

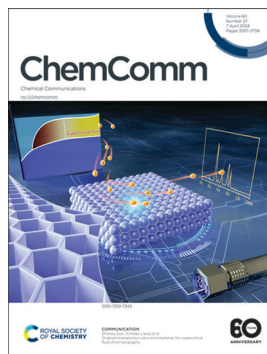
## IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 60(27) 3597-3734 (2024)



### Cover

See Kazuhiko Nakatani *et al.*, pp. 3645–3648. Image reproduced by permission of Manami Yamada and Takeshi Yamada from *Chem. Commun.*, 2024, 60, 3645.



### Inside cover

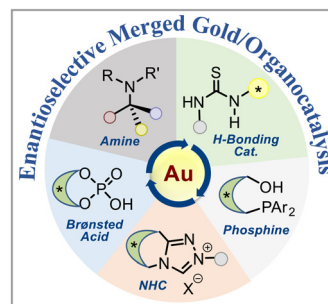
See Zhimou Guo, Xinmiao Liang *et al.*, pp. 3649–3652. Image reproduced by permission of Zhimou Guo from *Chem. Commun.*, 2024, 60, 3649.

## HIGHLIGHT

3607

### Enantioselective merged gold/organocatalysis

Chayanika Pegu, Bidisha Paroi and Nitin T. Patil\*

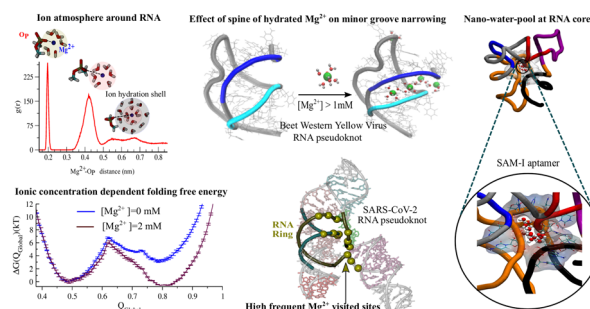


## FEATURE ARTICLE

3624

### Influence of ion and hydration atmospheres on RNA structure and dynamics: insights from advanced theoretical and computational methods

Raju Sarkar, Avijit Mainan and Susmita Roy\*



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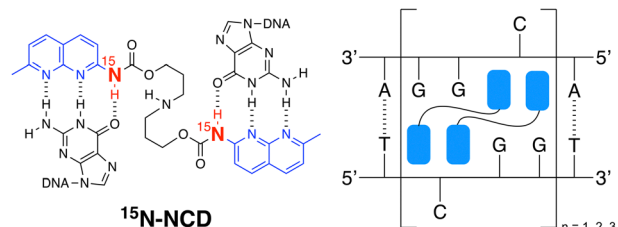


## COMMUNICATIONS

3645

**NMR analysis of  $^{15}\text{N}$ -labeled naphthyridine carbamate dimer (NCD) to contiguous CGG/CGG units in DNA**

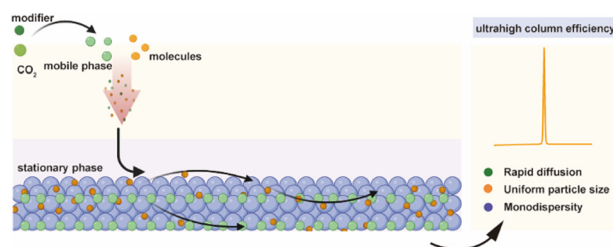
Takeshi Yamada, Shuhei Sakurabayashi, Noriaki Sugiura, Hitoshi Haneoka and Kazuhiko Nakatani\*



3649

**Ordered mesoporous silica microspheres for supercritical fluid chromatography**

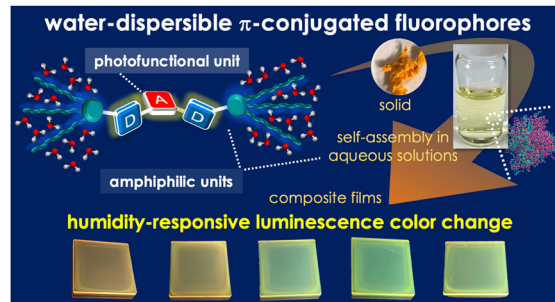
Chunying Song, Yi Qi, Chenyu Wang, Gaowa Jin, Shengfu Wang, Dongping Yu, Zhimou Guo\* and Xinmiao Liang\*



3653

**Water-dispersible donor–acceptor–donor  $\pi$ -conjugated bolaamphiphiles enabling a humidity-responsive luminescence color change**

