

Organic & Biomolecular Chemistry

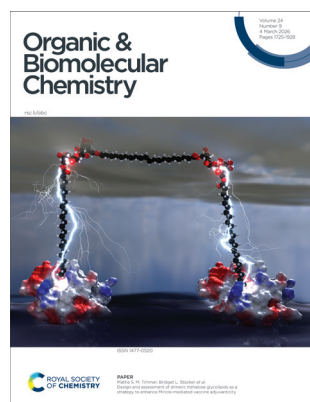
An international journal of synthetic, physical and biomolecular organic chemistry

rsc.li/obc

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

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.

Image reproduced by permission of Mattie S. M. Timmer from *Org. Biomol. Chem.*, 2026, **24**, 1822.

Cover image designed by Mattie S. M. Timmer.

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*

11	Na Sodium 22.990
19	K Potassium 39.098
37	Rb Rubidium 85.468
55	Cs Cesium 132.91

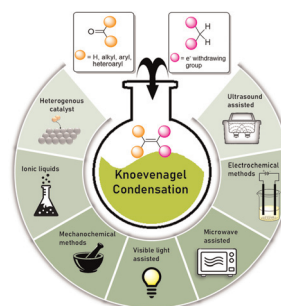
Contemporary Advances of the Alkali Metals

- 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*



EES Catalysis

GOLD
OPEN
ACCESS

Exceptional research on energy
and environmental catalysis

Open to everyone. Impactful for all

rsc.li/EESCatalysis

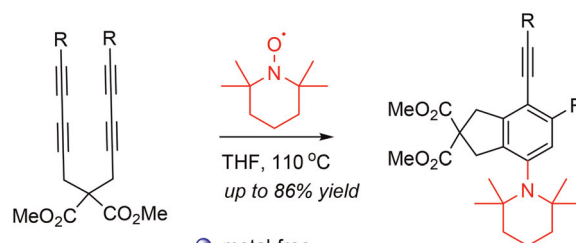
Fundamental questions
Elemental answers

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*

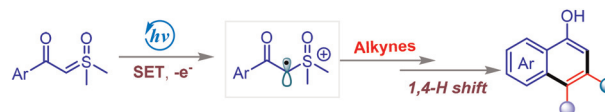


- metal-free
- highly regioselective
- radical transformations with arynes

1798

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

Ning Xian, Huawen Huang* and Feng Zhao*

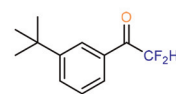
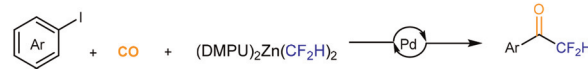
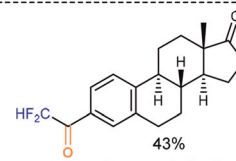


- ✓ Mild reaction conditions
- ✓ Excellent regio-selectivity
- ✓ Novel radical cascade process
- ✓ Valuable structural frameworks

1803

Palladium-catalyzed difluoromethylcarbonylation of aryl iodides

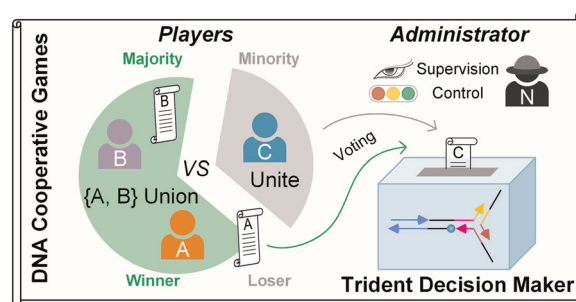
Yijie Wei, Jinxu Dong, Xiaohong Wen, Xiaodong Xiong* and Xiaojun Zeng*

68%
Inhibitor of AgAChE43%
Estrone derivative

1808

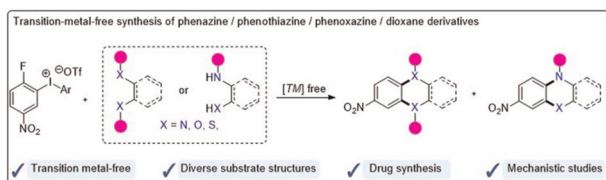
DNA-based cooperative games: an interactive collective decision-making architecture

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



COMMUNICATIONS

1817

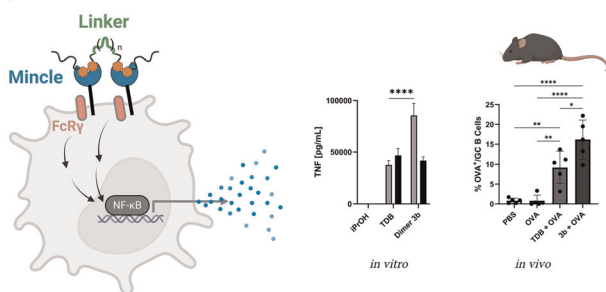


Transition-metal-free [4 + 2] cyclocondensation of diaryliodonium salts accessing phenazine, phenothiazine, phenoxazine and dioxane derivatives

