

Organic & Biomolecular Chemistry

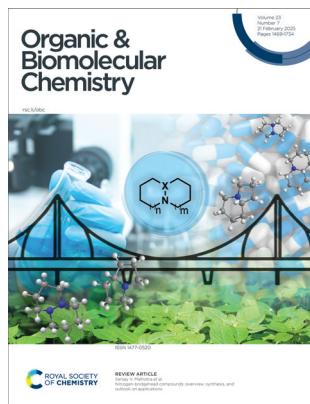
An international journal of synthetic, physical and biomolecular organic chemistry

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IN THIS ISSUE

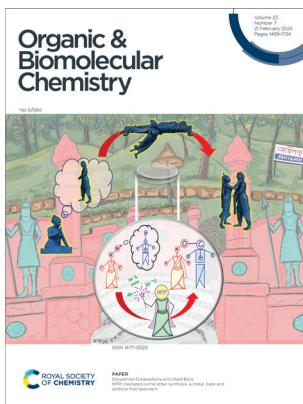
ISSN 1477-0520 CODEN OBCRAK 23(7) 1469–1734 (2025)



Cover

See Sanjay V. Malhotra et al.,
pp. 1479–1532.

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Benedikt W. Grau,
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2025, **23**, 1479.



Inside cover

See Dibyashree Dolakasharia
and Utpal Bora,
pp. 1622–1626.

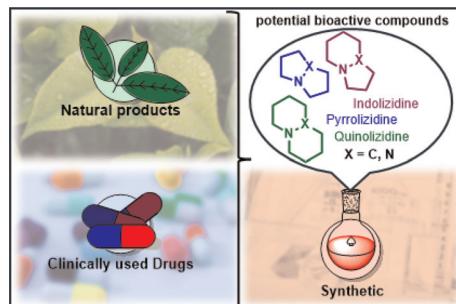
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2025, **23**, 1622.

REVIEWS

1479

Nitrogen-bridgehead compounds: overview, synthesis, and outlook on applications

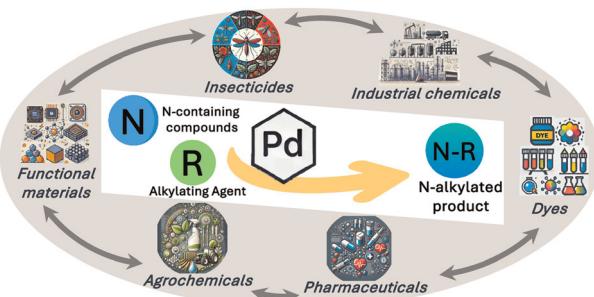
Benedikt W. Grau, Praveen Kumar, Aaron Nilsen and
Sanjay V. Malhotra*



1533

An overview of palladium-catalyzed *N*-alkylation reactions

Soyal Sabu, Padinjare Veetil Saranya and
Gopinathan Anilkumar*



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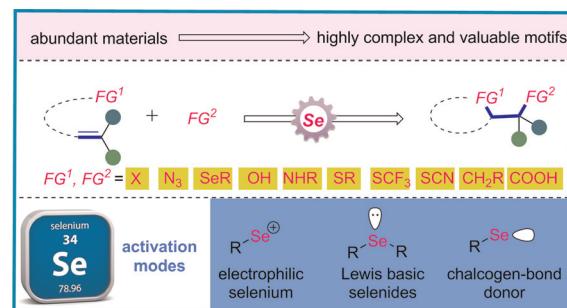
Fundamental questions
Elemental answers

