

# ChemComm

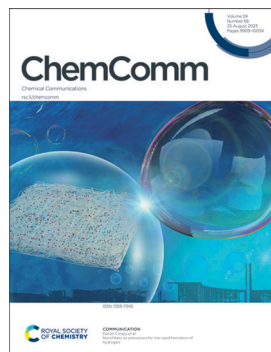
Chemical Communications

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## IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 59(66) 9909-10034 (2023)



### Cover

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### Inside cover

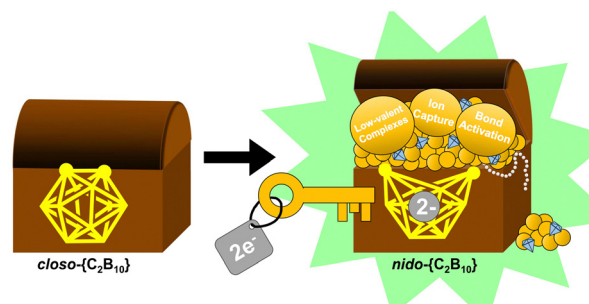
See Masaru Kondo, Shinobu Takizawa et al., pp. 9956–9959. Image reproduced by permission of Shinobu Takizawa from *Chem. Commun.*, 2023, 59, 9956.

## FEATURE ARTICLES

9918

### Redox-active carborane clusters in bond activation chemistry and ligand design

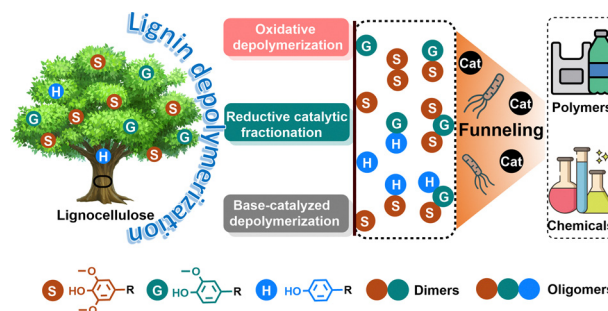
Bryce C. Nussbaum, Amanda L. Humphries, Gayathri B. Gange and Dmitry V. Peryshkov\*



9929

### Deriving high value products from depolymerized lignin oil, aided by (bio)catalytic funneling strategies

Xianyuan Wu, Mario De bruyn and Katalin Barta\*



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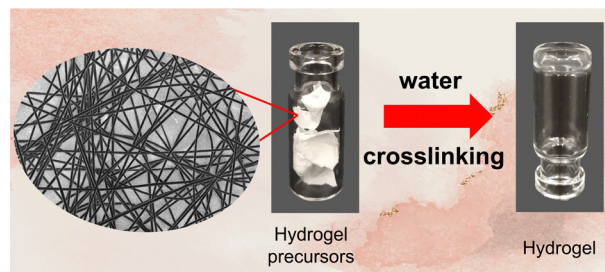


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9952

## Nanofibers as precursors for the rapid formation of hydrogels

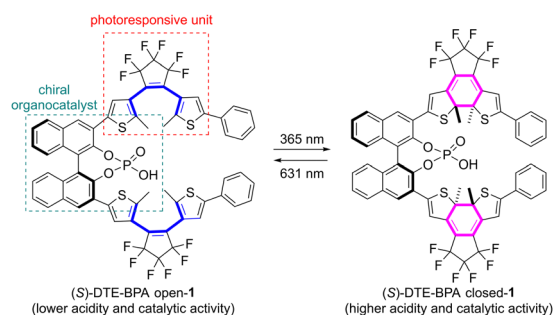
Pichapak Srikamut, Man Theerasilp and Daniel Crespy\*



9956

Light-controlled  $pK_a$  value of chiral Brønsted acid catalysts in enantioselective aza-Friedel–Crafts reaction

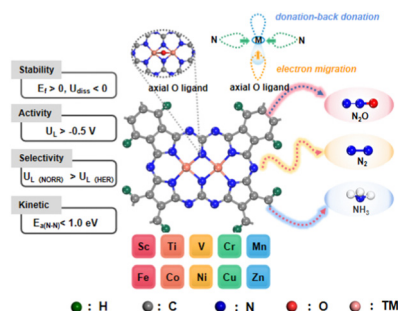
Chandu G. Krishnan, Masaru Kondo,\* Osamu Yasuda, Duona Fan, Kento Nakamura, Yoshitomo Wakabayashi, Hiroaki Sasai and Shinobu Takizawa\*



