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Cover

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Inside cover

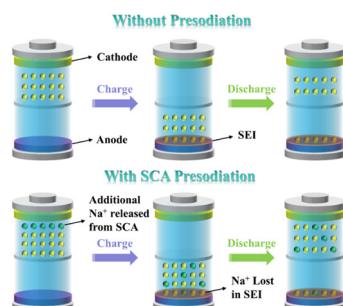
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HIGHLIGHT

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Presodiation technology: progress, strategy and prospects of sacrificial cathode additives in sodium-based energy storage systems

Luoming Zhang, Bo Xiong, Shengrui Gao, Jie Li, Dongxiao Li, Wentao Deng, Hongshuai Hou, Guoqiang Zou* and Xiaobo Ji

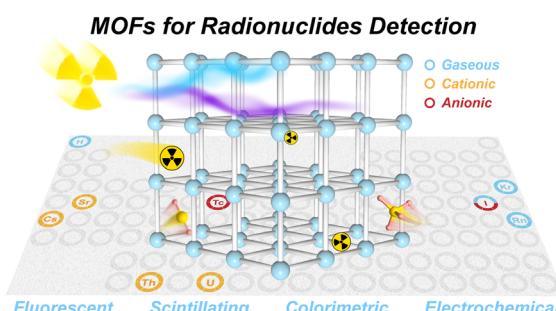


FEATURE ARTICLES

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Metal–organic frameworks as advanced platforms for radionuclide detection

Yunyi Cui and Jian Lin*





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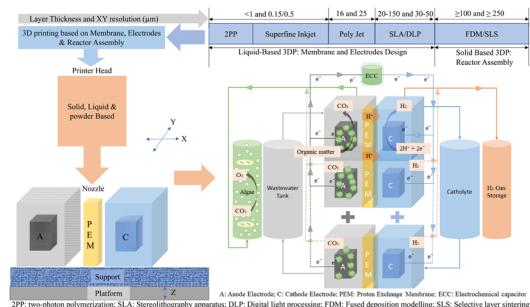


FEATURE ARTICLES

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Zero-discharge, self-sustained 3D-printed microbial electrolysis cell for biohydrogen production: a review

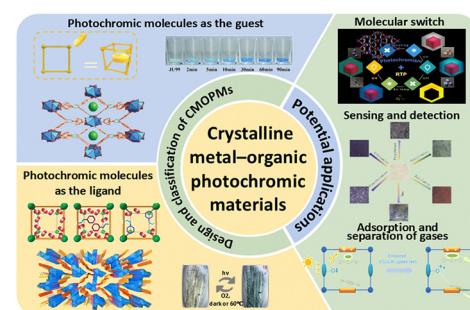
Mandar S. Bhagat,* Chirag Mevada,* Jaini Shah, M. Abdul Rasheed and Matti Mäntysalo



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Advances in crystalline metal–organic photochromic materials

Yang Hua, Li Li, Hong Zhang* and Guo-Cong Guo*

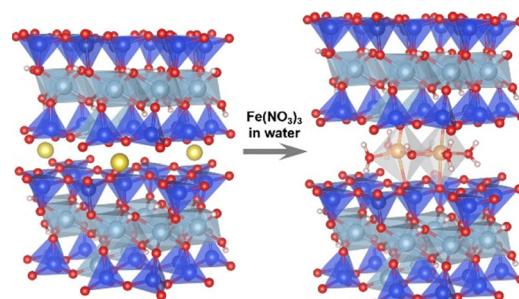


COMMUNICATIONS

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Stabilisation of iron-oxo dimers in a natural layered clay for efficient photocatalysts comparable to TiO₂

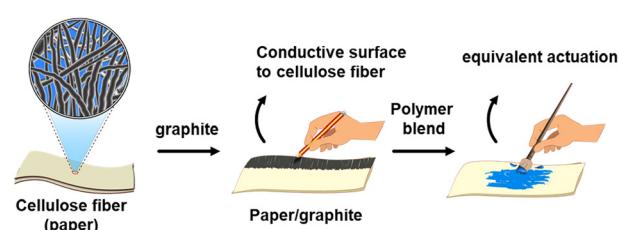
Hamza El-Hosainy, Ezz-Elregal M. Ezz-Elregal, Shinichiro Takano, Akio Iwanade, Takumi Miyakage, Duotian Chen, Chenxi He, Takashi Toyao, Ken-ichi Shimizu, Yusuke Ide* and Tomohiko Okada*



