

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 62(12) 3649-3926 (2026)



Cover

See Catherine Smith, Paul W. R. Harris *et al.*, pp. 3790–3793. Image reproduced by permission of Paul Harris and Catherine Smith from *Chem. Commun.*, 2026, 62, 3790.



Inside cover

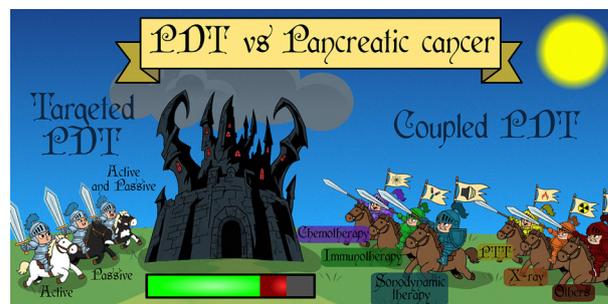
See Masahiko Nakamoto, Michiya Matsusaki *et al.*, pp. 3794–3797. Image reproduced by permission of Masahiko Nakamoto from *Chem. Commun.*, 2026, 62, 3794.

HIGHLIGHT

3662

Targeted photodynamic therapy for pancreatic cancer: recent innovations from fundamentals to *in vivo* and clinical applications (2020–2025)

S. Sarr, J. Godard, E. Valzer, E. Czuba, S. Acherar, M. Barberi-Heyob, M. Blanchard-Desce, E. Boleslawski, F. Brégier, A. Bulin, H. Burckel, J. Daouk, A. da Silva, J. Daniel, N. Delhem, A.-S. Dewalle, C. Frochot,* G. Gasser, V. Heitz, N. Jonckheere, G. Lemerrier, S. Mordon, G. Noël, A. Novell, J.-L. Ravanat, G. Roth and V. Sol*

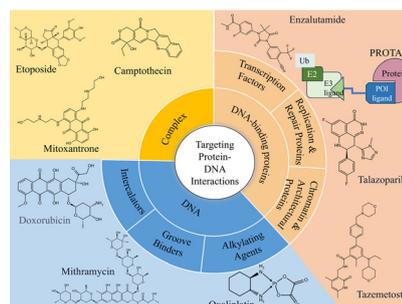


FEATURE ARTICLES

3702

Protein–DNA interactions in disease and drug discovery

Richa Mishra and Shandar Ahmad*



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%**

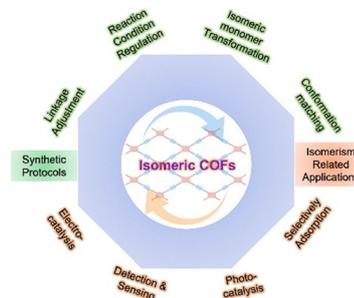


FEATURE ARTICLES

3730

Covalent organic framework isomers and isomerism related applications

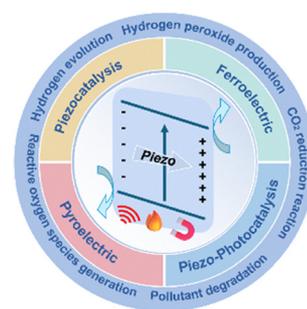
Yusen Li,* Meng Chen, Ruiling Liang, Xinjian Yin, Ronghui Cao* and Feng Bai*



3745

Piezocatalysis and piezo-assisted catalysis in environmental remediation and energy conversion

Shuaiyu Jiang, Qi Mai, Haimei Xu, Yibo Ma, Baohua Jia* and Tianyi Ma*

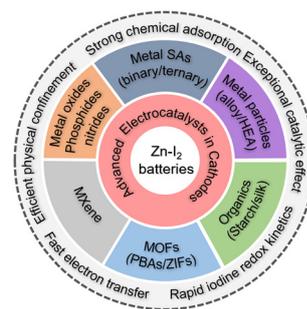


REVIEWS

3761

Review of electrocatalysts in aqueous zinc–iodine batteries

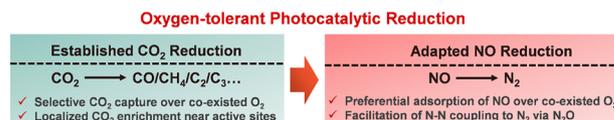
Liangyu Bi, Guobing Tang, Tongtong Yuan, Qi Kang,* Jie Xu* and Lianbo Ma*



