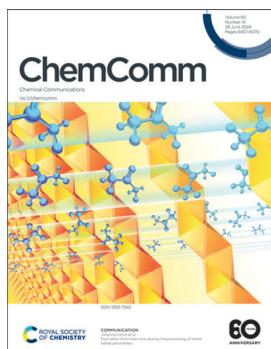


The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

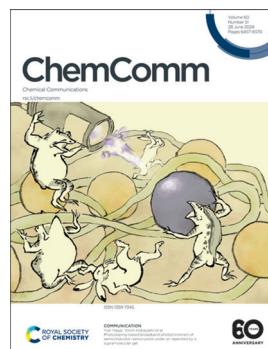
IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 60(51) 6457–6570 (2024)



Cover

See Johanna Heine et al.,
pp. 6488–6491.
Image reproduced
by permission of
Leander Aurel Taubner
from *Chem. Commun.*,
2024, **60**, 6488.



Inside cover

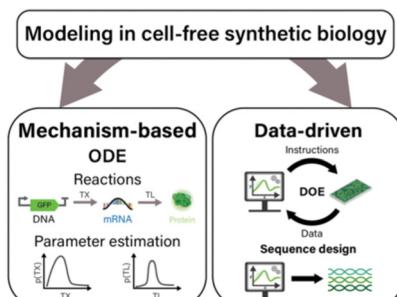
See Yuki Nagai,
Yoichi Kobayashi et al.,
pp. 6492–6495.
Image reproduced
by permission of
Yoichi Kobayashi from
Chem. Commun.,
2024, **60**, 6492.

HIGHLIGHT

6466

Mechanism-based and data-driven modeling in cell-free synthetic biology

Angelina Yurchenko, Gökçe Özkul, Natal A. W. van Riel,
Jan C. M. van Hest and Tom F. A. de Greef*

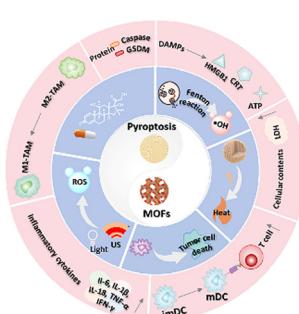


FEATURE ARTICLE

6476

Metal–organic framework (MOF)-based materials for pyroptosis-mediated cancer therapy

You Dou, Yuting Wang, Shu Tian, Qiao Song, Yun Deng,
Zhipeng Zhang,* PeiYao Chen* and Yao Sun*



ChemComm

Uncover new possibilities
with outstanding
preliminary research

Original discoveries, fuelling
every step of scientific progress

rsc.li/chemcomm

Fundamental questions
Elemental answers

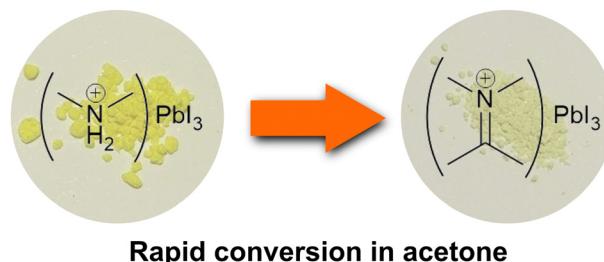
Published on 7/19/2025 5:23:02 PM
This article is licensed under a Creative Commons Attribution 3.0 Unported Licence.

COMMUNICATIONS

6488

Formation of iminium ions during the processing of metal halide perovskites

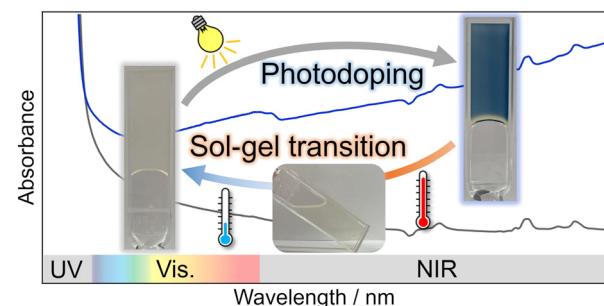
Jakob Möbs, Ajna Tomori and Johanna Heine*



6492

Photodoping-based broadband photochromism of semiconductor nanocrystals under air operated by a supramolecular gel