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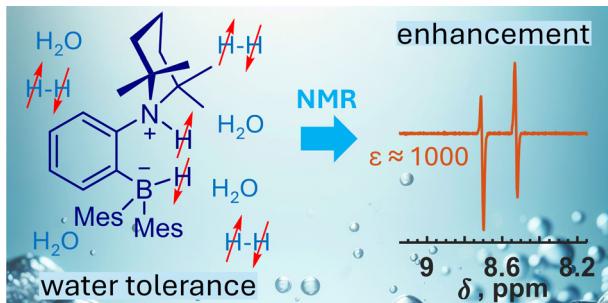
Light-stimulated paper/polymer bilayer actuators incorporated with photosensitizers for enhanced actuation

Ambrose A. Melvin, Minkyu Shin, Seewoo Kim and Jeong-Woo Choi*



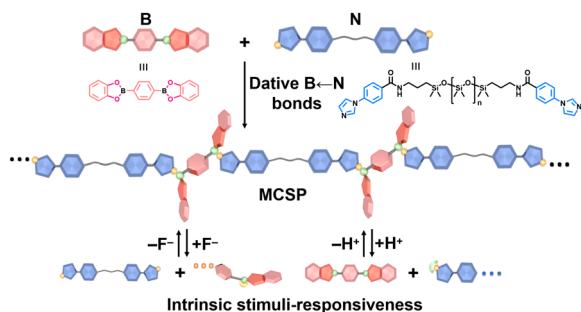
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**Towards water-tolerant *ansa*-aminoboranes for parahydrogen-induced polarization and beyond**

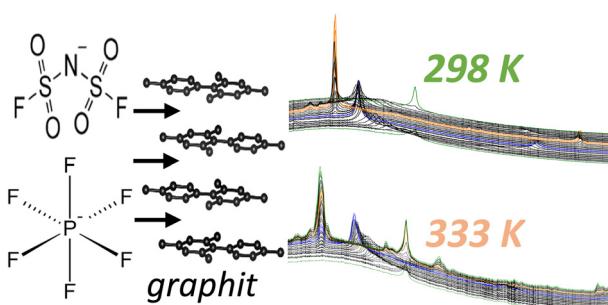
Karolina Konsewicz, Timo Repo and Vladimir V. Zhivonitko*

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**Intrinsic stimuli-responsive main-chain supramolecular polymers driven by dative $\text{B} \leftarrow \text{N}$ bonds**

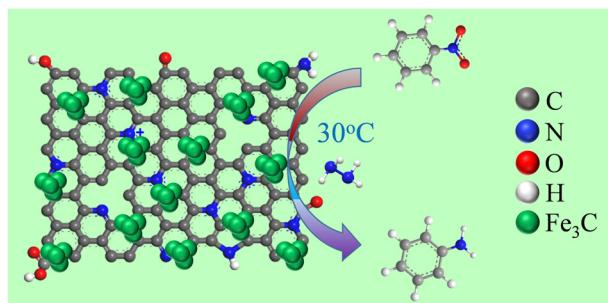
Xupeng Ji, Zihao Wang, Wei Yuan, Zhao Gao* and Wei Tian*

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Mikhail V. Gorbunov* and Daria Mikhailova

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**Tuning the surface structure of an Fe-based catalyst for transfer hydrogenation of nitroarenes at near room temperature**

Dan Wu, Shuchang Wu,* Jinliang Liu, Xiaomin Zhang, Xiaomin Fang, Shuchun Li, Yiquan Chen* and Zailai Xie*

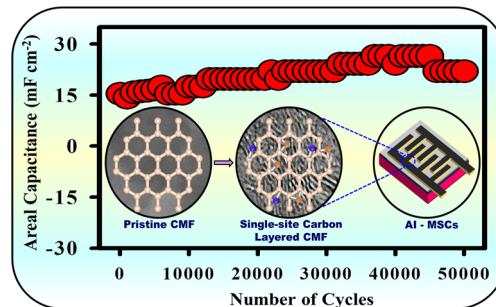


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Single-site carbon layer-based flexible interdigitated micro-supercapacitor: custom miniaturization and surface functional engineering

