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See David J. Nelson, Marcus W. Drover *et al.*, pp. 5871–5874. Image reproduced by permission of Renee Man from *Chem. Commun.*, 2026, 62, 5871.



Inside cover

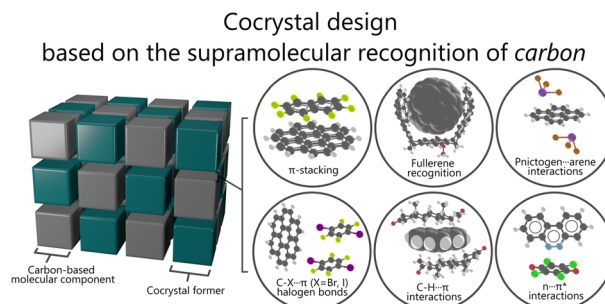
See Jogirdas Vainauskas and Tomislav Friščić, pp. 5780–5803. Image reproduced by permission of Tomislav Friščić and Jogirdas Vainauskas from *Chem. Commun.*, 2026, 62, 5780. Image created by Austėja Galinyte.

FEATURE ARTICLES

5780

Cocrystallisation with carbon

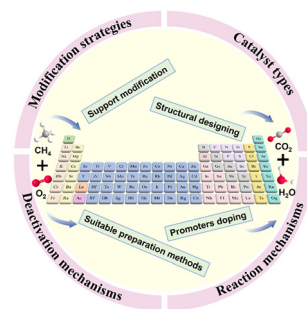
Jogirdas Vainauskas* and Tomislav Friščić*



5804

Recent advances in the catalytic combustion of methane

Tong Lu, Yuxi Liu,* Hongxia Lin, Jinxiong Tao, Jiguang Deng and Hongxing Dai*



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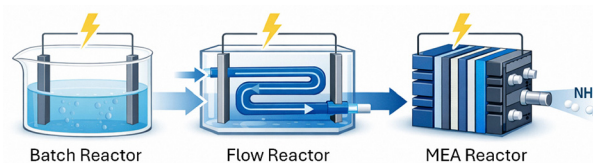
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REVIEWS

5821

Progress and prospects in electrocatalytic ammonia synthesis reactors

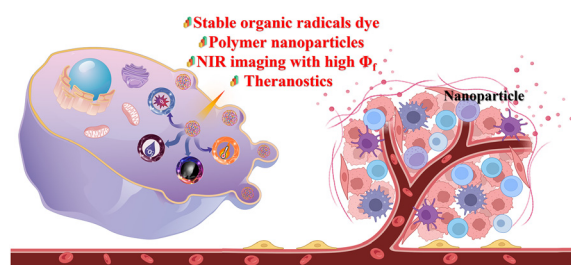
Xinyu Zou, Meijia Huang, Zhenhua Yao* and Maocong Hu*



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Stable organic radical luminescent groups and their applications in nano-diagnosis and therapy

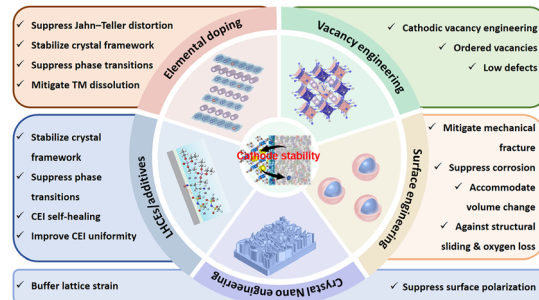
Congyan An and Lifeng Yan*



5853

Degradation and interfacial chemistry of inorganic cathodes for potassium-ion batteries

Weiwei Sun, Shiyan Zhu, Mingxuan Gu, Guohao Xia, Yiwei Lu, Zhendong Huang* and Shaozhou Li*