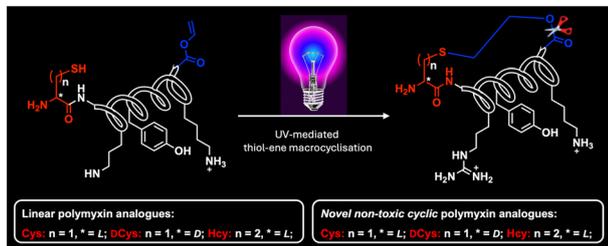
3777

Extending oxygen-tolerant photocatalysis: from CO₂ reduction to NO reduction

Yueqing Jia, Yixiang Zhang and Shen Zhao*



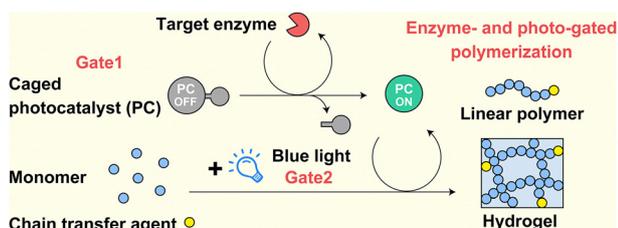
3790



Design, synthesis and biological activity of potential retrometabolic polymyxins via thiol–ene chemistry

Catherine Smith, Andrew Siow, Renata Kowalczyk, Scott A. Ferguson, Matigan J. B. Smith, Gregory M. Cook, Veronika Sander, Alan J. Davidson, Margaret A. Brimble* and Paul W. R. Harris*

3794



Enzyme- and photo-gated polymerization using readily available enzyme-responsive fluorescent dyes

Kanta Ogura, Masahiko Nakamoto* and Michiya Matsusaki*

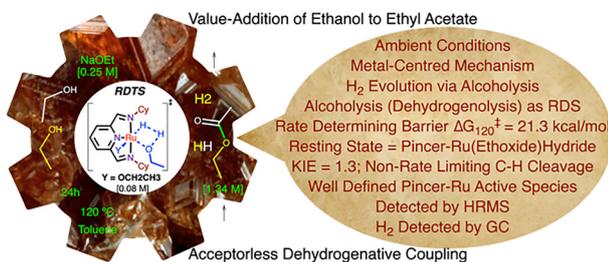
3798



A light-activated nickel(II)–antibiotic conjugate for synergistic antibacterial therapy

Ruijing Zhang, Yangyuting Zhou, Zenghui Lin, Xiao-Chun Huang,* Jing Zhang,* Song Gao and Jun-Long Zhang*

3802



Mechanistic studies on the NNN pincer–ruthenium catalysed transformation of ethanol to ethyl acetate

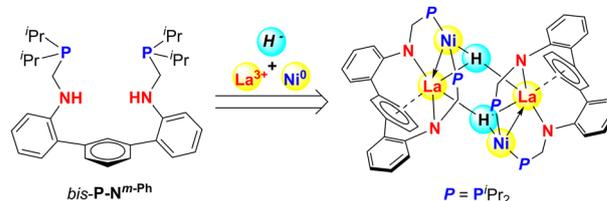
Vikas, Vinay Arora, Sunil Dhole and Akshai Kumar*



3807

A tetranuclear lanthanum–nickel hydrido complex supported by an arene-anchored bis(phosphinomethylamido) ligand

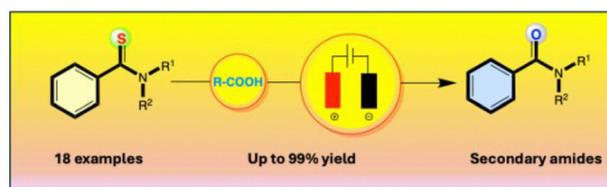
Xiuyan He, Changjiang Wu, Dongjing Hong, Huayi Fang* and Peng Cui*



3811

Kolbe radical-initiated electrochemical desulfurization of thioamides under aerobic conditions

