

ChemComm

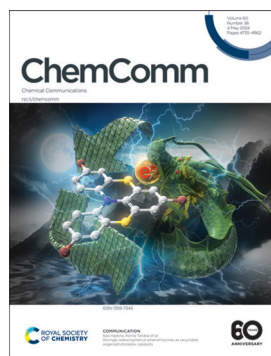
Chemical Communications

rsc.li/chemcomm

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.

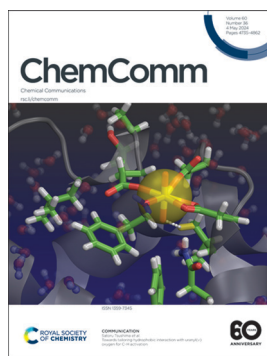
IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 60(36) 4735-4862 (2024)



Cover

See Isao Kadota, Kenta Tanaka *et al.*, pp. 4765–4768. Image reproduced by permission of Kenta Tanaka from *Chem. Commun.*, 2024, 60, 4765.



Inside cover

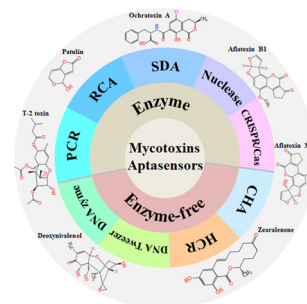
See Satoru Tsushima *et al.*, pp. 4769–4772. Image reproduced by permission of Satoru Tsushima from *Chem. Commun.*, 2024, 60, 4769.

FEATURE ARTICLE

4745

Recent advances in nucleic acid signal amplification-based aptasensors for sensing mycotoxins

Dandan Zhang, Ting Luo, Xiangyue Cai, Ning-ning Zhao* and Chun-yang Zhang*

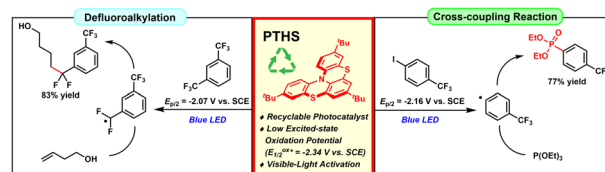


COMMUNICATIONS

4765

Strongly reducing helical phenothiazines as recyclable organophotoredox catalysts

Haru Ando, Hiroyoshi Takamura, Isao Kadota* and Kenta Tanaka*



Royal Society of Chemistry approved training courses

Explore your options.
Develop your skills.
Discover learning
that suits you.

**Courses in the classroom,
the lab, or online**

Find something for every
stage of your professional
development. Search our
database by:

- subject area
- location
- event type
- skill level

Members **get at least 10% off**

Visit rsc.li/cpd-training



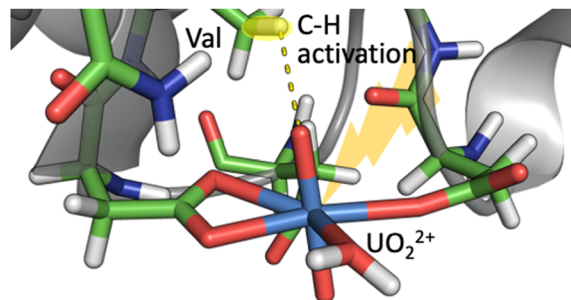
**SAVE
10%**



4769

Towards tailoring hydrophobic interaction with uranyl(vi) oxygen for C–H activation

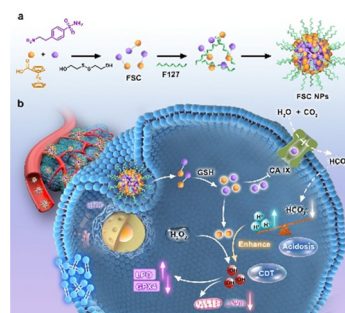
Satoru Tsushima,* Jérôme Kretzschmar, Hideo Doi, Koji Okuwaki, Masashi Kaneko, Yuji Mochizuki and Koichiro Takao



4773

A small-molecule Fenton reagent for self-augmented chemodynamic therapy by intelligently regulating intracellular acidosis

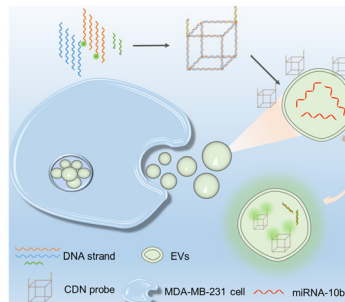
Kaiye Wang, Xiaohan Liu, Yuting Jia, Limeng Pan, Mingwan Shi, Wei Pan, Na Li* and Bo Tang*



4777

A cubic DNA nanocage probe for *in situ* analysis of miRNA-10b in tumor-derived extracellular vesicles

