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Chemical Communications

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See Soumalya Sinha and Jianbing “Jimmy” Jiang, pp. 11767–11779. Image reproduced by permission of Jianbing “Jimmy” Jiang from *Chem. Commun.*, 2023, 59, 11767.



Inside cover

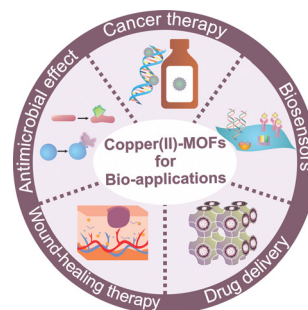
See Yanhong Li, Yunhuai Zhang et al., pp. 11791–11794. Image reproduced by permission of Yanhong Li from *Chem. Commun.*, 2023, 59, 11791.

HIGHLIGHT

11753

Copper(II)-MOFs for bio-applications

Javier Aguila-Rosas, Dalia Ramos, Carlos T. Quirino-Barreda,* Juan Andrés Flores-Aguilar, Juan L. Obeso, Ariel Guzmán-Vargas, Ilich A. Ibarra* and Enrique Lima*



FEATURE ARTICLES

11767

Main group elements in electrochemical hydrogen evolution and carbon dioxide reduction

Soumalya Sinha and Jianbing “Jimmy” Jiang*

1	Main Group Elements								2
H									He
3	4	5	6	7	8	9	10		
Li	Be	B	C	N	O	F	Ne		
11	12	13	14	15	16	17	18		
Na	Mg	Al	Si	P	S	Cl	Ar		
19	20	31	32	33	34	35	36		
K	Ca	Ga	Ge	As	Se	Br	Kr		
37	38	49	50	51	52	53	54		
Rb	Sr	In	Sn	Sb	Te	I	Xe		
55	56	81	82	83	84	85	86		
Cs	Ba	Tl	Pb	Bi	Po	At	Rn		
87	88	CO ₂ RR		CO ₂ RR + HER		HER			
Fr	Ra								

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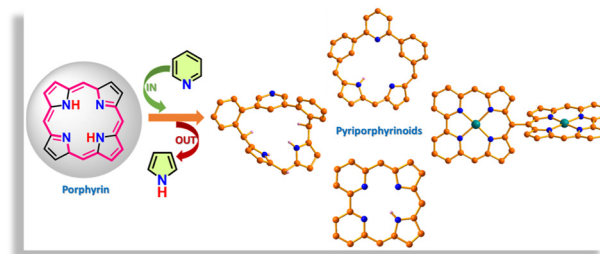


FEATURE ARTICLES

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Advent and features of pyriporphyrinoids: an overview of a pyridine-based porphyrin analogue

Mainak Das* and A. Srinivasan*

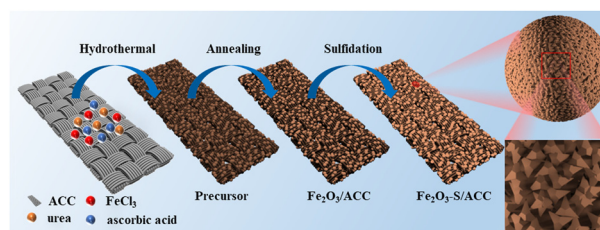


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Novel Fe₂O₃ microspheres composed of triangular star-shaped nanorods as an electrode for supercapacitors

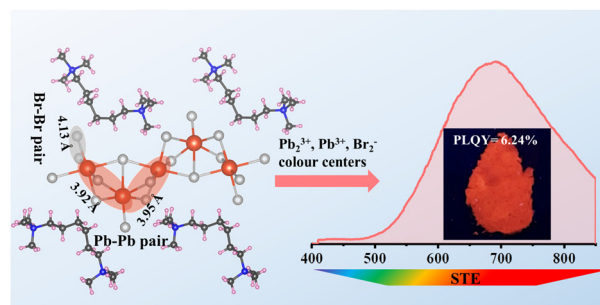
Zhiting Song, Hongming Hu, Kai Shu, Tao Liu, Xiao Tang, Xianju Zhou, Yanhong Li* and Yunhuai Zhang*



