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Cover

See Jun Liu, Fan Wu, Aming Xie, Weijin Li, Haibo Zeng *et al.*, pp. 7196–7199. Image reproduced by permission of Weijin Li from *Chem. Commun.*, 2023, 59, 7196.



Inside cover

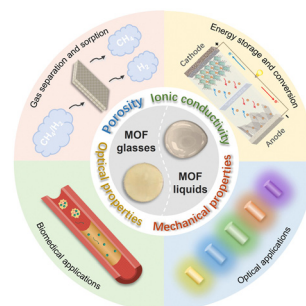
See Elfi Kraka *et al.*, pp. 7151–7165. Image reproduced by permission of Elfi Kraka from *Chem. Commun.*, 2023, 59, 7151.

HIGHLIGHTS

7126

Functions and applications of emerging metal–organic-framework liquids and glasses

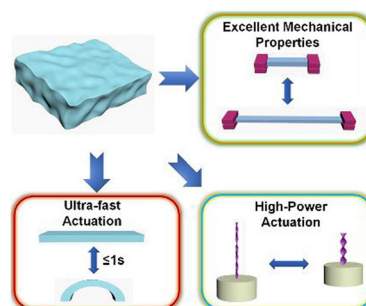
Mingyue Wang, Hongyang Zhao, Bowei Du, Xuan Lu, Shujiang Ding* and Xiaofei Hu*



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Designing strong, fast, high-performance hydrogel actuators

Burhan Bin Asghar Abbasi, Matthew Gigliotti, Sinnisola Aloko, Maryam Adavoudi Jolfaei, Geoffrey M. Spinks* and Zhen Jiang*



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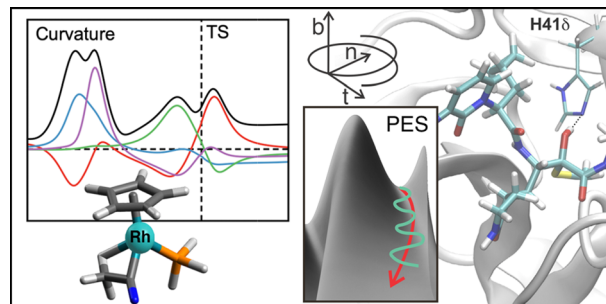


FEATURE ARTICLES

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Reaction mechanism – explored with the unified reaction valley approach

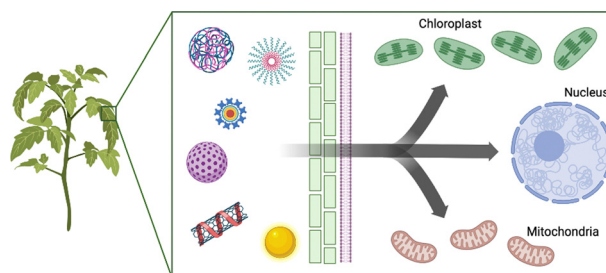
Elfi Kraka,* Juliana J. Antonio and Marek Freindorf



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Organelle-targeted gene delivery in plants by nanomaterials

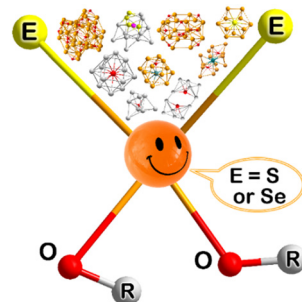
Simon Sau Yin Law,* Takaaki Miyamoto and Keiji Numata*



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Recent progress in dichalcophosphate coinage metal clusters and superatoms

Alexander V. Artem'ev and C. W. Liu*

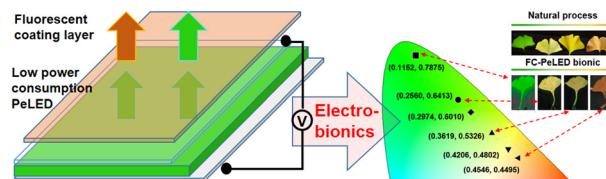


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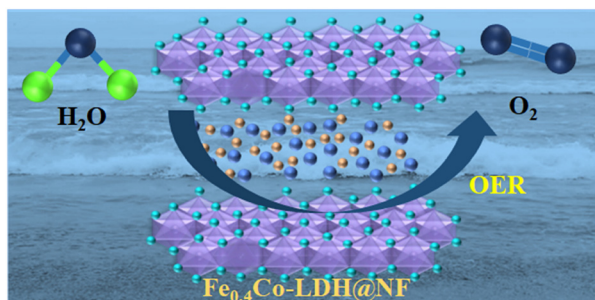
Bionic electroluminescent perovskite light-emitting device

