

Journal of Materials Chemistry A

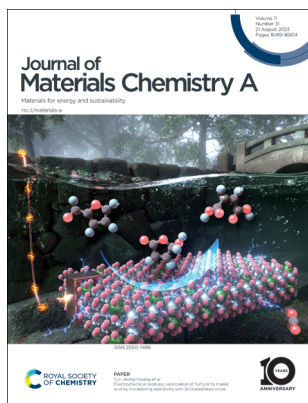
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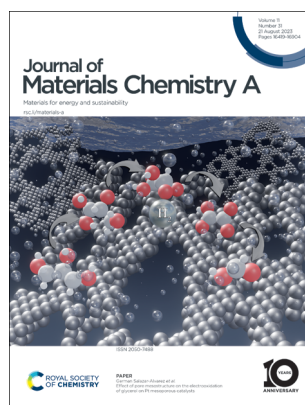
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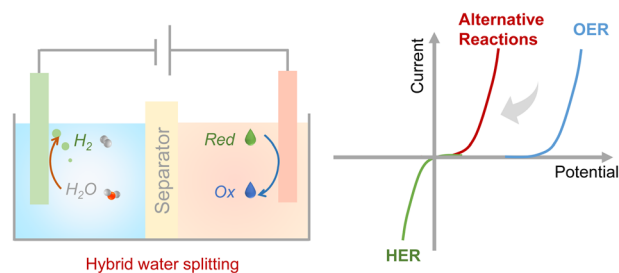
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Hybrid water electrolysis with integrated and cascading reactions using two-dimensional electrocatalysts

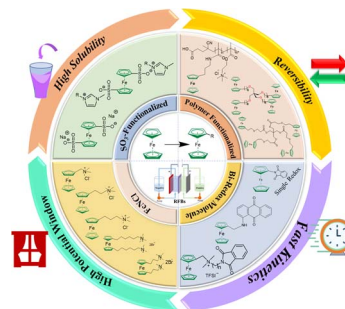
Dazhi Yao, Yanzhao Zhang, Shilin Zhang, Jun Wan,* Huimin Yu* and Huanyu Jin*



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Ferrocene to functionalized ferrocene: a versatile redox-active electrolyte for high-performance aqueous and non-aqueous organic redox flow batteries

Soumen Giri* and Ipsa Dash



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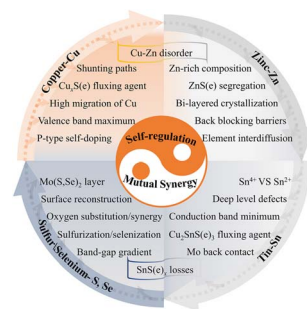


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A critical review on rational composition engineering in kesterite photovoltaic devices: self-regulation and mutual synergy

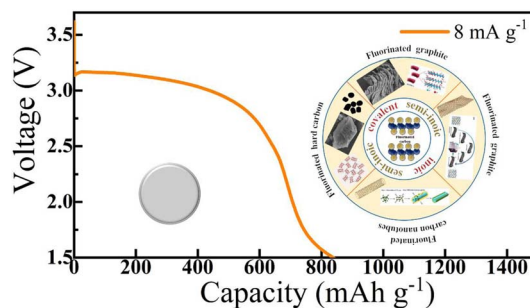
Jiajia Guo, Jianping Ao* and Yi Zhang*



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Research progress in fluorinated carbon sources and the discharge mechanism for Li/CF_x primary batteries

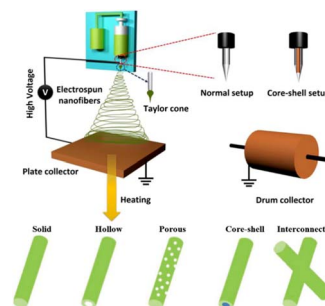
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Peng Wang, Jin-Hua Liu, Wenbo Cui, Xuehao Li, Zhi Li, Yong Wan, Jun Zhang* and Yun-Ze Long*