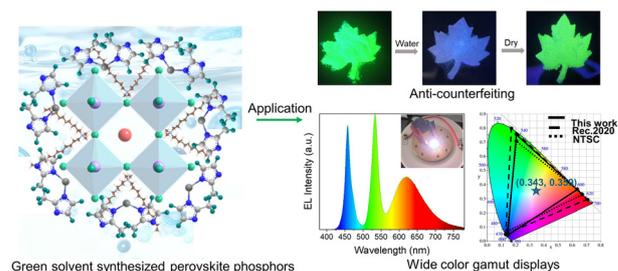
Subban Kathiravan* and Ian A. Nicholls



3815

The ligand-engineered aqueous synthesis of stable perovskite phosphors at room temperature

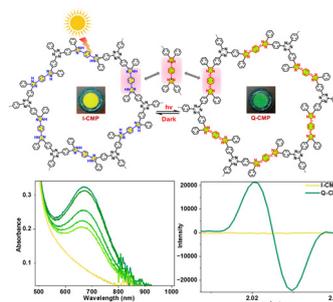
Kunhua Wang, Ziang Wang, Ling Wei, Jingwen Zhao, Xiaojun Wang, Yingying Wang, Meng Gao, Jianxu Ding and Shaodong Sun*



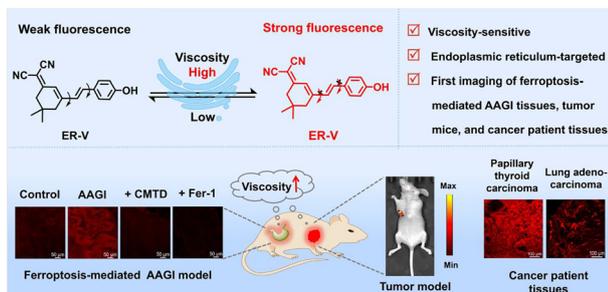
3820

Sunlight-triggered photochromism of imidazole-based 2D polymer *via* open–shell diradicalization

Vinutha K. Venkatarreddy, Abhijeet V. Kamble and M. Rajeswara Rao*



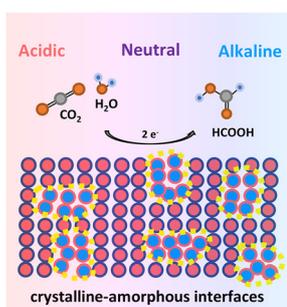
3825



Imaging of viscosity in ferroptosis-mediated acute alcoholic gastric injury and tumor models using an endoplasmic reticulum fluorescent probe

Hui Wang, Ling Ma, Sijie Li, Rui Wang, Shaomin Shuang, Chuan Dong* and Li Fan*

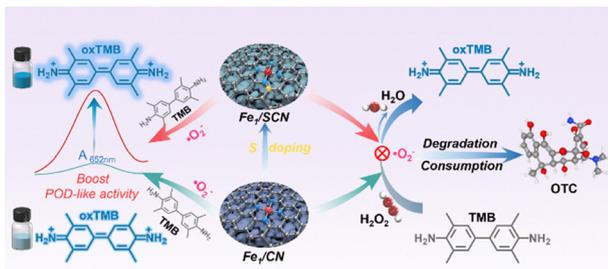
3830



A crystalline–amorphous interface enriched CuS–SnS composite catalyst boosts electrochemical CO₂ reduction over a wide pH window

Shanshan Wang, Baoxin Ni, Wei-Yi Zhang, Yanbo Hua, Jia-Ao Huang, Hui Fan, Hong Li, Songhai Xie, Tian-Wen Jiang,* Kun Jiang, Junliang Zhang and Wen-Bin Cai*

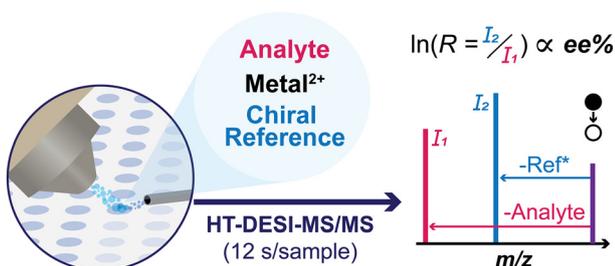
3834



S-doped Fe single atoms as efficient peroxidase-like nanozymes for colorimetric detection of oxytetracycline

Jianping Guan, Tianyu Tao, Nianhui Zhou, Xu Liu, Jinhua Hu, Chenyang Huang, Yunhu Han, Tao Gan* and Yu Xiong*

