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See Samanvaya Srivastava *et al.*, pp. 14952–14955. Image reproduced by permission of Fahed Albreiki from *Chem. Commun.*, 2024, 60, 14952.



Inside cover

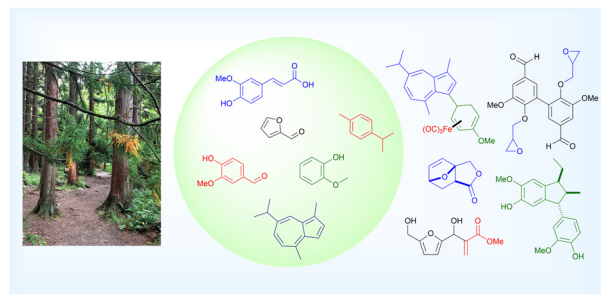
See JunWoo Kim, Myung Hwan Park, Min Kim *et al.*, pp. 14956–14959. Image reproduced by permission of Prof. Min Kim from *Chem. Commun.*, 2024, 60, 14956.

HIGHLIGHTS

14885

Carbon–carbon bond formation using aromatics from biomass

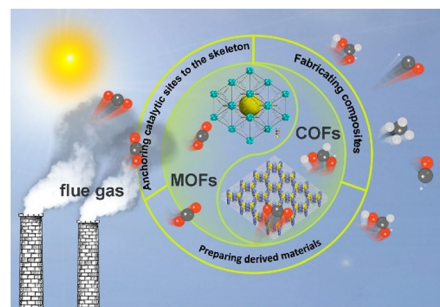
Petter Dunås, Andrew J. Paterson, Simon E. Lewis* and Nina Kann*



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Application of porous crystalline framework materials towards direct flue gas conversion

Jingting He, Man Dong, Jianxia Gu, Chunyi Sun,* Dongxu Cui, Xiaohui Yao, Fanfei Meng, Chunjing Tao, Xinlong Wang* and Zhongmin Su*



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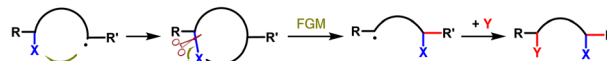
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FEATURE ARTICLES

14912

Intramolecularly remote functional group migration reactions involving free radicals

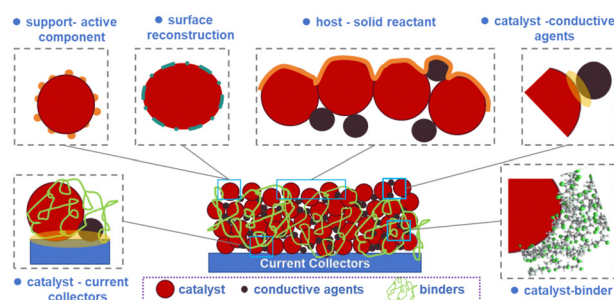
Fushan Chen, Zhu Cao and Chen Zhu*



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A review on solid–solid heterogeneous interfacial interactions in electrocatalytic conversion of inorganic molecules

Wen-Xuan Liang, Huimin Han, Chun-Hua Zhen, Yingjie Hua, Jun-Tao Li and Yao Zhou*



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Bioinspired metal–organic frameworks for aqueous environment decontamination: from laboratory scale to real-world technologies

Cristina Negro, Walter D. Guerra, Donatella Armentano, Jesús Ferrando-Soria, Thais Grancha* and Emilio Pardo*

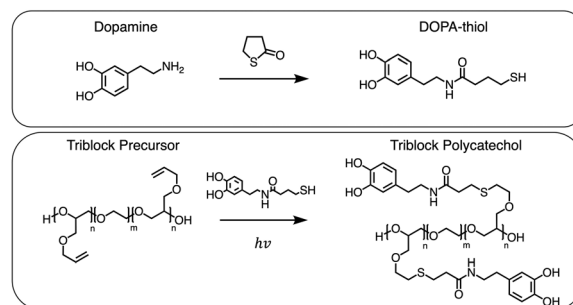


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14952

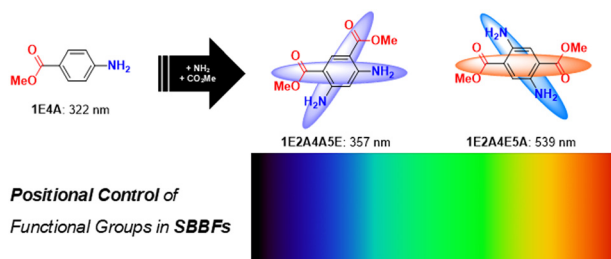
Modular synthesis and facile network formation of catechol functionalized triblock copolymers