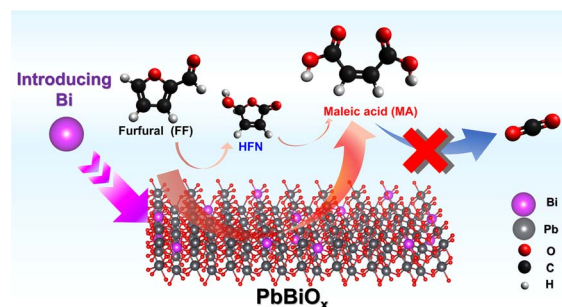


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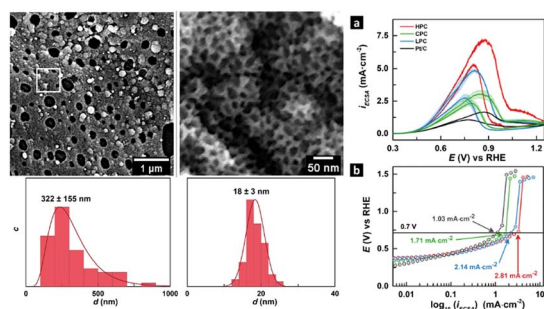
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Electrochemical biomass valorization of furfural to maleic acid by modulating selectivity with Bi-doped lead oxide

Eunchong Lee, Jae Hyung Kim, Juhung Choi, Yewon Hong, Dongwoo Shin, Hyewon Yun, Jimin Kim, Gwangsu Bak, Seongin Hong and Yun Jeong Hwang*



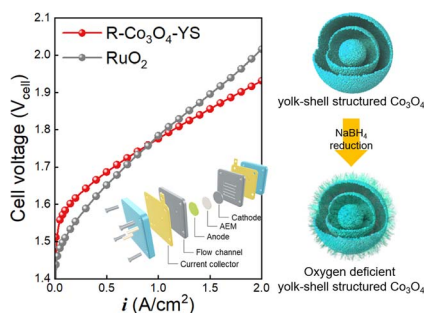
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Effect of pore mesostructure on the electrooxidation of glycerol on Pt mesoporous catalysts

Athira Anil, Jai White, Egon Campos dos Santos, Irina Terekhina, Mats Johnsson, Lars G. M. Pettersson, Ann Cornell and German Salazar-Alvarez*

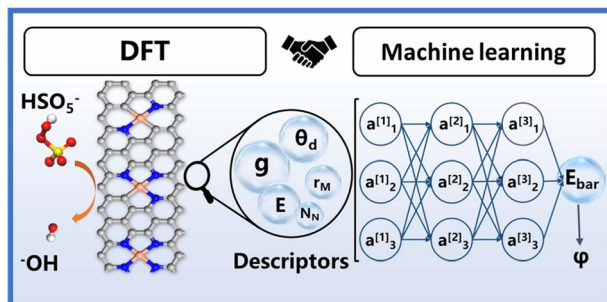
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Oxygen deficient yolk-shell structured Co_3O_4 microspheres as an oxygen evolution reaction electrocatalyst for anion exchange membrane water electrolyzers

In Tae Kim, Sang-Hyun Kim, Jun Seok Ha, Tae Ha Kim, Jungho Cho, Gi Dae Park* and Yoo Sei Park*

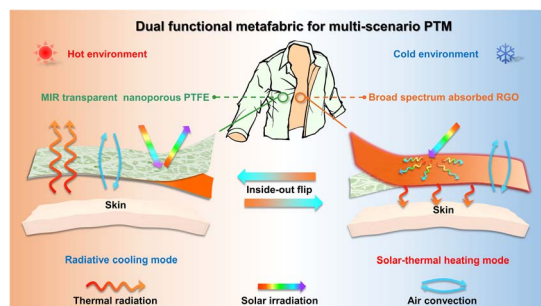
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Identifying key factors of peroxymonosulfate activation on single-atom M–N–C catalysts: a combined density functional theory and machine learning study

Yun Sun, Jiachun Cao, Qianyu Li, Didi Li and Zhimin Ao*

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Dual-functional reduced graphene oxide decorated nanoporous polytetrafluoroethylene metafabrics for radiative cooling and solar-heating