11795

Broadband red emission from one-dimensional hexamethonium lead bromide perovskitoid

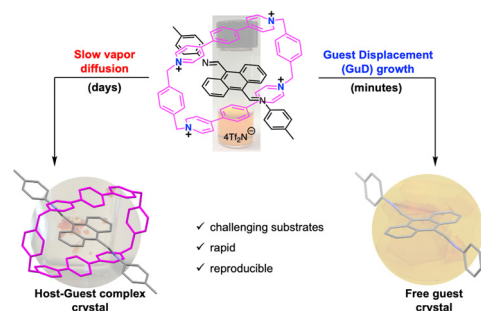
Biqi He, Kuan Kuang, Bing Xu, Junjie Tang, Sheng Cao, Zixian Yu, Mingkai Li,* Yunbin He* and Junnian Chen*



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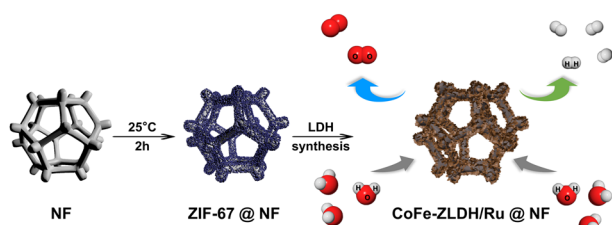
Rapid single crystal growth *via* guest displacement from host–guest complexes

Mikayla L. Horvath, Caylee E. Jumbelic, Rosemarie A. Burynski, M. Brody Mistrot, Robert D. Pike,* Brian J. Smith* and Hasan Arslan*



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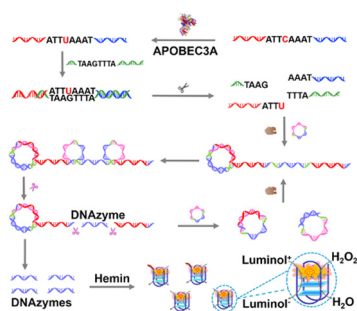
11803



Construction of a ruthenium-doped CoFe-layered double hydroxide as a bifunctional electrocatalyst for overall water splitting

Wenxin Ning, Rui Wang, Xiaoxia Li, Ming Hua Wang, Hao Guan Xu, Hao Yang Lin, Xiao Peng Fu, Mengmin Wang, Peng Fei Liu* and Hua Gui Yang

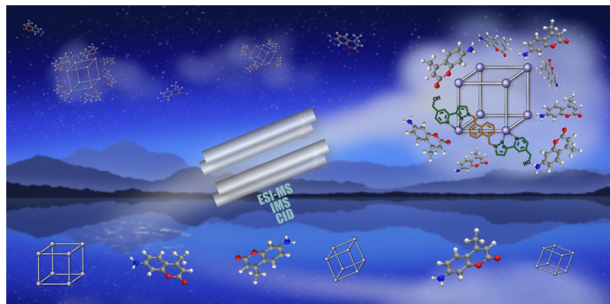
11807



Deamination-triggered exponential signal amplification for chemiluminescent detection of cytosine deaminase at the single-cell level

Wen-jing Liu, Hai-Juan Li, Xiaoran Zou, Qian Liu, Fei Ma* and Chun-yang Zhang*

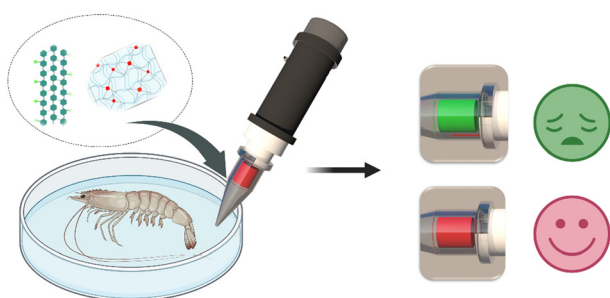
11811



Binding modes of high stoichiometry guest complexes with a Co₈L₁₂ cage uncovered by mass spectrometry

