

Organic & Biomolecular Chemistry

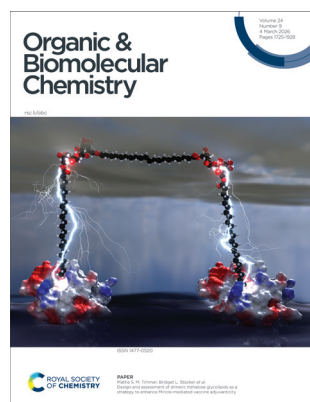
An international journal of synthetic, physical and biomolecular organic chemistry

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IN THIS ISSUE

ISSN 1477-0520 CODEN OBCRAK 24(9) 1725-1928 (2026)



Cover

See Mattie S. M. Timmer, Bridget L. Stocker *et al.*, pp. 1822–1836.

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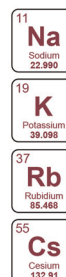
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REVIEWS

1734

Advances of well-defined alkali metal complexes in organic synthesis

Kimberly Martinez-Fair, Dinora N. Rodriguez, Kayla Bui, Alexander Dua and Sam Yruegas*



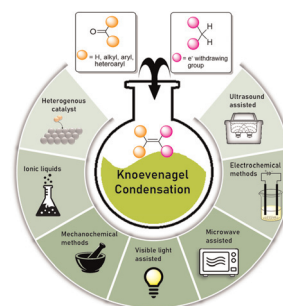
Contemporary Advances of the Alkali Metals

- Synthetic access to defined precursors
- Hydrofunctionalization
- Carbon-carbon bond formation
- Polymerization
- C-H activation
- Sustainable chemistry

1758

Sustainable and green approaches for Knoevenagel condensation

Nikita, Arju, Aman Kumar, Nisha and Vinod Kumar*



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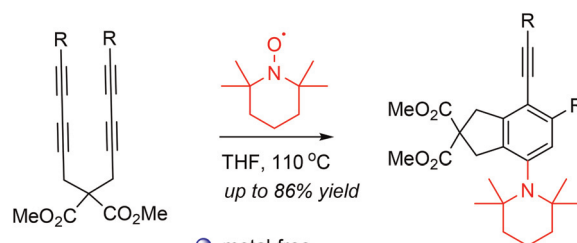
Fundamental questions
Elemental answers

COMMUNICATIONS

1792

Aryne-mediated synthesis of sterically hindered arylamines using TEMPO as the amine source

Qiaofeng Liang, Zhiwen Zhong, Zhihan Sheng, Bingfeng Sun* and Chenlong Zhu*

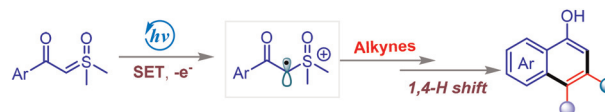


- metal-free
- highly regioselective
- radical transformations with arynes

1798

Photoredox radical annulation of aryl sulfoxonium ylides and alkynes for 1-naphthol assembly

Ning Xian, Huawen Huang* and Feng Zhao*

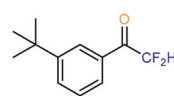
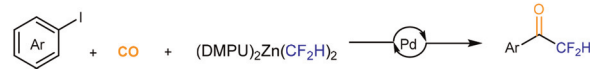
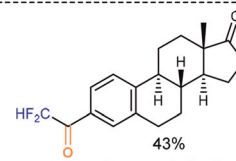


- ✓ Mild reaction conditions
- ✓ Excellent regio-selectivity
- ✓ Novel radical cascade process
- ✓ Valuable structural frameworks

1803

Palladium-catalyzed difluoromethylcarbonylation of aryl iodides

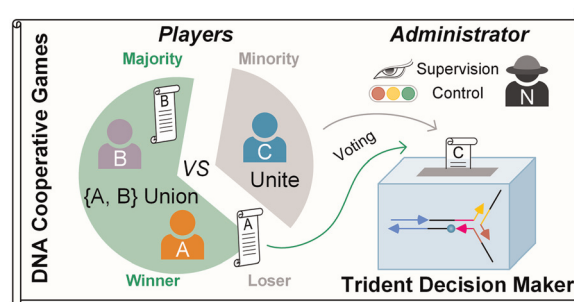
Yijie Wei, Jinxu Dong, Xiaohong Wen, Xiaodong Xiong* and Xiaojun Zeng*