REVIEWS

1552

Recent progress in the organoselenium-catalyzed difunctionalization of alkenes

Pei Qu and Gong-Qing Liu*

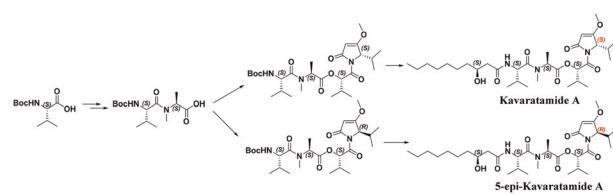


COMMUNICATIONS

1569

Total syntheses of Kavaratamide A and 5-*epi*-Kavaratamide A

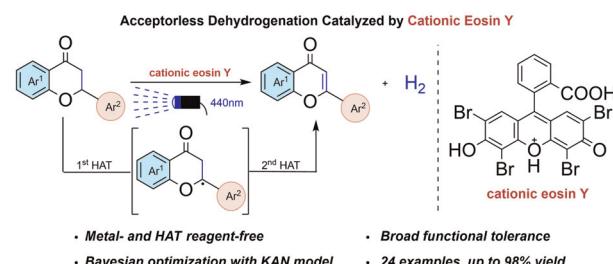
Tieshun Ren, Ke Lv, Fangzhong Hu* and Yue Chen*



1574

Photocatalytic acceptorless dehydrogenation of flavanones by cationic Eosin Y as a bifunctional catalyst

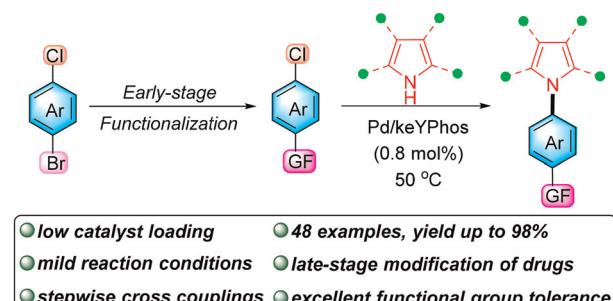
Peiyu Yi, Yufeng Wu, Juntao Wang, Qilei Liu,* Yafeng Xing, Yue Lu, Cunfei Ma, Liyuan Duan, Jingnan Zhao* and Qingwei Meng*



1581

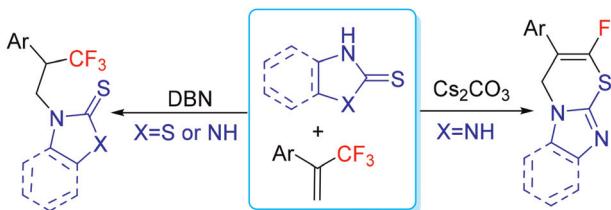
Palladium-catalyzed *N*-arylation of (hetero)aryl chlorides with pyrroles and their analogues

Ying Yin, Yuxuan Xiao, Xun Yang, Haiyan Li, Jiahui Du, Wengui Duan* and Lin Yu*



COMMUNICATIONS

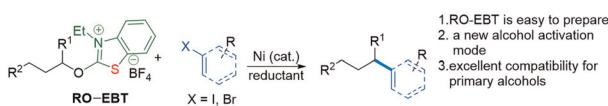
1588



Tunable base-controlled chemoselective synthesis of trifluoromethyl-containing *N*-substituted benzimidazole-2-thiones and monofluorinated 4*H*-benzo[4,5]imidazo[2,1-*b*][1,3]thiazine

Yupian Deng, Yuhao Qian, Jiaqi Huang, Zhudi Sun, Ronghua Zhuge, Qingchun Huang and Song Cao*

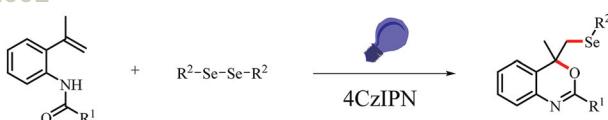
1596



Benzothiazolium salts as versatile primary alcohol derivatives in Ni-catalyzed cross-electrophile arylation/vinylation

Cheng Ye, Quan Lin, Yunrong Chen, Fan Wu* and Hegui Gong*

1602

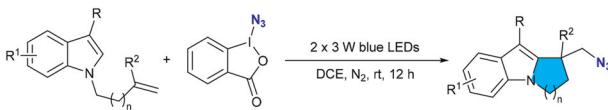


- ✓ Atom economy
- ✓ r.t., metal free, no additive
- ✓ 29 examples, up to 98% yield