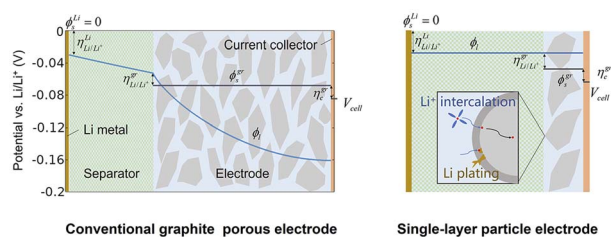
Zhuo Luo, Bai-Xue Li, Hao Sun, Ji Liu, Hao-Yu Zhao, Zhong-Zhen Yu* and Dongzhi Yang*



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Revealing the onset condition of Li plating on graphite electrodes under fast-charging

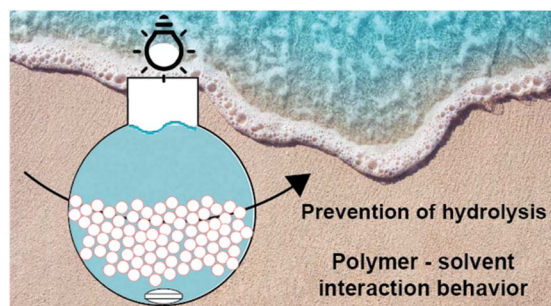
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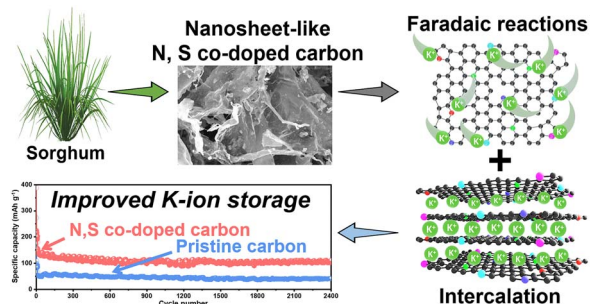
Kirsten Bell, Brock Hunter, Marvin Alvarez, Sai Dileep Kumar Seera, Yiwen Guo, Yen-Ting Lin, Seong H. Kim and Christian W. Pester*



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N and S co-doped nanosheet-like porous carbon derived from sorghum biomass: mechanical nanoarchitecturing for upgraded potassium ion batteries

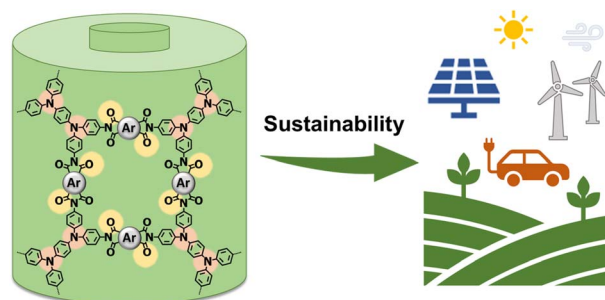
Minjun Kim, Liang Ma, Zhibin Li, Wenjie Mai, Nasim Amiralian,* Alan E. Rowan, Yusuke Yamauchi, Aimiao Qin, Rana Arslan Afzal, Darren Martin, Ashok Kumar Nanjundan and Jinliang Li*



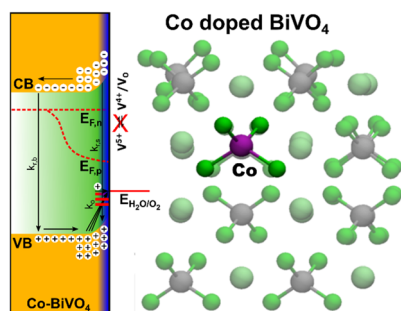
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Porous bipolar polymers as organic cathodes for sustainable sodium/potassium-ion batteries

Motahareh Mohammadiroudabari, Jinghao Huang, Eric Youngsam Kim, Zhenzhen Yang, Fu Chen and Chao Luo*