68%
Inhibitor of AgAChE43%
Estrone derivative

1808

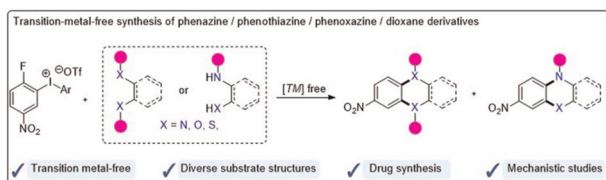
DNA-based cooperative games: an interactive collective decision-making architecture

Yao Yao, Xiaokang Zhang, Ranfeng Wu, Shuang Cui, Lijun Sun, Bin Wang and Qiang Zhang*



COMMUNICATIONS

1817

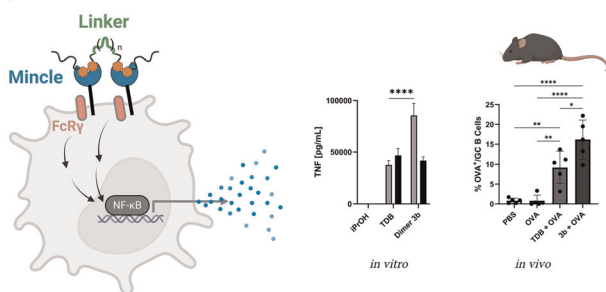


Transition-metal-free [4 + 2] cyclocondensation of diaryliodonium salts accessing phenazine, phenothiazine, phenoxazine and dioxane derivatives

Shaoqing Wang, Weilin Lan, Chengkai Yin, Tao Qin,*
Heye Zhou and Bin Liu*

PAPERS

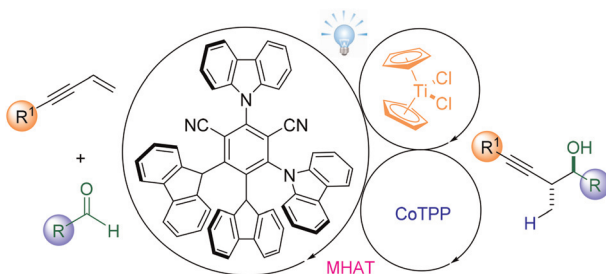
1822



Design and assessment of dimeric trehalose glycolipids as a strategy to enhance Mincle-mediated vaccine adjuvanticity

Emma M. Dangerfield, M. A. Thathsaranie
P. Manthirathna, James C. Robinson, Brenda S. Luong,
Olga R. Palmer, Lisa M. Connor, Mattie S. M. Timmer*
and Bridget L. Stocker*

1837



Regio- and diastereoselective 1,2-hydroalkylation of 1,3-enynes via dual photoredox/Ti catalysis

Xiaoxia He, Hongjiang Li,* Tao Huang, Fengzhen Li,
Junru Wang, Zulin Xiao, Xueping Zong, Xin Xiong and
Fusheng Li*

1844



Sodium halide-switchable divergent electrochemical synthesis of sulfonyl chlorides and thiosulfonates from thiols

Fateh Golmoradi, Amin Rostami and Farzad Nikpour*

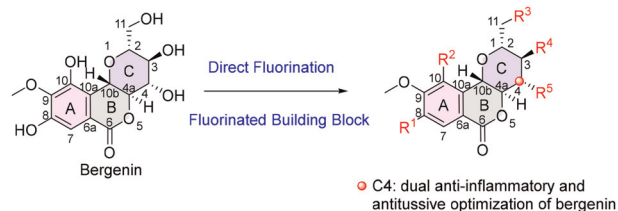


PAPERS

1852

Synthesis and biological evaluation of fluorinated bergenin derivatives

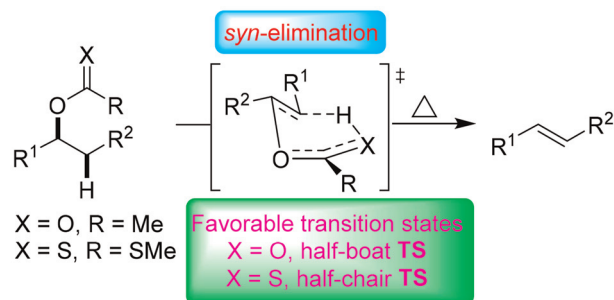
Hui Zhang, Ya-Li Xu and Lin Dong*



1857

Conformations of favorable transition states in the thermal pyrolysis of alkyl acetates and xanthates