Visible-light-mediated selenocyclization of *o*-vinylanilides with diselenides

Xuecheng Wang, Jiajie Guo, Shaofan Xue, Zikun Wang* and Jincan Zhao*

1607



Visible-light-promoted azidation/arylation of unactivated alkenes with Togni-N3 via electron donor–acceptor complexes

Peng Xie, Yue Gao, Chenqi Wu, Peidong Cheng, Yong Zhang* and Song Sun*



COMMUNICATIONS

1612

Photocatalytic oxidative hydroacylation with alcohols

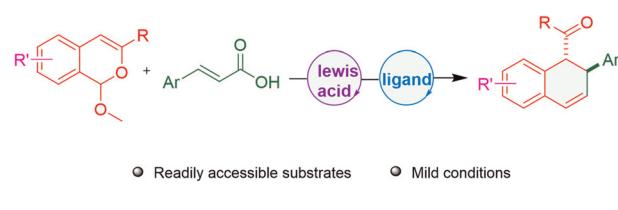
Sabhya Sandha and Chandra Bhushan Tripathi*



1617

Efficient synthesis of dihydronaphthalenes via cerium-catalyzed annulation of 1-alkoxy substituted 1*H*-isochromenes with cinnamic acids

Meng Guo, Xuetao Zhang, Wenqi Yang, Yanmei Chen, Jun Zhang, Zhiqing Liu, Chang-Yun Wang* and Pingyuan Wang*

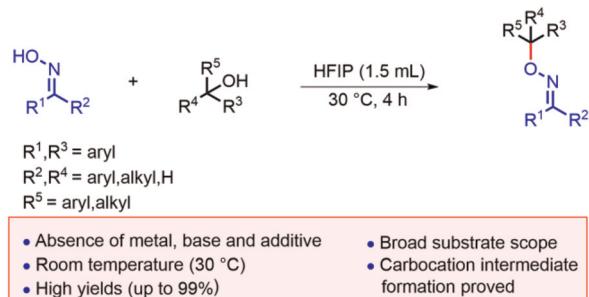


PAPERS

1622

HFIP mediated oxime ether synthesis: a metal, base and additive free approach

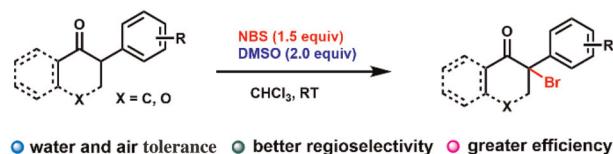
Dibyashree Dolakasharia and Utpal Bora*



1627

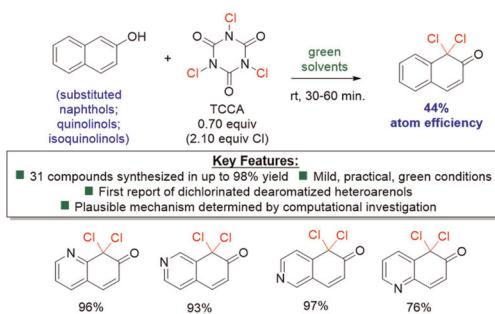
DMSO-promoted α -bromination of α -aryl ketones for the construction of 2-aryl-2-bromo-cycloketones

Haojiang Zhai, Penghui Li, Hongshuang Wang* and Xiaohui Wang*



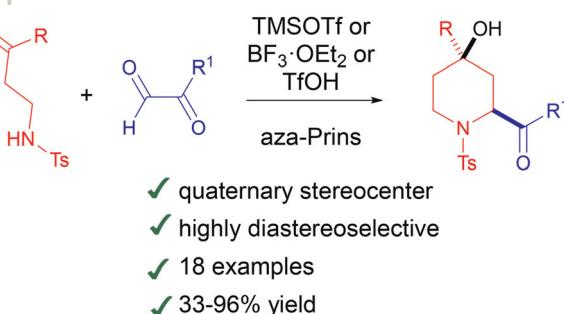
PAPERS

1633

**Atom-efficient chlorinative dearomatization of naphthol, quinolinol, and isoquinolinol derivatives using trichloroisocyanuric acid (TCCA)**