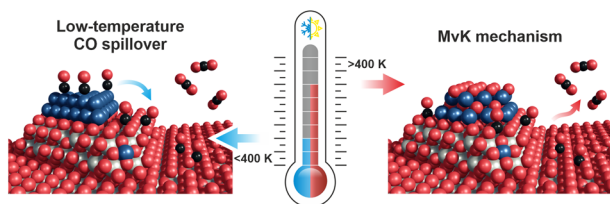
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Accelerating water oxidation on BiVO_4 photoanodes via surface modification with Co dopants

Mahsa Barzgar Vishlaghi, Abdullah Kahraman, Nicklas Österbacka, Emre Usman, Emre Erdem, Alphan Sennaroğlu, Julia Wiktor* and Sarp Kaya*

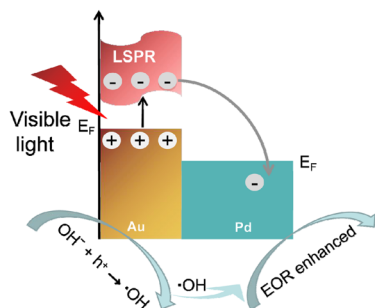
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Probing the redox capacity of Pt-CeO_2 model catalyst for low-temperature CO oxidation

Alexander Simanenkov, Maximilian Kastenmeier, Lesia Piliak, Yuliia Kosto, Tomáš Skála, Nataliya Tsud, Sascha Mehl, Mykhailo Vorokhta, Iva Matolínová, Yaroslava Lykhach* and Jörg Libuda

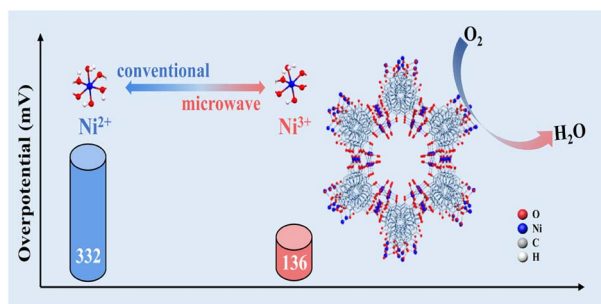
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Surface-plasmon-enhanced ethanol electrocatalysis and enhancement mechanism of nanoporous AuPd with wide-spectrum response characteristics under visible light irradiation

Cuilan Tang, Guo Chen, Yansong Liu, Jian Wang, Xiaoshan He, Chunping Xie, Zhibing He* and Jinglin Huang*

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Enhancing the electrocatalytic activity of metal-organic frameworks in the oxygen evolution reaction by introducing high-valent metal centers

Jie Dong, Danil W. Boukhvalov, Cuncai Lv, Mark G. Humphrey, Chi Zhang* and Zhipeng Huang*

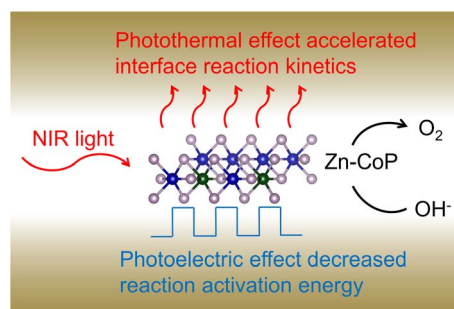


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Electrocatalytic water oxidation of coral-like porous Zn-CoP nanohybrids synergistically inspired by photothermal and photoelectric effects

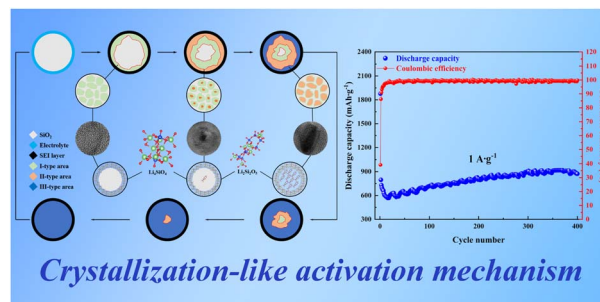
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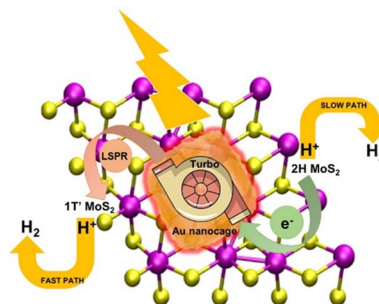
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Synergizing plasmonic Au nanocages with 2D MoS₂ nanosheets for significant enhancement in photocatalytic hydrogen evolution

