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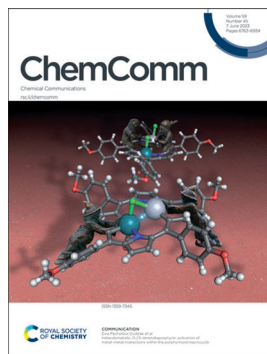
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ISSN 1359-7345 CODEN CHCOFS 59(45) 6763-6934 (2023)



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See Hanfeng Liang *et al.*, pp. 6837–6840.
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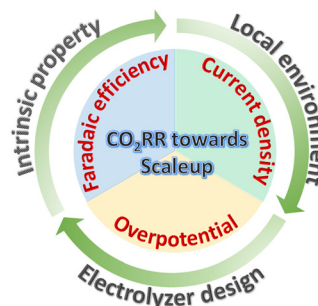
See Ewa Pacholska-Dudziak *et al.*, pp. 6841–6844.
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HIGHLIGHT

6774

CO₂ electrolysis towards large scale operation: rational catalyst and electrolyte design for efficient flow-cell

Kshirodra Kumar Patra and Chinnakonda S. Gopinath*

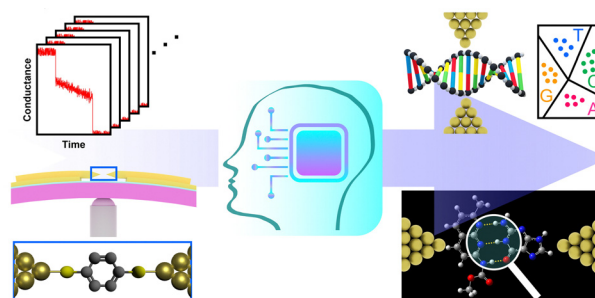


FEATURE ARTICLES

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Machine learning and analytical methods for single-molecule conductance measurements

Yuki Komoto, Jiho Ryu and Masateru Taniguchi*



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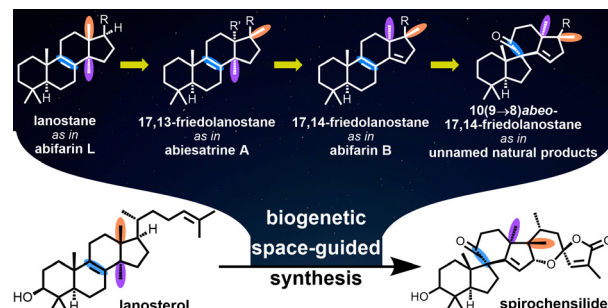


FEATURE ARTICLES

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Biogenetic space-guided synthesis of rearranged terpenoids

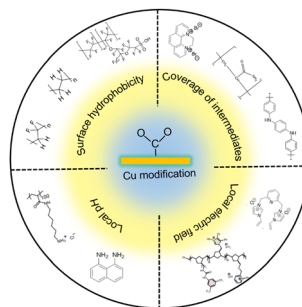
Mykhaylo Alekseychuk and Philipp Heretsch*



6827

Organic-moiety-engineering on copper surface for carbon dioxide reduction

Chenbao Lu, Yuezeng Su,* Jinhui Zhu, Jie Sun* and Xiaodong Zhuang*

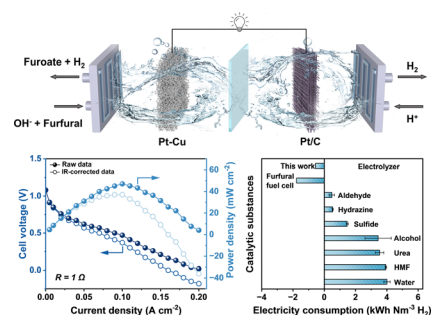


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An acid-alkaline furfural hybrid battery for furoate and bipolar hydrogen production

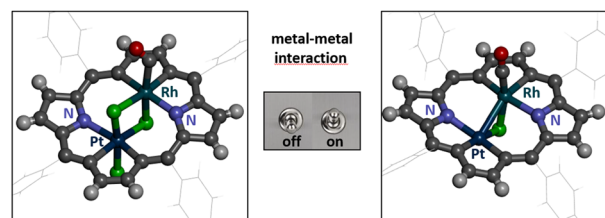
Xiaoyi Zhang, Weijie Zhu, Hao Zhou, Lin Sun, Zhoucheng Wang and Hanfeng Liang*