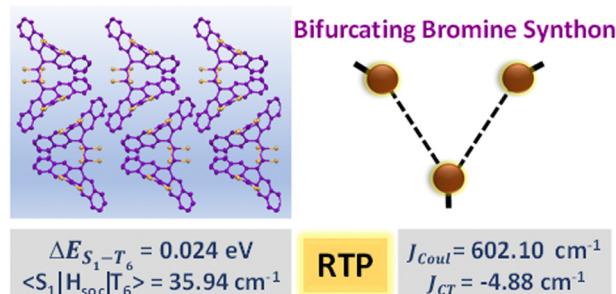
Mariyarthinam Vinoth Inbaraj and Govindhan Maduraiveeran*



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Room-temperature phosphorescence in crystalline bifurcating halogen···halogen synthon containing chromophore

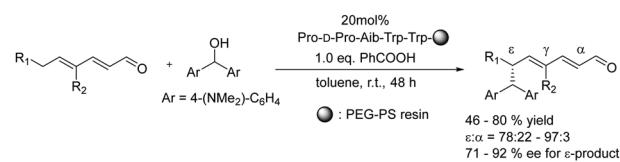
Suvarna Sujilkumar, Agaja Kalyani and Mahesh Hariharan*



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Peptide catalyzed regio- and enantioselective ε -alkylation of γ -branched 2,4-dienals via trienamine activation

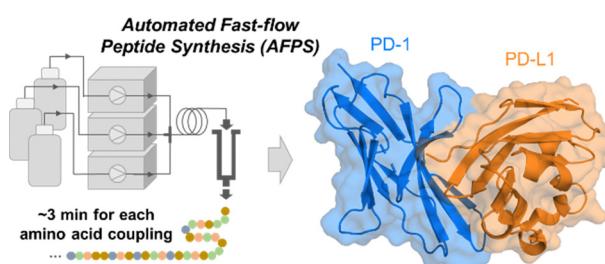
Qian Liu, Kengo Akagawa and Kazuaki Kudo*



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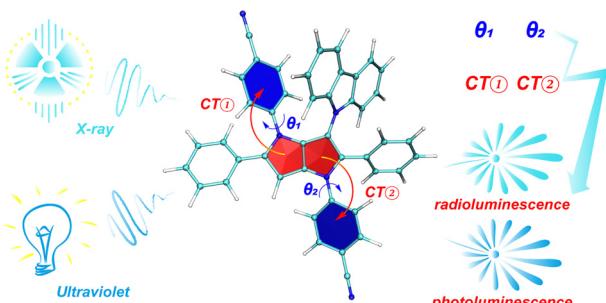
Automated fast-flow synthesis of the immune checkpoint receptors PD-1 and PD-L1

Giulio Fittolani, Alex J. Callahan, Andrei Loas and Bradley L. Pentelute*



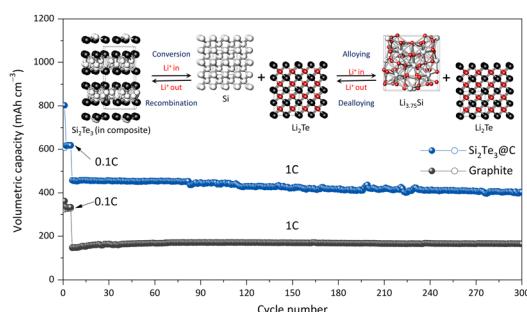
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**Tuning charge transfer properties in symmetric and asymmetric pyrrolo[3,2-b]pyrrole derivatives with hybridized local and charge-transfer characteristics**