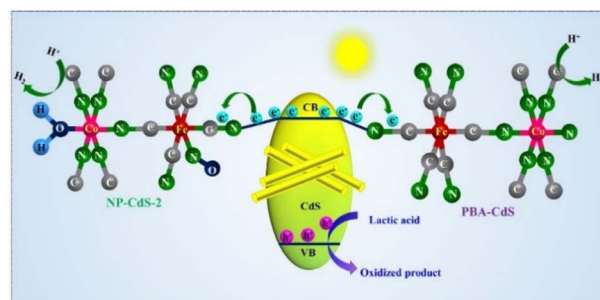
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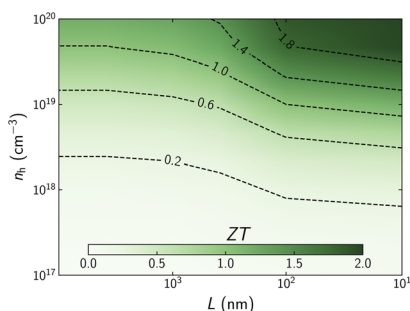
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Ajit Kumar Singh, Arpna Jaryal, Sunil Kumar Patel, Deepak Kumar, E. Siva Subramaniam Iyer,* Kamalakannan Kailasam* and Arindam Indra*



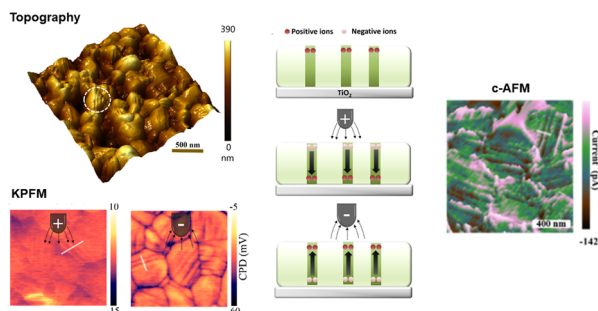
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Harnessing the unusually strong improvement of thermoelectric performance of AgInTe₂ with nanostructuring

Jose J. Plata,^{*} Ernesto J. Blancas, Antonio M. Márquez, Victor Posligua, Javier Fdez Sanz and Ricardo Grau-Crespo

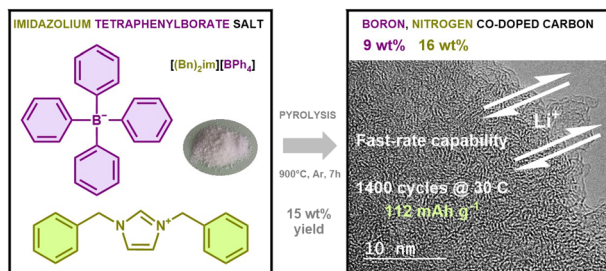
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Charge carrier transport properties of twin domains in halide perovskites

Dohyung Kim, Jae Sung Yun,^{*} Arun Sagotra, Alessandro Mattoni, Pankaj Sharma, Jincheol Kim, Da Seul Lee, Sean Lim, Padraic O'Reilly, Liz Brinkman, Martin A. Green, Shujuan Huang, Anita Ho-Baillie, Claudio Cazorla and Jan Seidel^{*}