Daniel L. Stares, Cristina Mozaceanu, Michael D. Ward* and Christoph A. Schalley*

11815



Integrated portable food safety testing pipette based on a color-switchable fluorescence probe for rapid visual discrimination of mild food deterioration

Ke Zhang, Tianzhi Mao, Wenqi Hu, Shijie Li, Xiaobo Zhou,* Majun Yang, Luxia Yang, Yuling Qin* and Li Wu*

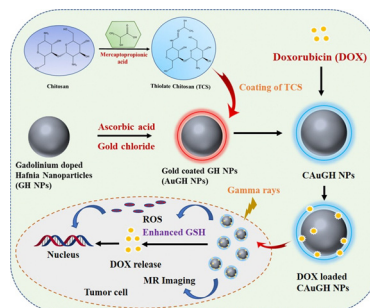


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Gd/hafnium oxide@gold@chitosan core-shell nanoparticles as a platform for multimodal theranostics in oncology research

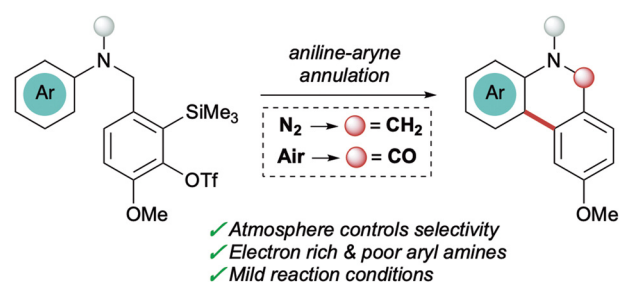
Aastha Gupta, Ritu Singhmar, Ankur Sood, Dimpy Bhardwaj, S. Senthil Kumaran, Shubhra Chaturvedi and Garima Agrawal*



11823

Selective access to dihydrophenanthridines and phenanthridinones via cyclisation of aryl amines onto *N*-tethered arynes

Weitao Sun, Maria Uttendorfer, Fahima I. M. Idris, A. Yannic R. Werling, Khushal Siddiq and Christopher R. Jones*



11827

Mechanical milling processed highly luminescent Cs–Pb–Br perovskite emitters

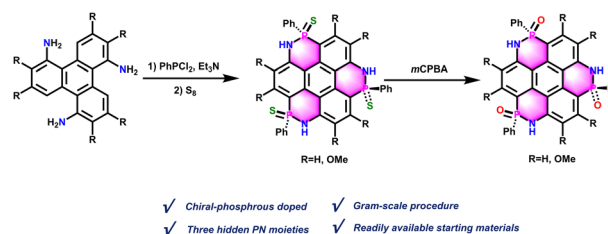
Teng Zhang,* Youru Bai, Shaohuan Feng, Qifan Xue,* Xiaotian Hu,* Xueqing Xu,* Heyuan Liu, Yuriy N. Luponosov, Muhammad Bilal Khan Niazi and Xiyou Li*



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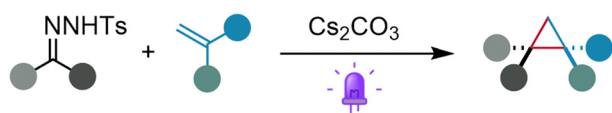
A straightforward synthesis and physicochemical properties of chiral phosphorus-doped coronenes

Xuexiang Li,* Jia Li, Xingchen Li, Rui Dang, Zhihao Li, Ying Li and Biyao Wang



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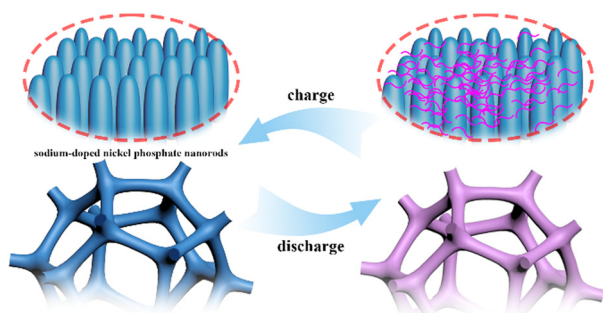