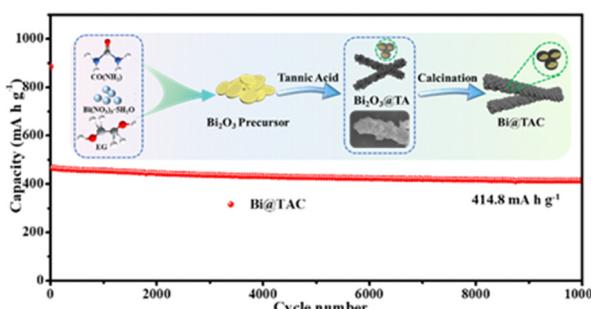
Jie Su, Jian Wei, Kaishun Ye, Feiyang Li,* Mengzhu Wang, Qixia Li, Aihua Yuan, Qiang Zhao* and Chao Shi*

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**Layered Si₂Te₃-based anodes for high-performance Li-ion batteries**

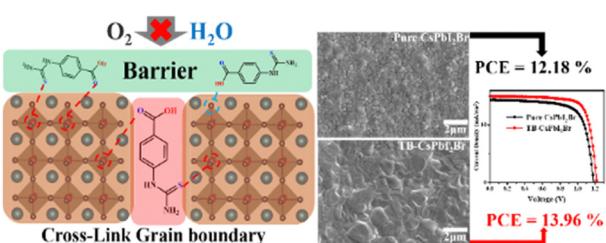
Byeong Guk Kim, Jihyeon Ryu, Dong Gyun Hong, Kyungmin Do, Sooyeon Jeong, Hye Jung Lee, Seung Yol Jeong,* Sunhye Yang* and Ki-Hun Nam*

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**Tannic acid-derived carbon-coated Bi nanodiscs for high-performance sodium-ion batteries**

Xiangyu Zhang, Manyi Zheng, Chunzheng Wu, Sha Li, Bing Li, Jianzhong Guo,* Mingdeng Wei* and Lin Chen*

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**Efficient carbon-based CsPbI₂Br perovskite solar cells achieved via coordination passivation by C=S and C=O of 4-(2-thioureido)benzoic acid**

HaoJu Li, Changzhong Wang, Yuhang Liang, Guangli Liu, Huang Cheng, Raochen Xie, Longxiang Luo and Yannan Qian*

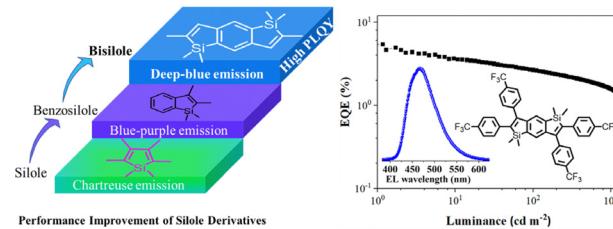


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**1,5-Disila-s-indacene-based emitters:
a molecular design towards efficient blue OLEDs**

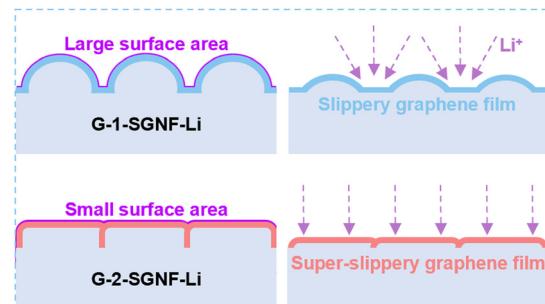
Jianbin Feng, Kerim Samedov, Yanfei Lu,
Dongcheng Chen* and Yuanjing Cai*



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A super-slippery graphene film enables highly reversible superdense deposition of a lithium metal anode

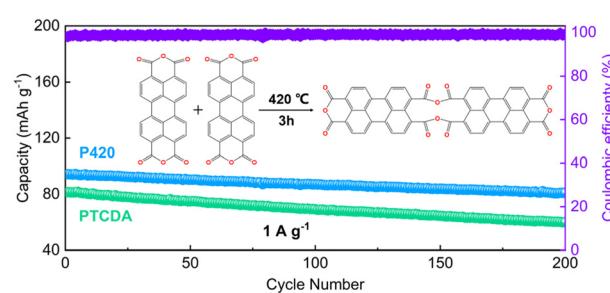
Heng Dong, Shengdi Luo, Junquan Lai, Linyi Zhang,
Bo Hong, Mengran Wang,* Yangen Zhou,* Jie Li and
Yanqing Lai



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Self-polymerization of carbonyl pigments for high-performance aqueous ammonium-ion batteries