Fahed Albreiki, Tobias Göckler and Samanvaya Srivastava*



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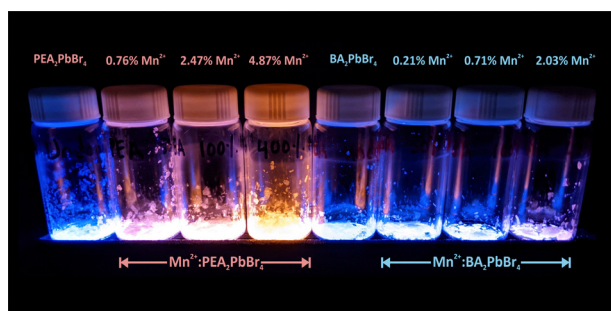
14956



Positional effects of electron-donating and withdrawing groups on the photophysical properties of single benzene fluorophores

Dopil Kim, Jun Yeong Kim, Haein Kim, Eunjin Jeong, Minhyuk Lee, Dongwook Kim, JunWoo Kim,* Myung Hwan Park* and Min Kim*

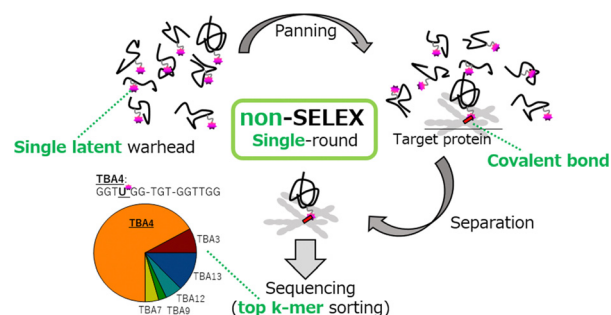
14960



Interstitial and substitutional doping of Mn²⁺ in 2D PEA₂PbBr₄ and BA₂PbBr₄ perovskites

Udara M. Kuruppu, Alvaro J. Magdaleno, Anuraj S. Kshirsagar, Bruno Donnadieu, Ferry Prins* and Mahesh K. Gangishetty*

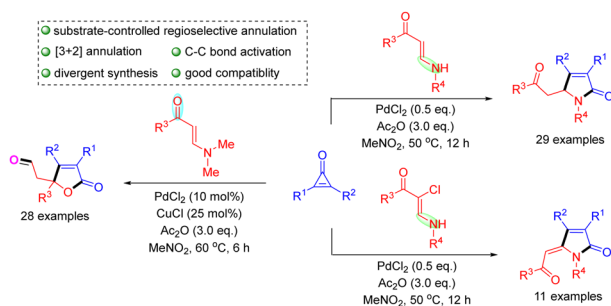
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ARCaDia: single-round screening of a DNA-type targeted covalent binder possessing a latent warhead

Masumi Taki,* Masayasu Kuwahara, Chaohui Li, Naoko Tomoda, Naoyuki Miyashita, Tetsuo Kan and Jay Yang*

14968



Pd(II)-catalyzed regioselective ring opening/[3+2] annulation reaction of enaminones with cyclopropanones: divergent synthesis of γ -butenolides and γ -lactams

Zhilai Zhang, Yu Xu, Menglin Peng, Siyu Song, Yuanzheng Wei, Huimin Hu, Xiuju Wang* and Fuchao Yu*