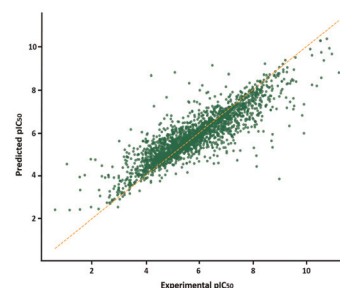
Chongjie Su and Jiayi Xu*



1868

TropMol: a cloud-based web tool for virtual screening and early-stage prediction of acetylcholinesterase inhibitors using machine learning

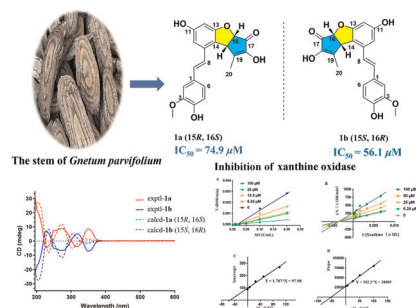
Thiago H. Doring



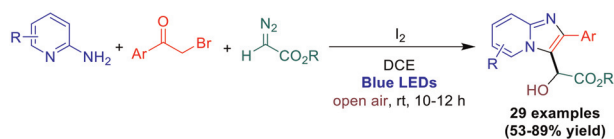
1877

(+)-Gnetuparin A: a pair of stilbene enantiomers from *Gnetum parvifolium* and their xanthine oxidase inhibitory activity

Qin-Feng Zhu, Qian Chen, Bei-Bei Gao, Ye Xue, Ling-Ling Yu, Jun-Li Ao, Guo-Bo Xu and Shang-Gao Liao*



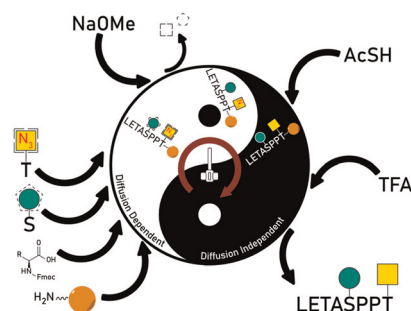
1883



One-pot three-component synthesis of hydroxyacetylated imidazo[1,2-a]pyridines via visible-light-mediated halogen atom transfer

Jalaj Kumar Pathak and Namrata Rastogi*

1889



Expeditious synthesis of multiglycopeptides with heterogeneous glycan cores derived from an α -dystroglycan mucin-like domain

Dror Ben Abba Amiel and Mattan Hurevich*

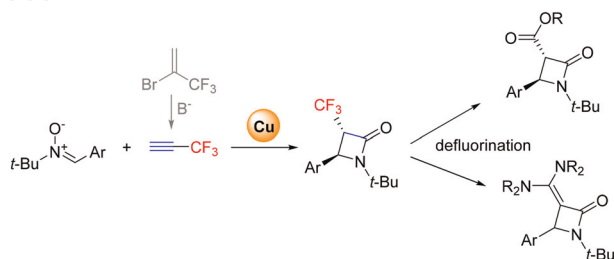
1899



Intramolecular hydrogen bonding in phenolic amides enables direct synthesis of indolizines

Alhajaj Almaani, Sulaiman Al-Shidhani, Parisa Pakari Shalmani, Mohammad Reza Hosseini, Ahmad Takallou,* Mohammad Kamangar, Yazdanbakhsh Lotfi Nosood and Ahmed Al-Harrasi*

1908



Synthesis of α -trifluoromethyl- β -lactams via a copper-catalyzed Kinugasa reaction of nitrones with 3,3,3-trifluoropropyne and their defluorination

Shouxiang Chen, Peiqi Yang, Biqiong Hong,* Fafu Yang and Zhiqiang Weng*

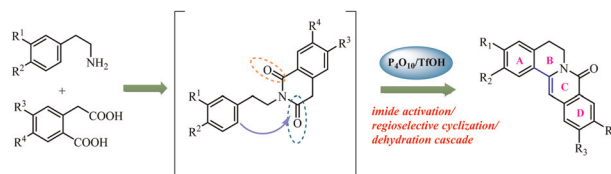


PAPERS

1915

P₄O₁₀/TfOH-assisted one-pot access to 8-oxoprotoberberines

Madhuri Gaikwad, Hari Kadam and Santosh Tilve*



1920

B(C₆F₅)₃/I₂ co-mediated cascade [4 + 2]/[3 + 2] cyclization to access spiroimidazolines

Huanyi Qiu, Jingxi Fang, Mingyan Guan, Surong Xie, Xi Chen, Qiuqi Zhang, Zhentao Pan* and Yongmin Ma*