3839



High-throughput chiral analysis using automated desorption electrospray ionization mass spectrometry

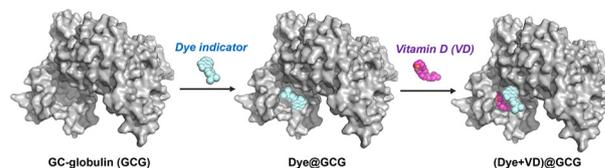
Jie Li, Nicolás M. Morato, Bo Hao, Ainslie Chen, Lucile Jouffroy, Ho Kim, Zhicai Shi, Karel Goossens, Iulia I. Strambeanu* and R. Graham Cooks*



3843

Unveiling a novel GC-globulin host for supramolecular recognition

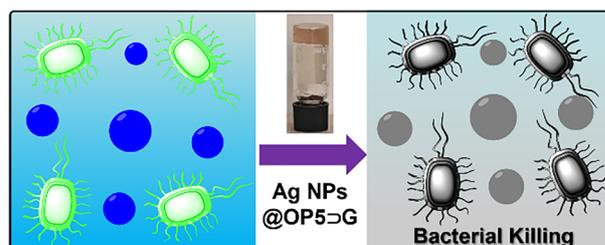
Xiaowen Wei, Immanuel David Charles,*
Xiongzhi Xiang, Lei Wang and Bin Liu*



3847

Oxime-modified pillar[5]arene-based hybrid supramolecular polymers: construction and antibacterial performance

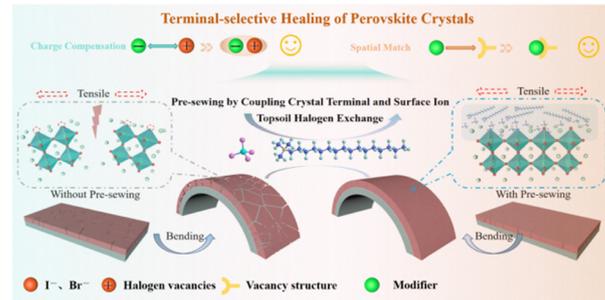
Chunlin Deng, Fuqiang Zhao, Peng Zhu,* Pingping Yuan,
Yang Wang, Jin Wang, Yan Cai* and Yong Yao*



3852

Terminal-selective healing of perovskite crystals for air-fabricated high-performance flexible perovskite solar cells

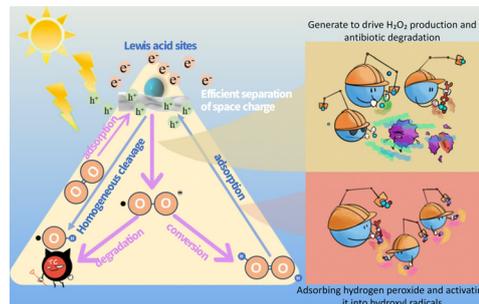
Shendong Xu, Yuli Tao, Ke Yang,* Yongtao Li,*
Haiying Zheng, Guozhen Liu* and Xu Pan*



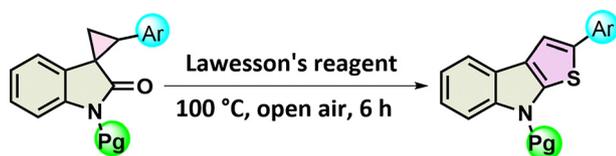
3856

Tailoring Lewis acid sites in lanthanum-doped carbon nitride for H₂O₂ synthesis and efficient photocatalytic degradation of antibiotics

Xiaojuan Bai,* Wenzhi Zhang, Jiaqian Dong and
Chi Zhang



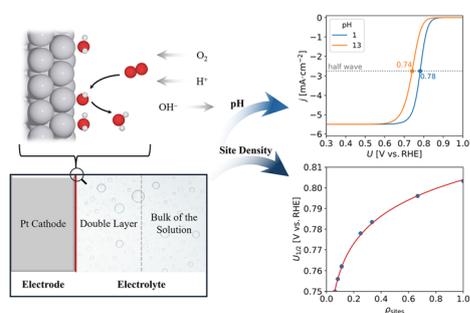
3861



Synthesis of thieno[2,3-*b*]indoles by Cloke–Wilson rearrangement of spiro donor–acceptor cyclopropanes

