

# ChemComm

Chemical Communications

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## IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 60(6) 621-768 (2024)



### Cover

See Demyan E. Prokopchuk *et al.*, pp. 674–677. Image reproduced by permission of Demyan Prokopchuk from *Chem. Commun.*, 2024, 60, 674.



### Inside cover

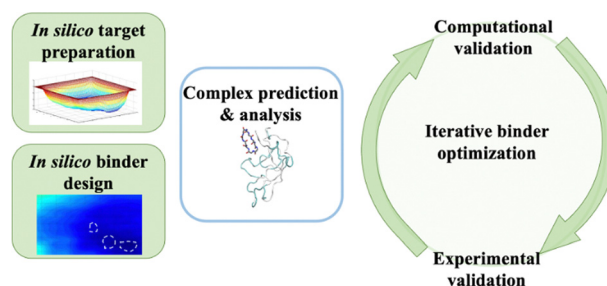
See Takashi Ikawa *et al.*, pp. 678–681. Image reproduced by permission of Takashi Ikawa from *Chem. Commun.*, 2024, 60, 678.

## HIGHLIGHT

632

### Unlocking novel therapies: cyclic peptide design for amyloidogenic targets through synergies of experiments, simulations, and machine learning

Daria de Raffe and Ioana M. Ilie\*

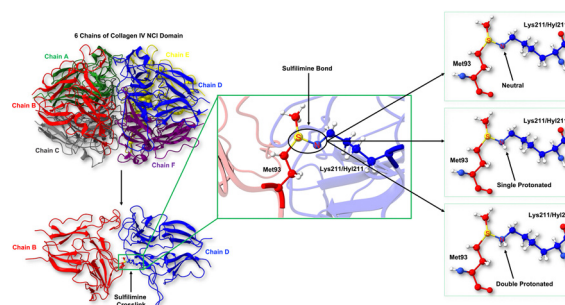


## FEATURE ARTICLES

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### Sulfilimine bond formation in collagen IV

Anupom Roy and James W. Gauld\*



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Fundamental questions  
Elemental answers

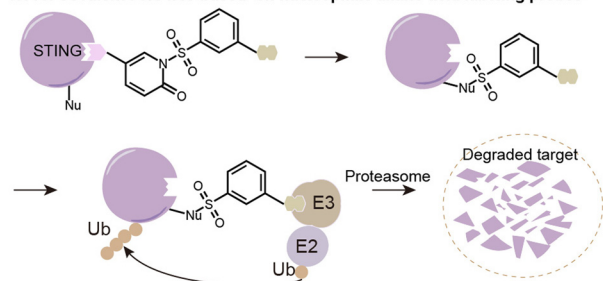




## COMMUNICATIONS

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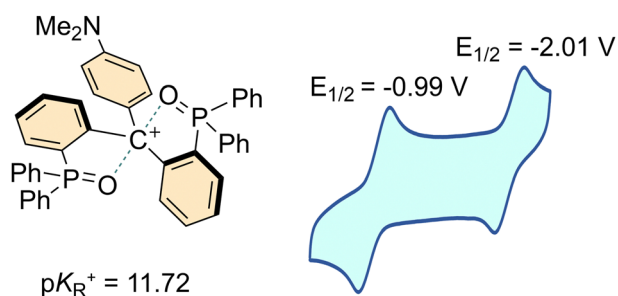
Novel Covalent PROTAC based on nucleophilic amino acid labeling probes



## Covalent PROTAC design method based on a sulfonyl pyridone probe

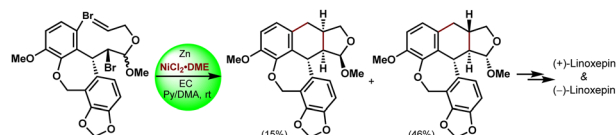
Qinhong Luo, Yaqi Wang, Zhanfeng Hou, Huiting Liang, Licheng Tu, Yun Xing, Chuan Wan, Jianbo Liu, Rui Wang, Lizhi Zhu, Wei Han, Jianlong Wu,\* Fei Lu,\* Feng Yin\* and Zigang Li\*

690

Double axial stabilization of a carbenium ion via convergent P=O → C<sup>+</sup> tetrel bonding