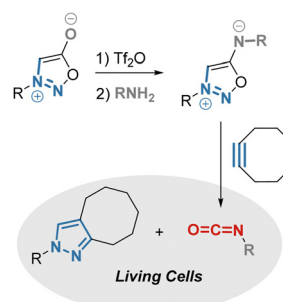
Tomoya Enjou, Shimpei Goto, Qiming Liu, Fumitaka Ishiwari, Akinori Saeki, Taro Uemtasu, Yuka Ikemoto, Sora Watanabe, Go Matsuba, Kouichiro Ishibashi, Go Watanabe, Satoshi Minakata, Yoshimitsu Sagara and Youhei Takeda\*



3657

**Synthesis of sydnonimines from sydnones and their use for bioorthogonal release of isocyanates in cells**

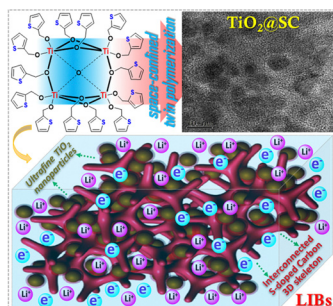
Judith Baudet, Emilie Lesur, Maxime Ribéraud, Arnaud Chevalier, Timothée D'Anfray, Pierre Thuéry, Davide Audisio and Frédéric Taran\*





## COMMUNICATIONS

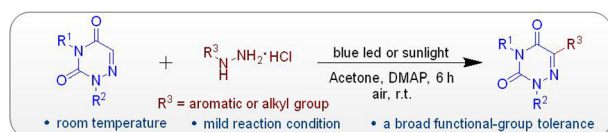
3661



### Space-confined twin-polymerization enabling homogeneous integration of ultrafine $\text{TiO}_2$ nanoparticles into a sulfur-doped carbon matrix for boosting lithium storage

Haisheng Huang, Yun Lu, Shuguang Bi,\* Changwang Yan and Yingkui Yang\*

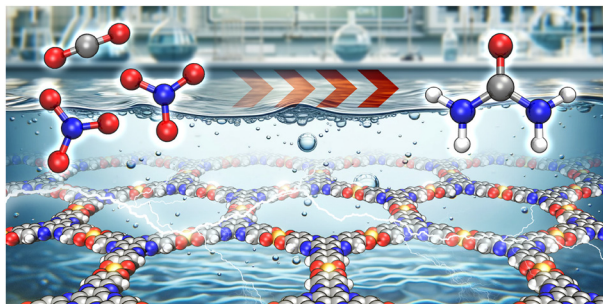
3665



### Photoinduced arylation or alkylation of 1,2,4-triazine-3,5(2H,4H)-diones with hydrazines

Youlu Pan, Yingchen Zhu, Shuangshuang Li, Gangjian Li, Zhen Ma,\* Yong Qian\* and Wenhai Huang\*

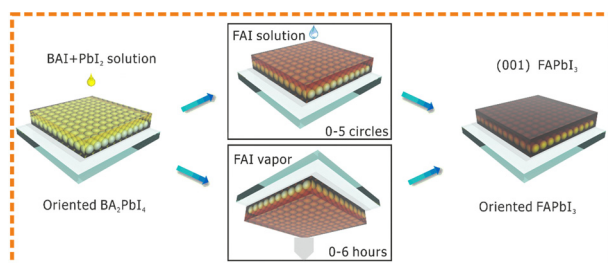
3669



### Utilisation of carbon dioxide and nitrate for urea electrosynthesis with a Cu-based metal–organic framework

Meng-Di Zhang, Jia-Run Huang, Pei-Qin Liao\* and Xiao-Ming Chen\*

3673



### Building (001) oriented $\text{FAPbI}_3$ films for high-performing perovskite solar cells

Yingke Ren, Hongyang Fu, Yingjie Sun, Zhaoqian Li,\* Xinge Guo\* and Xingtao An\*

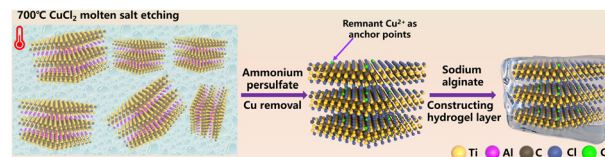




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### F-free etching and ingenious construction of hydrogel layer-prepared MXene membranes for oily wastewater separation

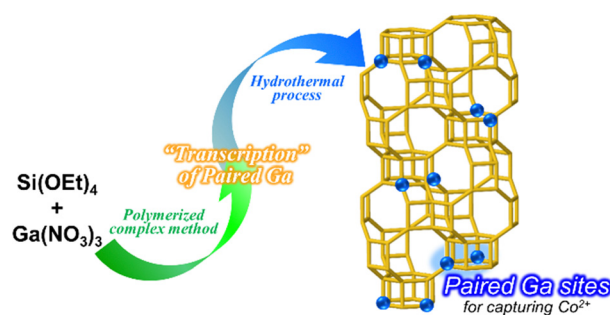
Xuan Long, Yijian Zheng, Jun Hu, Rongtong Wang, Wenjie Luo, Kai Han and Feipeng Jiao\*