Hengyang Xiang, Saichao Zhao, Yifei Wang, Run Wang, Xinxin Li, Hao Wang, Yuquan Laigao, Jun Liu,* Fan Wu,* Aming Xie,* Weijun Li* and Haibo Zeng*



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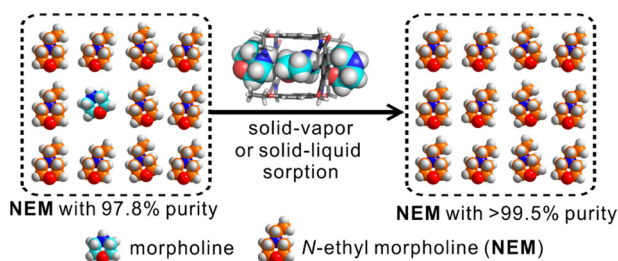
7200



Iron(III) ion-assisted transformation of ZIF-67 to a self-supported Fe_xCo-layered double hydroxide for improved water oxidation

Priyanka Maurya, Ved Vyas, Abhay Narayan Singh and Arindam Indra*

7204



Selective adsorption of trace morpholine impurities over *N*-ethyl morpholine by tetralactam solids

Shi-Yao Li, Huan Yao, Hao Hu, Wen-Jie Chen, Liu-Pan Yang* and Li-Li Wang*

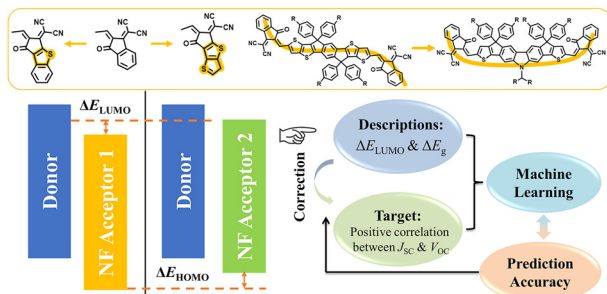
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High-performance reduced graphene oxide supercapacitors enabled by simple amino hydroquinone dimethylether

Yang Luo, Haihui Lin, Yuxiao Chu, Jian Wang, Naxing Liu, Lei Dong,* Fu-Gang Zhao,* Yuegang Chen* and Yongmiao Shen*

7212



Energy differences as descriptors for the correlation between J_{sc} and V_{oc} in nonfullerene organic photovoltaics

Yue Ren, Ming-Yang Li, Ming-Yue Sui, Guang-Yan Sun* and Zhong-Min Su*

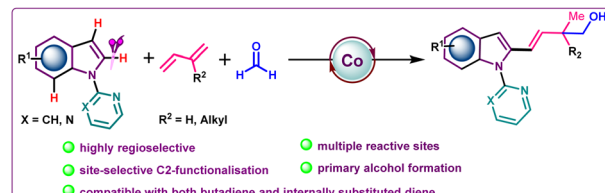


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Co(III)-Catalyzed three-component assembling of *N*-(2-pyrimidyl) indoles with dienes and formaldehyde

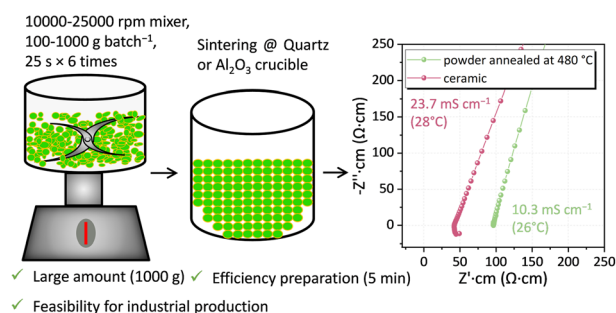
Priyambada Prusty and Masilamani Jeganmohan*



7220

20 mS cm⁻¹ Li-argyrodite solid electrolyte produced via facile high-speed-mixing

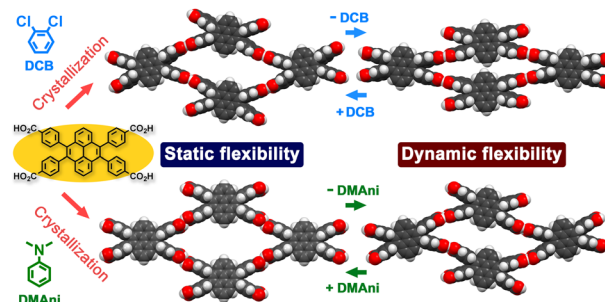
Hannan Chen, Yang Lu, Haochang Zhang, Yongjian Zhou, Jie Chen, Xiao Huang* and Bingbing Tian*