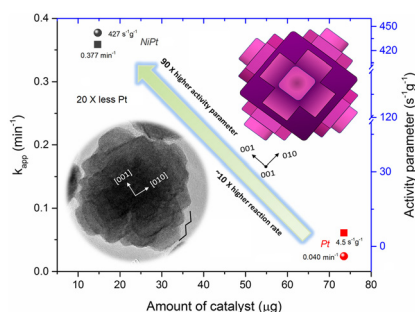
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Heterobimetallic 21,23-dimetallaporphyrin: activation of metal-metal interactions within the porphyrinoid macrocycle

Grzegorz Vetter, Agata Białońska, Aneta Jezierska, Jarosław J. Panek and Ewa Pacholska-Dudziak*



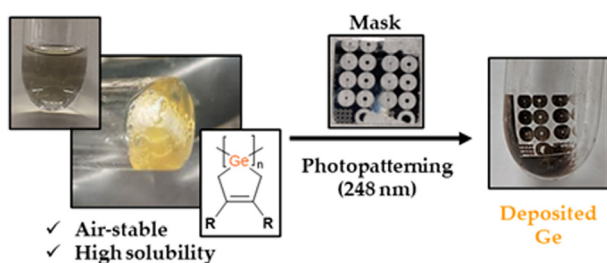
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PDDA induced step-pyramidal growth of nickel–platinum (Ni–Pt) nanoparticles for enhanced 4-nitrophenol reduction

Lourdes Bazán-Díaz, Ariadna Pérez, Naveen Kumar Reddy Bogireddy, J. Jesús Velázquez-Salazar, Israel Betancourt, Miguel José-Yacamán, Raúl Herrera-Becerra and Rubén Mendoza-Cruz*

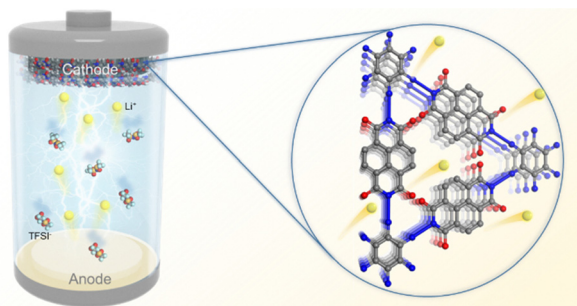
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Germanium photopatterning via poly(cyclogermapentene)s

William Medroa del Pino, Andres A. Ferero Pico, Manisha Gupta and Eric Rivard*

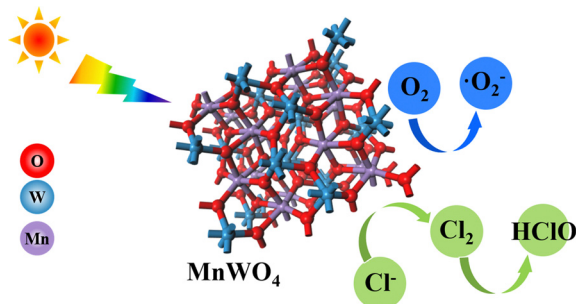
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Rational design of covalent organic frameworks with high capacity and stability as a lithium-ion battery cathode

Derong Luo, Jing Zhang, Huizi Zhao, Hai Xu, Xiaoyu Dong, Langyuan Wu, Bing Ding, Hui Dou* and Xiaogang Zhang*

6857



Breaking the barrier: a MnWO_4 photocatalyst enables solar chlorine production from seawater without noble metals

Shuiquan Han, Yi Wang,* Dun Zhang and Hailin Cong*

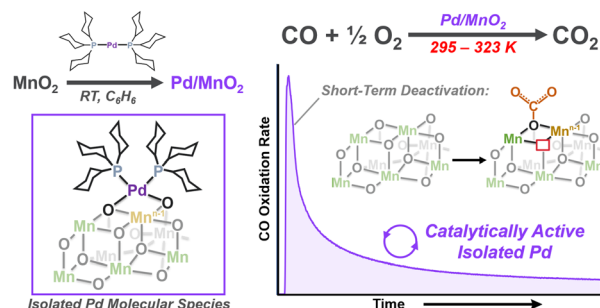


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Structural and reactive evolution of oxidatively grafted Pd catalysts on MnO₂ for the low-temperature oxidation of CO