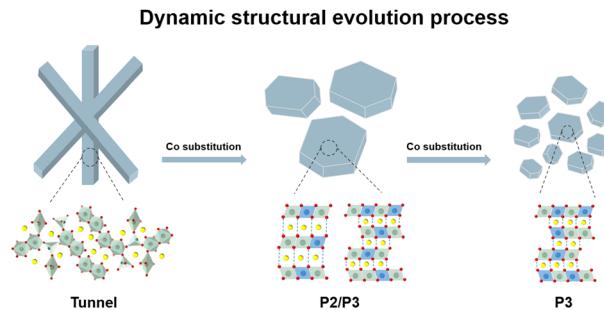
Yuki Nakai, Yuki Nagai,* Yoshinori Okayasu and Yoichi Kobayashi*



6496

Insights into dynamic structural evolution and its sodium storage mechanisms of P2/P3 composite cathode materials for sodium-ion batteries

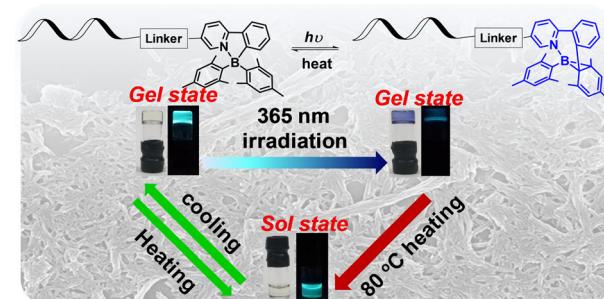
Yi-Feng Liu, Hai-Yan Hu, Yan-Fang Zhu,* Dan-Ni Peng, Jia-Yang Li, Yan-Jiang Li, Yu Su, Rui-Ren Tang,* Shu-Lei Chou* and Yao Xiao*



6500

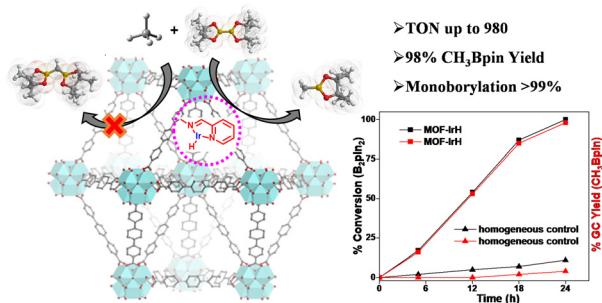
Organoboron based photochromic gelator

Tongtong Zhang, Zhenhui Zhao, Xiaodong Yin and Nan Wang*



COMMUNICATIONS

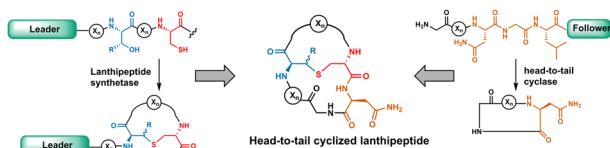
6504



Selective monoborylation of methane by metal–organic framework confined mononuclear pyridylimine-iridium(I) hydride

Rahul Kalita, Manav Chauhan, Poorvi Gupta, Wahida Begum, Chhaya Thadhani, Biplab Ghosh, Balendra, Himani Bisht and Kuntal Manna*

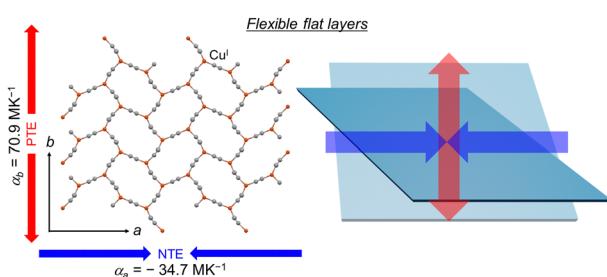
6508



Use of a head-to-tail peptide cyclase to prepare hybrid RiPPs

Tung Le, Dongtianyu Zhang, Rachel M. Martini, Subhanip Biswas and Wilfred A. van der Donk*

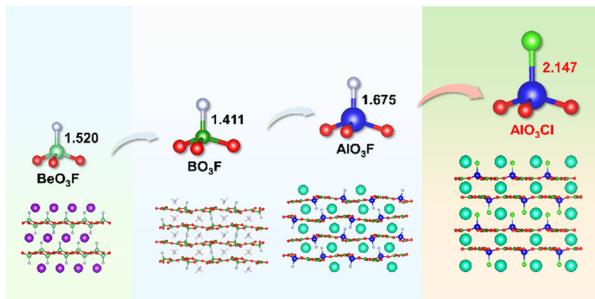
6512



Giant anisotropic thermal expansion of copper-cyanido flat layers with flexible copper nodes