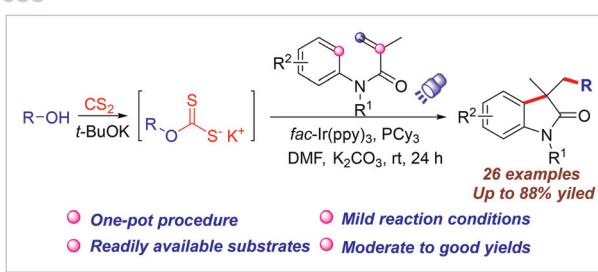
Jenna D. Caudle, Marlow K. Ennis, Dillon C. Dodge, Audrey A. Iskandar, Yesenia Portillo Urquiza, David K. Seo, Franklyn M. Wright, Gordon H. Purser, Daniele Leonori and Angus A. Lamar*

1644

**Synthesis of 4-hydroxypiperidines containing a quaternary stereocenter by aza-Prins cyclization**

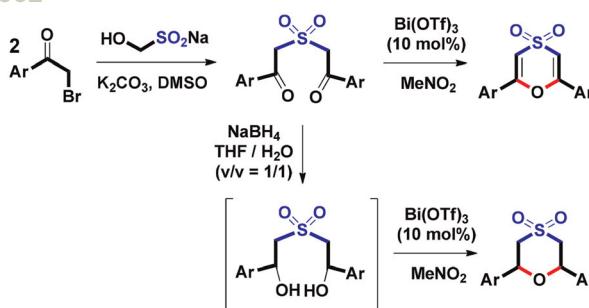
Myriam Le Roch, Nicolas Gouault,* Jacques Renault, Gilles Argouarch, Thierry Roisnel, Swarnayu Banik, B. V. Subba Reddy and Claudia Lalli*

1653

**Visible-light-induced radical-cascade alkylation/cyclization of acrylamides: access to 3,3-dialkylated oxindoles**

Pengyuan Yang, Lili Wang, Meng Yan, Jinwei Yuan,* Yongmei Xiao, Liangru Yang, Xiujuan Xu* and Lingbo Qu*

1662

**Construction of diaryl oxacyclic sulfones via Bi(OTf)3-catalyzed intramolecular cyclocondensation of 1,3-diaroylsulfones**

Meng-Yang Chang* and Chun-Yi Lin

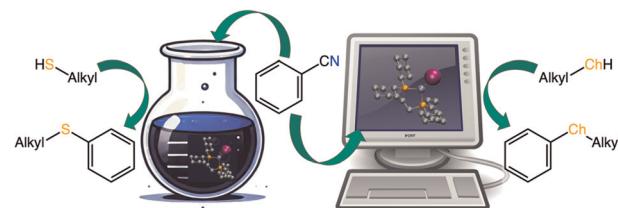


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1673

Exploring nickel-catalyzed organochalcogen synthesis via cross-coupling of benzonitrile and alkyl chalcogenols with computational tools

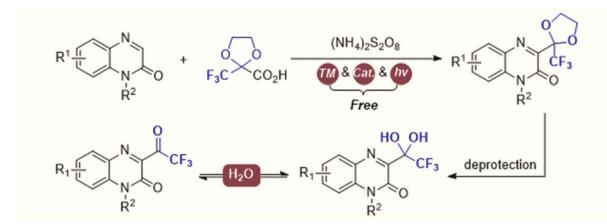
Francisco A. Gómez-Mudarra, Gabriel Aullón and Jesús Jover*



1683

Late-stage C–H trifluoroacetylation of quinoxaline-2(1*H*)-ones using masked trifluoroacyl reagents