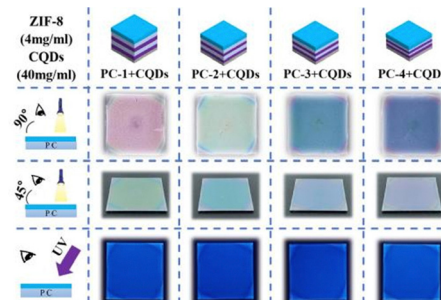


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Surface-mounted carbon quantum dots onto photonic crystals generating dual structural-fluorescent color rendering

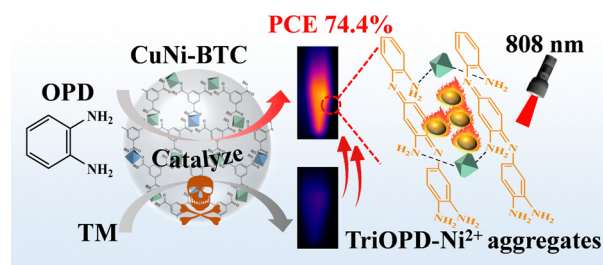
Wenyang Bian, Sijia Wang, Ruitao Zhou, Zhimin Ye, Wenjun Yuan, Hengyang Xiang, Aming Xie, Juan Liu,* Haibo Zeng* and Weijin Li*



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Ni²⁺ mediated oxidation and aggregation of o-phenylenediamine: an enhanced photothermal effect for direct, specific and background-free detection of thiophanate-methyl

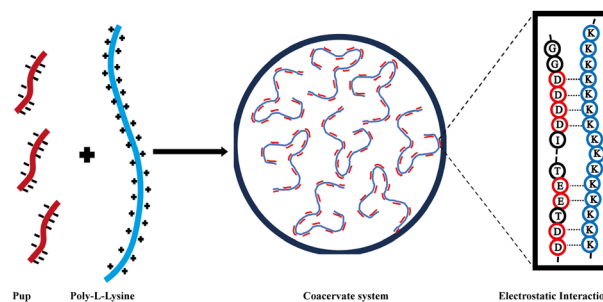
Jinju Xu, Ziyi Qin, Chunhui Liao, Tian Lan and Shuyun Shi*



14980

Electrostatic interactions drive phase separation in Pup protein

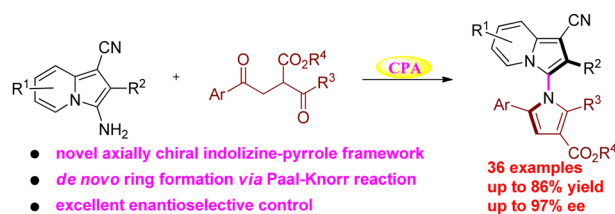
Narendran Sekar, Pushpkant Sahu, Swathi Sudhakar* and Hema Chandra Kotamarthi*



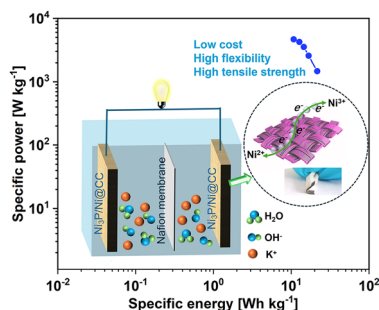
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Atroposelective synthesis of axially chiral indolizinyrpyrroles by catalytic asymmetric Paal–Knorr reaction

Wenyan Zhan, Jiameng Hu, Xiaoyun Chen, Gen Luo* and Xiaoxiao Song*



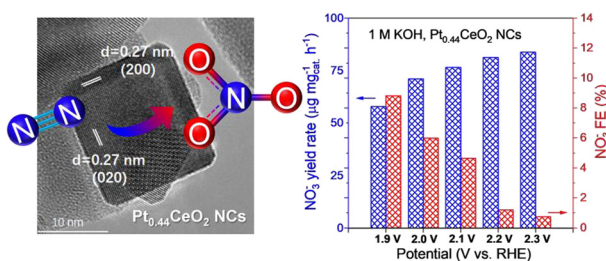
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Large scalable nickel phosphide/nickel@carbon cloth-based flexible composite electrodes for symmetric supercapacitors

