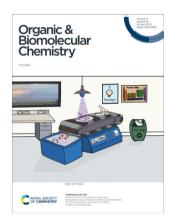
IN THIS ISSUE

ISSN 1477-0520 CODEN OBCRAK 21(16) 3253-3466 (2023)



See Lidya Salim and Jean-Paul Desaulniers, pp. 3365-3372.

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Inside cover

See Andrew D. Smith, Eli Zysman-Colman et al., pp. 3307-3310.

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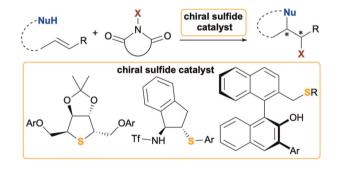
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REVIEWS

3263

Chiral sulfide and selenide catalysts for asymmetric halocyclizations and related reactions

Ryuichi Nishiyori, Taiki Mori, Ken Okuno and Seiji Shirakawa*



Recent progress in the homogeneous gold-catalysed cycloisomerisation reactions

Mahender Kumar, Kajal Kaliya and Sushil K. Maurya*



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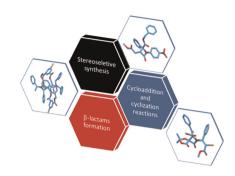


REVIEWS

3296

Stereoselective synthesis of β -lactams: recent examples

Adrian Saura-Sanmartin* and Laura Andreu-Ardil

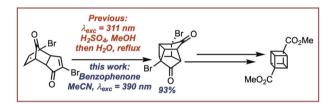


COMMUNICATIONS

3307

Benzophenone as a cheap and effective photosensitizer for the photocatalytic synthesis of dimethyl cubane-1,4-dicarboxylate

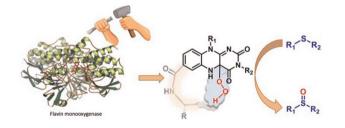
Callum Prentice, Alice E. Martin, James Morrison, Andrew D. Smith* and Eli Zysman-Colman*



3311

Stabilizing hydroperoxyflavin intermediate formation via a peptide appendage: a neutral flavoenzyme model

M. S. S. Vinod Mouli, Dipayan Mondal, Kusum Kumari, Saurabh Kumar Singh* and Ashutosh Kumar Mishra*



3317

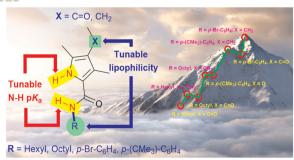
Photocatalytic synthesis of azaheterocycle-fused piperidines and pyrrolidines via tandem difunctionalization of unactivated alkenes

Qun-Huai Zhou, Jia-Ying Dai, Wen-Jing Zhao, Xi-Ya Zhong, Chun-Yang Liu, Wei-Wei Luo, Zhi-Wei Li, Jiang-Sheng Li* and Wei-Dong Liu

- transition metal-, base-, and additive-free
- diversified fused piperidines and pyrrolidines
- anchors toleratable: (benz)imidazole, theophylline, purine, and indole

COMMUNICATIONS

3323



Bimodal structural tuning of pyrrole-2carboxamide-based transmembrane ion transport systems

Naveen J. Roy, Parappa L. Pujari and Pinaki Talukdar*

3330

Defluorinative alkylation of 1-trifluoromethyl alkenes with alkyl radicals derived from visible light-induced deoxygenation of xanthate salts: synthesis of *gem*-difluoroalkenes

Xin Li, Yan Jiao, Lifei Han,* Jinwei Sun and Xuan Zhang*

3335

- 1. Using atom economic primary amide directing groups
- 2. Redox-neutral
- 3. Oxadiazolone for heterocycle synthesis

Synthesis of quinazolinones *via* Cp*Co(III)-catalyzed C-H functionalization of primary amides with oxadiazolones

Xuan Wu, Weiping Wu, Shuaixin Fan, Xuanzhen Han, Zhixin Wang, Hanxiao Xu, Baochen Wang and Jin Zhu*

3340

Catalytic aminomethylative etherification of N-allenamides with N,O-acetals enabled by Lewis/Brønsted acid catalysis

Tao Zhang, Danqing Ji and Jiangtao Sun*

COMMUNICATIONS

3345

Modular synthesis of fluorinated 2H-thiophenes via [4 + 1] cyclization of enaminothiones

Xinyu Zhang, Jinli Zhang, Jie Chen, Banghua Zhou, Jian Zhang, Shunhong Chen, Jian Wu* and Yaojia Jiang*

3350

Deoxygenation of oximes for the synthesis of pyrrolines via hydroimination cyclization

Wencheng Han, Wen-Deng Liu, Jungi Su and Jiannan Zhao*

3355

Pd-catalysed cross-coupling of allenylic carbonates with gem-diborylalkanes: efficient synthesis of isoprenylboronates