9960

## Revealing the origin of activity in phthalocyanine-based dual-metal sites towards electrochemical nitric oxide reduction

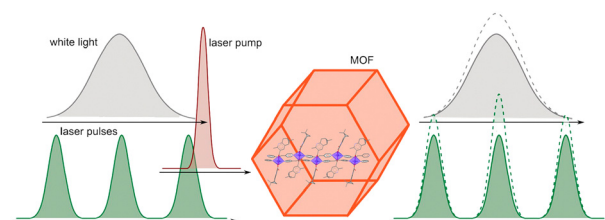
Xiaorong Zhu,\* Xiaolei Yuan, Yijin Wang, Ming Ge and Yanfeng Tang\*



9964

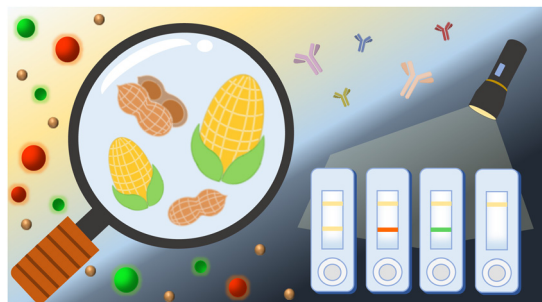
## Metal-mediated tunability of MOF-based optical modulators

Nikita K. Kulachenkov, Bogdan Orlioglo, Eugene S. Vasilyev, Svyatoslav A. Povarov, Alexander M. Agafontsev, Semyon Bachinin, Sergei Shipilovskikh, Artem Lunev, Denis G. Samsonenko, Vladimir P. Fedin, Konstantin A. Kovalenko\* and Valentin A. Milichko\*



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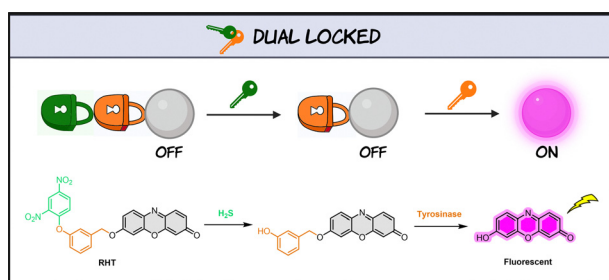
9968



### Hybrid polymer dot-magnetic nanoparticle based immunoassay for dual-mode multiplexed detection of two mycotoxins

Yi-Chen Chen, Yu-Han Syu, Jhen-Yan Huang, Chun-Yi Lin and Yang-Hsiang Chan\*

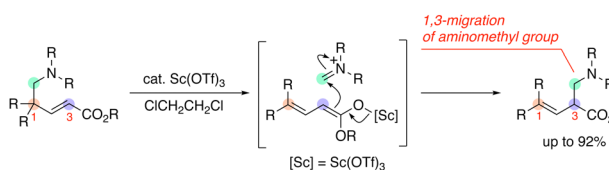
9972



### A hydrogen sulfide and tyrosinase responsive dual-locked fluorophore for selective imaging of melanoma cells

Toghrul Almammadov,\* Musa Dirak, Ayca Saymaz, Alperen Acari and Safacan Kolemen\*

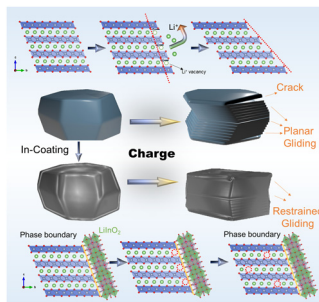
9976



### Lewis acid-catalyzed formal 1,3-aminomethyl migration

Suzuka Shibata, Koutarou Amano, Tatsuhiko Kojima and Keiji Mori\*

9980



### Enhanced mechanical strength of a highly de-lithiated single-crystal Ni-rich cathode to suppress irreversible planar gliding

Jiachao Yang, Shenyang Xu, Jian Yu, Yunjiao Li,\* Zhenjiang He,\* Feixiang Wu, Tao Zhang, Shuaipeng Hao, Shijie Jiang, Jiawei Pan, Xiaoming Xi and Shuaiwei Liu