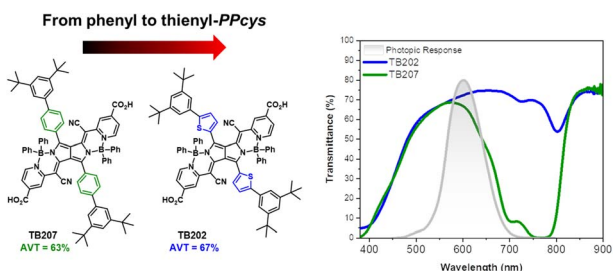
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Tailored imidazolium tetraphenylborate salts for the design of boron, nitrogen co-doped carbon materials as high-performance anodes for fast-rate monovalent ion batteries

Soha Aldroubi, Badre Larhrib, Louiza Larbi, Ibrahim Bou Malham, Camelia Matei Ghimbeu, Laure Monconduit, Ahmad Mehdi^{*} and Nicolas Brun^{*}

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Transparent and colorless DSSCs featuring thienyl-pyrrolopyrrole cyanine sensitizers

Thibaut Baron, Waad Naim, Mate Kurucz, Ilias Nikolinakos, Baptiste Andrin, Yann Pellegrin, Denis Jacquemin,^{*} Stefan Haacke,^{*} Frédéric Sauvage^{*} and Fabrice Odobel^{*}

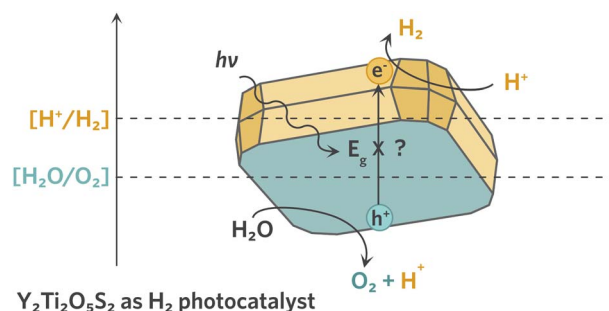


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Understanding the electronic structure of $\text{Y}_2\text{Ti}_2\text{O}_5\text{S}_2$ for green hydrogen production: a hybrid-DFT and GW study

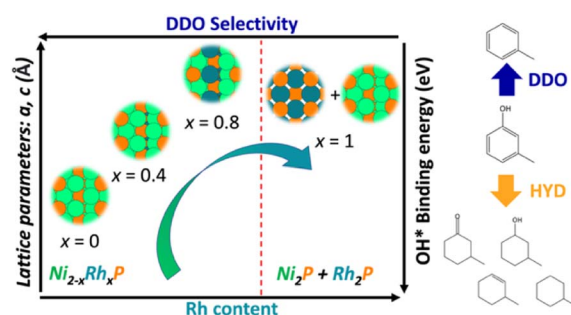
Katarina Brlec, Christopher N. Savory and David O. Scanlon*



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Compositional dependence of hydrodeoxygenation pathway selectivity for $\text{Ni}_{2-x}\text{Rh}_x\text{P}$ nanoparticle catalysts

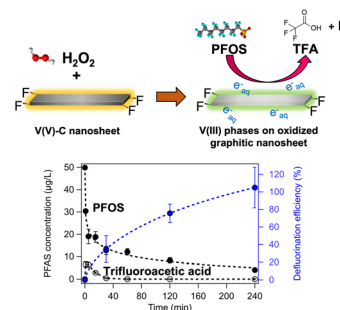
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H_2O_2 -catalyzed defluorination of perfluorooctanesulfonate (PFOS) by oxidized vanadium carbide MXene nanosheets

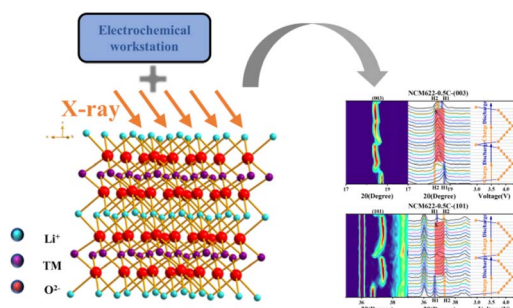
Yuemei Ye, Jessica M. Steigerwald, Hojeong Bang, Vivian Jones, Kaylie Dennehy and Jessica R. Ray*