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Statically and dynamically flexible hydrogen-bonded frameworks based on 4,5,9,10-tetrakis(4-carboxyphenyl)pyrene

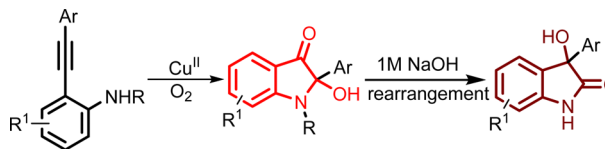
Taito Hashimoto, Ryusei Oketani, Asato Inoue, Kohei Okubo, Kouki Oka, Norimitsu Tohnai, Kazuhide Kamiya, Shuji Nakanishi and Ichiro Hisaki*



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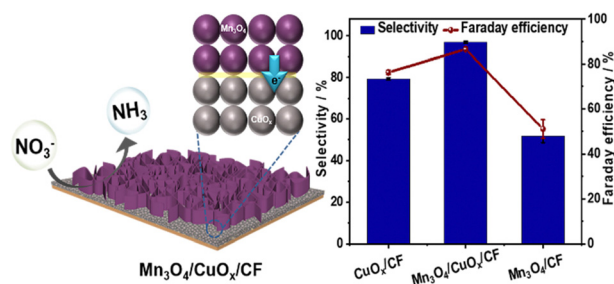
Facile access to 2-hydroxy-2-substituted indole-3-ones via a copper-catalyzed oxidative cyclization of 2-arylethynylanilines

Weiqiang Sun, Xueli Cui, Jing Qu, Xiaojia Cai, Jinhui Hu, Zhuang Xiong, Suqin Guo, Jun Xu,* Wen-Hua Chen* and Jia-Qiang Wu*



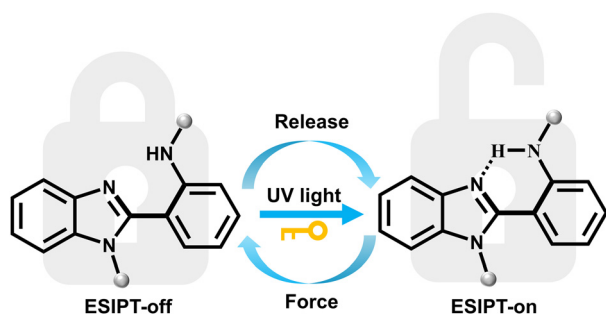
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 **$\text{Mn}_3\text{O}_4/\text{CuO}_x$ heterostructure for nitrate electroreduction to ammonia**

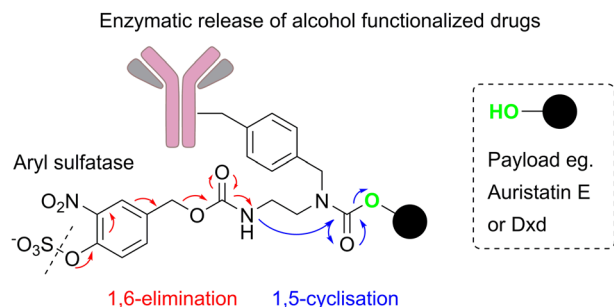
Jun Hu, Aijing Ma, Xuan Wu, Yilin Yin, Dan Liu,*
 Alex T. Kuvarega, Bhekia B. Mamba and Jianzhou Gui*

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**Photo-gated polymer mechanochromism from excited-state intramolecular proton transfer**

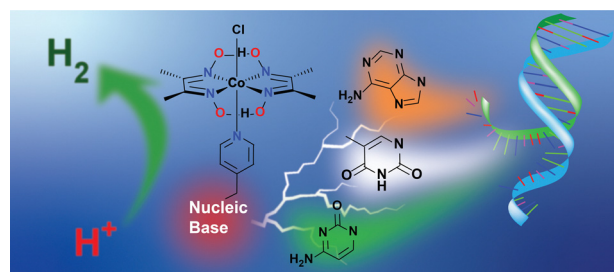
Xin Cheng, Huan Hu, Yu Wu, Zhimin Ma and
 Zhiyong Ma*