Elishua D. Litle and François P. Gabbaï\*

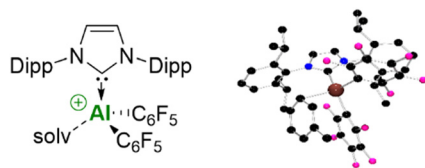
694



## Intramolecular Ni-catalyzed reductive coupling enables enantiodivergent synthesis of linoxetine

Zi-Hao Liu, Jian Xiao,\* Qian-Qian Zhai, Xi Tang, Li-Jun Xu, Zhi-Yuan Zhuang, Ya-Wen Wang and Yu Peng\*

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- ✓ Lewis Superacidity
- ✓ Isolable and Thermostable
- ✓ Versatile Catalyst

The Lewis superacidic aluminium cation: [(NHC)Al(C<sub>6</sub>F<sub>5</sub>)<sub>2</sub>]<sup>+</sup>

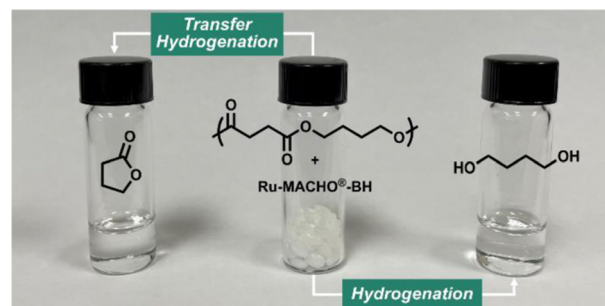
Shaoying Ju, Chi Zhang, Beili Tang, Liu Leo Liu, Douglas W. Stephan\* and Yile Wu\*



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### Highly selective pressure-dependent (transfer) hydrogenative depolymerization of polybutylene succinate

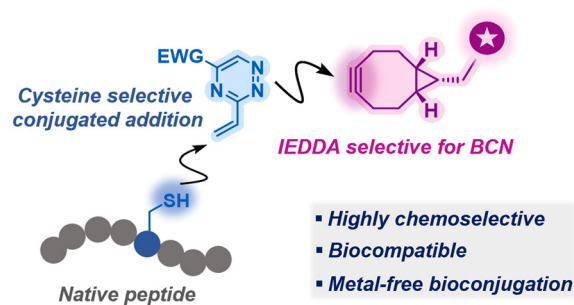
Mary L. Johnson, Rachel L. Fine, Dakota S. Stankowski, Casey A. Koch, Kylie A. Limoges and Nicholas J. Robertson\*



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### Site-selective peptide functionalisation mediated via vinyl-triazine linchpins

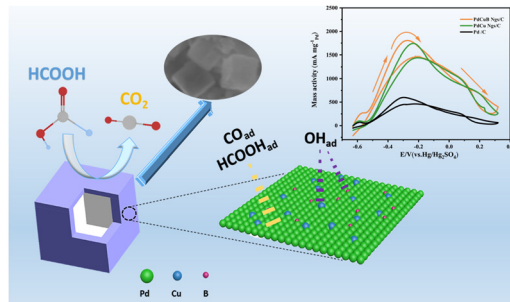
Jack D. Sydenham, Hikaru Seki, Sona Krajcovicova, Linwei Zeng, Tim Schober, Tomas Deingruber and David R. Spring\*



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### Hollow cubic ternary PdCuB nanocage electrocatalysts with greatly enhanced catalytic performance for formic acid oxidation

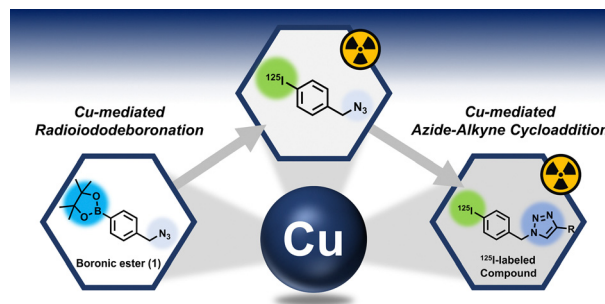
Fu-Kai Yang, Yue Fang, Bing-Tao Gong, Wei-Li Qu,\* Chao Deng and Zhen-Bo Wang