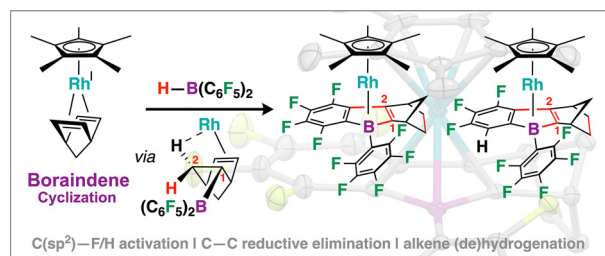


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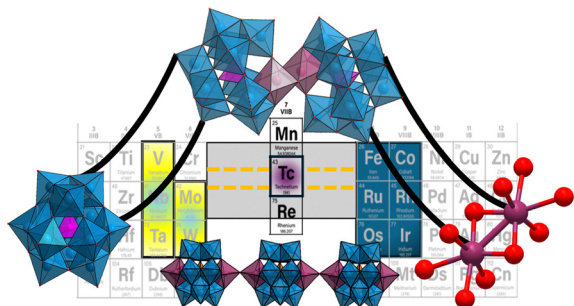
5871

From borane to metal-bound boraindene: a cascade of bond breaking and making at rhodium

Emily J. Addison, Joseph A. Zurakowski, Paul D. Boyle, David J. Nelson* and Marcus W. Drover*



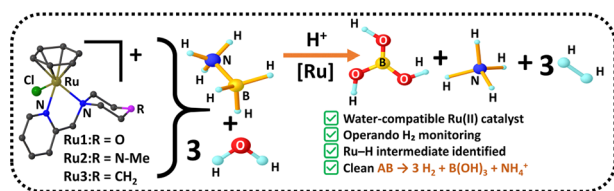
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Building block approach to technetium-substituted polyoxotungstates

Jenna Bustos, Lev N. Zakharov, Jordi Buils, Farzaneh Hosseini, Albert Solé-Daura, Carles Bo* and May Nyman*

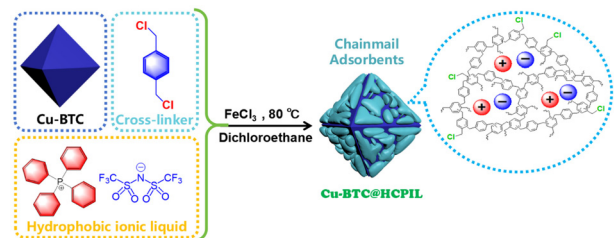
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Hydride-mediated ammonia borane dehydrogenation in water by arene-Ru(II) catalysts revealed through real-time gas evolution

Thillai Natarajan M and Sumanta Kumar Padhi*

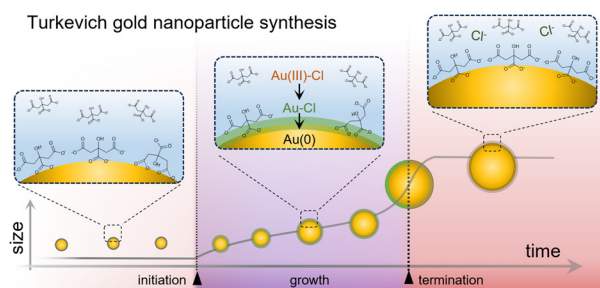
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Hyper-crosslinked polymeric ionic liquid (HCPIL)-based chainmail adsorbents for highly efficient gaseous toluene capture under high humidity

Xiongfeng Nie, Lei Zhang, Tao Jiang, Ruina Zhang, Ying Zhou, Quanli Ke, Xiaopo Niu, Zekai Zhang, Huayan Liu, Guokai Cui* and Hanfeng Lu*

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The role of Au-Cl adlayers in the Turkevich synthesis of gold nanoparticles

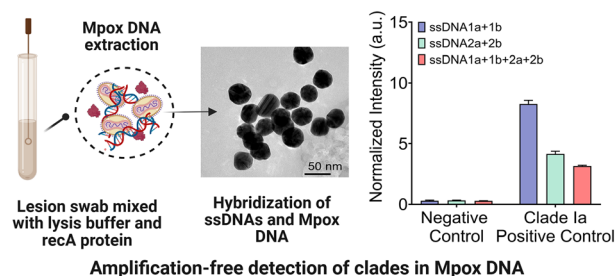
Sarah May Sibug-Torres, Gregory Q. Wallace, Tabitha Jones, Duncan Graham and Jeremy J. Baumberg*