Xin-Ru Ma, Qin Zhong,* Qian-Cheng Zhang, Hua-Xing Hu, Ma-Hong Yu and Jian Zhao*

3360

Nickel-catalyzed divergent formylation and carboxylation of aryl halides with isocyanides

Haoying Mao, Hongwei Qian, Zhichang He, Zhiguo Zhang, Hongwei Jin, Yunkui Liu and Bingwei Zhou*

- Base metal catalysis
- ♦ RNC/H₂O as carbonyl source
- ◆ Divergent formylation and carboxylation
 - Sensitive functional group tolerated

PAPERS

3365

Synthesis of folate-labeled siRNAs from a folate derivative phosphoramidite

Lidya Salim and Jean-Paul Desaulniers*

3373

A structure activity relationship study of 3,4'-dimethoxyflavone for ArlRS inhibition in Staphylococcus aureus

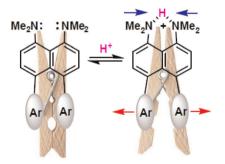
Alexander W. Weig, Patrick M. O'Conner, Jakub M. Kwiecinski, Orry M. Marciano, Angelica Nunag, Andrew T. Gutierrez, Roberta J. Melander, Alexander R. Horswill* and Christian Melander*

3381

Chiral phosphoric acid-catalyzed Friedel-Crafts reaction of 2,5-disubstituted and 2-monosubstituted pyrroles with isoindolinonederived ketimines

Arben Beriša and Matija Gredičak*

3388



Synthesis, conformational stability and molecular structure of 4-aryl- and 4,5-diaryl-1,8bis(dimethylamino)naphthalenes

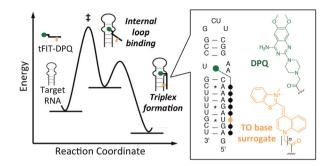
Ekaterina A. Filatova, Eugeny A. Ermolenko, Alexander F. Pozharskii, Valery A. Ozeryanskii, Oleg P. Demidov, Anatoly V. Chernyshev, Anatoly V. Metelitsa and Anna V. Gulevskaya*

PAPERS

3402

Kinetic analysis of highly effective triplex formation between a small molecule-peptide nucleic acid conjugate probe and the influenza A virus RNA promoter region at neutral pH

Chioma Uche Okeke, Hiromasa Miura, Yusuke Sato* and Seiichi Nishizawa*



3411

A metal-free synthesis of pyrimidines from amidines with α , β -unsaturated ketones via tandem [3 + 3] annulation and visible-light-enabled photo-oxidation

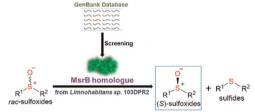
Jinshan Liu, Jiatian Zhuo, Qi Tan, Min Zhou, Lin Ma and Min Zhang*



3417

Kinetic resolution of sulfoxides with high enantioselectivity using a new homologue of methionine sulfoxide reductase B

Yuyan Zhao, Xu Jiang, Shihuan Zhou, Jin Tian, Piao Yang, Yanli Chen, Quan Zhang, Xianlin Xu, Yongzheng Chen and Jiawei Yang*



- 11 examples including aromatic, heteroaromatic, alkyl and thio-alkyl sulfoxides
- Up to 90 mM (11.2 g/L) of substrate loading
- ~ 50% yield: 92-99% ee
- 2.24 g large scale (0.2 L), 41.5% isolated yield (0.93g) and 99% ee

3423

Nickel-catalyzed reductive coupling of arylcarboxylic acid 2-pyridyl esters with alkyl methanesulfonates: access to alkyl aryl ketones

Hang Yu and Zhong-Xia Wang*

R = 1° alkyl, L = 1,10-phenanthroline R = 2° alkyl, L = 4,4'-di-tert-butyl-2,2'-bipyridine

PAPERS

3432

3,4-Diaminopyrazolo[3,4-d]pyrimidines: a new three-component microwave-assisted synthesis and anti-leukemic properties

Jia Hui Ng, Felicia Phei Lin Lim, Edward R. T. Tiekink and Anton V. Dolzhenko*

3447

Copper-catalyzed radical-mediated intermolecular cyanomonofluoroalkylation of alkenes and alkynes

Xuhui Cui, Xia Wang, Yanlan Huang, Qi Jiang, Li Liu, Yanzhao Wang,* Jingjing Wu* and Fanhong Wu*

Design and synthesis of iso-allo-DNJ and L-isoDALDP derivatives: pursuit of potent and selective inhibitors of α -glucosidase

Lin-Feng Yang, Ming Zhang, Yuna Shimadate, Atsushi Kato,* Tian-Yang Liu Hou, Yi-Xian Li,* Yue-Mei Jia, George W. J. Fleet and Chu-Yi Yu*