- metal-free
- up to 99% yield
- >20 examples
- synthesis of pyrazolines
- OH and NH tolerant

Photogenerated donor–donor diazo compounds enable facile access to spirocyclopropanes

Vincent George and Burkhard König*

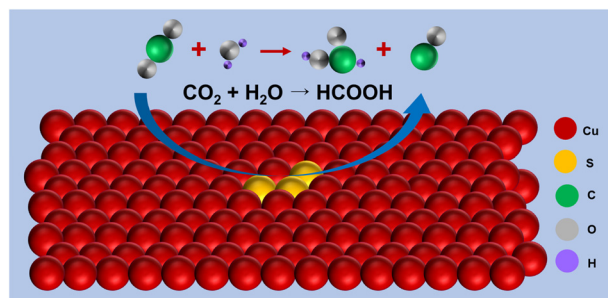
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Tailoring the growth route of lithium peroxide through the rational design of a sodium-doped nickel phosphate catalyst for lithium–oxygen batteries

Se-Si Li, Xing-He Zhao, Kai-Xue Wang* and Jie-Sheng Chen*

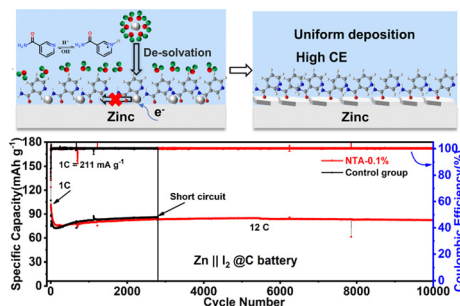
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Copper vulcanization realizes selective carbon dioxide reduction to formate

Wenqiang Liu, Yan Wen, Nan Fang, Mingmin Wang, Yong Xu* and Xiaoqing Huang*

11847



Versatile nicotinamide enabling dendrite-free and efficient deposition for aqueous Zn–I₂ batteries

Hejing Wang, Yitian Su, Lijing Yan,* Xiaomin Zeng,* Xiaoran Chen, Baorui Xiang, Huixin Ren, Tingli Ma and Min Ling*

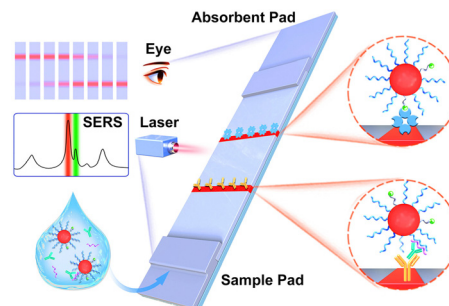


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An immunoassay-like recognition mechanism-based lateral flow strategy for rapid microRNA analysis

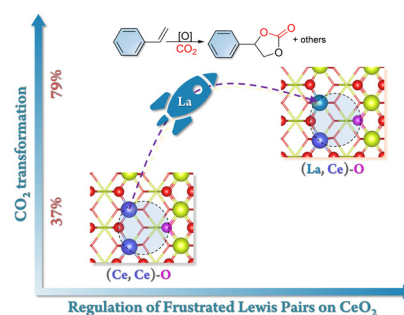
Jie Liu, Jingjing Shi, Qinya Feng, Wenjiao Fan* and Chenghui Liu*



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Regulation of frustrated Lewis pairs on CeO₂ facilitates tandem transformation of styrene and CO₂