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### Formation of paired Ga sites in CHA-type zeolite frameworks via a transcription-induced method

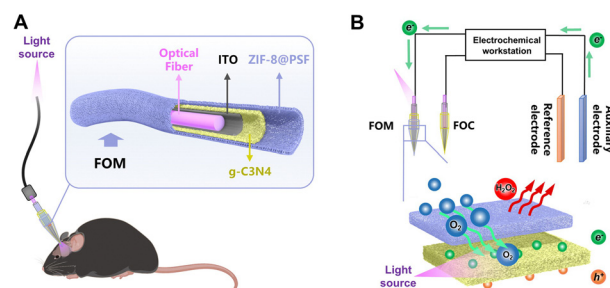
Takumi Kaneko, Mizuho Yabushita,\* Ryota Osuga, Yugo Sawada, Kei Sato, Ben Liu, Yoshinao Nakagawa, Kiyotaka Nakajima and Keiichi Tomishige\*



3685

### Light-activated g-C<sub>3</sub>N<sub>4</sub> photoelectrodes with a selective molecular sieve for *in vivo* quantification of oxygen levels in the living mouse brain

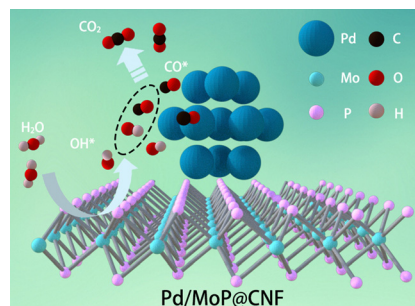
Yifan Da, Qi Sun, Limin Zhang\* and Yang Tian\*



3689

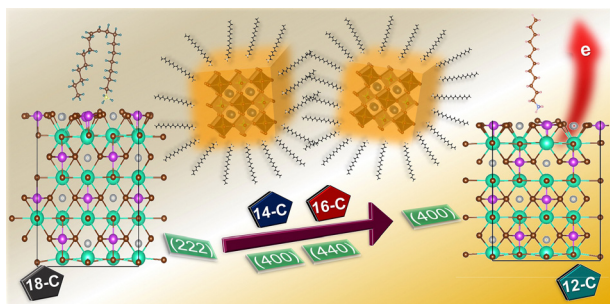
### Enhanced formic acid electrolysis of Pd sites by improved OH adsorption assisted by MoP

Lice Yu, Shuli Wang, Yun Yang\* and Ligang Feng\*



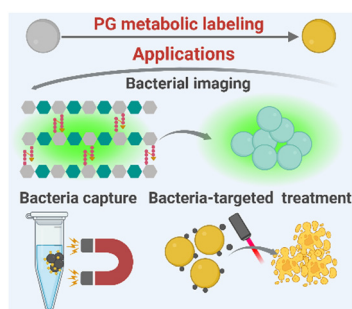
## COMMUNICATIONS

3693

Facet-specific ligand dynamics: scaling the descriptors of  $\text{Cs}_2\text{AgBiBr}_6$  nanocrystals

Anamika Mondal, Manuj Ahuja, Priya Johari\* and Sayan Bhattacharyya\*

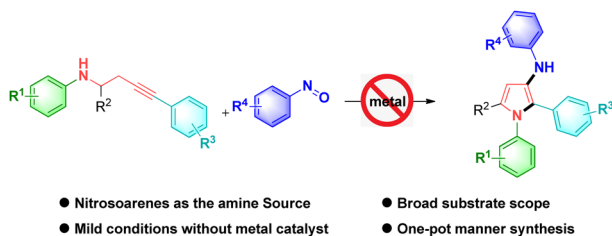
3697



## Metabolic labeling-mediated visualization, capture, and inactivation of Gram-positive bacteria via biotin–streptavidin interactions

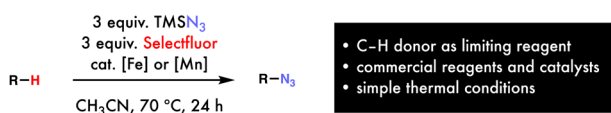
Yongfang Zheng, Mingyi Jiang, Xinyu Zhu, Yuyuan Chen, Lisha Feng and Hu Zhu\*

3701

 $\text{I}_2$ -catalyzed synthesis of 3-aminopyrrole with homopropargylic amines and nitrosoarenes

Jiaze Qin, Shixuan Jiang, Xiaofeng Luo, Tianqiang Wang, Peihua Liu, Bingxiang Yuan and Rulong Yan\*