Tao Wei, Meiling Cen, Jing Xu,* Guangmin Zhou* and Jiao-Jing Shao*

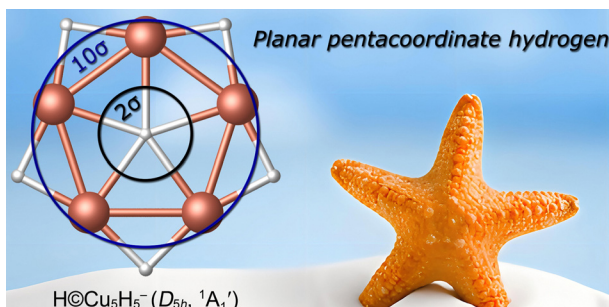
14992



Direct electrochemical N₂ oxidation to nitrate on supportive Pt/CeO₂

Ying Zhang, Yabing Shang, Ming Cheng, Qi Guo, Xiaoyu Liu, Baoyi Zeng, Danni Wang, Guoxin Zhang,* Zifeng Yan and Jinsheng Zhao*

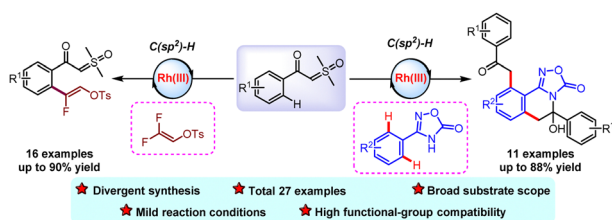
14996



D_{5h} H@Cu₅H₅⁻: a covalently bonded planar pentacoordinate hydrogen star

Li-Xia Bai, Yan-Xia Jin, Mesias Orozco-Ic, Gabriel Merino* and Jin-Chang Guo*

15000



Rhodium-catalyzed C–H α-fluoroalkenylation/annulation of β-ketosulfoxonium ylides with 2,2-difluorovinyl tosylate/oxadiazolones

Jia-Lin Song, Zi-Feng Yang, Sheng Fang, Wang-Liang Chen, Lian-Bao Ye,* Xiang Liu* and Bing Shu*

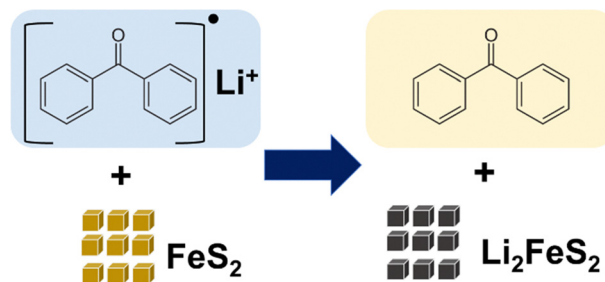


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15004

An alternate synthetic pathway to nanoscopic Li_2FeS_2 for energy storage

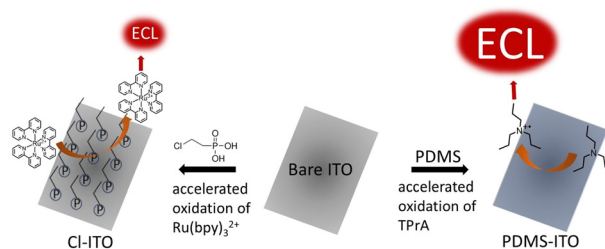
Ryan H. DeBlock, Hunter O. Ford, Meghanne E. Tighe, Debra R. Rolison and Jeffrey W. Long*



15007

Regulating the work function and surface hydrophobicity of an indium tin oxide electrode for enhanced electrochemiluminescence analysis

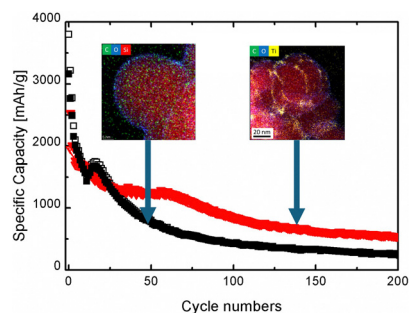
Tengyu Li, Jialian Ding, Yafeng Wang and Bin Su*