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**Targeted delivery of alcohol-containing payloads with antibody-drug conjugates**

Katja E. Grier, Anders H. Hansen, Christina S. Haxvig,
 Xin Li, Oliver Krigslund, Niels Behrendt,
 Lars H. Engelholm, Fabio Rossi, Bebiana C. Sousa,
 Grant J. Harradence, Nicolas Camper and
 Katrine M. Qvortrup*

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**Peripheral nucleic bases boost H_2 production by synthetic molecular catalysts in acidic water**

Srewashi Das, Chandan Das, Naseer Ahmad Shah,
 Santanu Ghorai, Piyali Majumder and Arnab Dutta*

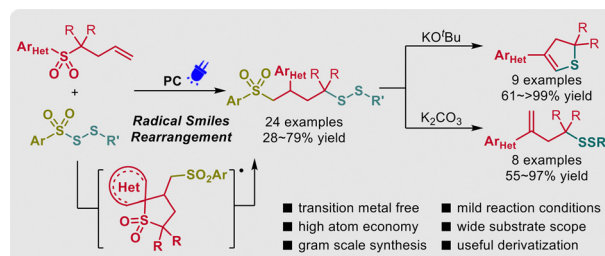


Baoxu Wang, Zijing Hu, Lu Huang, Xiaorui Ren,
Qianwen Gao* and Xi Wang*

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Redox flexibility in a germanium hydride mediating hydrogen shuttling *via* oxidative addition and reductive elimination

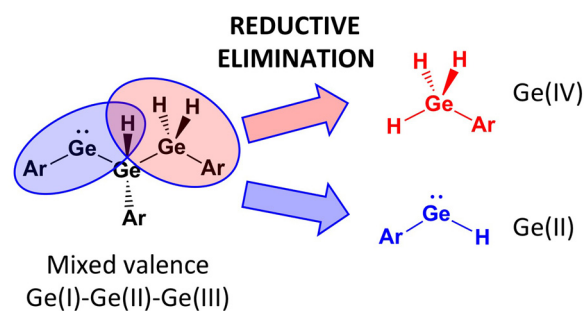
Alexa Caise, Jamie Hicks, Andreas Heilmann and Simon Aldridge*



7251

Redox flexibility in a germanium hydride manifold: hydrogen shuttling *via* oxidative addition and reductive elimination

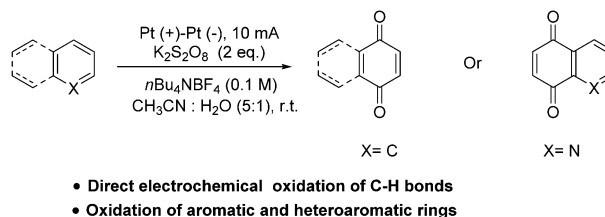
Alexa Caise, Jamie Hicks, Andreas Heilmann and
Simon Aldridge*



7255

Direct electrochemical synthesis of quinones from simple aromatics and heteroaromatics

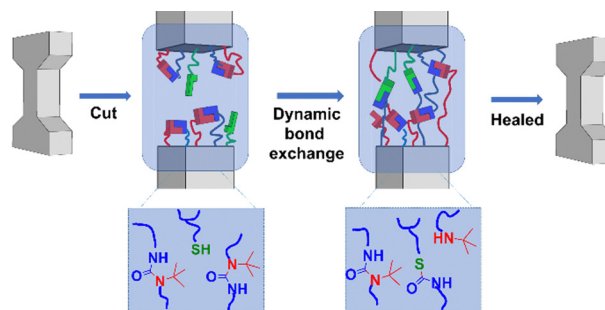
Ling Zhang, Youtian Fu, Lei Yang, Liming Cao, Junjun Yi,
Maolin Sun, Ruihua Cheng, Yueyue Ma* and Jinxing Ye*



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Self-reinforced and self-healing dynamic covalent polymeric networks with shifting chemical structures

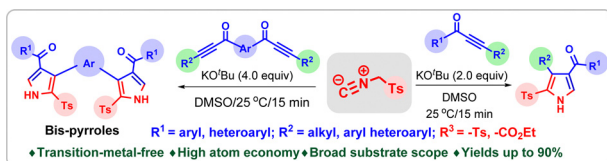
Ziwen Zhang and Chong Cheng*



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Base-mediated ynone-isocyanide [3+2] cycloaddition: a general method to 2,3,4-tri-substituted 1-*H*-pyrroles and bis-pyrroles