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A clade-specific, amplification-free molecular lateral flow platform for on-site detection of Mpxv

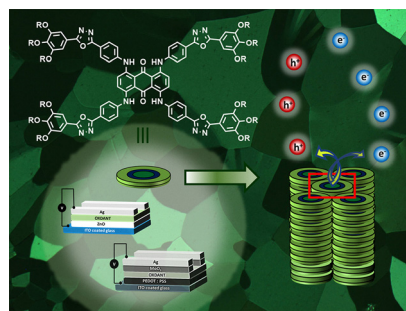
Satheesh Natarajan, Ketan Dighe, David Skrodzki, Nandhakumar Ponnusamy and Dipanjan Pan*



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Effective hole and electron transport in solution-processable nanoscale films of a deep-green dye exhibiting room-temperature columnar mesophases

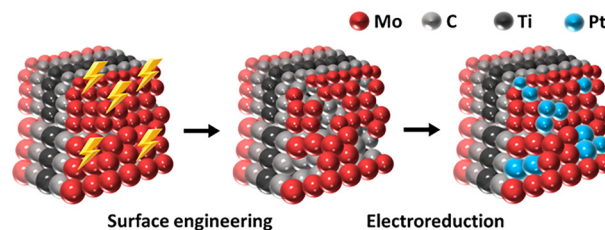
Ritabrata De, Joydip De, Alvin Joseph, Santosh Prasad Gupta, Manoj A. G. Namboothiry* and Santanu Kumar Pal*



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Revealing the platinum single-atom anchoring mechanism through sequential surface engineering in Mo₂TiC₂T_x MXene

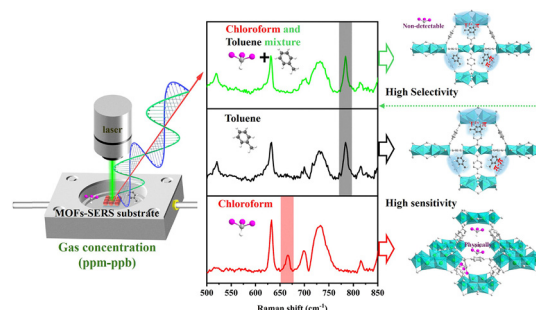
Bo-Heng Huang, Wen-Hsuan Liao, Shih-Wen Tseng and I-Wen Peter Chen*



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Dual-pathway sensing in Ti-MOFs for selective VOC discrimination by SERS

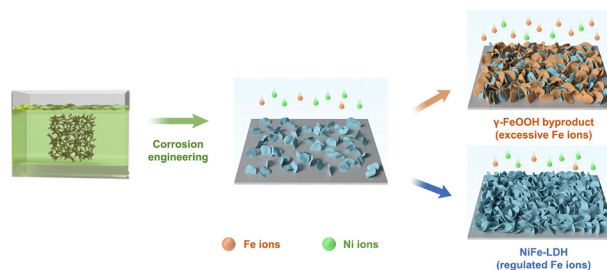
Zijing Guo, Xiaobing Ren, Jiale Hu, Yihui Dong,* Wei Cao, Suli Liu and Zhihui Dai*



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A key descriptor for corrosion engineering of NiFe-LDH: unlocking peak performance by managing Fe-ion concentration

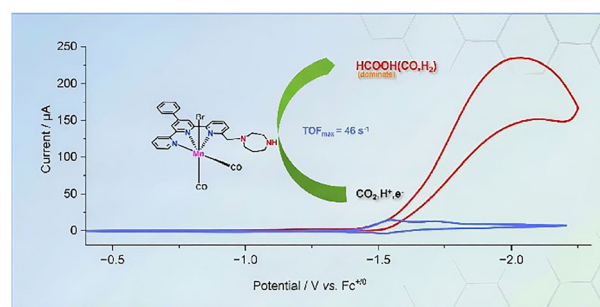
Bohan Deng, Kenan Shen, Heyong Zhu, Zheming Wang, Yanning Wang, Kun Zhang,* Kai Huang,* Kaihua Xu* and Peng Du*