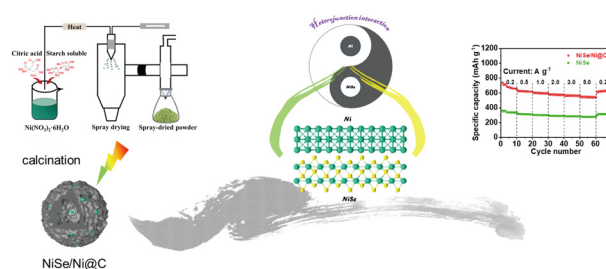
Yong Zou, Zhaoming Xia, You Wang, Yuxuan Liu, Sai Zhang* and Yongquan Qu*



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Ni-derived electronic/ionic engineering on NiSe/Ni@C for ultrafast and stable sodium storage

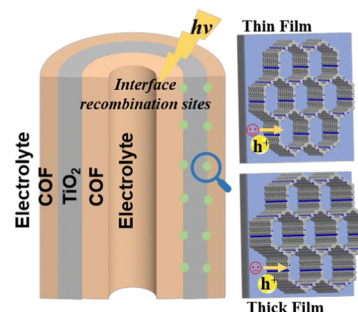
Haiwei Li, Weilong Zhang, Lei Wang, Hongping Li, Yanchen Fan, Xiaolong Yang, Hui Du, Yan Zhang and Zhuo Li*



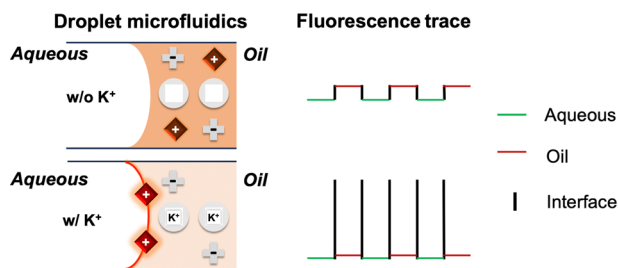
11863

Improved photocatalytic activity of TiO₂ with a regulated covalent organic framework thin film

Xiaochi Han, Wenbo Dong, Longyu Li* and Xuemei Zhou*



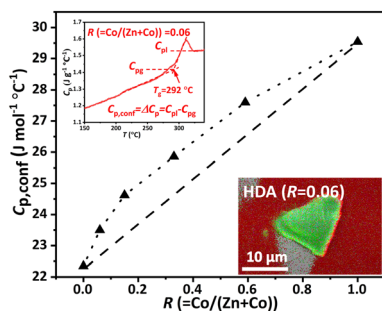
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Ion-modulated interfacial fluorescence in droplet microfluidics using an ionophore-doped oil

Renjie Wang, Nasrin Ghanbari Ghalehjoughi and Xuewei Wang*

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The glass transition in the high-density amorphous Zn/Co-ZIF-4

Zijuan Du, Ang Qiao, Hemin Zhou, Zhencai Li, Wessel M. W. Winters, Jiexin Zhu, Guanjie He, Ivan P. Parkin, Haizheng Tao* and Yuanzheng Yue*

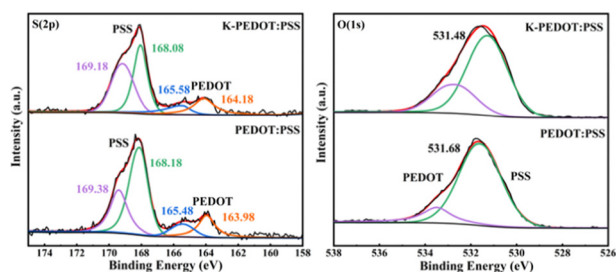
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A visible light-driven direct synthesis of industrially relevant glutaric acid diesters from aldehydes

Anindita Bhowmick, Abhijit Chatterjee, Sidharth S. Pathak and Ramakrishna G. Bhat*

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Potassium stearate doped PEDOT:PSS improves the performance of inverted perovskite solar cells

Ying Li, Yanqing Yao, Yuanlin Yang, Xusheng Zhao, Wan Cheng, Banghui Chen, Lijia Chen,* Ping Li* and Shuhui Tang

