# ChemComm

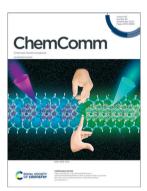
#### Chemical Communications

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#### IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 59(93) 13781-13908 (2023)



#### Cover

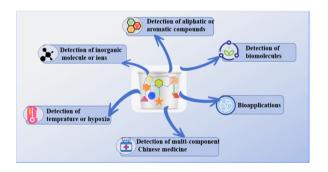
See Takuya Okamoto, Vasudevanpillai Biju et al., pp. 13831-13834. Image reproduced by permission of Vasudevanpillai Biju from Chem. Commun., 2023, 59, 13831.

#### HIGHLIGHT

## 13790

A summary of calixarene-based fluorescent sensors developed during the past five years

Haixian Ren, Hongliang Wang, Wei Wen, Sha Li, Nana Li, Fangjun Huo and Caixia Yin\*

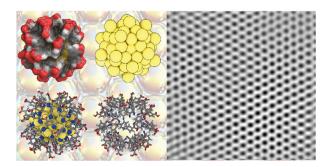


#### **FEATURE ARTICLES**

#### 13800

Precision nanoengineering for functional self-assemblies across length scales

Nonappa



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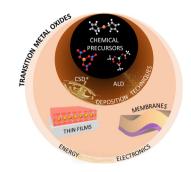


#### FEATURE ARTICLES

#### 13820

# Chemical synthesis of complex oxide thin films and freestanding membranes

Pol Salles, Pamela Machado, Pengmei Yu and Mariona Coll\*

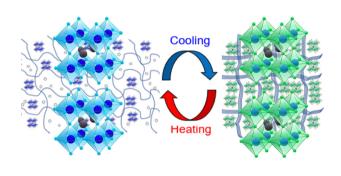


#### COMMUNICATIONS

#### 13831

Self-assembled halide perovskite quantum dots in polymer thin films showing temperature-controlled exciton recombination

Most Farida Khatun, Takuya Okamoto\* and Vasudevanpillai Biju\*



#### 13835

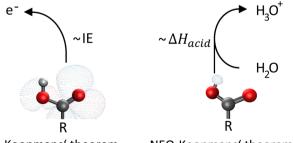
Regioselective synthesis of indazolo[2,3-a]quinazolines enabled by I<sub>2</sub>/S-facilitated annulation relay dehydrogenative aromatization of cyclohexanones

Qinghe Gao,\* Yimei Guo, Penghui Cao, Guangping Fan and Yongtao Xu\*

#### 13839

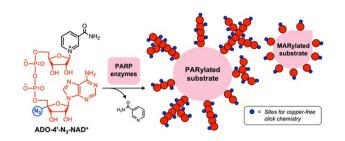
#### Koopmans' theorem for acidic protons

Tim Schrader, Jamoliddin Khanifaev and Eva Perlt\*



Koopmans' theorem NEO-Koopmans' theorem

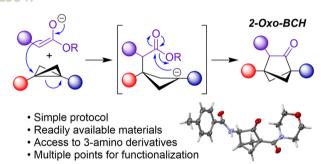
#### 13843



# A ribose-functionalized NAD+ with versatile activity for ADP-ribosylation

Elisa N. Stephens, Xiao-Nan Zhang, Albert T. Lam, Jiawei Li, Hua Pei, Stan G. Louie, Clay C. C. Wang and Yong Zhang\*

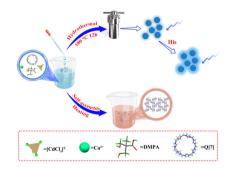
#### 13847



# Enolate addition to bicyclobutanes enables expedient access to 2-oxo-bicyclohexane scaffolds

Kyla J. Woelk, Kushal Dhake, Nathan D. Schley and David C. Leitch\*

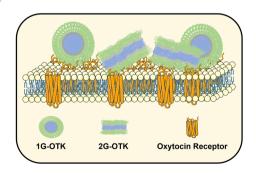
#### 13851



#### Cucurbit[7]uril-based carbon dots for recognizing histamine

Jian-Hang Hu, Cheng-Hui Wang, Qing-Hong Bai, Li-Xia Chen, An-Ting Zhao, Shang-Wei Yuan, Qing Chen, Pei-Hua Ma, Zhu Tao and Xin Xiao\*

# 13855



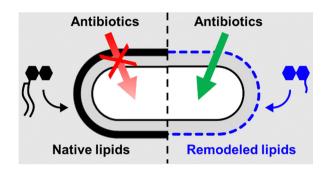
# Self-assembly of alkylated lysine-dendron oxytocin amphiphiles for enhanced stability and sustained pharmacological activity

Fengjuan Xie, Yingying Lin, Åsa Andersson, Irina Vetter, Liang Zhao\* and JingJing Wan\*