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Polyamines promote the electrochemical reduction of CO₂ to HCOOH catalyzed by a manganese terpyridine dicarbonyl complex

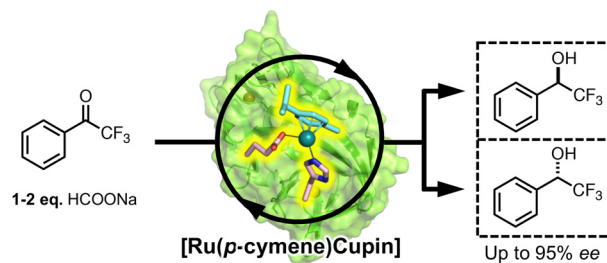
Rui Li, Shuanglin He, Fang Huang,* Ping Zhang, Ying Xiong, Rong Zhang, Fei Li* and Lin Chen*



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Rational design of a ruthenium–cupin complex as an artificial ketone reductase

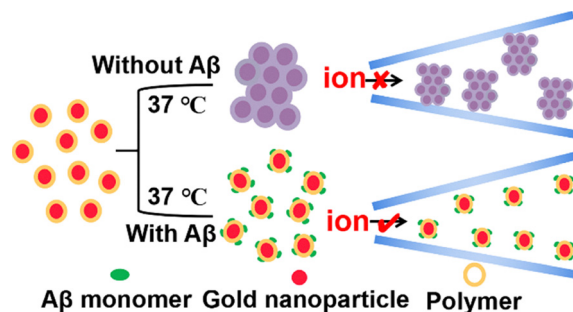
Koki Matsumoto, Souto Kitazawa, Ryusei Matsumoto, Yoshitsugu Morita and Nobutaka Fujieda*



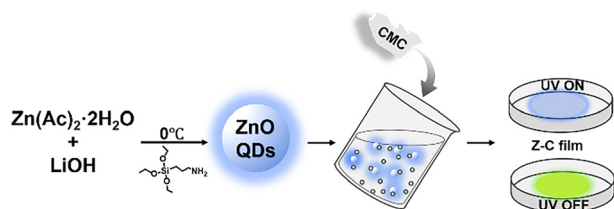
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A modification-free nanochannel platform for monitoring cerebral β-amyloid peptides based on the dispersion of stimuli-responsive polymer-modified gold nanoparticles

Jiaqi Ji, Bin Liu, Haoting Qiu, Mingdi Yu, Yanlong Huang, Changman Guo, Xiaoyan Dang, Congyu Zhang, Ding-Yi Fu* and Shushu Ding*



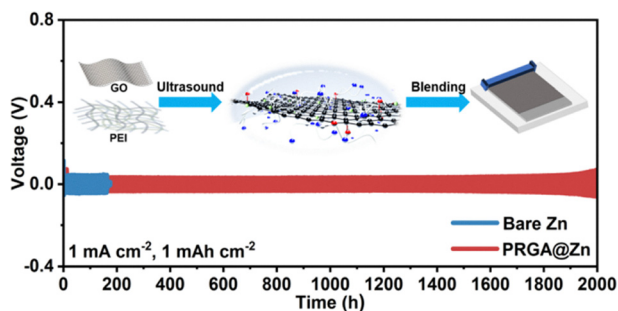
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Room-temperature phosphorescent sodium carboxymethyl cellulose composites with ZnO quantum dots

Jin Yang, Yanqing Liu, Jiajia Kong, Jipeng Men, Lejie Wang, Yan Liu* and Dongzhi Chen*