Sk Jubayar Ahashan, Kousik Maji, Syed Ramizul Kabir and Jyotirmayee Dash*

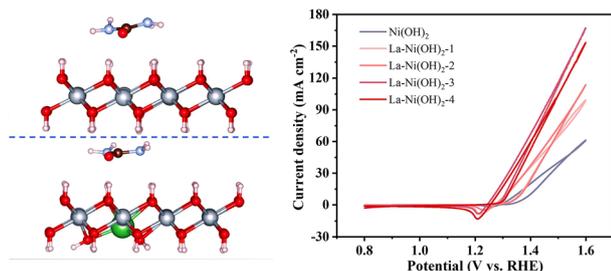
3866



Multiscale modelling unveils how mesoscopic mass transport determines the electrocatalytic activity

Xinnan Mao, Xuewei Hao, Zhiwei Liu, Hui Huang, Lu Wang* and Youyong Li

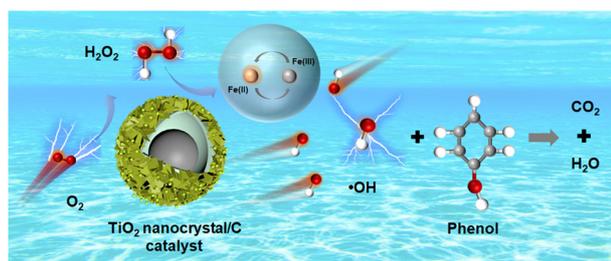
3871



Electronic structure modulation of a β - $Ni(OH)_2$ nanocatalyst via La doping to boost urea electrooxidation

Quan Zhang, Hejin Ma, Chenyu Zhang, Xin Gao, Cairui Sun, Liangqi Gui, Rufang Zhao,* Fangqi Yang* and Huihui Lin*

3876



In situ electrocatalytic H_2O_2 synthesis over TiO_2 nanocrystal/porous carbon yolk–shell composites with oxygen functional group modulation

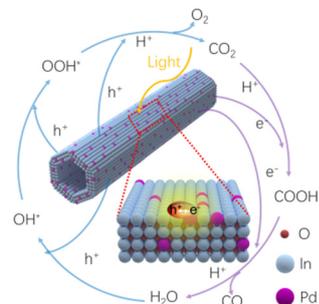
Yue Tian, Jie Wang,* Tianhong Zhou, Shengchun Ma and Yusuke Yamauchi*



3881

Direct CO₂-to-CO conversion with H₂O on an In₂O₃ photocatalyst enabled by atomically precise Pd sites

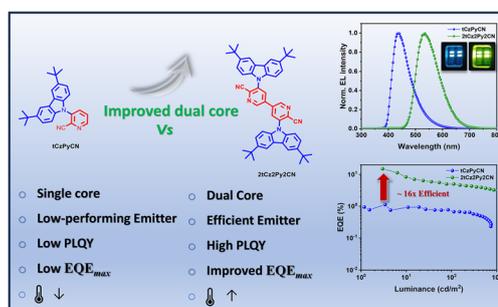
Fengyang Yu,* Cheng Chang, Hanghang Kang, Huixian Ma, Wansheng Zong* and Lina Su*



3885

Realizing high-efficiency TADF from a low-performing cyanopyridine emitter via symmetric coupling

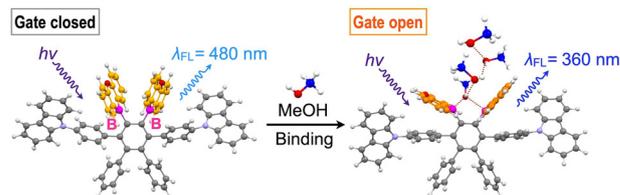
Ashish K. Mazumdar, Bhaskar Chelleng, Svadha Devi, Gyana Prakash Nanda, Ganesh Manikandan and Pachaiyappan Rajamalli*



3889

Gate-opening cooperative methanol binding to multi-bladed benzenes bearing 1,2-diboryl functionality