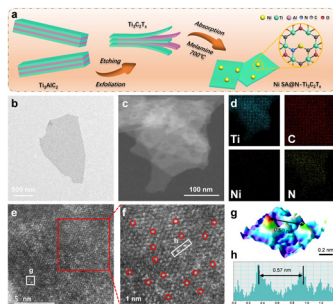
714

### One-pot two-step radioiodination based on copper-mediated iododeboronation and azide-alkyne cycloaddition reaction

Yuto Kondo, Hiroyuki Kimura,\* Ryota Chisaka, Yasunao Hattori, Hidekazu Kawashima and Hiroyuki Yasui



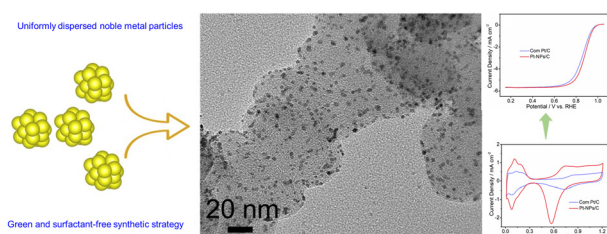
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### Isolated Ni-atom catalyst supported on $\text{Ti}_3\text{C}_2\text{T}_x$ with an asymmetrical C–Ni–N structure for the hydrogen evolution reaction

Haosen Yang, Pengfei Wu, Jiajing Pei, Bo Peng\* and Qingqing Liu\*

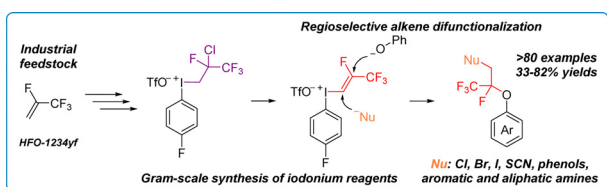
722



### A universal strategy for green and surfactant-free synthesis of noble metal nanoparticles

Xiaohang Ge, Wei Yong Yuan, Qinhe Guan and Lian Ying Zhang\*

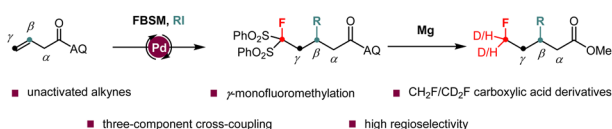
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### Iodonium based regioselective double nucleophilic alkene functionalization of a hydrofluoroolefin scaffold

János T. Csenki and Zoltán Novák\*

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### Palladium-catalyzed carbomonofluoromethylation of unactivated alkenes: rapid access to $\gamma$ -monofluoromethyl carboxylic acid derivatives

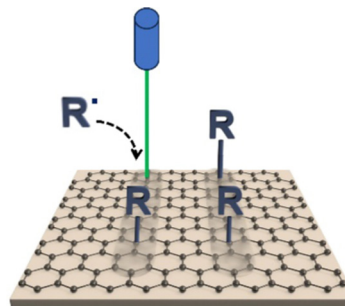
Xiao-Li Liu, Shun-Jun Ji\* and Zhong-Jian Cai\*



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### Spatially resolved fluoroalkylation and alkylation of graphene by direct laser writing

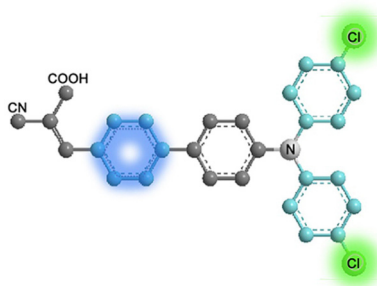
Sabrin Al-Fogra, Sofia Rohde, Marcus Speck, Frank Hauke, Andreas Hirsch and Tao Wei\*



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### Self-assembled hole-transporting material constructed by chlorination and conjugation strategies toward efficient organic solar cells

Xinjie Zhou, Renyong Geng,\* Shanlei Xu, Xingting Liu, Yahui Yang, Shengzheng Gao, Hao Xu, Weiguo Zhu and Xin Song\*



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### Visible light-induced hydrogen atom transfer trifluoromethylthiolation of aldehydes with bismuth catalyst