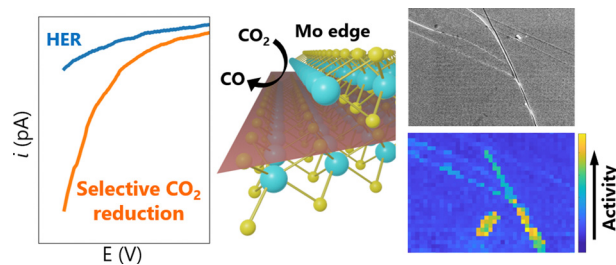
Xiaoyan Sun, Yafei Chen, Haiyan Li, Wei Xing, Mingli Chen,* Jianhua Wang and Lei Ye*



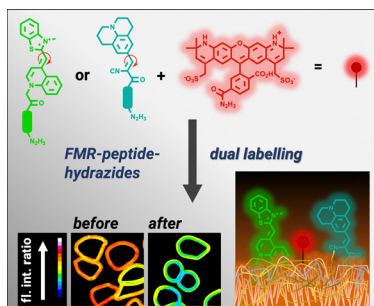
4781

Structure-dependent CO₂ reduction on molybdenite (MoS₂) electrocatalysts

Jake Limb, Lachlan F. Gaudin and Cameron L. Bentley*



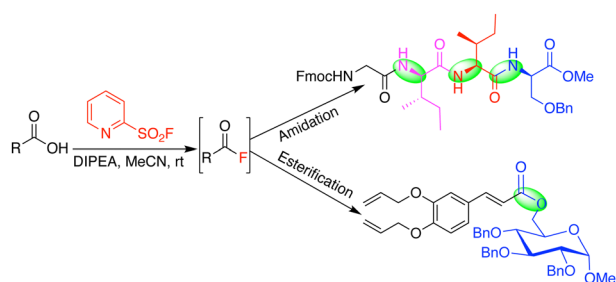
4785



Fluorogenic cell surface glycan labelling with fluorescence molecular rotor dyes and nucleic acid stains

Alen Koçak, Amal K. Homer, Antonia Feida, Florian Telschow, Jacob L. Gorenflós López, Cihan Baydaroglu, Michael Gradzielski, Christian P. R. Hackenberger, Ulrike Alexiev and Oliver Seitz*

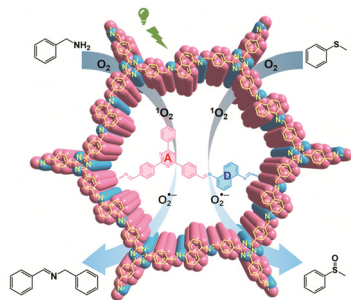
4789



Deoxyfluorinated amidation and esterification of carboxylic acid by pyridinesulfonyl fluoride

Anooha Neeliveetil, Soumyadip Dey, Vishnu Nomula, Swati Thakur, Debabrata Giri, Abhishek Santra and Abhijit Sau*

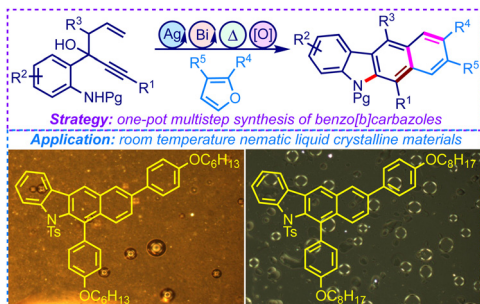
4793



Naphthalene-based donor-acceptor covalent organic frameworks as an electron distribution regulator for boosting photocatalysis

Zeming Wang, Qiang Song, Cheng He, Pengyu Feng, Liang Zhao* and Chunying Duan

4797



A one-pot telescopic synthesis of benzo[b]carbazoles and exploration of their liquid crystalline properties

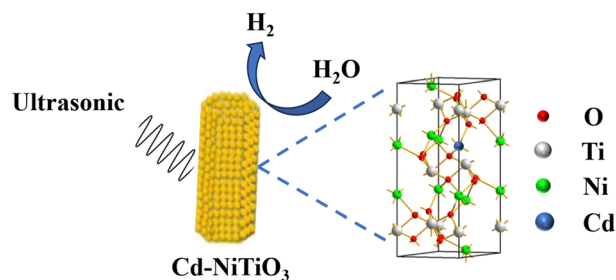
Nirmal Malik, Ritabrata De, Santanu Kumar Pal* and S. S. V. Ramasastry*



4801

Enhancement of NiTiO₃ piezocatalytic hydrogen evolution by doping with large radius elements