#### 13859

# Chemical remodeling of the mycomembrane with chain-truncated lipids sensitizes mycobacteria to rifampicin

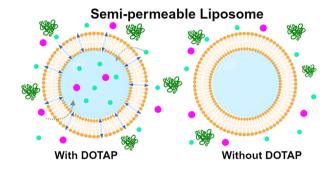
Ishani V. Gaidhane, Kyle J. Biegas, Helen E. Erickson, Prachi Agarwal, Yashpal S. Chhonker, Donald R. Ronning and Benjamin M. Swarts\*



#### 13863

# Engineering semi-permeable giant liposomes

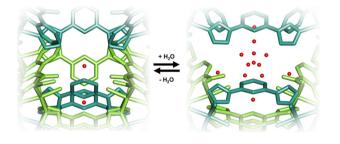
Sreelakshmi Radhakrishnan, Karthika S Nair, Samir Nandi and Harsha Bajaj\*



#### 13867

# Water vapour induced structural flexibility in a square lattice coordination network

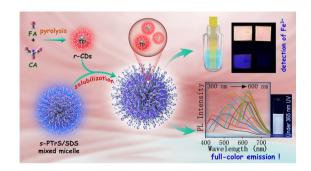
Kyriaki Koupepidou, Andrey A. Bezrukov, Dominic C. Castell, Debobroto Sensharma, Soumya Mukherjee and Michael J. Zaworotko\*



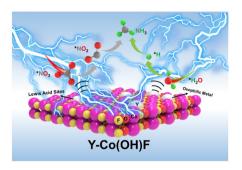
#### 13871

# Full-color-emitting fluids from carbon dots stabilized in nonconventionally fluorescent micelles

Aoxue Xu, Hailong Liu, Jie Zhang\* and Hongguang Li\*



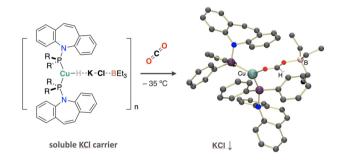
#### 13875



# Yttrium atomically incorporated into Co(OH)F nanowires enables efficient electrochemical reduction of nitrate to ammonia

Zuan Yu, Tianlun Ren, Jiangwei Xie, Hongjie Yu, Kai Deng, Ziqiang Wang, Hongjing Wang, Liang Wang and You Xu\*

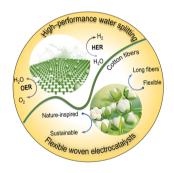
#### 13879



# Trapping of soluble, KCl-stabilized Cu(ı) hydrides with CO<sub>2</sub> gives crystalline formates

Alexander Grasruck, Giorgio Parla, Lisha Lou, Jens Langer, Christian Neiß, Alberto Herrera, Sybille Frieß, Andreas Görling, Günter Schmid and Romano Dorta\*

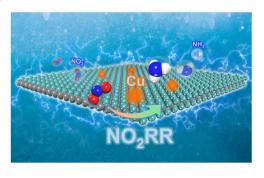
#### 13883



# Low-cost flexible textile electrocatalyst for overall water splitting

Zhen Liu,\* Jiamin Lan, Xinnian Xia, Tong Ren, Xuxu Wang, Rui Guo,\* Weijian Xu and Shuaijun Pan\*

#### 13887



# Single-atom Cu anchored on Mo<sub>2</sub>C boosts nitrite electroreduction to ammonia

Guohui Wang, Ruiyuan Ma, Nana Zhang, Yali Guo and Ke Chu\*

#### 13891

# Ammonium fluoride additive-modified interphase chemistry stabilizes zinc anodes in aqueous electrolytes

Wei Zhang, Xian Wu, Qingjin Fu, Haotian Qu, Joanna Borowiec, Mark Isaacs, Guangmin Zhou, Ivan P. Parkin\* and Guanjie He\*

# Baseline electrolyte With NH<sub>4</sub>F additives NH<sub>4</sub>+ electrostatic shielding layer ZnF<sub>2</sub>-rich SEI layer

- Severe HER Suppressed HER
- Inhibited side reactions Side reactions
- Zn dendrite growth
- Uniform Zn deposition

#### 13895

# Photochemically deoxygenating micelles for protecting TTA-UC against oxygen quenching

Shigang Wan, Dongxuan Wang, Mengqi Cai, Yizhong Shi, Yusheng Zhang, Shuoran Chen, Changqing Ye\* and Yanlin Song\*



#### 13899

## A condition-tuned unorthodox approach to indole-3-carboxylic acids and anthranilic acids via carbon atom translocation

Arup Bhowmik, Koushik Naskar, Shantonu Roy, Sudip Karmakar, Writhabrata Sarkar, Imtiaj Mondal, Arindam Sana and Indubhusan Deb\*

# 13903

# An MgAl layered double hydroxide as a new transition metal-free anode for lithium-ion batteries

Qingyan Yuan, Jian Zhang, Biao Li, Yunjia Wu, Zelin Wu, Yibo Dou, Qing Yin\* and Jingbin Han\*