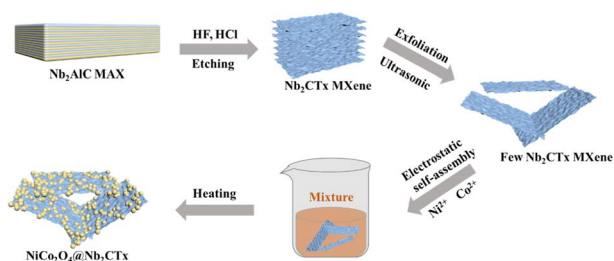
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In situ characterization of crystal phase evolution of the $\text{LiNi}_{0.6}\text{Co}_{0.2}\text{Mn}_{0.2}\text{O}_2$ cathode at different current densities

Yuhang Liu, Huanzhu Lv, Jun Mei, Yuanhua Xia, Jianli Cheng* and Bin Wang*



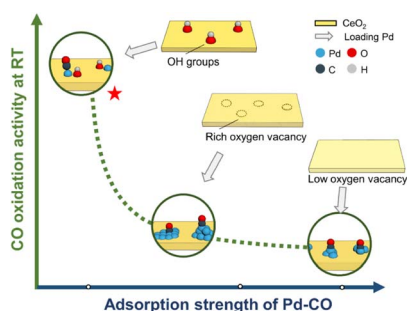
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A hollow nano-flower $\text{NiCo}_2\text{O}_4@\text{Nb}_2\text{CT}_x$ MXene heterostructure *via* interfacial engineering for high-performance flexible supercapacitor electrodes

Baolei Shen, Xilin Liao, Xianjin Hu, Hai-Tao Ren, Jia-Hong Lin, Ching-Wen Lou* and Ting-Ting Li*

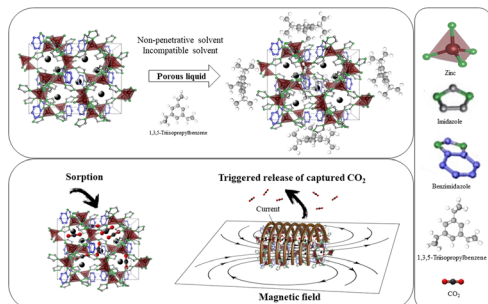
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Controlling the metal–support interaction with steam-modified ceria to boost Pd activity towards low-temperature CO oxidation

Yuanyuan An, Sheng-Yu Chen, Beibei Wang, Li Zhou, Guoxiu Hao, Yanli Wang, Junchen Chen, Chia-Kuang Tsung, Zhi Liu* and Lien-Yang Chou*

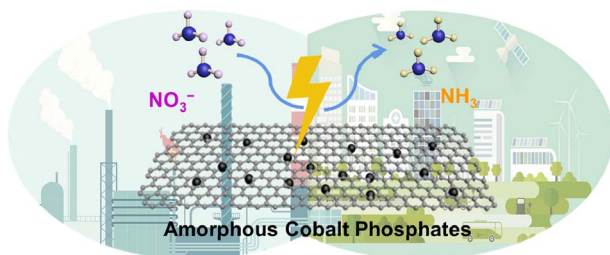
16846



Underlying potential evaluation of the real-process applications of magnetic porous liquids

Hamidreza Mahdavi, Muhammad M. Sadiq, Stefan J. D. Smith,* Xavier Mulet* and Matthew R. Hill*

16854



Amorphous cobalt phosphate incorporated in carbon matrix as an efficient pre-catalyst for promoted electrosynthesis of ammonia

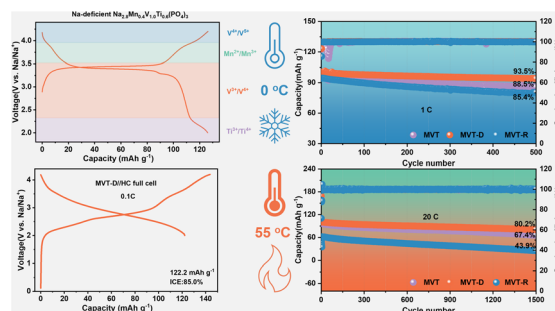
Fengcai Lei,* Mengmeng Xu, Yiming Zhang, Jing Yu, Menghan Zhang, Ruixue Huai, Junfeng Xie, Pin Hao, Guanwei Cui and Bo Tang*