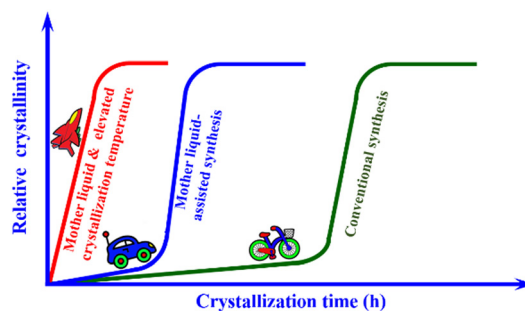
Kongming Li, Bonan Li, Xi Zhang, Junhao Wu, Mengxue Chen, Pengfei Feng, Xu Yang, Meiyu Zhang* and Yong Ding*



4805

A rapid and eco-friendly approach for the synthesis of low-silica SAPO-34 with excellent MTO catalytic performance

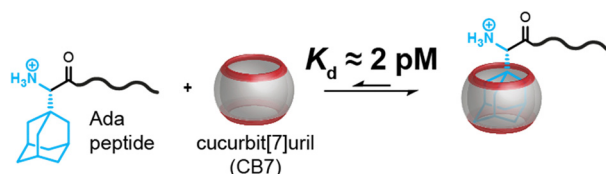
Xiaoxia Zou, Dong Fan, Xiaosi Zhang, Caiyi Lou, Miao Yang, Shutao Xu, Quanyi Wang,* Peng Tian* and Zhongmin Liu



4810

Adamantylglycine as a high-affinity peptide label for membrane transport monitoring and regulation

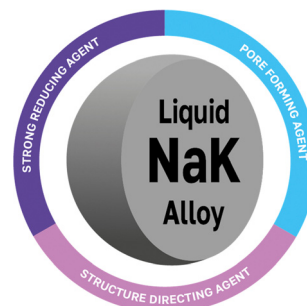
Malavika Pramod, Mohammad A. Alnajjar, Sandra N. Schöpfer, Thomas Schwarzlose, Werner M. Nau* and Andreas Hennig*



4814

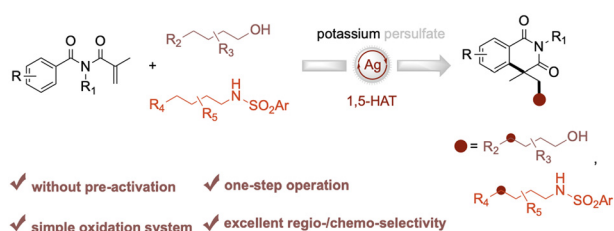
NaK alloy as a versatile reagent for template-free synthesis of porous metal- and metalloid-based nanostructures

Sergei S. Leonchuk, Aleksandra S. Falchevskaya, Polina A. Morozova, Nikolai V. Gromov and Vladimir V. Vinogradov*



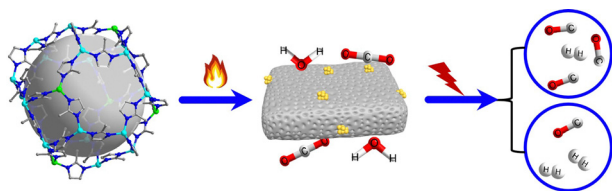
COMMUNICATIONS

4818

Regioselective synthesis of isoquinolinonediones through remote unactivated C(sp³)-H bonds

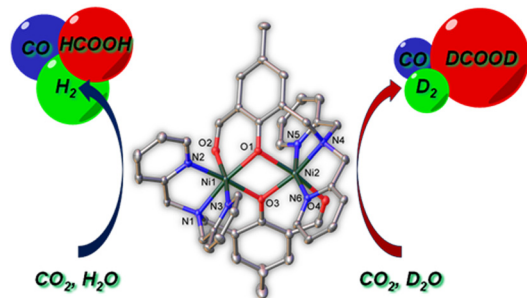
Lei Huang, Jun Sun, Boxuan Sun, Shengjie Song and Jianjun Li*

4822

Cu-nanocluster-loaded N-doped porous graphitic carbon for electrochemical CO₂ reduction towards syngas generation

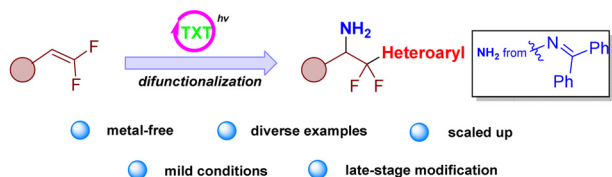
Xuefu Hu, Haiyue Lu, Gen Li, Baicheng Liao, Xiuli Zhang and Liyong Chen*

4826

Kinetic isotope effect offers selectivity in CO₂ reduction

Suman Patra, Sayan Atta, Soumili Ghosh, Amit Majumdar* and Abhishek Dey*

4830

Difunctionalization of *gem*-difluoroalkenes for amination and heteroarylation via metal-free photocatalysis