15011

Directing SEI formation on Si-based electrodes using atomic layer deposition

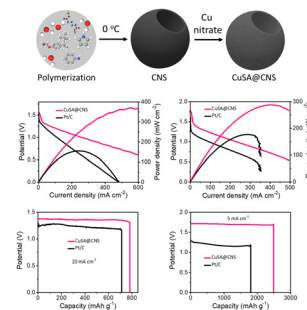
Supti Das, Anders Brennhagen, Carmen Cavallo, Veronica Anne-Line Kathrine Killi, Ingvild Julie Thue Jensen, Annett Thøgersen, Jan Petter Mæhlen, Samson Yuxiu Lai, Ola Nilsen and Alexey Y. Kozlov*



15015

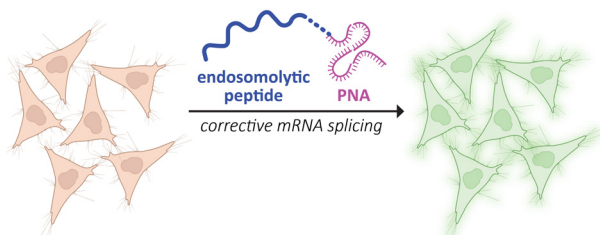
Atomically modulated Cu single-atom catalysts for oxygen reduction reactions towards high-power density Zn- and Al-air batteries

Nayantara K. Wagh, Sambhaji S. Shinde* and Jung-Ho Lee*



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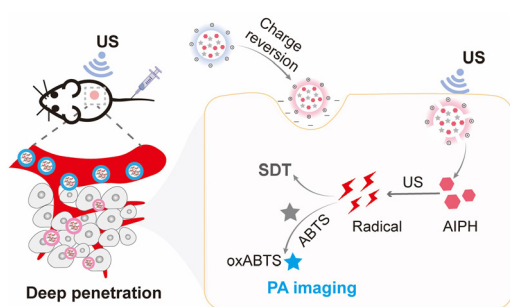
15019



Endosomolytic peptides enable the cellular delivery of peptide nucleic acids

JoLynn B. Giancola and Ronald T. Raines*

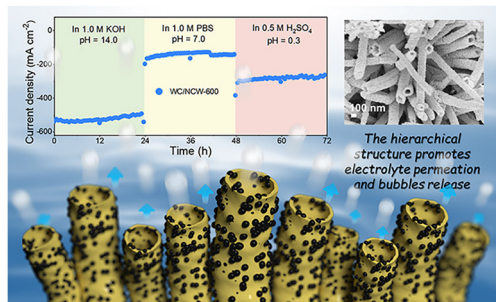
15023



Acid-responsive liposomal nanodrug with promoted tumor penetration for photoacoustic imaging-guided sonodynamic therapy

Xiangli Li, Wen-Jing Tang, Wei Wang, Shuzhen Yue,* Huiqin Yao* and Jun-Jie Zhu*

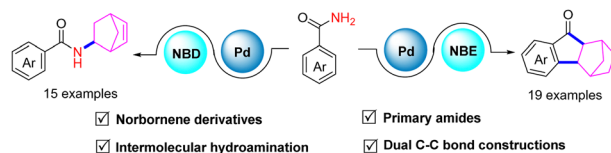
15027



A hierarchical WC/NiCoW hollow nanotube array as a highly efficient electrocatalyst for hydrogen evolution

Xuesong Liu, Kuan Deng, Peng Liu, Xingbin Lv, Wen Tian* and Junyi Ji*

15031

Palladium-catalyzed annulation and intermolecular hydroamination involving norbornene derivatives: synthesis of indanones and *N*-alkylamines

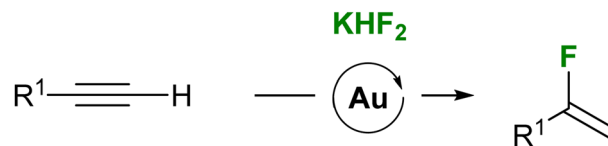
Wenguang Li,* Xinfeng Cheng, Man Cao, Heyun Sheng, Wenchao Gao, Ming Chen, Xu Zhang, Wentao Li, Yongqi Yu* and Ting Li*