16860

A zero-strain Na-deficient NASICON-type $\text{Na}_{2.8}\text{Mn}_{0.4}\text{V}_{1.0}\text{Ti}_{0.6}(\text{PO}_4)_3$ cathode for wide-temperature rechargeable Na-ion batteries

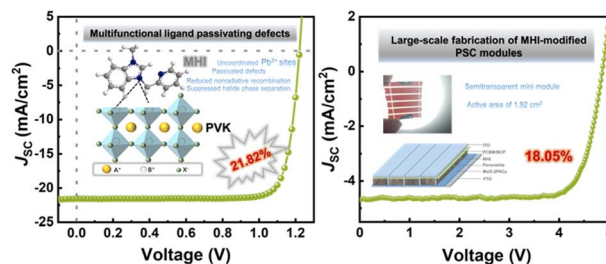
Xing Shen, Yuefeng Su,* Shunli He, Yali Li, Lifeng Xu, Ni Yang, Yanshun Liao, Meng Wang and Feng Wu*



16871

Multifunctional molecule interface modification for high-performance inverted wide-bandgap perovskite cells and modules

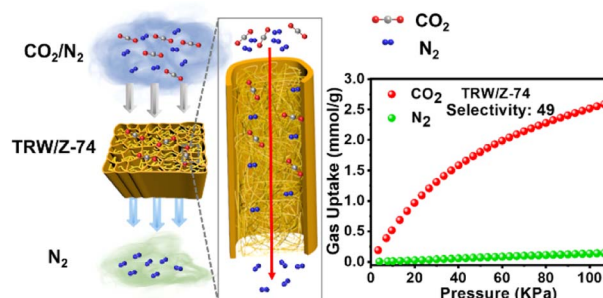
Yang Yang, Qing Chang, Yuyao Yang, Yuhui Jiang, Zhiyuan Dai, Xiaofeng Huang, Jiangwei Huo, Pengfei Guo, Hui Shen, Zhe Liu, Ruihao Chen* and Hongqiang Wang*



16878

In situ growth of Zn-based metal–organic frameworks in ultra-high surface area nano-wood aerogel for efficient CO_2 capture and separation

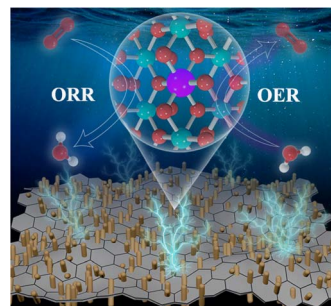
Jianpeng Huang, Deshi Yang, Zhipeng Hu, Huihui Zhang, Zhijun Zhang,* Fengqiang Wang, Yanjun Xie, Shouxin Liu, Qingwen Wang and Charles U. Pittman, Jr



16889

Associating Co single atoms with RuO_2 nanoparticles anchor on nitrogen-doped ultrathin porous carbon nanosheets as effective bifunctional oxygen electrocatalysts for rechargeable Zn–air batteries

Xuena Ma, Mingyang Liu,* Qi Li, Xudong Xiao, Jianan Liu, Xiaoqin Xu, Yihang Yin, Panzhe Qiao, Luoming Zhang, Xiaoyan Zou,* Ruihong Wang* and Baojiang Jiang*



CORRECTIONS

16900

Correction: Low-energy interlayer phonon assisted carrier recombination in Z-scheme van der Waals heterostructures for photocatalysis

Hejin Yan, Qiye Guan, Hongfei Chen, Xiangyue Cui, Zheng Shu, Dan Liang, Bowen Wang and Yongqing Cai*

16901

Correction: Porous bipolar polymers as organic cathodes for sustainable sodium/potassium-ion batteries

Motahareh Mohammadiroudbari, Jinghao Huang, Eric Youngsam Kim, Zhenzhen Yang, Fu Chen and Chao Luo*