Yawei Shen, Yuan Li, Xia Wang, Jiaoyan Wei, Yafen Shen, Lei Wu* and Kai Luo*

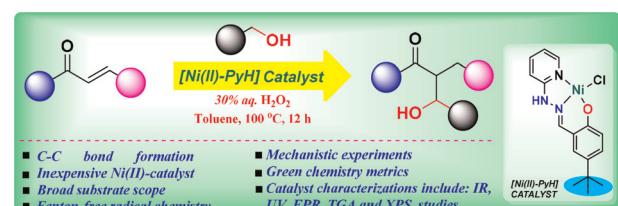


- Room temperature and convenient operation ● gram scale synthesis
- Metal, Catalyst, and Light-Free ● 21 examples, up to 90% yield
- Controllable transformation of trifluoromethyl ketone and its hydrate

1689

Nickel(II)-hydrazinepyridine catalyzed regioselective synthesis of α -benzyl substituted β -hydroxy ketones via a Fenton free radical reaction

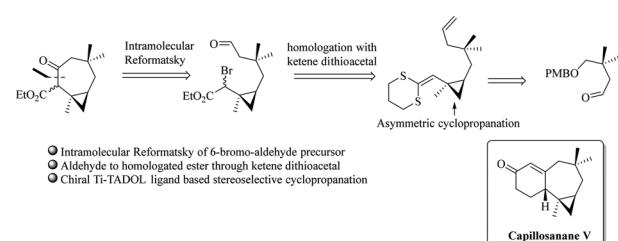
Apurva Singh and Naseem Ahmed*



1696

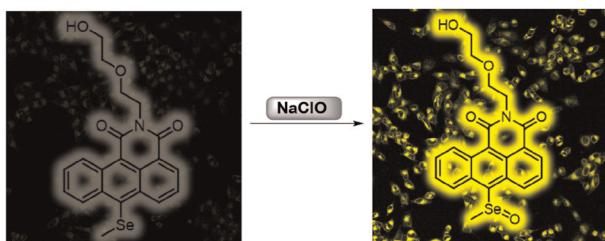
Synthetic studies towards naturally occurring sesquiterpene capillosanane V: construction of a fully functionalized cycloheptane core through an intramolecular Reformatsky reaction

Rasmita Barik, Jayanta Das and Samik Nanda*



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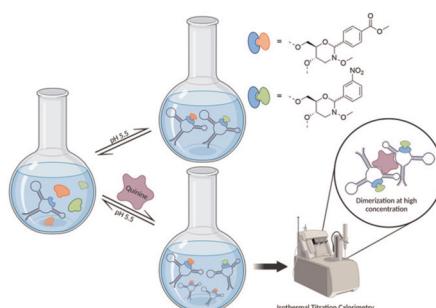
1708



Anthracene carboxyimide-based selenide as a fluorescent probe for the ultrasensitive detection of hypochlorous acid

Xueling Liu, Ziqi Liu, Yujia Li, Yali Wang* and Wenzhou Zhang*

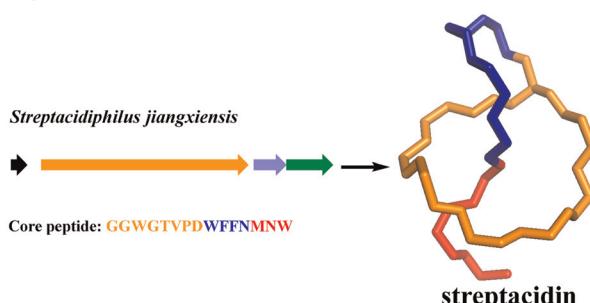
1714



Post-SELEX modification of quinine aptamers through neoacetalization

Heidi Kähkölä, Muditha Herath, Pasi Virta and Tuomas Lönnberg*

1723



Genome mining and heterologous expression reveal streptacidin, a new lasso peptide from *Streptacidiphilus jiangxiensis*

Jiwu Huang, Botao Cheng, Chunyang Cao* and Wen Liu*

CORRECTION

1731

Correction: Total syntheses of Kavaratamide A and 5-*epi*-Kavaratamide A

Tieshun Ren, Ke Lv, Fangzhong Hu* and Yue Chen*