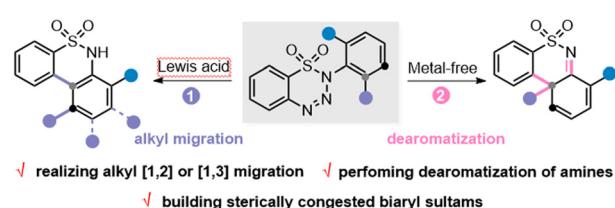
Jinyao Yang, Wendi Wang, Zeyu Cao, Jingyuan Zhang,
Hang Ren, Ying Yang, Huaiyu Shao and
Shengyang Dong*



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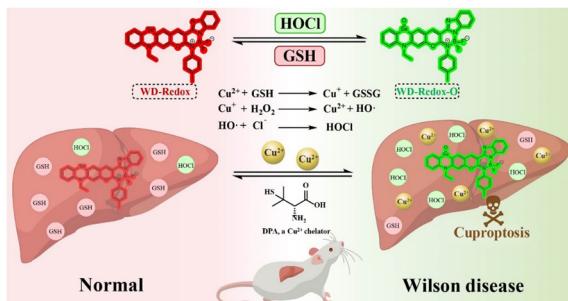
Radical-mediated chemo-divergent recyclization of 1,2,3,4-benzothiadiazine-1,1-dioxides: alkyl migration and dearomatization

Jiang Nan,* Shuai Yang, Guanjie Huang and
Liangxin Fan*



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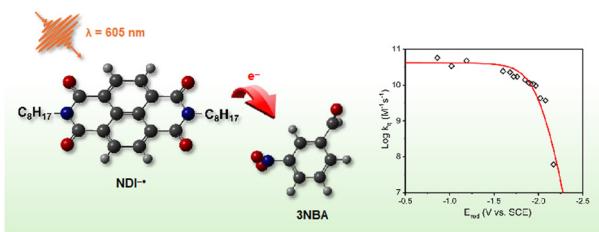
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Elucidating cuproptosis-linked redox dynamics in Wilson's disease via a reversible ratiometric fluorescence strategy

Shunping Zang, Qingguo He, Yuyang Zeng, Yuyang Huang, Benhua Wang,* Qing Liu* and Xiangzhi Song*

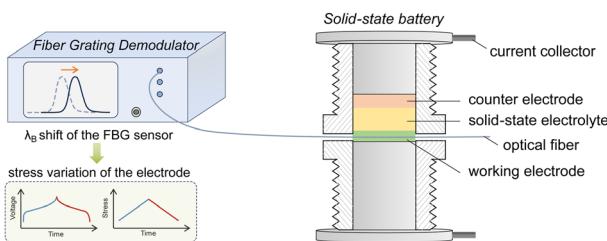
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Photoinduced electron transfer from the naphthalene diimide anion radical doublet excited state

Soojin Kim, Charles J. Zeman IV, Habtom B. Gobeze, Naresh Duvva and Kirk S. Schanze*

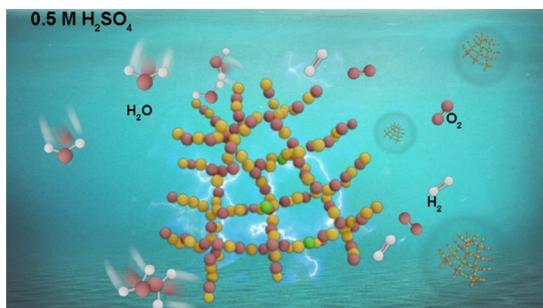
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Monitoring internal stress variation of solid-state batteries by fiber Bragg grating

Hui Pan, Sixie Yang, Haoshen Zhou and Ping He*

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Cerium regulating Ru–O covalency enhances the RuO_2 acidic oxygen evolution reaction

Pingping Wang, Jinglin Mu, Guozhou Feng, Yuxin Fan, Yaping Pan, Lechen Diao,* Zhichao Miao and Jin Zhou*



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**General aggregation-induced deposition approach
for creating asymmetric single-atom catalysts**

Yutong Liao, Yingjie Chang, Yanqing Wang* and Qi Li*