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

PAPERS

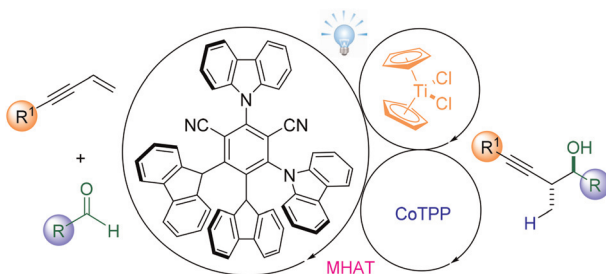
1822



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*

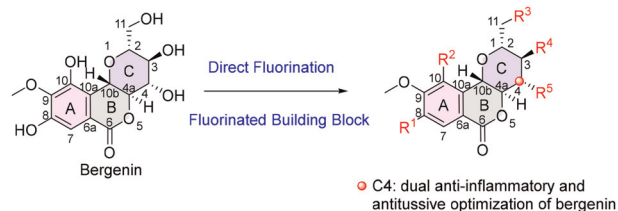


PAPERS

1852

Synthesis and biological evaluation of fluorinated bergenin derivatives

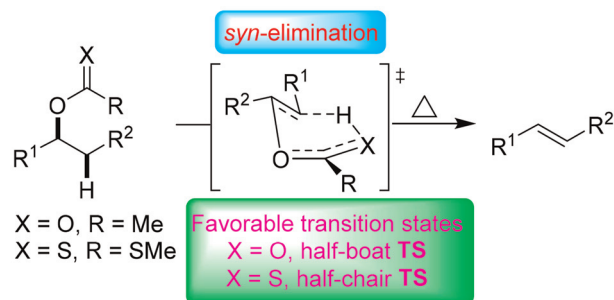
Hui Zhang, Ya-Li Xu and Lin Dong*



1857

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

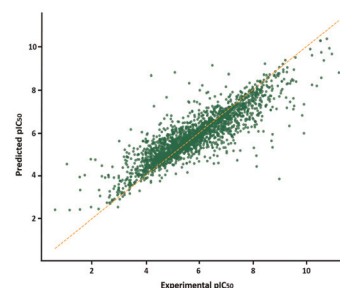
Chongjie Su and Jiayi Xu*



1868

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

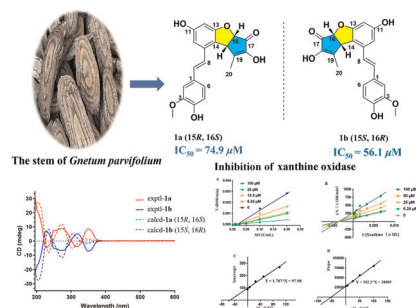
Thiago H. Doring



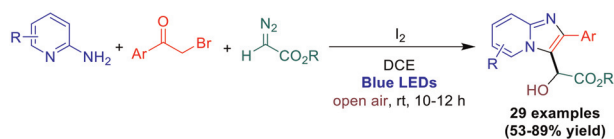
1877

(±)-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*



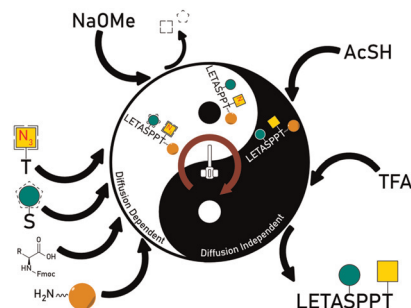
1883



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*

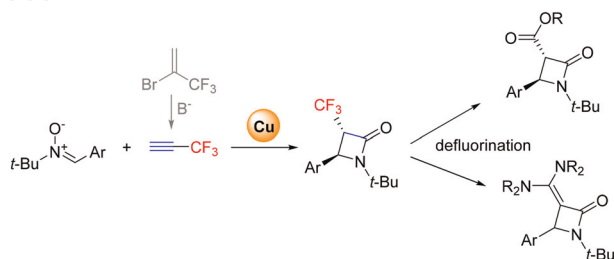
1899



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*

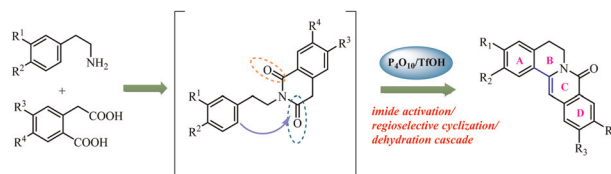


PAPERS

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*