3705

Simple, catalytic  $\text{C}(\text{sp}^3)\text{--H}$  azidation using the C–H donor as the limiting reagent

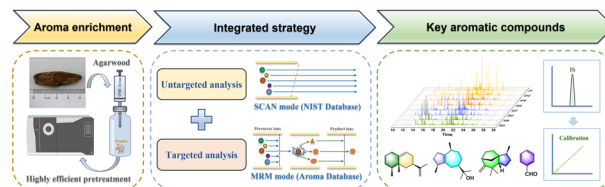
James F. Hooson, Hai N. Tran, Kang-Jie Bian and Julian G. West\*



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### Uncovering the secrets of agarwood aroma according to regions and grades using a comprehensive analytical strategy

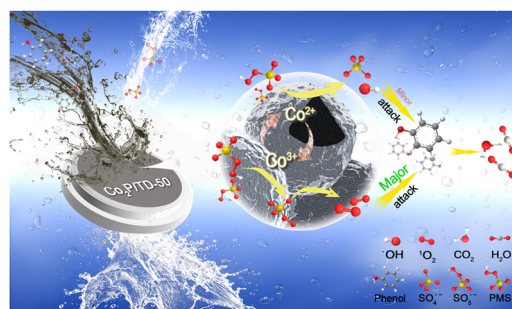
Yanqiao Xie, Chen Shen, Ge Yin, Siyu Zhang, Yilin Chen, Wenxiang Fan, Kaixian Chen, Zhengtao Wang, Linnan Li\* and Li Yang\*



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### Ultrafast removal of organics via peroxymonosulfate activation over $\text{Co}_2\text{P/TD}$ hollow spheres derived from ZIF-67

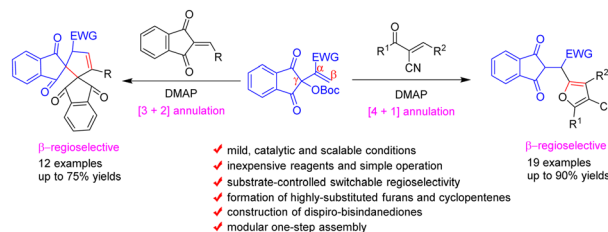
Fei Wang, Yu-Hang Li, Ya Gao, Yutong Chai, Yuwei Wei, Chong-Chen Wang,\* Peng Wang, Huifen Fu and Chen Zhao



3717

### Substrate-controlled [4+1] and [3+2] annulations of ninhydrin-derived Morita–Baylis–Hillman carbonates to access polysubstituted furans and cyclopentenones

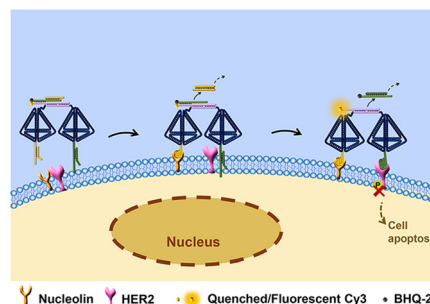
Kai-Kai Wang, Yan-Li Li, Ya-Fei Li, Wei-Wei Yao, Lan-Xin Li, Xiao-Long He\* and Rongxiang Chen\*



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### A DNA tetrahedron dimer for dual membrane protein logic recognition and interaction inhibition

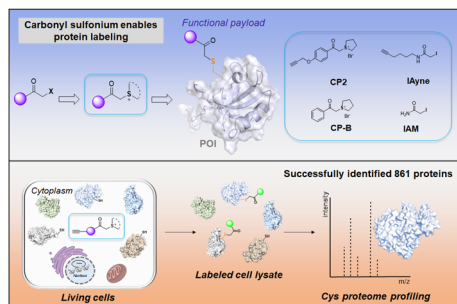
Yuanmeng Zhang, Muyang Lin, Jingkang Yao and Xiaowen Xu\*





## COMMUNICATIONS

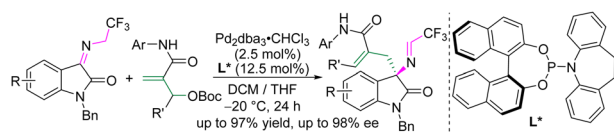
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### $\beta$ -Carbonyl sulfonium enables cysteine-specific bioconjugation for activity-based protein profiling in live cells

Chuan Wan, Dongyan Yang, Xiaochun Guo, Tuanjie Zhang, Zhijun Ruan, Chuan Dai, Yun Xing, Feng Yin,\* Rui Wang\* and Zigang Li\*

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### Palladium-catalyzed enantioselective umpolung allylation of amido-tethered allylic carbonates with isatin-derived ketimines

Lan Wang, Mengxi Lu, Kuan Li, Sen Yang, Lei Wang and Hongchao Guo\*