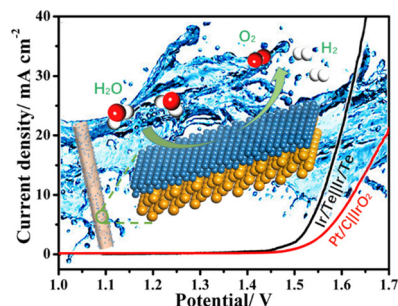


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9984

**An efficient bi-functional Ir-based catalyst for the acidic overall water splitting reaction**

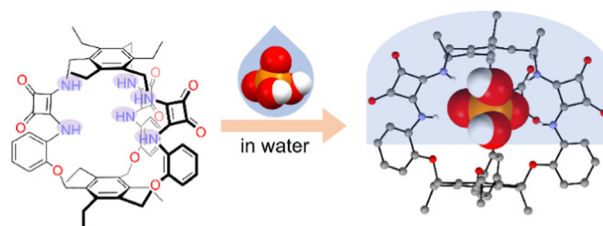
Chunyan Wang, Fulin Yang and Ligang Feng\*



9988

**A squaramide cage capable of binding and extracting  $\text{H}_2\text{PO}_4^-$  and  $\text{HP}_2\text{O}_7^{3-}$  in highly polar protic media**

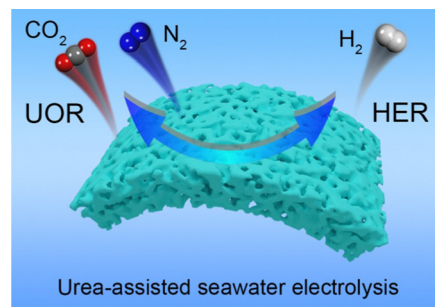
Ju Ho Yang and Sung Kuk Kim\*



9992

**Amorphous Fe–Co oxide as an active and durable bifunctional catalyst for the urea-assisted  $\text{H}_2$  evolution reaction in seawater**

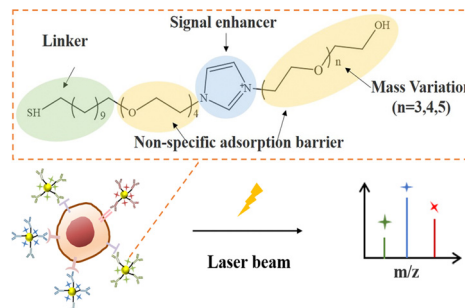
Tianran Wei, Ge Meng,\* Yin Hai Zhou, Zhifeng Wang,\* Qian Liu, Jun Luo and Xijun Liu\*



9996

**Imidazolium-based mass tags for protein biomarker detection using laser desorption ionization mass spectrometry**

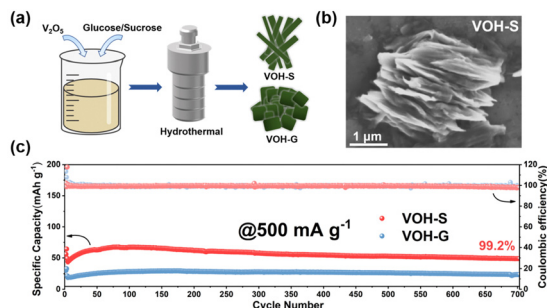
Mingxia Liu, Jinjuan Xue, Huwei Liu and Yu Bai\*





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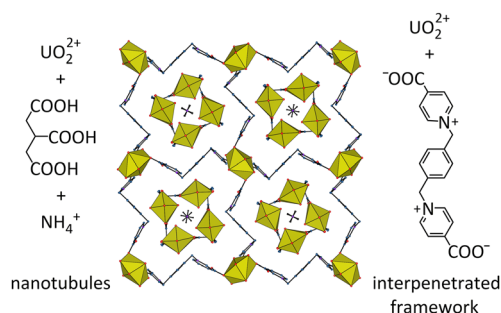
10000



## Fine valence regulation of hydrated vanadium oxide as a novel cathode for stable potassium-ion storage

Yi-ran Zhu, Kuo Cao, Fei Chen, Jie-min Dong, Nai-qing Ren and Chun-hua Chen\*

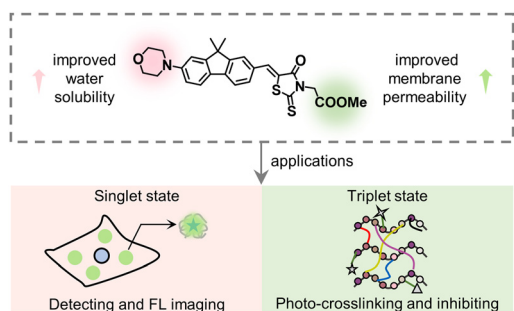
10004



## Nanotubule inclusion in the channels formed by a six-fold interpenetrated, triperiodic framework

Sotaro Kusumoto, Youssef Atoui, Yoshihiro Koide, Kittipong Chainok,\* Shinya Hayami,\* Yang Kim,\* Jack Harrowfield\* and Pierre Thuéry\*