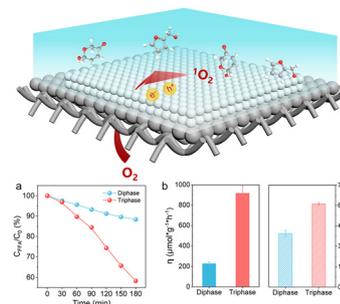
Yunyi Song, Hiromichi Yokoyama, Yoshiaki Shoji,* Hayato Sakai, Taku Hasobe and Takanori Fukushima*



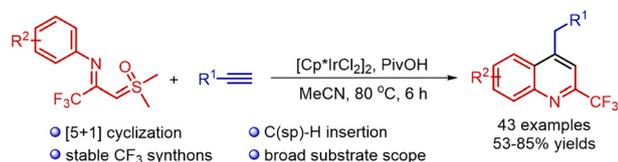
3893

Efficient singlet oxygen (¹O₂)-mediated photocatalysis-driven Achmatowicz rearrangement based on a gas–liquid–solid tri-phase system

Jiamin Yu, Xia Sheng,* Zhiping Liu, Weiqian Liao, Lijun Zhou and Xinjian Feng*



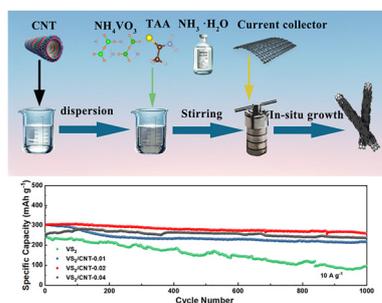
3897



Iridium-catalyzed [5+1] cyclization of terminal alkynes with CF₃-imidoyl sulfoxonium ylides to construct 2-trifluoroquinolines

E. Mi, Haichao Han, Li Zhou, Ziyang Chen, Xiaobao Zeng, Biao Xiong* and Wei Xu*

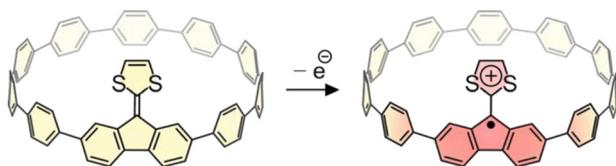
3902



An interfacial engineering strategy of a VS₂/CNT 3D conductive network for stable and high-performance zinc-ion batteries

Longjue Hu, Yunlong Duan, Sufang Chen,* Daohong Zhang* and Qiufan Wang*

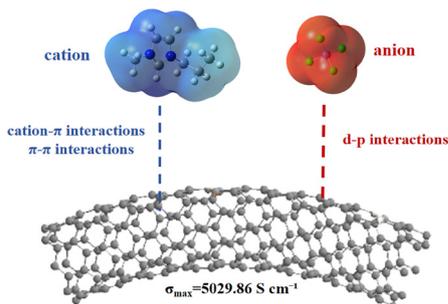
3906



[11]Cycloparaphenylene incorporating a redox-active dithiafulvene moiety provides access to a carbon nano hoop with an unpaired electron along the core

Viktor Bliksted Roug Pedersen,* Lukas Bradley Woodcock, Phillip Gustav Iuel Lunøe Dünweber, Kurt Valentin Mikkelsen, Ramesh Jasti and Mogens Brøndsted Nielsen*

3911



Exploration of metal-ionic liquids for enhancing electron conductivity and thermoelectric properties of single-walled carbon nanotube composites

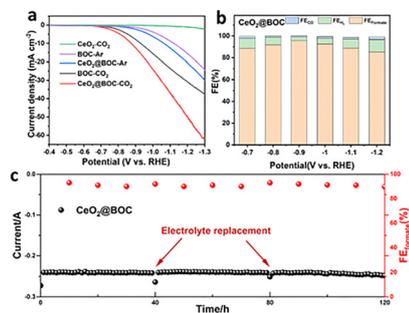
Zhifu Chen, Xuwen Xie, Zhiyong Luo, Fei Zhong, Chunmei Gao* and Lei Wang



3915

Stabilizing Bi active species *via* constructing a Bi–O–Ce interface for enhanced CO₂ electroreduction to formate

Xinya Ren, She Gong, Zhenze Han, Yu Wei* and Yan Gao*



3920

Deciphering the cooperative roles of NH₄⁺ and H⁺ in aqueous ammonium-ion batteries

Sungjin Yang, Min Soo Jung, Maxine A. McNerney, Jungwook Song, Yanzhao Fang and Xiulei Ji*