15035

Gold-catalyzed hydrofluorination of terminal alkynes using potassium bifluoride (KHF₂)

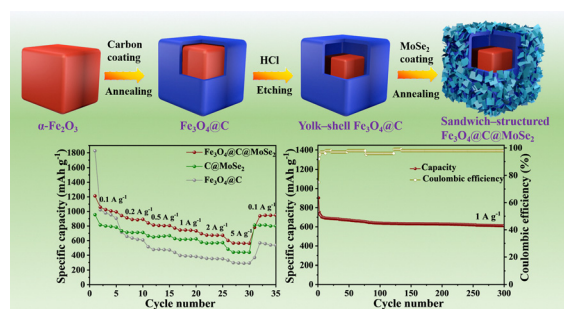
Raphaël Pronovost, Mathis Rion, Nikolaos V. Tzouras, Steven P. Nolan and Jean-François Paquin*



15039

Sandwich-structured Fe₃O₄@C@MoSe₂ architecture for efficient lithium-ion storage

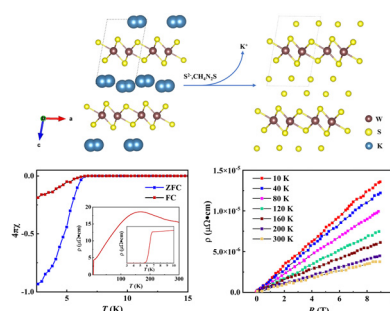
Linan Yang, Chengjie Zhang, Liuyang Cao, Rong Xu, Hongbo Li, Zhanjun Yang* and Juan Li*



15043

Topochemical synthesis of anion-intercalated transition metal dichalcogenide superconductor S_{0.66(2)}WS₂

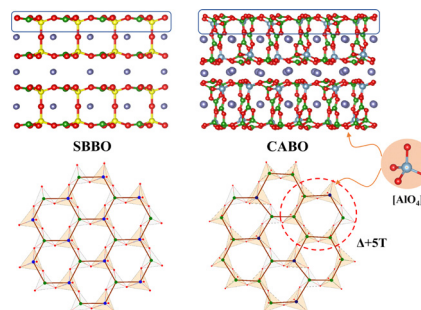
Ruijin Sun,* Haodong Li, Duo Zhang, Zhaolong Liu, Yuxin Ma, Dezhong Meng and Changchun Zhao*



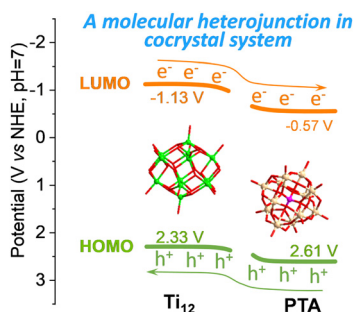
15047

Ca₃Al₂B₈O₁₈: borate with a graphene-like layer featuring two types of topological six-membered rings induced by [AlO₄] units

Ziting Yan, Dongdong Chu, Zihua Yang, Shilie Pan* and Min Zhang*



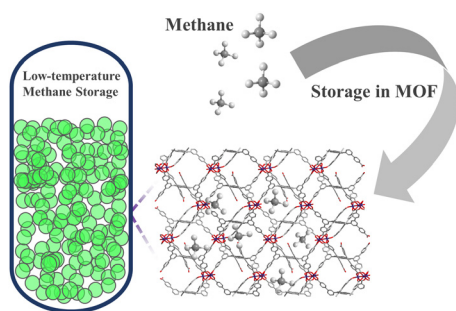
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Assembling molecular semiconductor composites for enhanced photocatalytic cyclohexene oxidation

Haiyan Yu, Xueting Wang, Tingting Kong, Mei-Yan Gao* and Xiaofeng Cui*

15055



Porous MOFs with geometric mismatch between trimers and octatopic pyrene-based ligands for low-temperature methane storage

Kun Wang, Honghao Cao, Yuanlong Zhong, Zhenning Yang, Hancheng Shi, Zhangyi Xiong, Yuqiao Mu and Zhijie Chen*