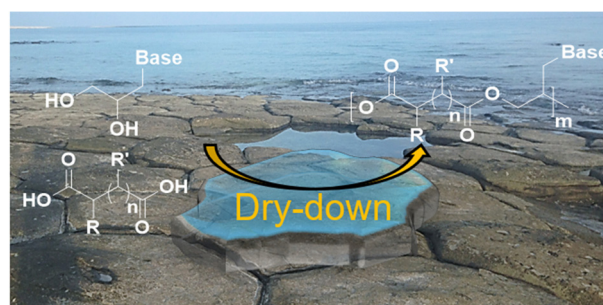
Jacklyn N. Hall, A. Jeremy Kropf,* Uddhav Kanbur, Fulya Dogan, Carly Byron, Jianguo Wen, Massimiliano Delferro* and David M. Kaphan*



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Alternating co-synthesis of glycol nucleic acid (GNA) monomers with dicarboxylic acids *via* drying

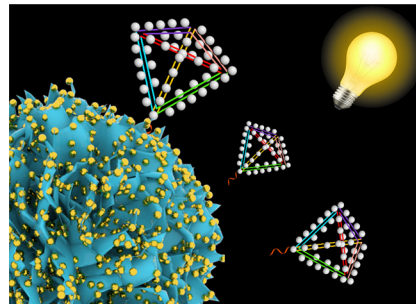
Ruiqin Yi,* Tony Z. Jia, Markus Meringer, Luke K. Marshall, Chen Chen, Shawn Erin McGlynn, Albert C. Fahrenbach and H. James Cleaves II*



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Reusable electrochemiluminescence biosensor based on tetrahedral DNA signal amplification for ultrasensitive detection of microRNAs

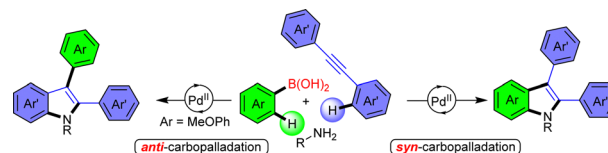
Jingjing Zhang, Jingfeng Zhu, Fenglian Guo, Jinke Jiang, Mo Xie, Lin Hao* and Jie Chao*



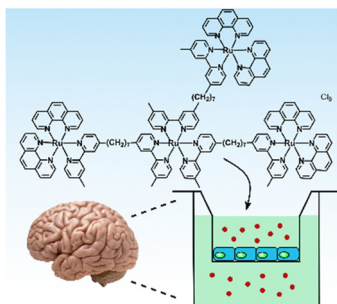
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Syn- versus *anti*-carbopalladation of alkynes with organoborons: access to indoles symmetrically and unsymmetrically substituted on their 2,3-positions

Mehran Ghasemi, Banafshe Rahimi, Maryam Dehghan, Mohammad Hossein Bernoosha and Farnaz Jafarpour*



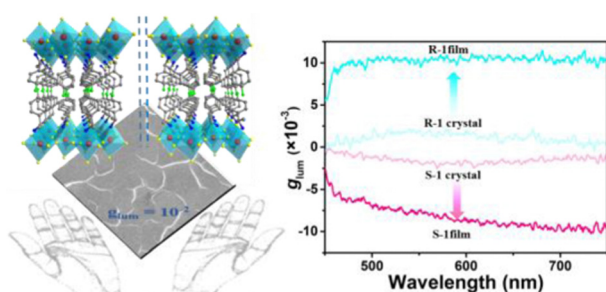
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A tetranuclear polypyridylruthenium(II) complex as a selective stain for extracellular vesicle penetration through brain microvascular endothelium

Kartika Wardhani, Aviva Levina, Biyun Sun, Georges E. R. Grau, F. Richard Keene, J. Grant Collins and Peter A. Lay*

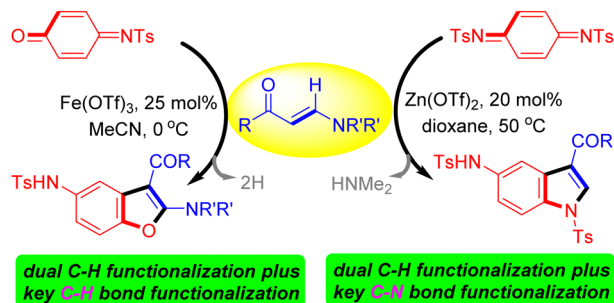
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Circularly polarized luminescence enlargement from crystals to oriented films of enantiopure 2D hybrid perovskites