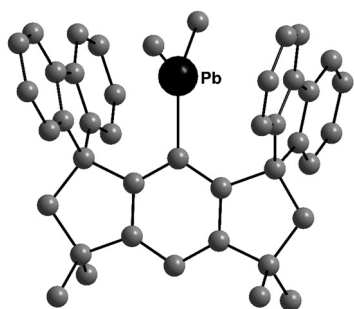
Ankit Kumar, Pawan K. Mishra and Akhilesh K. Verma*



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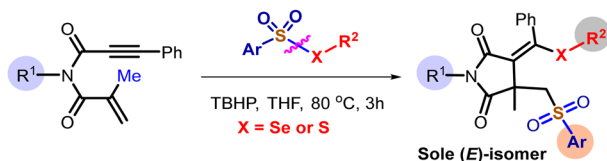
Aryldimethylelement cations of the heavier group 14 elements. An essentially three-coordinate plumbium ion

Marvin Janssen, Stefan Mebs* and Jens Beckmann*



7271

Stereoselective difunctionalization of aza-1,6-enynes

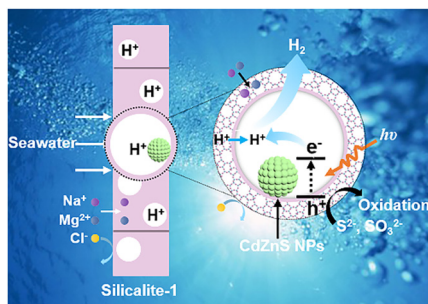
 R^1 = Aryl, Benzyl, alkyl, cyclopropyl, R^2 = Ar, HetAr, Me, Et, Pentynyl

- Highly stereoselective • Broad substrate scope
- Transition metal free • Yield upto 89% • Atom economic

Stereoselective synthesis of difunctionalized succinimides from aza-1,6-enynes by radical cascade reaction

Shivam A. Meena, Poonam Sharma and Akhilesh K. Verma*

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Hierarchical zeolites containing embedded Cd_{0.2}Zn_{0.8}S as a photocatalyst for hydrogen production from seawater

Yue Yuan, Feng-Juan Wu, Shi-Tian Xiao, Yi-Tian Wang, Zhi-Wen Yin, Gustaaf Van Tendeloo, Gang-Gang Chang, Ge Tian, Zhi-Yi Hu,* Si-Ming Wu* and Xiao-Yu Yang*

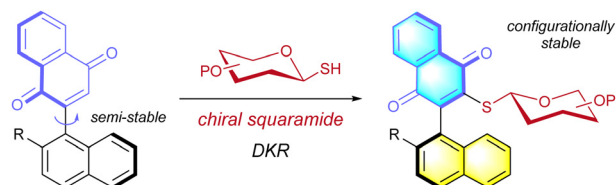


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Organocatalytic atroposelective synthesis of naphthoquinone thioglycosides from aryl-naphthoquinones and thiosugars

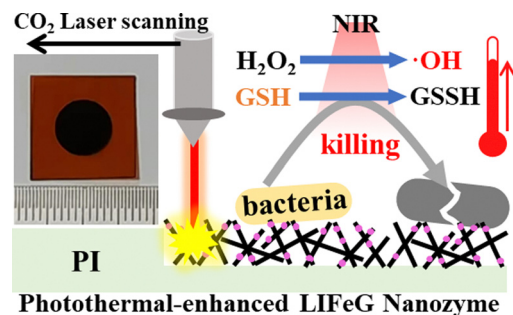
Yuling Wu, Wu-Jingyun Zhou, Laiping Yao, Yadi Niu, Hongli Zhao, Cheng Peng, Bo Han, Wei Huang* and Gu Zhan*



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A laser-induced Fe_3O_4 -graphene nanozyme for catalytic-photothermal synergetic bactericidal applications

Limin Yang, Liuying Chen, Zhiliang Feng, Haiyan Shi, Baokun Wang, Wenjie Liu, Xiaojuan Liu, Ting Hou, Lei Ge* and Feng Li*



CORRECTION

7287

Correction: Reinforced hydrogel network building by a rapid dual-photo-coupling reaction for 3D printing

Renjie Zhou, Yujie Hua, Lipeng Yang, Bingkun Bao,* Qiuning Lin* and Linyong Zhu