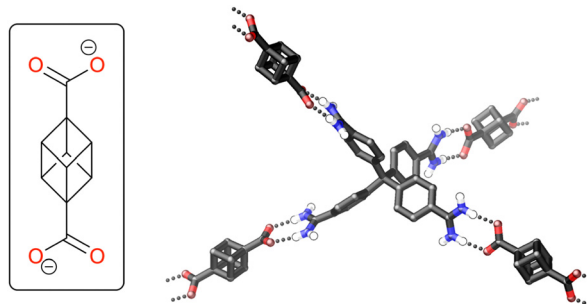
Jun Dong, Zhuang Tang, Luqian Zou, Yongyun Zhou\* and Jingchao Chen\*



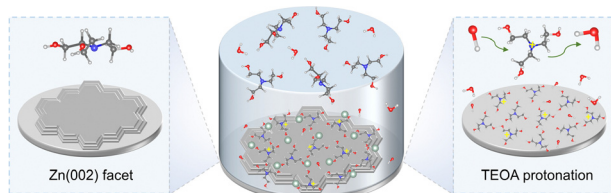
746

### Hydrogen-bonded frameworks containing aliphatic 3D linkers show high-capacity water vapour sorption

Phonlakrit Muang-Non, Carmen Zhou, Lauren K. Macreadie\* and Nicholas G. White\*



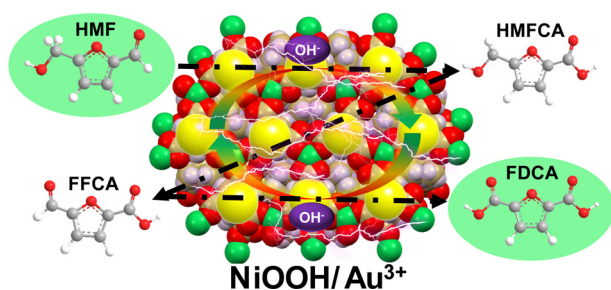
750



### Zn(002)-preferred and pH-buffering triethanolamine as electrolyte additive for dendrite-free Zn anodes

Wenjing Ge, Huili Peng, Jingjing Dong, Gulian Wang, Lifeng Cui, Wei Sun, Xiaojian Ma and Jian Yang\*

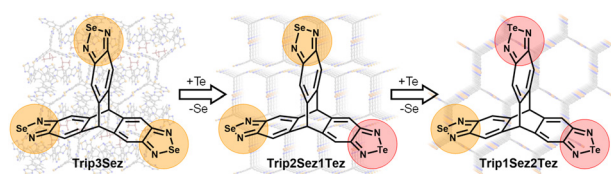
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### Controllable evolution of NiOOH/Au<sup>3+</sup> active species for the oxidation of 5-hydroxymethylfurfural

Xuliang Pang,\* Yifei Huang, Huaiquan Zhao, Weiqiang Fan\* and Hongye Bai\*

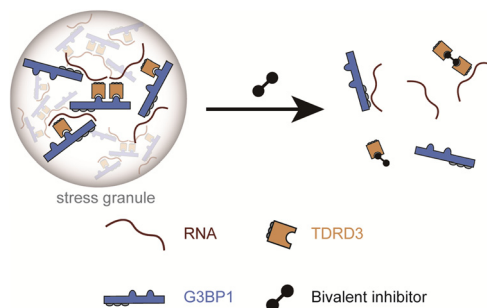
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### Influence of donor point modifications on the assembly of chalcogen-bonded organic frameworks

Brian J. Eckstein, Hannah R. Martin, Michael P. Moghadasnia, Arijit Halder, Michael J. Melville, Tara N. Buzinski, Gary J. Balaich and C. Michael McGuirk\*

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### A bivalent inhibitor against TDRD3 to suppress phase separation of methylated G3BP1

Wei-Wei Fan, Tian Xu, Jia Gao, Han-Yu Zhang, Yan Li, Duo-Duo Hu, Shuaixin Gao, Jia-Hai Zhang, Xing Liu, Dan Liu, Pi-Long Li, Catherine C. L. Wong, Xue-Biao Yao, Yun-Yu Shi, Zhen-Ye Yang, Xi-Sheng Wang\* and Ke Ruan\*



## CORRECTION

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**Correction: Velocity map images from surface-hopping; reactive scattering of OH ( $^2\Sigma^+$ ) + H<sub>2</sub> ( $^1\Sigma_g^+$ )**

Christopher Robertson\* and Martin J. Paterson\*