Xuan-Hui Zhao, Na-Na Li, Jing Peng, Jun Xu, Peng Luo, Xi-Yan Dong* and Xiaozong Hu*

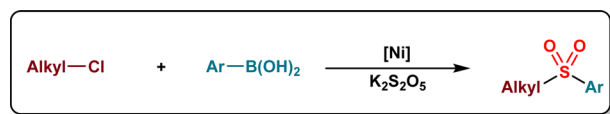
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Annulation of enaminones with quinonediimides/quinoneimides for selective synthesis of indoles and 2-aminobenzofurans

Zukang Zhong, Lihua Liao, Yunyun Liu, Ming Zhang and Jie-Ping Wan*

6889



- Readily available non-activated alkyl chlorides
- Cheap and commercially available SO_2 source
- High selectivity with the 1/1.1/1.2 ratio of alkyl-Cl: $\text{K}_2\text{S}_2\text{O}_5$: ArB(OH)_2

Nickel catalyzed three-component sulfonylation of non-activated alkyl chlorides

Chang Gu, Zhuochen Wang and Renyi Shi*

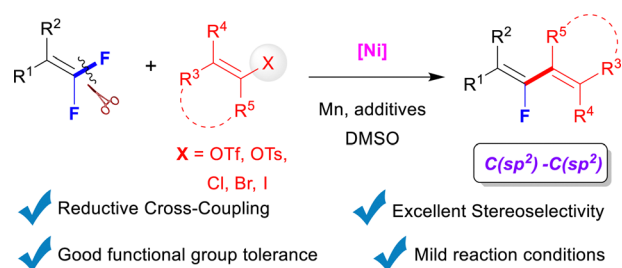


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Nickel-catalyzed stereoselective reductive cross-coupling of *gem*-difluoroalkenes with alkenyl electrophiles

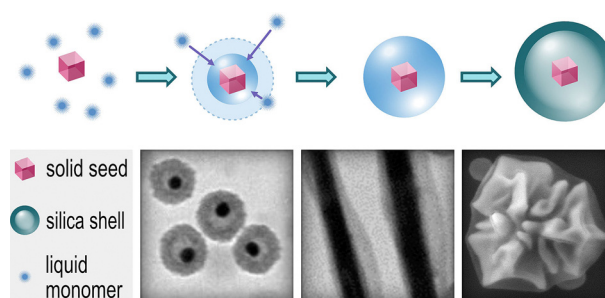
Xiaowei Li, Yuxiu Li, Wenlong Shan, Zemin Wang, Ruihua Liu, Zhong Zhang, Xiangqian Li and Dayong Shi*



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Liquid-on-solid heterogeneous nucleation for a general synthesis of yolk-shell nanostructures

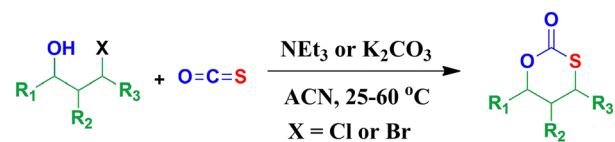
Huiying Guo, Huai Lin, Zhouling Wu, Ruoxu Wang* and Hongyu Chen*



6901

Efficient synthesis of 6-membered cyclic monothiocarbonates from halohydrin and carbonyl sulfide

Yang Li, Jianghui Li, Yingying Zhang, Zizheng Fang* and Chengjian Zhang*

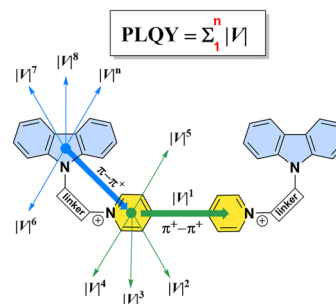


- easy-to-obtain starting materials
- high yields and selectivity
- mild reaction conditions

6905

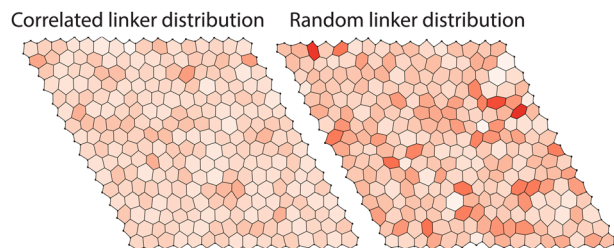
The emission efficiency of cationic solid state luminophores is directly proportional to the intermolecular charge transfer intensity