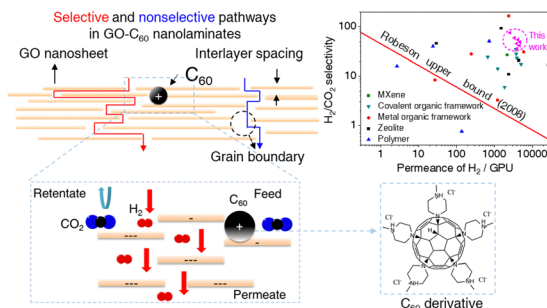
10008



## Fluorene-based tau fibrillation sensor and inhibitor with fluorogenic and photo-crosslinking properties

Qiuxuan Xia, Zhiming Wang, Wang Wan, Huan Feng, Rui Sun, Biao Jing, Yusong Ge\* and Yu Liu\*

10012



## Graphene oxide-fullerene nanocomposite laminates for efficient hydrogen purification

Qi Guo, Behnam Ghalei,\* Detao Qin, Daizu Mizutani, Ikumi Joko, Habib Al-Aziz, Tomohiro Higashino, Masateru M Ito, Hiroshi Imahori\* and Easan Sivaniah\*

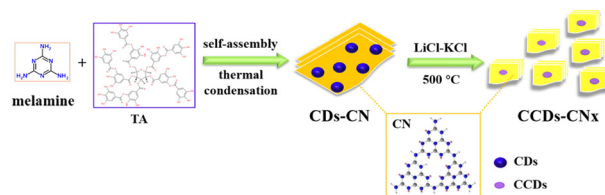


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10016

**Construction of  $\pi$ -conjugated crystalline carbon dots with carbon nitride nanofragments for efficient photocatalytic  $H_2$  evolution**

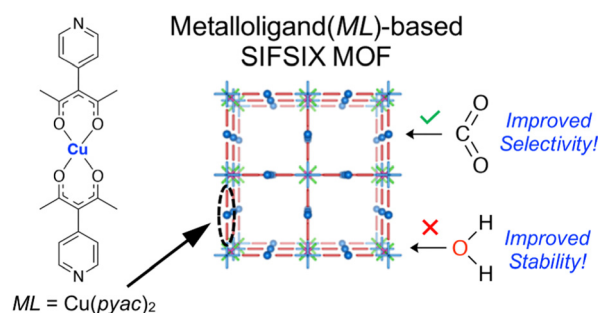
Fang He,\* Hubo Yuan, Yan Hu, Jiawei Huang, Zhenxing Wang, Shaoqin Peng and Yuexiang Li\*



10020

**A SIFSIX-MOF constructed from a metalloligand yields enhanced stability for selective  $CO_2$  adsorption**

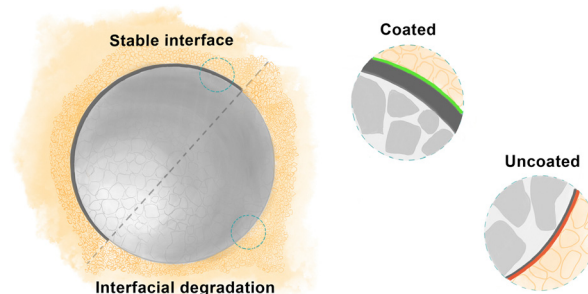
Alberto M. Tous-Granados and Arturo J. Hernandez-Maldonado\*



10024

**Facile solid-state synthesis of a layered Co-free, Ni-rich cathode material for all-solid-state batteries**

Saravanakumar Murugan,\* Ruizhuo Zhang, Jürgen Janek, Aleksandr Kondrakov and Torsten Brezesinski\*



10028

**Hydroxamate-directed access to  $\beta$ -Kdo glycosides**

Sourav Pramanik, Soumik Mondal, Alexander Chinarev, Nicolai V. Bovin and Jaideep Saha\*