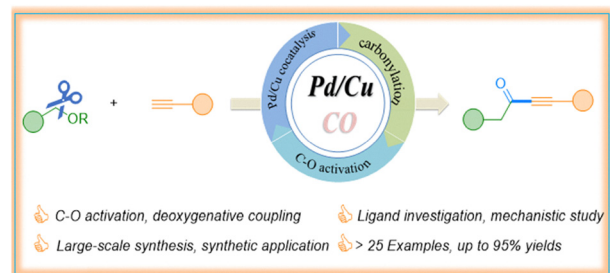
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A multi-functional polymer coating enabling stable Zn anodes for high performance zinc-ion batteries

Zhaoen Liu,* Yiwen Hu, Lujia Chai, Liang Zhang, Wenfu Liu, Yujuan Chen,* Dong Sun, Dongyang Xiao and Kelei Zhuo*

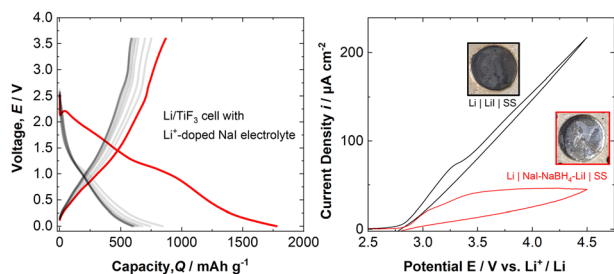
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A direct route to ynones: Pd-catalyzed Sonogashira carbonylative coupling of ethers with alkynes via C–O cleavage

Xiaowen Qin, Shuhui Sun, Weijie Zhang, Tiefeng Xu, Xiao-Feng Wu* and Zhiping Yin*

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Unusual capacity boost in Li/TiF₃ cells enabled by a Li⁺/Na⁺ mixed solid electrolyte with high-voltage stability

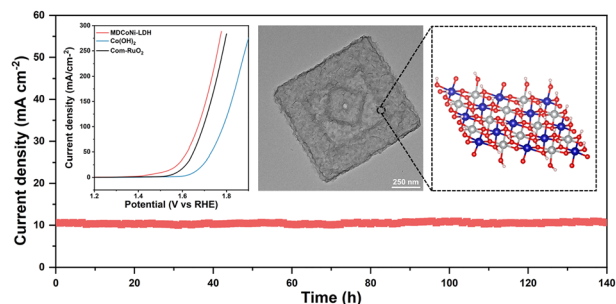
Kaisei Sano, Reona Miyazaki* and Takehiko Hihara



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Unraveling the role of Co–O–Ni motifs in MOF-derived CoNi-LDH for the enhanced oxygen evolution reaction

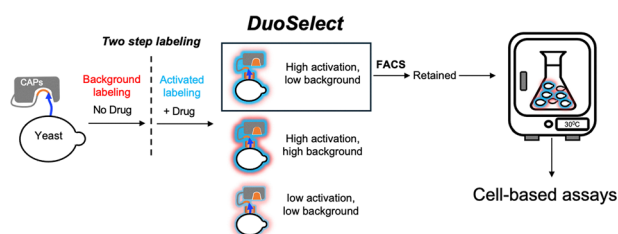
Di Li, Ruihui Gan, Yongping Zheng, Chang Chen* and Jiawei Wan*



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A novel directed evolution platform for engineering chemically gated protein switches

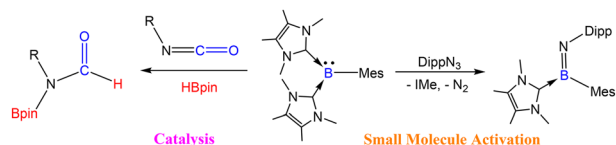
Luis A. Vázquez-Rivera, Jiaqi Shen, Gwendolyn Shingles, Guanwei Zhou and Wenjing Wang*



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Bis(*N*-heterocyclic carbene)-borylene-mediated heteroallene activation

An-Ping Koh, Gaël Vernezoul, Jun Fan, Zheng-Feng Zhang, Ming-Der Su* and Cheuk-Wai So*



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Protein migration via dissolution of ATP-stabilized condensate in a gradient of AMP

Shikha Shikha, Sakshi Juneja and Subhabrata Maiti*