Kaspars Leduskrasts, Artis Kinens and Edgars Suna*



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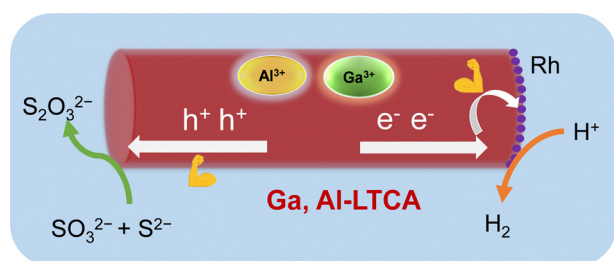
6909



The effect of disorder in multi-component covalent organic frameworks

Emma H. Wolpert,* Andrew Tarzia and Kim E. Jelfs*

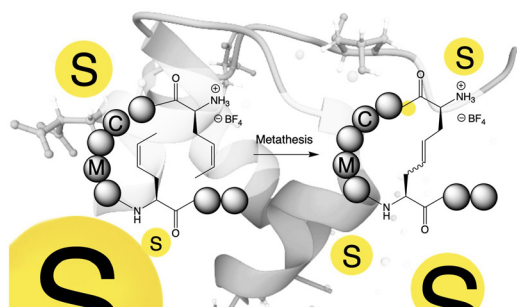
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Co-doping of a $\text{La}_5\text{Ti}_2\text{Cu}_{0.9}\text{Ag}_{0.1}\text{O}_{7.5}\text{S}_5$ photocatalyst ($\lambda < 700 \text{ nm}$) with Ga and Al to enhance photocatalytic H_2 evolution

Xiaojun Wang, Zhenhua Pan, Junie Jhon M. Vequizo, Takashi Hisatomi, Swarnava Nandy, Tomohiro Higashi, Lihua Lin, Jiadong Xiao, Tsuyoshi Takata, Akira Yamakata, Wei Yan* and Kazunari Domen*

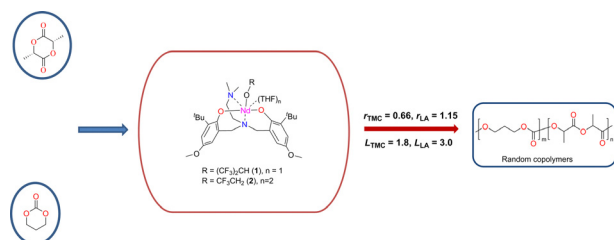
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Negating coordinative cysteine and methionine residues during metathesis of unprotected peptides

Amy L. Thomson, Ellen C. Gleeson, Alessia Belgi, W. Roy Jackson, Ekaterina I. Izgorodina and Andrea J. Robinson*

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Random copolymerization of trimethylene carbonate with L-lactide initiated by amine-bridged bis(phenolate) neodymium alkoxides

Guojun Hu, Yanwei Wang, Yaorong Wang, Xuehua Zhu, Dan Yuan* and Yingming Yao*

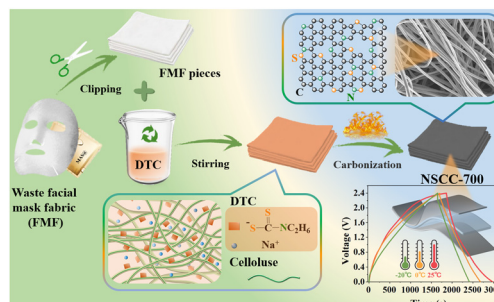


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A N/S co-doped free-standing carbon electrode derived from waste facial masks for anti-freezing flexible quasi-solid-state supercapacitors

Yong Ye, Hongchuan Zhang, Yu Shi, Yijiang Liu, Huaming Li, Zhiyu Wang,* Mei Yang* and Bei Liu*



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Zn-ProPhenol catalyzed asymmetric inverse-electron-demand Diels–Alder reaction

Yu-Hang Miao, Yuan-Zhao Hua,* Shi-Kun Jia, Xiao Xiao, Min-Can Wang* and Guang-Jian Mei*