Yuudai Iwai, Manabu Nakaya, Yuta Tsuji, Benjamin Le Ouay, Masaaki Ohba* and Ryo Ohtani*

6516



CsAlB₃O₆Cl: the rational construction of a KBBF-type structure with aligned $^2\infty$ [AlB₃O₆Cl] layers via introducing unprecedented [AlO₃Cl] tetrahedra

Haoran Liu, Jiahao Jiao, Abudukadi Tudi, Qingyu Liu, Zhihua Yang, Shilie Pan* and Min Zhang*

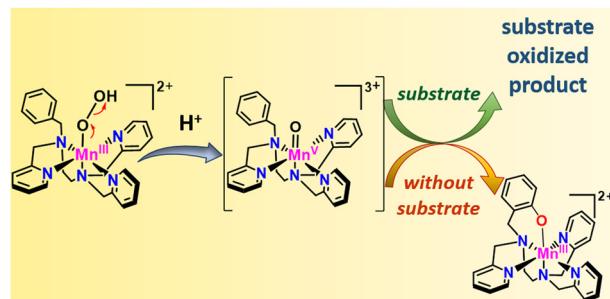


COMMUNICATIONS

6520

Proton-assisted activation of a Mn^{III}-OOH for aromatic C-H hydroxylation through a putative [Mn^V=O] species

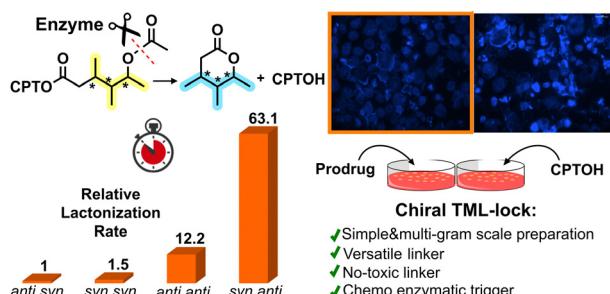
Sikha Gupta, Parkhi Sharma, Khyati Jain, Bittu Chandra, Sharath Chandra Mallojala* and Apparao Draksharapu*



6524

A chiral trimethyl lock based on the *vicinal* disubstituent effect: prolonged release of camptothecin into cancer cells

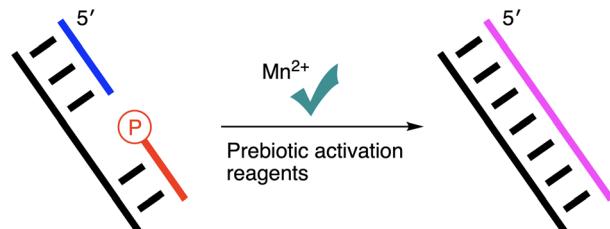
Silvia Venturi, Ferdinando Chiaradonna, Francesco G. Gatti,* Barbara La Ferla,* Roberta Palorini and Barbara Zerbato



6528

Manganese(II) promotes prebiotically plausible non-enzymatic RNA ligation reactions

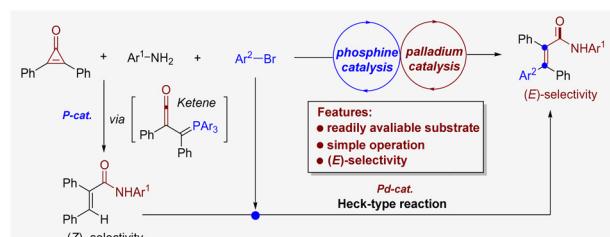
Ziwei Liu,* Clancy Zhijian Jiang, Andrew D. Bond, Nicholas J. Tosca and John D. Sutherland



6532

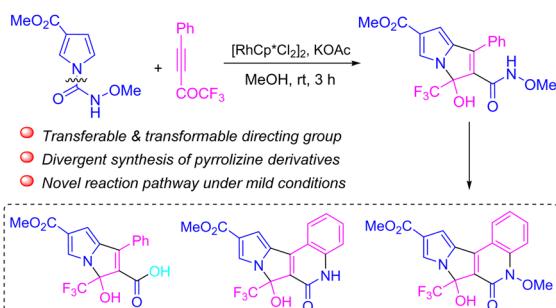
Expedient access to polysubstituted acrylamides via strain-release-driven dual phosphine and palladium catalysis

Yu-Xiang Yao, Jing Zhang, Xuehong Min, Lan Qin, Yi Wei, Yang Gao* and Xiao-Qiang Hu*