Yuanchen Zhong, Zhen Zhuang, Xiaofei Zhang, Bin Xu* and Chunhao Yang*

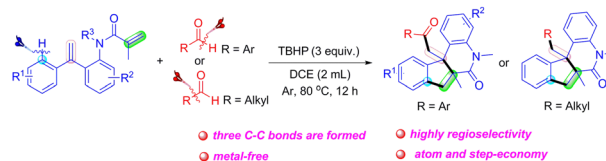


COMMUNICATIONS

4834

Regioselective synthesis of N-containing polycyclic compounds *via* radical annulation cyclization of 1,7-dienes with aldehydes

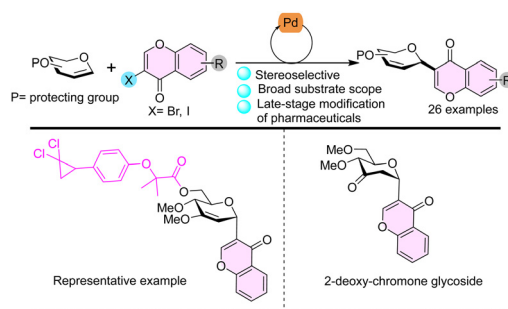
Jia-Li Sui, Long-Jin Zhong,* Bi-Quan Xiong, Ke-Wen Tang and Yu Liu*



4838

Pd-catalyzed stereoselective synthesis of chromone C-glycosides

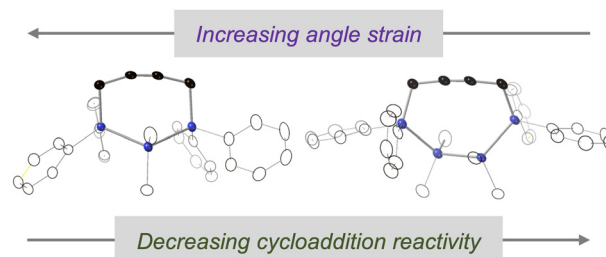
Manish Kumar Sharma, Bindu Tiwari and Nazar Hussain*



4842

Angle-strained sila-cycloalkynes

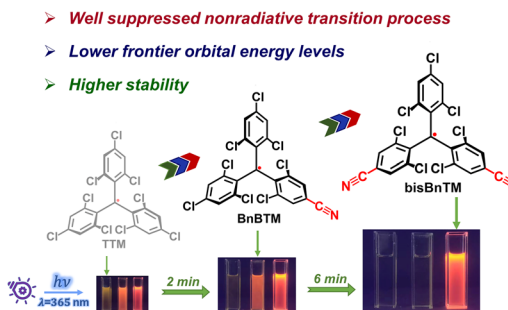
Herbert Wakefield IV, Sophia J. Melvin, Jennifer Jiang, Iliia Kevlishvili, Maxime A. Siegler, Stephen L. Craig, Heather J. Kulik and Rebekka S. Klausen*



4846

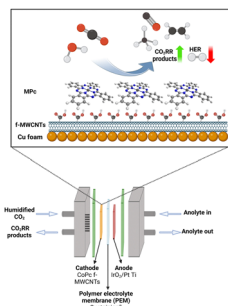
Cyano modified triphenylmethyl radical skeletons: higher stability and efficiency

Kuo Lv, Minzhe Zhang, Xin Xia, Wenjing Liu, Keke Wan, Ming Zhang and Feng Li*



COMMUNICATIONS

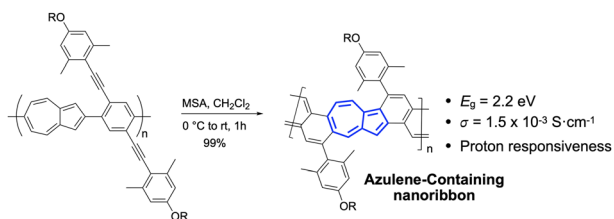
4850



Surface modified copper foam with cobalt phthalocyanine carbon nanotube hybrids for tuning CO₂ reduction reaction products

Javier O. Rivera-Reyes, Keith J. Billings, Carmen L. Metzler, Richard M. Lagle, Mebougna Drabo, Ratnakar Palai, John-Paul Jones and Dalice M. Piñero Cruz*

4854



Synthesis of an azulene-containing graphene nanoribbon

Pierre Mathey, Quentin Sobczak, Ali Darvish and Jean-François Morin*

CORRECTIONS

4858

Correction: Not antiaromaticity gain, but increased asynchronicity enhances the Diels–Alder reactivity of tropone

Eveline H. Tiekink, Pascal Vermeeren* and Trevor A. Hamlin*

4860

Correction: Controllable synthesis of star-shaped FeCoMnO_x nanocrystals and their self-assembly into superlattices with low-packing densities

Zhe Xia, Yutong Gao, Qingfu Cai, Yajun Wang,* Dong Yang,* Tongtao Li* and Angang Dong*