COMMUNICATIONS

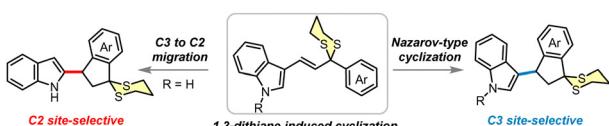
6536



Divergent synthesis of pyrrolizine derivatives through C–H bond functionalization of pyrroles

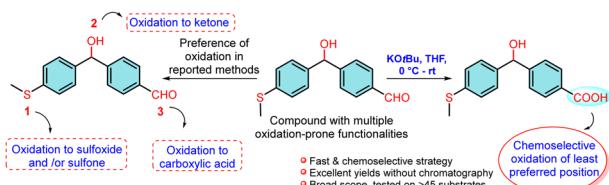
Manqing Wang, Yuanshuang Xu, Huihang Hou, Xinying Zhang* and Xuesen Fan*

6540

Site-selective synthesis of indanyl-substituted indole derivatives *via* 1,3-dithiane induced Nazarov cyclization

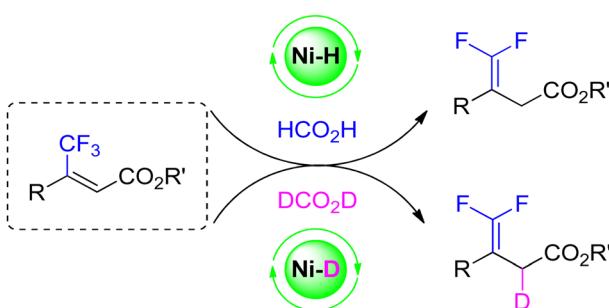
Jia Li, Liang Li, Mingming Mao, Rui-Peng Li, Xing Huo* and Shouchu Tang*

6544

Chemoselective oxidation of aromatic aldehydes to carboxylic acids: potassium *tert*-butoxide as an anomalous source of oxygen

Waseem I. Lone, Auqib Rashid, Bilal A. Bhat* and Showkat Rashid*

6548

Nickel-catalyzed hydrodefluorination/deuterodeflourination of CF₃-alkenes with formic acid

Peng Yang,* Haiping Yu, Runze Zhai, Jianrong Steve Zhou* and Bo Tang*

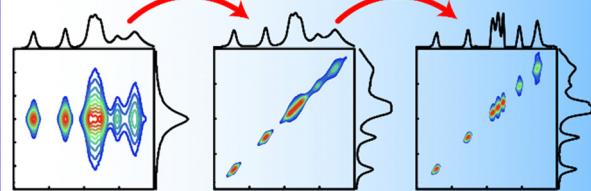


COMMUNICATIONS

6552

Elimination of homogeneous broadening in ^1H solid-state NMR

Frédéric A. Perras

Effective Doubling of the MAS Frequency

6556

Photoinduced decarboxylative germylation of α -fluoroacrylic acids: access to germylated monofluoroalkenes

Xiao-Yu Lu,* Yu-Jun Qian, Hai-Lun Sun, Meng-Xue Su, Zi-Zhen Wang, Fan Jiang, Xin-Yue Zhou, Yan-Xi Sun, Wan-Li Shi and Ji-Ru Wan



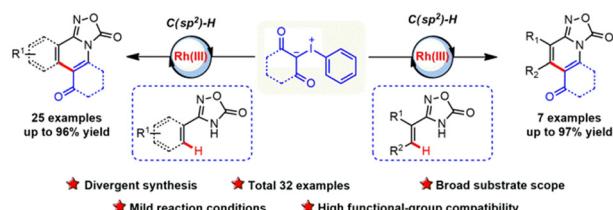
R = Aryl, Alkenyl

- ✓ Short photoradiation time
- ✓ Excellent E/Z selectivity
- ✓ Efficient synthesis of germylated monofluoroalkenes

6560

Rh(III)-catalyzed $\text{C}(\text{sp}^2)\text{-H}$ functionalization/[4+2] annulation of oxadiazolones with iodonium ylides to access diverse fused-isoquinolines and fused-pyridines

Wang-Liang Chen, Jia-Lin Song, Sheng Fang, Jiong-Bang Li, Shang-Shi Zhang* and Bing Shu*



6564

Over-lithiated NCM through Li_5FeO_4 for high energy silicon-based lithium-ion batteries

Yue Dai, Bo Chang, Wei Li,* Haoshen Zhou and Ping He*

